

## **DEFINITIVE PROPOSAL FORM 1.5**

### FRONT-END TRANSITION PLAN

Luma Energy (the Qualified Respondent) hereby acknowledges and affirms that the attached documentation (i) constitutes its full and complete submission for Definitive Proposal Form 1.5, (ii) meets the requirements described in Section 4.1.5 (*Front-End Transition Plan*) of the RFP and (iii) addresses the topics below, at a minimum.

Capitalized terms not defined herein shall have the meaning set forth in the Request for Proposals for Puerto Rico Electric Power Transmission and Distribution System issued by the Puerto Rico Public-Private Partnerships Authority on February 1, 2019 (as amended, the "RFP") or the final form of the Puerto Rico Transmission and Distribution System Operation and Maintenance Agreement (the "O&M Agreement"). If there is a term defined in both, and their definitions conflict, the definition in the O&M Agreement shall prevail.

### 1. General and Transition Management

- a. Proposed text of plan to provide Front-End Transition Services to be incorporated into the O&M Agreement as <u>Annex II</u> (Front-End Transition Services).
- b. The proposed hourly fully allocated cost rate for each category of employee, affiliate personnel or front-end subcontractor providing Front-End Transition Services, to be included in the O&M Agreement as <u>Annex V</u> (Front-End Transition Hourly Fully Allocated Rates).
- c. Detailed description of the contemplated transition team, including plans and timeline for mobilizing transition team members and details on the role to be played by each member of the consortium (as applicable), including the number of transition team members and their general job description/classifications.
- d. Proposed detailed timeline and key milestones for each scope of work including required resources and clear identification of steps to complete each scope of work, leading up to the Qualified Respondent's proposed Target Service Commencement Date. Include a description of the Qualified Respondent's views on the feasibility of the Government of Puerto Rico's strong desire for the Target Service Commencement Date to occur in 2020.
- A detailed cost estimate to complete the Front-End Transition Plan, including associated manhours reflected by such estimate.
- f. Detailed description of the Qualified Respondent's approach to the development of a communications plan and management transition plan, including of the Qualified Respondent's proposed approach to dealing with a predominantly Spanish-speaking workforce and an operational interface predominantly in Spanish (i.e., computer and data entry systems).
- g. Development of criteria for commencement of operations.
- h. Description of approach to complying with required and periodic reporting obligations.
- i. Detailed description of the plan for coordinating the obtainment of Governmental Approvals required for the Service Commencement Date.

- Description of the plan for coordinating the identification, review and analysis of System Contracts and Generation Supply Contracts.
- k. Identification and analysis of gaps (assets, technology, processes, etc.) and a detailed description of the plan to address each identified gap as well as an estimate of costs.
- I. Development of a Handover Checklist that the Administrator will use to determine when the transition (i.e., the takeover of operations by the Operator) may occur.
- m. Description of approach and plan for filings and interactions with PREB with respect to any required rate increase.
- n. Description of the Qualified Respondent's approach to identifying the proposed profit margin for the Operator on the Front-End Transition Service Fee and the rationale underlying such proposal.

### 2. T&D Services Milestones

- a. Development and implementation of an operation take-over plan for transmission and subtransmission assets outside and inside of legacy PREPA power plants and substations.
- b. Development and implementation of an operation take-over plan for the electric distribution system.
- c. Operational take-over plans should include but are not limited to the development and implementation of the following:
  - i. Transition plan for respective control center(s)
  - ii. Transition plan for operations and maintenance (O&M) activities
  - iii. Emergency response / disaster recovery / business continuity plans
  - iv. Fleet management plan
  - v. Asset management plan
  - vi. Workforce management and training plan (can be included in the human resources management plan)
  - vii. Safety management plan
  - viii. Engineering and asset management plan
  - ix. Identification of real estate
  - x. Materials management and warehouse plan
  - xi. System operations plan
  - xii. Vegetation management plan
- d. Updating operations manual and business continuity / disaster recovery plan.

- e. Conducting environmental exposure assessment and establishing an environmental exposure management plan.
- f. Detailed budget forecast for expected transition expenditures by scope of work, number of full time equivalents, contractors, US employees and any other costs. Also include a detailed description of key assumptions.

### 3. System Remediation Plan Milestones

- a. Detailed description of the proposed team that the Qualified Respondent expects to designate to prepare the System Remediation Plan, including the individual names, background, prior experience and qualifications of each proposed team member.
- b. Detailed description of the proposed approach to the development of System Remediation Plan, including the Qualified Respondents views on the current state of the T&D System and control, monitoring and information equipment, systems, practices, services (including related hardware, Information Systems and software) and general operating and administrative practices used in connection therewith.
- c. Proposed timeline and key milestones to drafting, revising and finalizing the System Remediation Plan (including milestones involving applicable approvals and subsequent implementation), including estimated costs to be incurred in the development of the System Remediation Plan.
- d. Describe the methodology used to formulate the Qualified Respondent's views of the T&D system, including a description of (i) the information the Qualified Respondent has already analyzed to assess the needs of the T&D System and (ii) information that the Qualified Respondent believes it will need to fully develop the System Remediation Plan within the proposed timeline.

### 4. Customer Service Milestones

- a. Evaluating customer service facilities and assets
- b. Evaluating and updating customer service policies and procedures
- c. Development of a meter reading plan
- d. Identification and analysis of gaps
- e. Development of a customer service transition plan
- f. Approach to acquisition and replacement of customer service assets
- g. Development and implementation of a service start and shut-off plan
- h. Development of a meter asset management plan
- i. Development and implementation of customer service technology

### 5. Information Technology ("IT") / Operation Technology ("OT") Systems Milestones

a. Development of an IT / OT communication plan and acceptance criteria

- b. Identification and analysis of gaps
- c. Evaluating IT / OT applications and infrastructure
- d. Development of a cyber security and business continuity plan
- e. Development of an IT asset management program
- f. Development of an IT / OT transition plan and schedule

### 6. Financial Management Milestones

- a. Detailed description of approach to budgeting and reporting over the transition period and samples of proposed budget and milestone reporting.
- b. Description of approach to complying with initial budget delivery obligations under the O&M Agreement.
- c. Approach to formalizing changes to control processes.
- d. Identifying and evaluating business processes.
- e. Establishing a financial accounting system and account structure.
- f. Preparing Initial Budgets and other financial forecasts.
- g. Establishing bank accounts.
- h. Evaluating and updating the payroll and labor cost reporting systems.
- i. Establishing a delegation of authority matrix and process.

### 7. FEMA Funds and Federal Funding Procurement Manual Milestones

- a. Detailed description of the proposed team that the Qualified Respondent expects to designate to assist in the preparation of a Federal Funding Procurement Manual, including the individual names, background, prior experience and qualifications of each proposed team member.
- b. Detailed description of the proposed approach to the development of the Federal Funding Procurement Manual and coordinating review by, and responses to comments from, COR3 and FEMA, as applicable.
- c. Views regarding the implementation of procurement processes and the management of government grants and similar types of funds, including a description of federal funds managed in the past and infrastructure programs or projects utilizing federal funds.
- d. Proposed timeline and key milestones to drafting, revising and finalizing the Federal Funding Procurement Manual (including milestones involving applicable approvals and subsequent implementation).

## 8. Staffing for Front-End Transition Period

a. Organizational chart outlining general organizational structure proposed, and clearly identifying the Qualified Respondent's key personnel to be involved in various work streams related to the

Front-End Transition Period (including a list of subcontractors, descriptions of activities each subcontractor will perform and a detailed description of the strategy for selecting and managing subcontractors).

- b. Detailed description of the individuals that the Qualified Respondent expects to designate to oversee the transition team, including the individual names, background, prior experience and qualifications of each proposed team member.
- c. Number of employees and subcontractors the Qualified Respondent expects to deploy as part of the transition efforts, including detailed description of proposed team divisions and responsibilities.
- d. Detailed description of the proposed approach to providing the Operator's stated requirements for employment to be included in the O&M Agreement as <u>Annex IV</u> (*Operator Employment Requirements*).
- e. Proposed timeline and key milestones to drafting, revising and finalizing the Operator Employment Requirements.

### 9. Additional Front-End Transition Period Milestones

- a. Detailed description of the proposed team that the Qualified Respondent expects to designate to prepare, assist in the preparation or development and/or negotiate the terms and conditions, as applicable, of each of the following Front-End Transition Period milestones:
  - i. GenCo Shared Services and the related Shared Services Agreement.
  - ii. Emergency Response Plan.
  - iii. Non-Federal Funding Procurement Manual.
  - iv. Physical Security Plan.
  - v. Data Security Plan.
  - vi. Vegetation Management Plan.
  - vii. System Operation Principles.
- Detailed description of the Qualified Respondent's proposed approach to meet or otherwise develop each of the following Front-End Transition Period milestones:
  - Drafting and negotiation of the Shared Services Agreement, including views on the provisions set forth set forth in <u>Annex VI</u> (GenCo Shared Services) of the O&M Agreement.
  - ii. Emergency Response Plan, including the assumptions, procedures and actions provided therein, the Qualified Respondent's views on why the proposed plan is suited for Puerto Rico and federal requirements and a description of prior experience in developing similar emergency response or contingency plans.
  - iii. Non-Federal Funding Procurement Manual.
  - iv. Physical Security Plan.

- v. Data Security Plan.
- vi. Vegetation Management Plan.
- vii. System Operation Principles, including the Qualified Respondent's views on the indicative System Operation Principles as set forth in <u>Annex I</u> (*Scope of Services*) of the O&M Agreement, a description of any proposed changes to the contents thereto and a description of the Qualified Respondent's proposed approach to coordinating review and comments from PREB.
- c. Proposed timeline and key milestones to drafting, revising and finalizing (including obtaining the applicable regulatory approvals and coordinating subsequent implementation) each of the following items to be addressed during the Front-End Transition Period:
  - i. GenCo Shared Services and the related Shared Services Agreement.
  - ii. Emergency Response Plan (including milestones involving applicable approvals and subsequent implementation).
  - iii. Non-Federal Funding Procurement Manual
  - iv. Physical Security Plan.
  - v. Data Security Plan.
  - vi. Vegetation Management Plan.
  - vii. System Operation Principles.

### 10. Asset Acquisition

- a. Evaluating existing procurement and subcontracting policies, procedures and systems.
- b. Assuming responsibility for securing use of assets, facilities, IT / OT, etc.
- c. Assuming existing subcontracts.
- d. Views on existing procurement policies and guidelines, including potential modifications thereto.

### 11. Back-End Transition Plan

- a. Detailed description of the Qualified Respondent's proposed members of the planning team designated to prepare the Back-End Transition Plan.
- b. Detailed description of the proposed approach to the development and implementation of the Back-End Transition Plan, including rights and responsibilities thereunder.
- c. Proposed outline of the Back-End Transition Plan to be included as <u>Annex III</u> (Back-End Transition Plan) of the O&M Agreement, which outline should address the treatment of ServCo employees upon the expiration or early termination of the O&M Agreement, among other things.

[Signature page follows].

## Luma Energy

# QUALIFIED RESPONDENT

Company Name

# Gerald Albert Ducey, Jr.

Name of Qualified Respondent's Authorized Official

# Authorized Representative

Title

Signature of Qualified Respondent's Authorized Official

Namber 25th 2019

# **DEFINITIVE PROPOSAL FORM 1.5**

# FRONT-END TRANSITION PLAN

November 25, 2019





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1. GENERAL & TRANSITION MANAGEMENT

# A. FRONT-END TRANSITION SERVICES PLAN

The proposed text of the plan to provide Front-End Transition Services to be incorporated into the O&M Agreement is provided in Annex II (Front-End Transition Services).



# **B. HOURLY FULLY ALLOCATED COST BY POSITION**

The proposed hourly fully allocated cost rate for each category of employee, affiliate personnel or front-end subcontractor providing Front-End Transition Service is incorporated into the O&M Agreement and is provided in Annex V (Front-End Transition Hourly Fully Allocated Rates).



# C. CONTEMPLATED TRANSITION TEAM

During the discussions held throughout the RFP process, the P3 Authority (Administrator) was very clear that there is strong desire to complete the Front-End Transition Services in a timely manner and as soon as practical.

Luma Energy (LUMA) acknowledges this goal. We have worked to develop a comprehensive yet aggressive and ambitious schedule to achieve a January 1, 2021 Service Commencement Date, but this is based on the factors noted below. Based on an Effective Date of January 20, 2020, Operator has scheduled completion of the Front-End Transition Services by December 3, 2020. In view of Administrator's and PREPA's desire to achieve these dates, Operator has structured its Front-End Transition Plan to deploy appropriate resources during this critical period to achieve success. However, a critical and essential element and condition to meeting this aggressive timeline is the meaningful participation by existing PREPA and Administrator employees and/or contractors, as applicable, including PREPA and Administrator management, all of whom will be required to dedicate significant time and resources during the Front-End Transition period in order to permit Operator to achieve a January 1, 2021 Service Commencement Date. Operator looks forward to this participation and to working together with PREPA and Administrator to achieve these goals and to allow it to affect this Front-End Transition Plan.

A well-executed Front-End Transition will be the foundation on which the success of the Puerto Rican T&D System transformation will be based.

### 1.0 TRANSITION TEAM

Our transition plan emphasizes building a schedule that is well-organized, focused on deliverables and designed to complete the transition as quickly as possible to meet safety and operational requirements. Additional benefits from a timely transition include:

- Being better prepared for the next hurricane season;
- Increasing the public's confidence in their utility provider;
- Reenergizing the workforce and improving morale;
- Reassuring the public as well as policymakers in San Juan and Washington, DC that utility service in Puerto Rico is on a rapid road to recovery; and
- Resolving the backlog of deferred necessary maintenance that leads to unsafe conditions and threatens public and employee safety.

We see the transformation of the electric utility in Puerto Rico as both a challenge and a truly unique and exciting opportunity. A timely and well-managed Front-End Transition Period will be a pivotal building block of our efforts. Our transition plan includes measures that drive short- and long-term improvements. In the short term, our priorities are to address the most serious safety and security shortfalls, as well as ensuring a robust storm response plan. We will also lay the foundation for longer-term priorities such as more efficient operations, higher levels of customer satisfaction and more



resilient, modern and clean electric infrastructure. These longer-term priorities will be included in the System Remediation Plan and other transition deliverables.

The main features of our transition plan are:

- Developing a post-commencement strategy that appropriately balances near- and longer-term initiatives;
- Immediately addressing the urgent issues of storm response planning as well as critical safety and operational deficiencies;
- Accelerating the transition schedule by drawing upon our combined workforce of approximately 50,000 employees to supplement the transition team during the initial months;
- Using the proven internal processes Consortium members have employed, which includes more than 200 acquisitions around the world, to support the integration strategy;
- Using the collaborative, proven P3 model that our Consortium has perfected over 10 years and multiple projects, including the \$1.2 billion Fort McMurray West 500 kV Transmission Project, an award-winning P3 project that was also the largest in Canadian history;
- Developing a strong internal culture around project management skills, including accountability, elevating issues as they occur, developing work-around solutions and communicating frequent status updates to internal and external stakeholders; and
- Sending a well-orchestrated and consistent message to employees to define expectations for the new T&D Operator.

In addition to the functional areas of review (e.g., IT, Customer Service, Environmental), several specific deliverables were identified in RFP Addendum 7, which we will complete by forming specific "Special Teams" for each major deliverable. These special teams are focused on deliverables such as the System Remediation Plan and will be staffed by individuals that span across the functional teams in a matrix-style organization. Each special team will have an assigned lead responsible for overall coordination and execution, and several support team-members may be assigned to multiple teams and workstreams. This matrix-style approach is more efficient since the subject matter experts (SMEs) in each area can focus on how their deliverables contribute to those of the special teams to ensure quality and consistency. This organization by workstream better frames how we will discuss the specific activities and deliverables in Form 1.5.

The Transition Organization by Workstream Chart can be found in Figure 1 below.

### **Board of Directors**

A Board of Directors (BOD) will be established to provide governance, strategic guidance and oversight. The BOD will consist of qualified leaders who have significant business experience and who will provide LUMA the necessary governance structure and guidance to achieve success. LUMA already has commitments to serve on the BOD from experienced industry leaders Dr. Roger Urwin and Pat Wood III, whose qualifications are summarized along with the rest of the leadership team in Form 1.6 Section 1.A and Form 1.4 Section 2.



### **Transition Program Managment**

The transition will be managed by the Chief Executive Officer (CEO) who will be accountable for the completion and execution of all workstream deliverables and key contract elements. The CEO provides a single point of contact and reflects the critical importance we place on a successful transition. The CEO will be supported by a robust Program Management Office run by a senior Program Coordinator. The CEO will report to the BOD.

The Transition Program Office is led by a Transition Program Coordinator — a senior manager with a history of large project scheduling experience. The group will be fully staffed to closely monitor schedule progress. There will be a high degree of coordination and support from this team to ensure that transparency, all required reporting and high-quality deliverables are produced on schedule.

### Workstream Leads

Each workstream will have a dedicated lead, which in most cases is a senior manager or higher. Each lead will be accountable for ensuring that all assigned assessments and due-diligence tasks are completed to support the transition schedule. In many cases, the transition team leads are the same individuals who will be leading post-Commencement.

### Special Teams

"Special Teams" are those formed out of the workstream teams, though with a separate lead. Their role is to work toward the following major deliverables:

- The System Remediation Plan;
- Performance Metrics:
- Systems Operations Principles;
- Federal Funding Procurement Manual;
- Non-Federal Funding Procurement Manual;
- Initial Budgets;
- Employee Transition:
- Integrated Resource Plan (IRP) Coordination; and
- Back-Fnd Transition

Special Teams will work jointly with the Administrator. Each Special Teams area is led by an experienced utility/technical expert. In some cases, the special teams lead is also a lead for a related functional area. This overlap will increase efficiency as the workstream support team members can be efficiently organized to support several activities and deliverables related to common topics they are working on.

Given that communication and collaboration between all Parties is important to a successful transition, we are proposing a program management organization that incorporates coordination of our team's activities with PREPA, the Administrator and PREB.



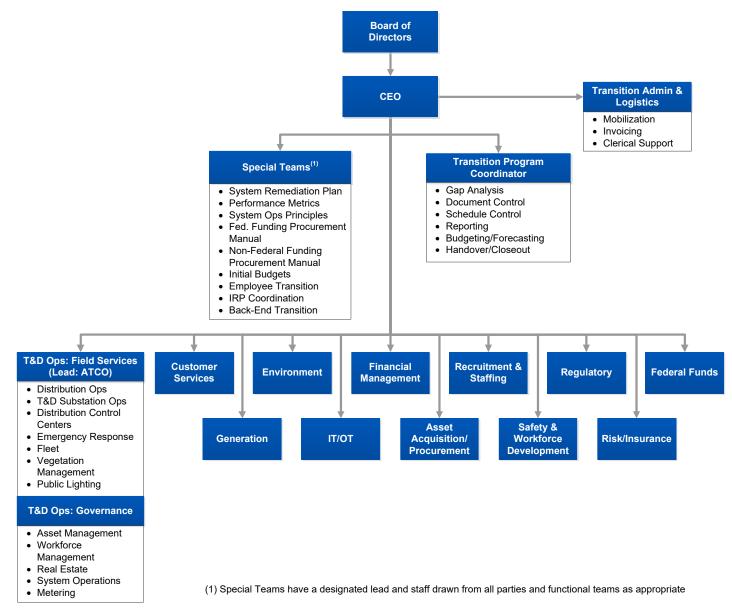


Figure 1: Transition Organization by Workstream Chart

#### 2.0 PLAN & TIMELINE FOR MOBILIZATION

Our mobilization plan is designed to support our overall approach to the transition, and to quickly ramp up activities to complete scheduled activities as soon as possible.

Before the effective date, we plan to immediately mobilize key members of the transition management team and place them in San Juan. We estimate this advance team will have 5-10 members. This team will secure housing and administrative support as well as office space as necessary for the short period between the award and the effective date. We plan to establish housing in corporate



apartments or similar facilities for team members during the front-end transition period. After the effective date, team members who become ServCo employees will transition to permanent housing.

During this period, the advance team will coordinate plans for basic logistics with representatives of the Owner and Administrator. These arrangements will include agreeing on lines of communication between parties and securing longer-term office space and administrative support. We expect that office space for LUMA's transition team members will be provided at the Owner's headquarters or as appropriate at other Owner offices.

During mobilization, we will also complete several commercial and business tasks such as opening initial bank accounts, receiving Administrator authorization to use subcontractors identified in our proposal, approving and awarding any needed contracts and identifying lead PREPA liaison members for each of the identified transition teams which outlines the scope of the team and its responsibilities.

Additional logistics-related tasks, which will begin immediately after contract award, include:

- Preparing preliminary site visitation schedules and combining team members on common visits where appropriate (e.g., Environmental, HR, translators) to minimize the need for multiple trips to the same sites;
- Developing draft team charters for special teams (e.g., System Remediation Plan, Performance Metrics), which define roles, responsibilities and expectations in advance of each team's kick-off meeting;
- Begin defining a logistics plan for employment interviews with all PREPA employees, including schedule process, locations and sequencing; and
- Preparing draft rules of engagement for interactions with PREPA and Administrator regarding meetings, communications, daily interactions and general working expectations.

We have already had conversations with major subcontractors and confirmed the availability of key personnel and the scope and timelines from completion of contracted tasks.

The overall transition plan has been divided into three primary phases: assess, analyze and act. These are not distinct phases with clear separation between them, but rather they indicate the general focus of activities that will gradually migrate as we arrive on site, complete our assessments and work with the PREPA employees to develop our improvement initiatives.

This approach is summarized in Table 1 and referenced later in this section.

Table 1: Mobilization Phases

	PHASE 1	PHASE 2	PHASE 3
	ASSESS	ANALYZE	ACT
Tasks	<ul> <li>Detailed data review</li> <li>Interview PREPA rank &amp; file</li> <li>Assess performance trends &amp; issues</li> </ul>	<ul><li>Understand root causes of performance issues</li><li>Identify potential solutions</li></ul>	<ul> <li>Consolidate solutions into initiatives</li> <li>Quantify costs and benefits of solutions</li> </ul>



	PHASE 1	PHASE 2	PHASE 3
	ASSESS	ANALYZE	ACT
	<ul><li>Confirm or modify hypotheses</li></ul>	<ul> <li>Work with employees to understand constraints &amp; implementation challenges</li> </ul>	<ul> <li>Prioritize initiatives into near         and longer-term schedule</li> </ul>
Major Attributes of Each Phase	<ul> <li>Large team supplemented from Operator affiliate</li> <li>Compile performance data on consistent basis for future</li> <li>Set expectation that how business is conducted is being transformed</li> <li>Identify internal champions &amp; leaders</li> </ul>	<ul> <li>Invest time to understand local constraints, but always driving schedule progress</li> <li>Catalog potential issues &amp; initiatives</li> <li>Start work in collaborative teams with rank &amp; file; internal champions emerge and assume more active roles</li> <li>Business process reengineering requirements being identified</li> </ul>	<ul> <li>Internal champions take leadership roles as new attitude becomes understood</li> <li>Develop implementation plans that cut across organization for efficiency</li> <li>Gather input and perspective from broad set of internal &amp; external stakeholders</li> </ul>

Our staffing ramp-up plan recognizes the phased approach and is designed to coordinate staff resources, logistics and interface with PREPA employees to support the required deliverables.

### Phase 1: Assess

During Phase 1, the workstream teams will review detailed data, conduct site visits and compile their findings from each functional area into a single, aggregated perspective of PREPA operations. A supplemental team will support the on-site workstream teams to assist with employee screening and evaluation, which will be a lengthy task critical to the overall schedule and which must be completed in a timely manner to reduce the period of employee uncertainty and apprehension. An additional key task during Phase 1 will be finalizing the schedule for individual facility visits. These visits will be scheduled in advance so that all the relevant workstreams can participate as needed for each visit (e.g. T&D, Environmental, HR, Safety). This will reduce the logistical demands of having many transition team members visiting the same sites on multiple trips.

### Phase 2: Analyze

During Phase 2, performance trends will be analyzed, gaps identified, and root causes understood. This phase features greater involvement of the PREPA workforce. The joint team will begin to work more collaboratively to understand constraints and implementation challenges, identify issues and compile potential improvement initiatives for later prioritization. Champions inside PREPA will be recognized and will begin to assume a greater role in supporting analysis.

### Phase 3: Act

During Phase 3, the focus will shift to detailed action planning. The teams will have quantified the costs and impacts of various initiatives and begun to prioritize them into near- and longer-term schedules. Improvement initiatives will be evaluated together, with focus placed on initiatives that cut



across the organization. Such initiatives are more efficient to implement and offer greater improvement opportunities by leveraging resources.

Figure 2 illustrates our phased approach to the front-end transition, including the distribution of work resources by workstream as well as a cumulative expenditure curve. As activities go from Phase 1 to Phase 2 and then on to Phase 3, more work resources will be required from PREPA.

The schedules have been independently developed for each workstream, so each team will pass through the three phases at different paces. Durations within each phase are estimates only, and scheduled activities for each specific workstream are included in the team's section in later parts of this chapter.

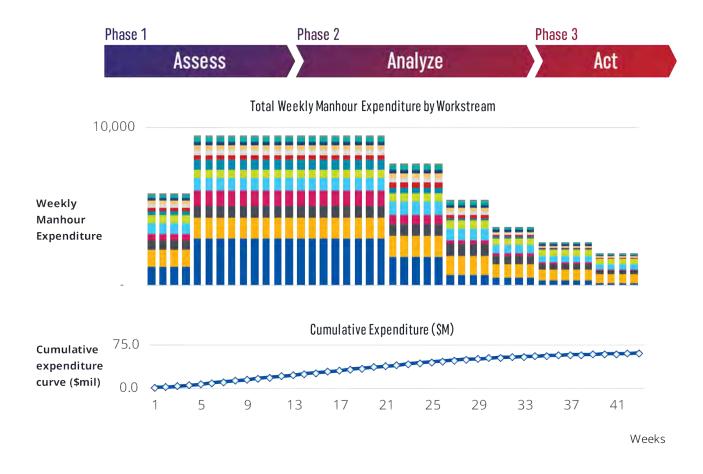


Figure 2: Phased Approach to Front-End Transition

#### 3.0 **TEAM MEMBER ROLES**

The transition team will immediately ramp-up with a relatively large resource pool to quickly complete critical path activities. Team leaders will be drawn from our pool of experienced managers. Many of these professionals will also be designated to serve as senior leadership for LUMA after commencement and will be moving to Puerto Rico on a permanent basis.



Our team members are experienced in leading successful utility transformations. Many of them have executed management transitions at large utilities and other infrastructure operations in Latin America, including taking over management of utilities and other infrastructure operations in Buenos Aires, Argentina; São Paulo, Brazil; Cali, Colombia; Cartagena, Colombia; Santiago, Chile and Mexico City, Mexico. The names and resumes of the entire transition team can be found in Appendix 1.

The Front-End Transition Organization Chart is shown in Figure 3 below. This organization chart names the individual leads in each functional area who will be supporting the workstreams and special teams. The specific workstream assignment for each team lead is shown in Table 2 below.

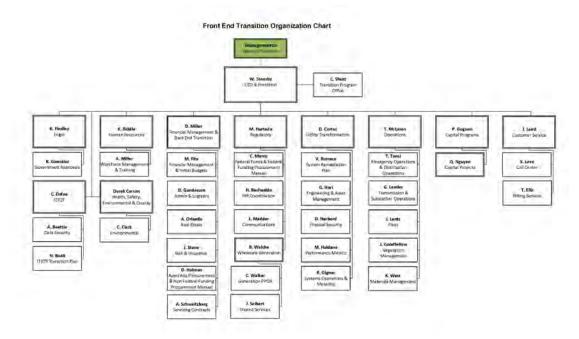


Figure 3: Front-End Transition Organization Chart

The CEO will report to the BOD. The BOD will receive periodic updates, help establish policy and resolve any high-level issues needed to resolve bottlenecks in the process to allow for completion of the Transition on schedule.

The manhour budgets assigned to each team reflect the level of change management associated with most of the workstreams. Four of the largest components of our estimated manhours serve to illustrate where we have placed our priorities, which are discussed below and illustrated in Figure 4:

• In the case of HR, there will be a time-intensive process required to interview all PREPA employees and extend employment offers where applicable. In addition, we plan to use a pool of 30 translators, a further 40 bilingual interviewers (for a total of 70 staff hired for language translation services), during transition to support all workstreams.



- The IT staffing levels reflect the magnitude of system definition and change which will be required to fully transform PREPA into an efficient organization with the tools and capabilities to operate in today's utility environment.
- The T&D Operations workstream represents the heart of what is needed to fully modernize the grid and provide safe, reliable and resilient operations. Note that total hours for T&D Operations are actually the sum of T&D Operations and Asset Management, since a concerted effort to instill advanced asset management practices will help ensure a reliable, resilient grid in the future.
- Transition Coordination Group will set schedules, track activities and serve as the central organizational hub for the Transition. They will also coordinate the gap analysis and business process review.

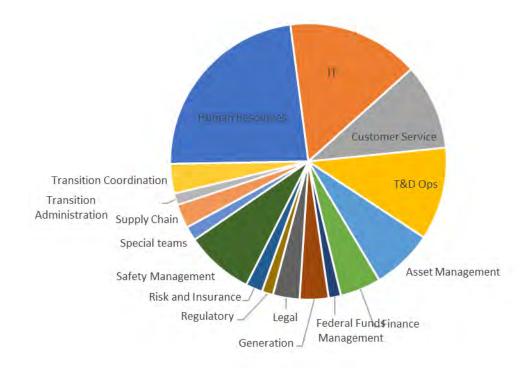


Figure 4: Transition Estimate by Workstream (hours)

Our project budget and manhour estimates reflect an overall team of approximately 210 full-time equivalents (excluding time for interviews coordination and translation, which will be sub-contracted to a local firm).

The workstream leads will play a critical role in the success of the transition program. Each of these leads has been hand selected based upon his or her direct and relevant experience with the known challenges of each specific workstream. In most cases, these leads have also been involved with developing our proposed approach for the past five to eight months and have met with PREPA personnel in their respective areas on site assessments. Therefore, they will have already been working tightly as a team and will have no learning curve during transition. In some cases, the workstream leads will also assume direct management roles at ServCo post-commencement. The



workstream leads are named in Table 2, which includes the workstream, the lead responsible for that workstream and the role they will play during transition.

Table 2: Workstream Lead & Role

WORKSTREAM	NAME	ROLE
Overall Front-End Transition	W. Stensby	Lead
Transition Program Office	C. Shutt	Lead
Legal	K. Findley	Lead
Government Approvals	B. Gonzalez	Lead
IT/OT	C. Dafoe	Lead
Data Security	A. Beattie	Lead
IT/OT Transition Plan	N. Buell	Lead
Human Resources	K. Riddle	Lead
Workforce Management & Training	A. Miller	Lead
Health, Safety, Environmental & Quality	D. Carson	Lead
Environmental	C. Clark	Lead
Financial Management & Back-End Transition	D. Miller	Lead
Financial Management & Initial Budgets	M. Fite	Lead
Administration & Logistics	D. Gunderson	Lead
Real Estate	A. Orlando	Lead
Risk & Insurance	J. Stone	Lead
Asset Acquisition & Non-federal Funding Procurement Manual	D. Holman	Lead
Servicing Contracts	A. Schwaitzberg	Lead
Regulatory	M. Hurtado	Lead
Federal Funds & Federal Funding Procurement Manual	C. Montz	Lead
IRP Coordination	H. Bashualdo	Lead
Communications	L. Madder	Lead
Wholesale Generation	B. Walshe	Lead
Generation PPOA	C. Walker	Lead
Shared Services	J. Seibert	Lead
Utility Transformation	D. Cortez	Lead
System Remediation Plan	V. Romero	Lead
Engineering & Asset Management	G. Hari	Lead



WORKSTREAM	NAME	ROLE
Physical Security	D. Harbord	Lead
Performance Metrics	M. Haldane	Lead
Systems Operations & Metering	R. Gignac	Lead
Operations	T. McLaren	Lead
Emergency Operations & Distribution Operations	T. Tonsi	Lead
Transmission & Substation Operations	G. Lemler	Lead
Fleet	J. Lentz	Lead
Vegetation Management	J. Goodfellow	Lead
Materials Management	K. West	Lead
Capital Programs	P. Goguen	Lead
Capital Projects	Q. Nguyen	Lead
Customer Service	J. Laird	Lead
Call Center	S. Love	Lead
Billing Service	T. Ellis	Lead

The remainder of the transition team will be drawn from the highly qualified resources contained within Appendix 2 and will be supplemented with select experts from the existing owner's subject matter experts.



### **TIMELINE & KEY MILESTONES FOR EACH SCOPE** D.

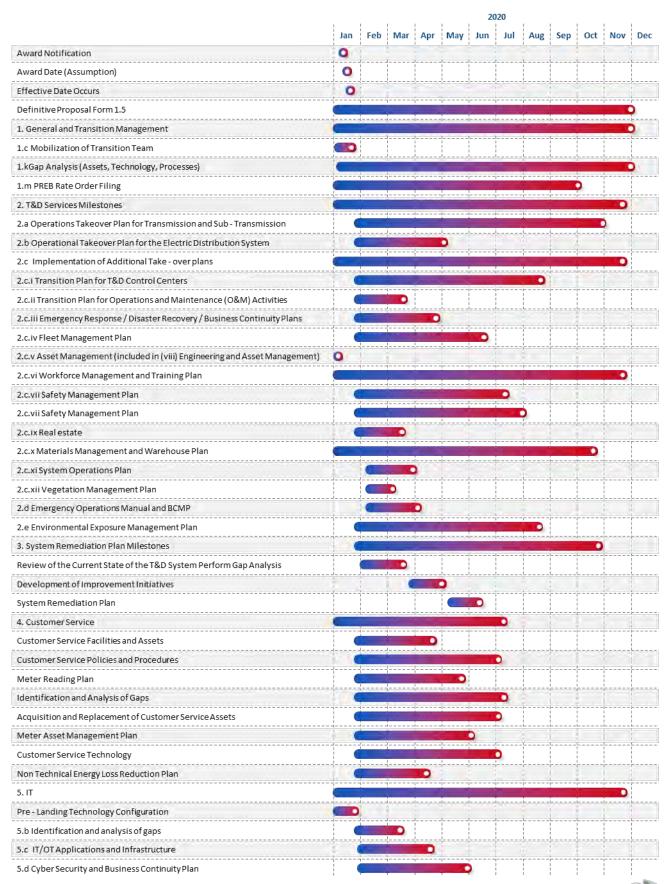
#### **TIMELINE & STEPS TO COMPLETE** 1.0

Our transition schedule calls for a completion of transition program on December 3, 2020 and a commencement date of January 1, 2021. We have provided a detailed project schedule for all transition activities, which contains over 1,300 activities, in Appendix 2. For ease of reference in this section, Figure 5 below is a two-page summary of this schedule.

The transition schedule is aggressive, but achievable. It is critically important that we get an Effective Date of January 20, 2020 to support our schedule. The time to receive regulatory approvals creates a schedule where most workstreams quickly ramp up to full resource loading, then work full-time to achieve the mid-year milestones. While there is a critical path to completion, there are several other secondary and tertiary critical paths that are not far behind. When viewed on a roll-up basis by consolidating major activities, it can look as if each workstream is running full-out to completion since activity scheduling is done on a "finish as early as possible" basis. Nevertheless, there are a number of key activities that drive the overall timeline. These key activities are:

- Mobilization of transition team members after contract award (i.e., early kick-off);
- Several IT-related system development tasks, but most critically, the path to implement and stand up the new payroll module;
- Development of the System Remediation Plan and approval;
- Development of the Federal and Non-Federal Procurement Manual and approval;
- Development of the Systems Operations Principles and approval;
- Initial budget submission and approval; and
- Development of performance metrics and approval.





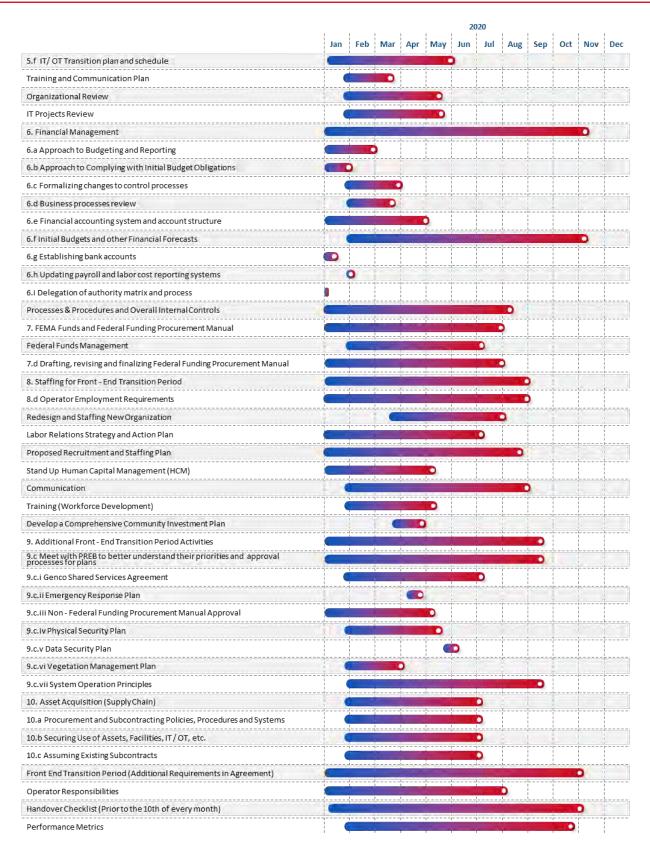


Figure 5: Project Schedule Summary



### 2.0 REQUIRED RESOURCES

Resources to complete the transition schedule have been estimated for each workstream and task. The resources required for the overall transition schedule are summarized in Table 3 below, which also shows how many estimated hours by individual position or job title will be required for each workstream.

An overview of expenditures for each employee category is also shown in Figure 6, which shows the total for all workstreams rolled up. It should be noted that approximately three-quarters of the total manhours (excluding contracted translators and interviewers) will be performed by Manager, Senior Manager, Director and Senior Director personnel. This group represents an extremely deep bench of individuals who average almost 20 years of utility experience each, much of it at senior levels in other utilities before joining the Consortium.

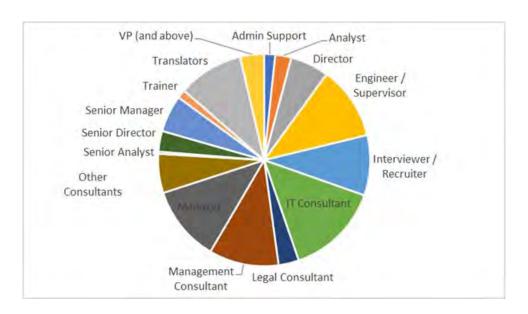


Figure 6: Transition Resources by Employee Category

Table 3: Resources (Man-Hours) Required for Overall Transition Schedule

Position	Asset Mar	Lustoner C	şen <sup>ice</sup> Federal Fi	nds Manageme	generation	n Hunan Re	şaurces 1	Legal	Regulatory	Riskandli	Safety Mai	speial tea	supph Chi	in Ladobs	Transition	Administration Transition	n Coordination
Admin Support										1,000					4,160		5,160
Analyst		6,000				520				1,000							7,520
Director	378	1,507	406	227	7,815	1,040	213	77	52	14	134	33	286	4,707	33	1,073	17,995
Engineer / Supervisor	9,160	3,300												21,820			34,280
Interviewer / Recruiter						27,200					960						28,160
IT Consultant		1,000					42,920										43,920
Legal Consultant								9,500									9,500
Management Consultant	8,920	1,202	4,000	6,765		4,160				2,000			4,565	1,000			32,613
Manager	3,520	11,300		3,150		3,120	4,160			2,000	2,240		3,740	2,120			35,350
Other Consultants											16,974			1,250			18,224
Senior Analyst						1,040											1,040
Senior Director		2,500		3,600	2,500	1,040											9,640
Senior Manager						1,560			4,000		4,160	5,120		2,400			17,240
Trainer		4,000															4,000
Translators						30,600											30,600
VP (and above)				900		780										9,500	11,180
<b>Grand Total</b>	21,978	30,809	4,406	14,642	10,315	71,060	47,293	9,577	4,052	6,014	24,468	5,153	8,591	33,297	4,193	10,573	306,422

## 3.0 VIEW ON FEASIBILITY OF 2020 COMMENCEMENT

It is our unequivocal viewpoint that with an effective date in mid-January 2020, transition activities can be completed before December 2020.

In order to achieve this schedule target, LUMA, the Administrator, PREB and PREPA will all need to be aligned. We have worked to build collaboration and clear communication channels into the structure of the transition schedule.

This schedule has been carefully constructed to ensure that each workstream has a separate and realistic schedule and budget for the time and activities required to complete its work. In addition, predecessor and successor activities have been identified and a critical path analysis has been conducted to ensure the robustness of the overall transition schedule. However, the critical path analysis did raise a number of considerations worthy of future discussion after contract award.

The first schedule-related consideration is that several major deliverables require an extended review and approval process, which includes 30 days for Administrator approval, 30 days to reconcile Administrator comments and a subsequent 90 days for PREB review and approval. A scenario in which PREB does not approve or mandates certain changes be made prior to approval needs to be mitigated. This scenario would result in a situation whereby to achieve a 2020 commencement, we would have to spend nearly the same amount of time receiving approvals as doing the work (i.e., it would take five months to get all approvals, leaving only seven months to complete all the work to meet the 2020 completion deadline)

There are a few potential options that can be considered to mitigate this possibility. First, since the Administrator will be participating on all major deliverables, we suggest providing the Administrator interim progress reports. These reports could provide the Administrator with sufficient familiarity to reduce the review time. Similarly, LUMA's response time could also be reduced.

In a similar vein, it seems reasonable that some major deliverables that require PREB approval could be separated into a series of smaller deliverables due at different points during the transition and provided to PREB in interim submissions. Due to this option, not only would overall approval time be reduced, but PREB could also have a less onerous task to review all documents at the end of the stated time period. Steps like these could reduce lag time between submittals and approval and reduce the burden of review. We look forward to working with Administrator and PREB to pursue these opportunities, if possible.



# E. FRONT-END TRANSITION PLAN COST

### 1.0 BUDGETS

Budgets for the entire transition program have been developed using itemized, fully loaded rates for each professional level as defined in Annex V: Front-End Transition Hourly Fully Allocated Rates. The budgets represent our best cost estimate of the specific activities to be performed and which professional level or third-party contractor will perform those activities.

Depending on resource availability, during the transition period some of the hours for individual activities may be performed by different professional levels than those currently estimated. However, all invoices for reimbursement for transition services will be processed to reflect the actual person at the appropriate professional level and hourly rate. It is also possible that the mix of hours used by third-party subcontractors may vary from task to task and the hourly cost for some subcontractors may vary from the estimated costs shown in Annex V. In all cases, the costs for third-party subcontractors will also be invoiced at the actual cost incurred for each contracted resource, with zero markup.

All budgets described in this proposal for transition program activities are for labor only; any associated travel and expenses (T&E) or non-labor charges will be passed through at actual cost with zero markup. All hours incurred will be directly charged to a specifically authorized project code. Separate hourly estimates have been developed for each workstream, and each workstream will have a separate charge code assigned so that budgets will be tracked and progress assessed on an individual workstream basis.

The budgeted costs for fees associated with transition program activities are shown in Table 4 below. Costs for travel and out-of-pocket expenses have not been included. Based on our experience we anticipate that these T&E costs can typically be managed to less than 17% of total professional fees.

Table 4: Transition Program Estimated Budget

	HOURS	DOLLARS	FTEs
Human Resources	71,060	\$ 7,324,500	47
IT	47,293	\$ 13,766,575	32
Customer Service	30,809	\$ 6,052,425	21
T&D Ops	33,297	\$ 6,213,625	22
Asset Management	21,978	\$ 4,503,550	15
Finance	14,642	\$ 3,756,210	10
Federal Funds Management	4,406	\$ 1,111,650	3
Generation	10,315	\$ 2,899,125	7
Legal	9,577	\$ 6,196,175	6
Regulatory	4,052	\$ 854,300	3



	HOURS	DOLLARS	FTEs
Risk & Insurance	6,014	\$ 1,078,850	4
Safety Management	24,468	\$ 4,849,250	3
Special Teams	5,153	\$ 1,084,275	3
Supply Chain	8,591	\$ 1,967,900	6
Transition Administration	4,193	\$ 217,075	3
Transition Coordination	10,573	\$ 3,382,575	7
Grand Total	306,422	\$ 65,258,060	204

Table 4 includes the following assumptions:

- Includes hours and costs for both Consortium employees and contractors.
- Estimates are for professional fees only. They do not include travel, accommodation or other costs associated with mobilizing and relocating transition team members. No allowances have been made for office-related services or other out-of-pocket expenditures.
- Includes 60,000 hours for interview coordinators and translators to be hired locally.
- As referenced in Section 1.8, any travel and out-of-pocket expenses are expected to be managed to 17% or less of total professional fees.

The estimate for transition activities was developed based on the following general approach and key assumptions.

### Task Definition

The activities to complete the required deliverables and the due diligence activities for each individual work stream were identified, scheduled and estimated. These tasks form the basis for the master transition project schedule included in Annex II.

### Internal Employee Personnel

For each task, a separate estimate was prepared based upon work to be completed for each team member in that workstream. We accounted for efficiency savings opportunities by leveraging the same team member on multiple tasks (e.g., T&D Ops people who will also be heavily involved in related activities in the System Remediation Plan).

### Subcontractor Personnel

For several tasks within the individual workstreams, sub-contractor personnel will be used. This includes subject matter experts who will provide specific, focused support to individual task completion. It also includes scopes of work, such as IT system development, which will rely more heavily on contractors or other workstreams, which will use local contractors.

### **Hourly Rates**

For each workstream, specific hourly rates were applied to each individual at the appropriate professional level. This allowed us to develop the overall estimate as well as the estimate for each workstream. These hourly rates are defined in Annex V – Front-End Transition Services.



# F. COMMUNICATIONS & MANAGEMENT TRANSITION PLANS

## 1.0 TRANSITION COMMUNICATIONS PLAN

A robust communications strategy is a critical element of the transition plan. A more comprehensive communications approach is described in Form 1.4: Approach to O&M Services, but a communications plan that specifically addresses the transition period will also be developed and implemented.

The transition period is likely to be a time of stress and uncertainty for the workforce. A well-designed communications plan, which will deliver every communication in Spanish and English, will reduce this stress and build a bridge to both the workforce and the general public that will help long after the transition has been completed.

Key milestones in the transition period will be identified and targeted messages delivered to coincide with those milestones. At a very high level, these messages will include introductory materials, periodic status updates and a report on transition period achievements that includes a plan for the future.

The Transition Communications Plan will be our first opportunity to define our management vision and expectations, mission statement and core values. We will coordinate with Owner to provide a plan that will feature the following:

- A commitment from LUMA's senior leadership to communicate with employees transparently and frequently. Communications will express empathy for employees facing uncertainty and change.
   LUMA will also communicate plans for increased dialogue with employees to keep them motivated and productive;
- The use of multiple communication channels to reinforce our key messages. This will include townhall meetings, one-on-one meetings with employees, group sessions, intranet updates and posting of frequently asked questions (FAQs), memos and other forms of media to communicate applicable information; and
- The development of an employee value proposition that defines the Operator and ServCo and why employees will want to stay and join the organization if offered employment.

To enhance communications, we will include the following meetings and status reporting:

- Daily meetings between transition team leaders and the transition program manager to identify and resolve any emergent items and assist with other teams' data, analytical or other issues;
- Biweekly progress meetings between LUMA and PREPA leads involved with the transition program. These meetings will be action oriented, with summary progress reported. Materials widely reported may be edited to protect confidential information;
- Monthly progress meetings with PREPA, the Administrator and LUMA's transition program leadership;



- Supplemental progress meetings with PREPA and Administrator executives as appropriate;
- General public progress reporting updates every three months with other stakeholders as determined by PREPA and the Administrator (likely to include PREB and interested political leaders);
- Summary reporting for media or public consumption; and
- Others as defined in the external relations strategy.

Figure 7 shows the structure, purpose and proposed frequency of transition program meetings.

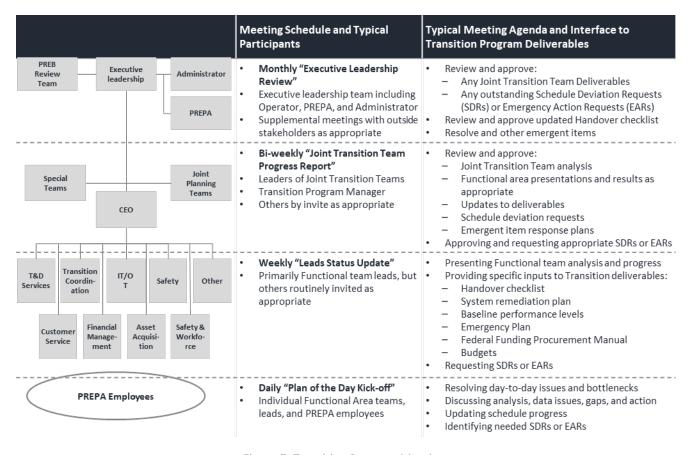


Figure 7: Transition Program Meetings

### 2.0 MANAGEMENT TRANSITION PLAN

To set a new management tone, and to increase expectations of how LUMA will operate in the future, our management transition plan reflects our philosophy and approach. The drivers behind PREPA's operating track record are well documented and accepted by most stakeholders. The Consortium will not be another outsider coming to Puerto Rico on a short-term basis, but rather a new permanent organization focused on improving service and rebuilding the system together with former PREPA team members.

We believe, based on our site assessment and field interviews, that PREPA field forces are knowledgeable about what their system requires and are highly frustrated that they have not been able to address these problems. The transformation of the utility requires that talented and resourceful



PREPA employees choose to join LUMA. We will work to improve the employee experience in order to stem the rate of attrition and increase employee morale. We envision LUMA, in due course, being seen as one of the best career opportunities on the entire island. We are determined to convince employees of this by the manner that we interact with them during transition.

Table 5 summarizes our initial observations of the issues facing PREPA and how we see our role during transition. This list is not comprehensive; it is meant to be illustrative of our philosophy and approach.

Table 5: Operator Role During Transition INITIAL OBSERVATION	T&D OPERATOR ROLE DURING TRANSITION
Low employee morale	<ul> <li>Focus on team involvement, listen to employees' input and build communication bridges based on mutual respect.</li> <li>Take actions to convince new employees of ServCo that this will soon be one of the best career opportunities in Puerto Rico.</li> </ul>
High levels of customer dissatisfaction	<ul> <li>Prioritize early high-impact initiatives ("quick-wins") to build credibility (e.g., public lighting).</li> <li>Completely transform the mindset and attitude toward customer service at all company levels.</li> </ul>
Lack of public confidence and trust in decision-making and contracting	<ul> <li>Implement new transparent processes and a greater degree of open disclosure; demonstrate zero tolerance for corruption by active enforcement.</li> </ul>
Significant operational issues due to five- plus years of under-performing maintenance	Reengineer the entire maintenance program.
PREPA history of identifying problems but not fixing them	Enforce accountability at all levels from President to entry level employees.
Poor workforce efficiency due to existing work rules and extremely manual and inefficient processes	<ul> <li>Bring management expertise and tools to increase productivity levels. Prioritize needed IT investments and coordinate technology upgrades.</li> </ul>
High degree of regulatory uncertainty and strained relationship with regulator	<ul> <li>Work with the Regulator and build a constructive relationship. Present alternatives where appropriate but focus on achieving the Regulator's objectives.</li> </ul>
Potential for significant safety or operational risk factors	<ul> <li>Put in place a defined mechanism to escalate high-priority items for immediate action (e.g., safety stand-downs).</li> </ul>

A number of specific deliverables will be produced during transition, including the following:

Specific requirements in the O&M agreement: This will include the System Remediation Plan, updates to the Handover Checklist, the initial budgets and performance metrics, the Federal and Non-Federal Funding Procurement manuals, the Physical Security Plan and the evaluation of potential employees, offers and onboarding. These deliverables will be worked on and advanced



- continuously during transition, incorporating input from PREPA and the Administrator (as appropriate) to produce agreement;
- Initiative database: A large number of potential improvement initiatives will be identified, evaluated and prioritized. Many of these will be included in the specified deliverables such as the System Remediation Plan and prioritized for early implementation; others may be placed in a backlog for implementation in the future;
- Backup documentation and analysis: All improvement initiatives in the initiative database will have a standardized level of documentation. Preliminary analysis of the initiative will be performed on a consistent basis to support future implementation planning. This will include the description of initial scope, cost-benefit analysis, assessment of impact potential and degree of interaction with other initiatives: and
- Process improvement analysis and planning: Each functional team will perform several defined steps to identify and prioritize key process improvement opportunities and will create standardized deliverables that can be evaluated across functional teams. This will include the following:
  - Identification of all major processes for each functional area to create a master inventory of all corporate processes, and preliminary assessment of the adequacy or improvement potential for each functional area according to defined criteria;
  - Preliminary assessment of the impact of improved processes against strategic criteria of reliability, customer service, cost-benefit or transformation potential; and
  - Prioritized list of the entire inventory of process improvement opportunities to re-engineer.

### Management Transition Review of Regulatory, Legal & Government Relations

During the transition period, we will establish effective relationships with government entities and ensure regulatory requirements are met. As part of this effort, we will assess existing regulatory group capabilities and workload, meet with the Administrator and key government leaders to understand and review current priorities and develop plans for government relations and communications outreach.

At the start of transition, we will assess PREPA's existing regulatory group to determine the status of the revenue requirements model and other key tools. We will evaluate how the attrition of key personnel affects the organization and staffing requirements. When the new organizational structure has been designed, we will coordinate with HR on the process of conducting job interviews and extending offers.

We will meet with PREB to understand current regulatory priorities and requirements, establish a schedule for updates during transition and gain Administrator approval of them. Individual dockets will be reviewed as appropriate in coordination with team leads, including the energy efficiency program, net metering, retail wheeling, mini grids, rates and legacy transitions charges. Following review and assessment, we will prioritize workstream activities and develop our improvement plan that includes Environmental, Mercury and Air Toxic Standards (MATS) compliance, legal and community relations.

We will meet with key government leaders and develop a plan for government outreach and other stakeholder communication efforts. The plan will include formulating a list of key officials, influencers



and contacts to communicate messages to as needed for emergent items, developing a strategy for external relations communications and confirming Operator/Administrator interface requirements.

The development of our external relations strategy will include gathering survey data on issues such as the cost of electricity and the residents' ability to pay, their desire for renewables and their perception of PREPA's hurricane preparedness. Gaining this baseline information will help us develop successful messaging to begin delivering during the transition period.

We will share with the people of Puerto Rico the way we intend to manage the T&D system, emphasizing that we are only the caretaker for their system and in 15 years it will again be theirs to manage.

We will begin a large and multi-month effort to reach out to the legislature, mayors, trade associations and other local officials who will want to understand our objectives. We will build supportive coalitions. A specific PR strategy will be developed to support our efforts to communicate with union employees.

In addition to the above, executing our plan will allow us to complete the following efforts during the transition:

- Review digital media efforts;
- Establish contact with state/Commonwealth and federal agencies, local mayors and other elected officials;
- Develop a branding campaign;
- Identify local PR support contractors;
- Develop new communications protocols for external and internal communications;
- Conduct meetings between leadership and trade associations;
- Develop a communications plan for vegetation management activities;
- Plan activities that include local and territory elected officials;
- Build supportive coalitions:
- Develop storylines to highlight the faces of LUMA; and
- Promote the new lineman training center and campus.

Part of our transition period focus will be the legal and regulatory requirements and complexities surrounding planned unbundling of generation. A key priority will be defining a process to interface with the legacy fleet (e.g., necessary contracts, authorizations, performance tracking and regulatory reporting). We will coordinate closely with the regulatory functional team to ensure we are developing a complete perspective and accurate understanding of regulatory priorities.

### Management Approach to Risk & Insurance

Our goal during transition is to make sure we understand the risk management processes that are already in place and build on them to establish best practices to be implemented on day one after commencement.



We will put our recommended team in place to establish processes and procedures that will allow us to meet goals and objectives on schedule. In particular, we will identify if a crisis management plan exists. If not, develop one and make a plan for implementation.

We believe it is important for risk management employees to develop leadership skills and improve confidence in order to better interact with colleagues in other departments. This allows for a greater understanding of all business areas, leading to better understanding of risks across the entire organization. We will begin this process during the transition.

We will provide opportunities for our employees to obtain professional risk management certifications, enhancing their understanding of the overall scope of risk management.

### 3.0 APPROACH TO SPANISH-SPEAKING WORKFORCE

Our transition team has a number of fluent Spanish speakers, including several senior members who have lived and managed businesses in several different Latin American countries including Argentina, Brazil, Colombia, Dominican Republic and Mexico. These senior team members should be able to handle most interactions with senior officials, regulatory or politicians or members of the media when a Spanish language conversation would be more productive. We would anticipate that all higher-level meetings could be led by our native-speaking or fluent non-native senior team members as necessary.

Interacting with the broader Spanish-speaking PREPA workforce does represent some potential challenges, but these can be overcome by our planned approach. For planning purposes, we have categorized the workforce into two groups, first, the office workers in PREPA corporate and satellite offices and second, the front-line employees working in the field or call centers.

For office workers, we expect that many PREPA employees will be able to converse in English similar to what we experienced during our field visits. We realize that employees with whom we met during due diligence may have a higher level of proficiency in English than that of their co-workers. Our team will be cognizant of language skills of the people with whom we meet. When needed, we will engage PREPA employees in small group discussions, where several people are bilingual. In other cases, we may meet with individuals one-on-one, including with one of the translators specifically hired for this purpose.

For interactions with front-line personnel, we would follow a similar approach. We acknowledge that we may not gain the full benefit of the opinion of all front-line personnel. We understand that this may cause some frustration and will consider solutions to address this. We will always try our hardest to make the effort to meet those who want to make their voices heard, such as coming back for a second interview to make sure all employees know we value their input.

For both groups, our transition plan includes a pool of approximately 30 translators that we will contract with from a Puerto Rico-based firm. One of the key features of our bi-lingual communications plan is that we will always have translators available to support interactions. These translators may not all have utility-specific knowledge, but we are confident that they will be able to support workstream members as needed. We anticipate organizing them in a pool, which can be used to



support any transition team member's language need. When possible, we will try to have a translator aligned to specific workstreams, allowing the translator to familiarize themselves with specific aspects of the workstream to be able to translate work specific issues better.

Our plan also recognizes however, that when dealing with language barriers, limitations in fluency can often be overcome with the right approach and attitude from the transition team. When we sent out for an expression of interest among the Consortium's workforce to see who wanted to be considered we received 25 times as many interested responses as we had positions to be filled. Our transition members are being selected because they *want* to come and interact with the employees of Puerto Rico. Many interested candidates expressed their primary motivation as the opportunity to help fix a utility system that needed repair and was not serving customers the way PREPA employees wanted to serve them. The utility industry has a history of collaboration and customer service. Few things are as impressive or personally motivating as when utilities join together to help each other out.

Finally, we recognize our obligation to help our transition members be successful. We will have mandatory internal training sessions for all transition members regarding personal and professional manners and expectations, an orientation on Puerto Rico's history and culture, sensitivity to language issues and how PREPA's workforce are likely to react after five years of working under bankruptcy and receiving a barrage of criticism in the press and from their neighbors. We are also planning on making Spanish-language instruction training available to those of our team members with a more realistic ambition of developing fluency, as well as requiring all team members to attend a Spanish instruction class at least once per week no matter their prospects for fluency. We operate in many countries and it is our experience that almost any attempt to engage in the native language, no matter how poor the language skills of the new-comer, can help break down barriers and almost always build a bridge to communication that can overcome mere vocabulary challenges.



# G. CRITERIA FOR COMMENCEMENT

The criteria for commencement of operations will integrate requirements from a wide range of operational, commercial and legal inputs. We will work collaboratively with PREPA and the Administrator to transition to commencement in an expeditious but realistic time frame. We will do this by carefully scheduling and coordinating these different inputs and working in a structured manner to identify and resolve issues that might arise during the process. The three primary categories of inputs are shown in Figure 8 below.

The previous section described the elements of the management transition plan and how we will be organized to produce the defined deliverables. Most of these deliverables have been specifically identified in Addendum 7 to the RFP. Others, however, reflect our own assessment of what tasks must be completed before we can safely and effectively take over operation of the system.

Our approach will be to divide the transition scope of work into specific teams or workstreams, which are described in later sections of this proposal. These teams will perform both the "Management System-Based" assessments such as gap analysis and business process reviews and the "Asset Condition-Based" assessments, which focus more on asset condition and O&M practices, and typically require broader, asset management-oriented solutions.

Each workstream has its own detailed transition schedule of activities described in Annex II. As the teams complete their reviews, they will produce a series of improvement initiatives to address or rectify what they have found. In some cases, these improvement initiatives might not all strictly be required for commencement, but they will provide benefits and the analysis and documentation completed during transition will still become the basis for longer-term continuous improvement, so it is important to capture this information for future operations.

The content, formatting and documentation requirements for these improvement initiatives will be defined in advance for all teams. Each initiative will be uniquely numbered, tracked and managed as a discrete work package in a database that will feed all the deliverables required for commencement as shown in Figure 8.



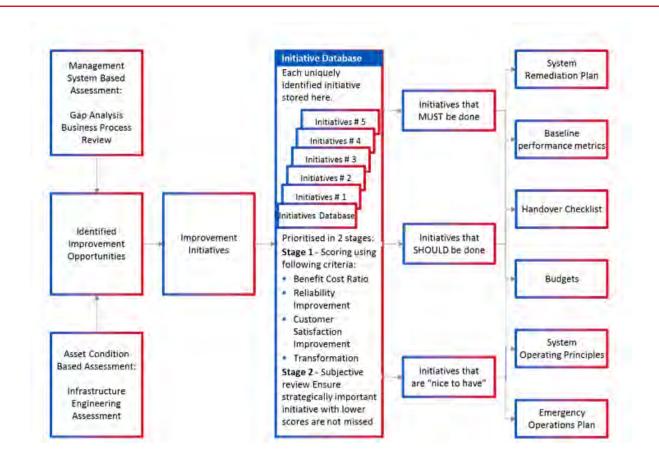


Figure 8: Transition Deliverables

The six deliverables referenced in Figure 8 are those that will be most complex and require the highest degree of interaction in special teams between LUMA and the Administrator, as well as the longest review and approval cycles. In addition to these major deliverables, the following additional deliverables will also be completed during transition:

- Liability waiver: reference Operations and Maintenance Agreement (OMA) Section 4.1 (g);
- Confirmation of acceptable operator security: reference OMA Section 4.2 (c);
- Confirmation of required insurance: reference OMA Section 4.2 (d);
- Emergency response plan: reference OMA Section 4.2 (g);
- Physical security plan: reference OMA Section 4.2 (h);
- **Data security plan**: reference OMA Section 4.2 (h);
- Vegetation management plan: reference OMA Section 4.2 (h);
- Back-end transition plan: reference OMA Section 4.2 (i);
- Employment evaluations: reference OMA Section 4.2 (j);
- **Employment offers**: reference OMA Section 4.2 (k);
- **Shared services agreement**: reference OMA Section 4.2 (I);
- **Periodic reports**: reference OMA Section 4.2 (m);
- **Representations**: reference OMA Section 4.2 (n);
- Any notice of default: reference OMA Section 4.2 (o);



- System contracts and generation supply contracts: reference OMA Section 4.3 (c); and
- Any other conditions precedent or obligations described in OMA.

All required deliverables are specifically identified in our project schedule along with predecessor events and interdependencies with other activities that might affect schedule progress. We anticipate, at a minimum, monthly updates on the status of all deliverables.



#### REPORTING COMPLIANCE Н.

During transition, there are a number of workstreams that will have specific reporting requirements. Our approach to transition is to be as transparent with information as possible and to cooperate with the Administrator on schedule adjustments or work-around solutions as needed. This will include wide-spread circulation of status reports, updated critical path schedules prominently displayed on walls and a web-based reporting system to be deployed on SharePoint with different levels of authorized content available to different people from different organizations.

We will provide status updates on the following.

### Handover Checklist

The Handover Checklist is a key deliverable that has specific update requirements spelled out in Addendum 7. The details of the approach to updating the Handover Checklist is defined in greater detail in Form 1.5 Section 1.L. The Handover Checklist status update will be submitted to Administrator (with a copy to PREB) monthly, on or before the 10th of each month. It will be a written document that describes the progress of each item and an identification of any proposed changes identified by the Operator. The Handover Checklist shall be adjusted, jointly updated or otherwise modified by the Operator and Administrator.

## **Transition Program Schedule**

All scheduled activities have been entered into an MS Project schedule, which is included in Annex II. This schedule contains over 1,300 line items and will be actively maintained with daily/weekly/monthly updates as discussed earlier in Form 1.5 Section 1.F.

### **Transition Program Budget**

The transition budget status will be reported monthly as described in Form 1.5 Section 6.A, which describes the reporting approach and sample reports to be used. Any proposed changes to the transition estimate will be identified and subsequently approved as the need arises.

### Joint Team Deliverables

The major joint team deliverables are identified in Figure 8 (Transition deliverables). For these deliverables, a monthly status report will be delivered to Administrator — with a copy to PREB — that describes overall status, progress during the past period, any emergent issues that could affect deliverables and any necessary actions required to resolve open issues.

### Other Transition Deliverables

The other 16 deliverables identified in Form 1.5 Section 1.G (Criteria for Commencement) will also be assessed in a progress monitoring report as appropriate. It is expected that this report will be a realtime status log which will be available on SharePoint. A person will be identified to manage the status of each deliverable and will be available for any detailed questions or status clarifications that might be required.



# Identification of Key Changes to Any Transition Assumptions

Any key changes to the transition program scope, cost or schedule will be identified and communicated to the Administrator along with reasons for change and actions needed to incorporate changes as needed.



# I. GOVERNMENT APPROVALS FOR COMMENCEMENT

### 1.0 GOVERNMENT APPROVALS

The O&M Agreement requires that the Governmental Approvals necessary for commencement be maintained or secured by the Service Commencement Date. The O&M Agreement states that the applicable permit or approval continue to name the Owner as the permittee or applicant and that ManagementCo only be a permittee, applicant, co-permittee or co-applicant if and to the extent required by applicable law. ManagementCo, Administrator and Owner will work together to achieve these objectives.

We will use a team of experienced local consultants and legal advisors in the area of permitting, including but not limited to land use, environment and energy. This will ensure compliance with all requirements related to Governmental Approvals under the O&M Agreement. Among others, ManagementCo plans to use ERM, a leading global provider of environmental, health, safety and risk consulting services, with offices in Puerto Rico. In addition, we have retained the services of DLA Piper, a global law firm, with offices in Puerto Rico. DLA Piper has experienced lawyers in the areas of land use, environmental and energy law, and commercial and industrial permitting in Puerto Rico. We will use several attorneys who have experience in one or more P3 transactions, numerous complex transactions in Puerto Rico and addressing associated permitting issues, including determining permitting requirements and assisting in implementing permitting objectives.

With the assistance and support of our team of consultants, we will work with the Owner and Administrator to secure the Government Approvals. The approach we will take with respect to Government Approvals is outlined below.

We will have an initial kick-off meeting with the Owner and Administrator's staff who are designated for these tasks. At the kick-off meeting, we will designate permit leads from the Owner and Administrator who will be the primary contacts in this area. The Governmental Approvals team lead from ManagementCo and the permit leads will agree on the schedule of update meetings to be held regularly until tasks are complete.

We will agree on simple procedures for the exchange and review of documents and communications to expedite our work. We will also agree on how to resolve any disagreements among the parties and, if we are not able to resolve them, how to elevate them for resolution.

Our efforts will include the following:

A compliance review of Owner's existing permits, checking that Owner and Owner's facilities
have proper documentation. We will update and fill any gaps from the due diligence done before
Effective Date. We will identify any other necessary permits not currently held by Owner;



- Based on the compliance review, we will evaluate and determine which permits require Operator
  to be a permitee/co-permitee or an applicant/co-applicant for other permits/approvals not held by
  Owner but that must be sought or secured;
- LUMA team lead will create a list of the identified permits that have to be modified or obtained for Operator to start operations. This list will go to Owner and Administrator for their approval;
- Create a permit matrix with schedule, relevant agencies and responsible parties to obtain the applicable approval;
- Meetings with the relevant government agencies that have jurisdiction to ensure timley review and approval; and
- Assisting Owner with reviews and filings.

It is critical that all parties stick to the permit matrix and schedule to meet the timelines necessary to receive the Governmental Approvals within the contemplated schedule and to allow for the Commencement Service Date.

As part of its review, LUMA team and advisors will evaluate the ability to use any expedited permitting approvals, if applicable. Act 21-2019 contains an expedited permitting procedure for P3s under contract. If this procedure is deemed appropriate or beneficial, the parties should meet with Office of Management of Permits to discuss the requirements and procedures.

A summary schedule for these activities is below.

Table 6: Summary Schedule Milestones for Government Approvals

Table No.		ummary Schedule Milestones for Government Approvals TIAL OBSERVATION	TIMEFRAME
1	ре	anagementCo, Administrator and Owner each designate a rmit lead to be the contact person in charge of the requirements Government Approvals. The permit leads will:	Within 2 weeks of the Effective Date.
	a. Have an initial kickoff meeting;		-
	b.	Meet in person or by telephone no less frequently than every two weeks, until the Governmental Approvals tasks are completed;	-
	C.	Agree on procedures for the exchange and review of documents and communications to proceed efficiently and expeditiously; and	
	d.	Agree on the procedures to resolve disagreements among the parties.	-
2.		e Governmental Approvals team will coordinate identifying the overnmental Approvals. These efforts should include:	-
	a.	A compliance check (to evaluate current and recent existing compliance audits and environmental assessments) of Owner facilities, a review of existing permits and associated compliance documentation, and the identification of other necessary Governmental Approvals not held by Owner that must be sought or secured;	From twenty (20) days after the Effective Date until sixty-five (65) days after the Effective Date.



No.	INITIAL OBSERVATION	TIMEFRAME
	b. Based on this review, ManagementCo, Owner and Administrator to evaluate and determine which permits require Operator to be a permittee or co-permittee under the existing permits or be the applicant or co-applicant with respect to other permits/approvals not held by Owner that must be sought or secured and the regulatory requirements and time frame to achieve these permitting tasks; and	From sixty-five (65) days after the Effective Date until eighty-five (85) days after the Effective Date.
	c. ManagementCo, Administrator and Owner to prepare the Permit Matrix of all the identified Governmental Approvals, identifying the permitting agencies, the tasks necessary to meet the permitting objectives, the tasks and responsibilities assigned to Owner, Administrator and ManagementCo and the timeframe to achieve these tasks to meet the permitting objectives by the Service Commencement Date.	From sixty-five (65) days after the Effective Date until eighty-five (85) days after the Effective Date.
3.	ManagementCo, Administrator and Owner evaluate whether any existing expedited permitting procedure may apply to the identified Governmental Approvals and whether to use this procedure.	From sixty-five (65) days after the Effective Date until eighty-five (85) days after the Effective Date.
4.	ManagementCo, Administrator and Owner to meet with any government agencies with jurisdiction over the Governmental Authorizations to discuss any issues related to the substance, procedure and/or timing of the application submittal, review and approval to ensure expeditious review and approval of the Governmental Authorizations. The Permit Matrix should be revised accordingly.	From sixty-five (65) days after the Effective Date until eighty-five (85) days after the Effective Date.
5.	Management Co, Owner and Administrator to assist and coordinate the efforts related to the transfer or assignment or issuance or reissuance of the identified Governmental Approvals. These tasks should include:	From eighty-five (85) days after the Effective Date until one hundred and fifteen (115) days after the
	<ul> <li>Compliance by each party with its respective tasks and responsibilities in the Permit Matrix by the deadlines set out;</li> </ul>	Effective Date.
	<ul> <li>Cooperation among the parties to share any required documents to comply with the Permit Matrix tasks and responsibilities;</li> </ul>	
	<ul> <li>Compliance with the established document review procedures and time frame to ensure the expeditious review and approval of drafts of the required permit applications and other required documentation;</li> </ul>	
	d. Filing or assisting Owner in filing (as applicable) the required applications and other required documentation by the deadlines established in the Permit Matrix; and	
	e. Following up or assisting Owner in following up on the status of the processing and review of filed applications.	
6.	Owner to provide copies of all applications filed to ManagementCo and Administrator promptly upon filing.	Promptly after filing of each application.



No.	INITIAL OBSERVATION	TIMEFRAME
7.	All required Governmental Authorizations to be obtained no later than thirty (30) days prior to the Service Commencement Date. (Permit Matrix should be drafted to ensure this deadline is met.)	No later than thirty (30) Days prior to the Service Commencement Date. [Estimated at two hundred and forty (240) days after the Effective Date.]
8.	Owner and ManagementCo (as applicable) to provide copy of all agency approvals secured promptly upon receipt.	Promptly upon receipt.
9.	ManagementCo will manage ongoing requirements of Governmental Approvals and collaborate with Owner.	Commencing on the Service Commencement Date.



# J. SYSTEM CONTRACTS & GENERATION SUPPLY CONTRACTS

## 1.0 T&D SYSTEM CONTRACTS

LUMA will coordinate the effort with all required parties to identify, review and analyze system contracts required for the operation and maintenance of the T&D system.

We have already completed assessment of some contracts for securing the use of assets. In the identification stage we will leverage the work already done to help us identify systems contracts more quickly, including but not limited to facilities, furnishings, material, supplies, assets, equipment and IT/OT systems facilities.

In addition, we will use this same process for all other contracts, leases, licenses, permits related to the ownership, system operation and maintenance of the T&D system and ancillary services.

Notable inclusions in the system contracts identification process include:

- Interconnection and other related agreements;
- Access to any T&D system site (e.g., rights of way);
- All information technology hardware/software used to operate or administer the T&D system;
- Vegetation management;
- Fleet vehicles and fleet fuel;
- Meters:
- Call centers; and
- Engineering, procurement and construction.

The review will be coordinated through a cross functional team to be referred to as the System Contract Review Committee for the purpose of this initiative. The committee will represent key areas such as: construction, procurement, IT, T&D operations, fleet, customer service, finance, legal services, etc. This committee will be responsible for identifying gaps in absent system contracts, reviewing identified system contracts for compliance with Federal Funding requirements and complete analysis of their respective contracts with the support of the procurement and contract administration team. All members will complete the comprehensive review ensuring the need to operate and maintain the T&D system are met.

The completion of this activity is dependent on gathering of all known system contracts. Throughout the process, the committee will provide monthly status updates to the Owner and Operator.

For those functions the Operator is not authorized to carry out, the Owner will be required to support such requests for information.



## 2.0 GENERATION SUPPLY CONTRACTS

For purposes of generation supply, it is anticipated that all future generation supply will be procured through the GridCo-GenCo PPOA. It is presumed that any future IPP developments will be governed under a PPOA with the future GenCo. Several uncertainties with the restructured generation sector are still undefined (e.g., such as whether there will be one GenCo or multiple GenCos) and will have an effect on generation supply. These questions will be resolved during transition and the negotiation of the GridCo-GenCo PPOA.



# **K. IDENTIFYING & ADDRESSING GAPS**

The identification of gaps will be a critical task conducted by every functional area team during transition. Our overall approach coordinates the Management Systems-based and the Asset Condition-based Assessments described in the previous section. The detailed work steps have been scheduled and are included in Annex II and will be tightly coordinated to ensure completion of all tasks in the available time.

### 1.0 MANAGEMENT SYSTEMS-BASED ASSESSMENT OF CAPABILITIES

Each workstream team will first review its department's capabilities with an assessment of the organization, workforce management tools, training and development and leadership capabilities. Each workstream lead will be responsible for directing the assessment of his or her respective functional area.

This assessment will be coordinated by the CEO (described in Form 1.5 Section 1.C) to ensure consistent methodology, evaluative criteria and level of supporting documentation produced to develop findings and conclusions that can be compared across different departments to identify common macro-level themes. Depending on the results across the organization, there could be fundamental leadership problems or merely the need for some supplemental training in a few areas.

The Management Systems-based Assessment will also provide supporting data to make consistent, fact-based recommendations in areas where site visits identify potential issues, such as:

- Organization design, span of control and ratio of administrative to direct workers;
- Accountability and discipline regarding budgets, expenditures and cost tracking;
- Controls on use of overtime; and
- Workforce development and training to ensure employees can realize their true potential.

Our use of a standardized methodology and evaluative criteria will also help our workstream teams work efficiently and quickly document their conclusions. We will have defined criteria and consistent scoresheets prepared in advance that each workstream lead will complete for his or her area. The Transition Coordinator will ensure that adequate analysis has been performed and documented to support each conclusion.

The workstream leads will focus much of their initial two to three months on analyzing performance gaps and identifying business processes in need of improvement. Among the key deliverables that will result from this effort will be:

- Summary gap analysis looking at organization strengths and weaknesses;
- Assessment of key leaders and managers;
- Understanding of the degree of personal accountability that key managers exhibit regarding procedural compliance, meeting commitments or supporting the overall organization goals; and
- Identification of major business processes to be catalogued and later prioritized for process improvements.



A summary of activities to be performed in the Management Systems-based Assessment is shown below in Figure 9.

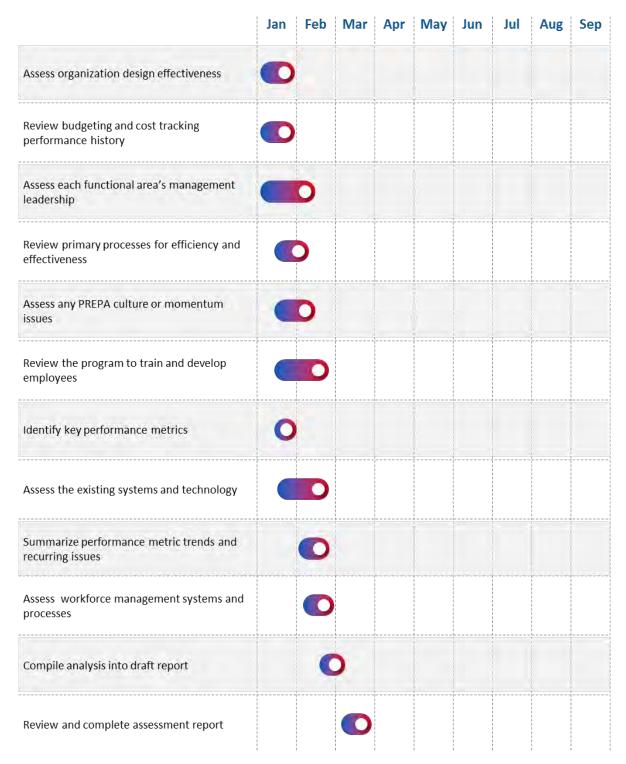


Figure 9: Management Systems-Based Assessment Summary



## 2.0 ASSET CONDITION-BASED ASSESSMENT

Each workstream lead will also review its department's performance history and operational results with a focused assessment of asset condition, O&M practices and asset management strategies. This review will be tailored to each specific department and its relevant technical performance metrics. Team members will observe and question PREPA personnel as they complete their daily tasks either in the office or in the field.

This assessment will be very hands-on. We will interact directly with employees at all levels to learn how they perform their daily tasks and what will make them more effective. The reports and analysis performed by each workstream will be reviewed with each observed employee. We will solicit these employees' input to explain historic performance

### CASE STUDY: GAP ANALYSIS

When a long-time utility customer sought to lower costs by enacting process improvements, Quanta formed a utility-contractor team to identify a series of initiatives. After reviewing all relevant processes and estimating savings, Quanta compiled the initiatives by cost type and presented a range of options, each with different degrees of implementation challenges. In some scenarios, the total potential savings was estimated at up to 50%.

trends or specific incidents. Since most of LUMA team performing this assessment are expected to be the actual managers transitioning to Puerto Rico, this phase also provides us the opportunity to learn the individual strengths and weaknesses of the PREPA employees in each department and to develop relationships with the employees with whom we will be working side by side.

This review will assess the history of those performance metrics identified in the O&M Agreement and will also include several other performance metrics typically used for each functional area. This Asset Condition-based Assessment will review how work is done at PREPA and how those work practices result in the output performance of each department.

It was frequently observed during site visits to Puerto Rico that PREPA employees generally understood the existing problems and had firm ideas about what needs to be done to improve performance but are constrained from implementing solutions due to financial and other reasons. We view the transition period as an opportunity to demonstrate that we are a people first organization that intends to work together with these employees to jointly understand and solve these operational problems. It is also an opportunity to demonstrate our expectations and our emphasis on a level of personal and professional accountability that is likely different from their experience over the past few years. We will spend time identifying internal champions to help lead future improvement initiatives and building these expectations into those individuals' personnel development plans.

Among the key deliverables that will result from this effort will be:

- Detailed engineering assessment of improvement opportunities while conducting O&M activities and developing asset strategies; and
- Analysis required to support inputs to the System Remediation Plan and other joint team deliverables.



### 3.0 COMPILATION OF INITIATIVE DATABASE & ESTIMATE OF COSTS

As the Management Systems-based and Asset Condition-based Assessments are being conducted, the review sheets and performance scorecards will be completed and opportunities for improvement will be identified. These opportunities will be entered into an "initiative database," which will be a master repository for all fieldwork analysis and recommendations. Each initiative in the Initiative Database will be treated as a separate work package which will have a unique work package identifier, consistent structure, documentation requirements, and estimated costs and benefits.

An estimate will be prepared for the costs of each potential improvement initiative. The level of detailed engineering performed for each cost estimate will vary according to the relative priority of each initiative. For example, all initiatives will have a "level one" estimate, more complex initiatives that are likely to be pursued will have a "level two" estimate, and initiatives that are highly likely to be implemented, for example, as part of the System Remediation Plan, will have a "level three" estimate. Each estimate level will have defined criteria for the degree of analysis or engineering to be completed, the expected accuracy range of each estimate, and an identification of key uncertainties in the scope of each initiative.

The deliverables from this effort will be:

- A summary of findings and supporting documentation (compiled into a pre-defined database that will be built to capture key information);
- An initial assessment of the necessary next steps to define gaps (e.g., process mapping and redesign, specific deep-dive analysis and comparison to best practices to quantify impact); and
- A history of the performance of the assessed department, reports or benchmarking performed along with performance metric calculation methodology.

### 4.0 INITIATIVES TO ADDRESS IDENTIFIED GAPS

To leverage the time and effort spent on assessment and analysis, we have designed a structured approach to manage the overall process of initiative development so that each workstream's assessments lead to the prioritization of those initiatives that can address multiple of the deliverables stated above (e.g., The System Remediation Plan, Budgets and System Operations Principles).

As the summary of findings and supporting documentation database is compiled toward the end of the second month, the PREPA employee base will become more involved as they work side by side with LUMA to complete the necessary analytical steps for each finding. During this phase, details of performance gaps will become better understood and quantified so that improvement initiatives for each can be explicitly defined and quantified. In addition, LUMA and PREPA employees will interact closely to understand why certain improvements have not been implemented earlier, determine whether improvements have been tried unsuccessfully in the past and investigate any special circumstances or constraints to change the "as-is" to the proposed "as-should-be" condition. All this information is required to conduct a useful prioritization of opportunities.



### Estimating Benefits from Improvement Initiatives

The first step in prioritizing improvement initiatives is to estimate their impact, which will vary according to their scope. We have identified four different metrics to estimate impact. These metrics, closely aligned with PREPA's overall strategic objectives, are defined below.

The first step in prioritizing improvement initiatives is to estimate their impact, which will vary according to their scope. We have identified four different metrics to estimate impact. These metrics, closely aligned with PREPA's overall strategic objectives, are defined below.

- Metric 1 Benefit-Cost Ratio: The ratio of total estimated financial benefits from an initiative divided by the total cost to implement that initiative.
  - This metric is related to the Affordability strategic objective and is a measure of the relative financial attractiveness of each initiative.
- Metric 2 Reliability Improvement: The reduction in SAIDI or SAIFI
  - This metric is related to the *Reliability* and the *Resiliency* strategic objectives. While other metrics for reliability and resiliency are also relevant, we have attempted to simplify the screening process by restricting ourselves to SAIDI and SAIFI.
- Metric 3 Customer Satisfaction Improvement: The improvement in customer satisfaction
  - This metric is related to the *Customer Centric* strategic objective. Many customer satisfaction metrics are potentially relevant, but we have simplified this measure of impact by restricting it to a simple improvement in expected customer satisfaction scores after implementation.
- Metric 4 Transformation: The corporate cultural changes to be promoted at PREPA
  - This metric is somewhat subjective and will be determined by LUMA as a measure of whether an initiative is related to a core culture value (such as safety) that would elevate its measure of impact.

The other key strategic objective, *Sustainability*, is not used in the initial screening methodology but will become more relevant post-commencement. Sustainability initiatives will need to build upon the established foundation reflected in the four previously listed metrics, so it is difficult to screen the relative impact of a sustainability initiative (e.g., increased utility-scale solar) against the foundation enabler that allowed it (e.g., improved reliability of the transmission system). Sustainability-related initiatives will be reviewed on a case-by-case basis.

### Estimate Timeframe for Initiatives to Deliver Benefits to Ratepayers

The Consortium must quickly improve performance in order to establish expectations among the former PREPA workforce and demonstrate to Puerto Ricans that improvement momentum is underway. As a result, a key factor in our prioritization screening methodology will be how quickly the impact is expected to be achieved. In this way, if multiple initiatives will have an equivalent impact but ratepayers will receive the benefit sooner for one initiative compared to another, then that initiative will receive a higher score and be performed first.

The Consortium will estimate the date of impact (defined as the year the initiative becomes fully implemented) for each of the identified initiatives. Consideration may also be given to the overall size



of the investment for each initiative. At the end of this scoring phase, those projects identified as having the largest impact and being the most rapidly achieved (indicated in Figure 10 by the shaded circle) will become the highest priority projects for that strategic objective.

# Perform Initial screening & prioritization of Initiatives Against Four Measures of Impact

Once the impact and expected timing of achievement have been estimated, this information will be used to develop a composite impact score, which will form the basis of the initial prioritization. At this point, it is expected that the impact scores will be equally weighted, but this might be reassessed with the Owner and Administrator at a later date. After the composite scores have been tabulated, the projects with the highest scores will be deemed highest priority, and the other projects will be scored on an equivalent basis. This step is illustrated in Figure 11 below.

Largest Improvement, Most Rapidly Achieved

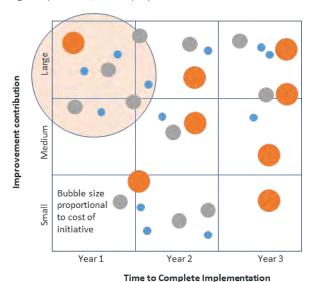


Figure 10: Project Scoring













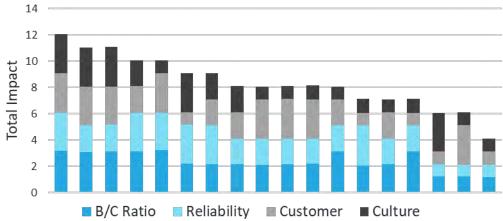


Figure 11: Identifying Highest Scoring Initiatives

### Subjective Quality Review

After the initial screening has been completed, each project will also need be reassessed to validate its relative priority and confirm the initial screening results. This is to ensure strategically useful projects with a lower initial score are nevertheless implemented. It also avoids having to base decisions purely on a score cutoff (i.e. initiative will not have to reply on getting over an arbitrary cut off). This reassessment will be carried out subjectively, rather than quantitatively.

Each ranked initiative will be checked to validate its ranking from the first stage. An assessment will be to see if an alternate interpretation of impacts might boost its score. The purpose of the first stage prioritization is to find out which initiative has the highest impact earliest, in order to implement those first. However, we also need to make sure we have not accidentally screened out any initiative that should be included on the list due to other merits. Finally, initiatives may be reviewed to determine if subdividing the project into two smaller projects might improve its score by delivering a subset of total benefits at an earlier date.



### Implement Post-Commencement Prioritization Methodology

After the full commencement of the Consortium's role in operation, the project prioritization process could be slightly revised. While the same basic approach to measuring and ranking initiative projects will remain the same, there are at least two primary reasons a modified approach might be warranted: First, after the first year of operations, the Consortium will be much more involved in the early scoping and project approval cycle, so there will be significantly more information available about project benefits, which could affect their relative prioritization. Second, there will not be the same relative importance of achieving an impact as early as possible, since most of the near-term triage-type projects will already be underway. In the future, after the initial triage projects have been implemented, project prioritization will be more quantitative and based more on the differences in return on investment between projects.

Evaluate Schedule Dependencies/Constraints across Functional Areas & Develop Integrated Schedule for All Functional Areas

Detailed planning and scheduling will be performed to develop schedules with efficient deployment to achieve impacts as soon as possible. We will review final implementation plan priorities and schedules to ensure they are supported by all stakeholder groups. The next step would be to produce an initial systems requirements document for IT.

After the initiatives have been analyzed and prioritized, we will have sufficient understanding of each to complete all required deliverables (e.g., System Remediation Plan, Handover Checklist).



# L. HANDOVER CHECKLIST

Our initial Handover Checklist is shown below in Table 7. This checklist consists primarily of the major activities for each workstream from the master detailed schedule which is attached as Annex II.

Our plan to manage the Handover Checklist is to continually maintain an updated checklist and submit updates on or before the 10<sup>th</sup> of every month to the Administrator. These updates will include reporting checklist items that have been completed, as well as identifying any checklist items that might have emergent issues or problems that need to be escalated. In addition, if any new emergent items are identified that are not currently known, they will be proposed to be added to the Handover Checklist to be reviewed with Administrator.

The preliminary Handover Checklist is shown in Table 7 below.

Table 7: Preliminary Handover Checklist

PRELIMINARY HANDOVER CHECKLIST ITEM	REQUIRED FOR COMMENCEMENT? (Y/N)	COMPLETED? (Y/N)
I. General & Transition Management		
Government Approvals		
<ol> <li>Plan to Address Gaps in Assets, Technology, Processes, etc. (plan to include cost estimates)</li> </ol>		
PREB Rate Order Filling		
II. T&D Services Milestones		
1.Development and Implementation of an Operations     Takeover Plan for Transmission and Sub-     Transmission Inside and Outside of the Plant		
<ol> <li>Development and Implementation of an Operational Takeover Plan for the Electric Distribution System</li> </ol>		
Development and Implementation of Additional     Take-over plans		
A. Transition Plan for T&D Control Centers		
B. Transition Plan for Operations and Maintenance (O&M) Activities		
C. Emergency Response/Disaster Recovery/Business Continuity Plans		
D. Fleet Management Plan		



PRELI	MINARY HANDOVER CHECKLIST ITEM	REQUIRED FOR COMMENCEMENT? (Y/N)	COMPLETED? (Y/N)
	E. Asset Management (included in 8.		
	Engineering and Asset Management)  F. Workforce Management & Training Plan		
	G. Safety Management Plan		
	H. Engineering and Asset Management		
	Identification of Real Estate		
	Ŭ		
	K. System Operations Plan		
	L. Vegetation Management Plan		
4.	Update Emergency Operations Manual and Business Continuity/Disaster Recovery Plan		
5.	Environmental Exposure Management Plan		
6.	PREB Rate Order Filling		
III. Sy	stem Remediation Plan Milestones		
1.	Remediation Plan Proposal		
2.	Development of Improvement Initiatives		
3.	Consolidate Plans from All Areas		
4.	Development of System Remediation Plan		
5.	Approval of System Remediation Plan		
IV. Cu	stomer Services		
1.	Evaluating Customer Service Facilities and Assets		
2.	Evaluating and Updating Customer Service Policies and Procedures		
3.	Development of a Meter Reading Plan		
4.	Development of a Customer Service Transition Plan		
5.	Development and Implementation of a Service Start and Shut-Off Plan		
6.	Development of a Meter Asset Management (MAM) Plan		



PRELIM	MINARY HANDOVER CHECKLIST ITEM	REQUIRED FOR COMMENCEMENT? (Y/N)	COMPLETED? (Y/N)
7.	Development and Implementation of a Customer Service Technology		
8.	Develop and Implement a Non-Technical Energy Loss Reduction Plan		
9.	Establish Integration Between Customer Services & T&D Ops		
V. IT			
1.	Development of IT/OT Communication Plan and Acceptance Criteria		
2.	Identification and Gap Analysis		
3.	Evaluating IT/OT Applications and Infrastructure		
4.	Development of Cyber Security and Business Continuity Plan		
5.	Development of an IT Asset Management Program		
6.	Development of an IT/OT Transition Plan and Schedule		
7.	Commencement Cutover Planning		
8.	Training and Communication Plan		
VI. Fir	nancial Management		
1.	Detailed Description of Approach to Budgeting and Reporting		
2.	Description of Approach to Complying with Initial Budget Obligations		
3.	Approach to Formalizing Changes to Control Processes		
4.	Establishing a Financial Accounting System and Account Structure		
5.	Preparing Initial Budgets and Other Financial Forecasts		
6.	Establishing Bank Accounts		
7.	Evaluating and Updating Payroll and Labor Cost Reporting systems		



PRELII	MINARY HANDOVER CHECKLIST ITEM	REQUIRED FOR COMMENCEMENT? (Y/N)	COMPLETED? (Y/N)
8.	Establishing a Delegation of Authority Matrix and Process		
9.	Processes & Procedures and Overall Internal Controls		
	MA Funds and Federal Funding Procurement anual		
1.	Set Up Governance Framework		
2.	Policies and Procedures		
3.	Staffing Plan		
4.	Surge Staffing		
5.	Project Worksheet Assessment (also covered under Section 4.3)		
6.	Handoff of Project Worksheet Activity from COR <sup>3</sup> and Vendors		
7.	Project Procurement Planning		
8.	Drafting, Revising and Finalizing Federal Funding Procurement Manual		
VIII. St	affing for Front-End Transition Period		
1.	Draft, Revise and Finalize Operator Employment Requirements		
2.	Recruiting and Staffing		
3.	Redesign and Staff New Organization		
4.	Proposed Recruitment and Staffing Plan		
5.	Stand Up Human Capital Management (HCM) System		
6.	Communication Plan		
7.	Training (Workforce Development) Plan		
8.	Develop Employee Retirement Plan		
9.	Occupational Health and Wellness		
10.	Compliance Plan		
11.	Engagement Plan		



PRELI	MINARY HANDOVER CHECKLIST ITEM	REQUIRED FOR COMMENCEMENT? (Y/N)	COMPLETED? (Y/N)
12.	Develop a Community Investment Plan		
IX. Ad	ditional Front-End Transition Period Activities		
1.	Genco Shared Services Agreement Approval		
2.	Emergency Response Plan Approval		
3.	Non-Federal Funding Procurement Manual Approval		
4.	Physical Security Plan Approval		
5.	Data Security Plan Approval		
6.	Vegetation Management Plan Approval		
7.	System Operation Principles Regulatory Approval		
X. As	sset Acquisition (Supply Chain)		
1.	Evaluating Existing Procurement and Subcontracting Policies, Procedures and Systems		
2.	Assuming Responsibility for Securing Use of Assets, Facilities, IT / OT, etc.		
3.	Assuming Existing Subcontracts		
XI. Ba	ack-End Transition Plan		
1.	Develop Back-End Transition Plan		
	ont-End Transition Plan (Additional quirements)		
1.	Confirmation of Acceptable Operator Security		
2.	Required Insurance		
3.	Baseline Performance Levels		
4.	Back-End Transition Plan		
5.	Representations		
6.	Operator Representations and Warranties		
7.	Section 4.3: Owner and Administrator Responsibilities		
8.	Owner Representations and Warranties		



PRELI	MINARY HANDOVER CHECKLIST ITEM	REQUIRED FOR COMMENCEMENT? (Y/N)	COMPLETED? (Y/N)
9.	Section 4.4 Governmental Approvals		
10.	Section 4.5: Conditions Precedent to Service Commencement Date		
11.	Section 4.7: Closing the Front-End Transition Period		
12.	Service Commencement Begins		



#### INITIAL RATE CASE $M_{-}$

The O&M Agreement states that ManagementCo will prepare the Initial Budgets "as soon as practicable" after the effective date. In parallel to preparation of the initial budgets, our regulatory team will begin to review the latest rate order from PREB and prepare the materials for the initial rate order. This effort will require close schedule coordination between multiple teams at PREPA, the Administrator and the Consortium. We will plan to work closely with PREPA's regulatory team to understand how they integrate the budget process and rates. We also plan on having an initial meeting and regular communication with PREB to assure that we are taking into account their requirements for the initial rate filing and liability waiver process and the material that PREB expects ManagementCo to submit.

We anticipate working with the PREPA and Administrator teams to make sure that there is timely input to their preparation of PREPA's FY2021 Fiscal Plan. We intend to incorporate the relevant information available from the federal funds requests, and in general the capital expenditures plans, into the material for the initial rate request.

Soon after the effective date, the Consortium regulatory team will organize a kick-off meeting for preparation and submittal of the initial rate order. At the kick-off meeting we will designate rate case leads from the Owner and the Administrator, who will be the primary contacts in this area.

With an effective date in mid-January, our plan forecasts that we will complete the initial budgets in June. The rate order team will work closely with PREPA and, in parallel where possible, with the team preparing the initial budgets. We will review the last rate order submittal materials and order with the PREPA regulatory team. After discussing with PREPA's regulatory team we may request assistance from PREPA's consultants involved in the last rate order. Our team will also prepare the liability waiver that will be included in the request for the rate order and is a condition precedent for Commencement.

Where appropriate, we expect to receive input from the Consortium's regulatory experts and Puerto Rico experts. With the assistance and support of our team of consultants, we will work with the Owner and the Administrator to submit the initial rate order and be responsive to any comments from PREB.

A summary of the major activities for the initial rate request process is below.

- Initial kick-off meeting with the Owner and the Administrator's staff who are designated for these tasks:
  - o The Consortium, Administrator and Owner each designate a lead to be the contact person in charge of the requirements for the initial rate case:
  - o Agree on procedures for the exchange and review of documents and communications;
  - o Agree on additional resources needed for reviews of last rate case and of other materials:
- Early meeting with PREB to receive feedback on process and materials that will be required;
- Review materials for liability waiver;



- Work in parallel to prepare initial budgets with cost of service model and review other regulatory materials;
- Upon completion of initial budgets, determine rate impact, if any, and prepare filing materials;
- Complete materials for liability waiver;
- Upon Administrator approval of initial budgets, submit initial rate order; and
- Submit to PREB for approval and follow process to conclusion including receipt of initial rate order with liability waiver.



# N. PROPOSED PROFIT MARGIN - CONFIDENTIAL

The entirety of Form 1.5 Section 1.N is Confidential





## 2. T&D SERVICES MILESTONES



#### Overview of Scope & Schedule

The T&D group will be one of the largest teams during the transition in terms of the number of people involved and sites and facilities visited. The primary critical path activities that determine the schedule for the T&D transition program are as follows:

- Use the data in the Intralinks data room to the extent practical;
- Incorporate the Sargent & Lundy Conceptual Transmission and Distribution 10-Year Capital Investment Plan for Reliability and the GridMod Plan Courses of Action including the Next Steps into the take-over planning and System Remediation Plan;
- Meet with T&D operations leadership to obtain their input into asset condition and priority;
- Visit and assess the large number of critical physical sites and assets throughout Puerto Rico;
- In conjunction with the PREPA T&D leadership, meet with the local contractors who provide maintenance service to PREPA to obtain their input into the health of the assets they provide maintenance on and to assess their resource capacity;
- Time required to interview and assess the large employee base currently in T&D and to reorganize and staff the new T&D organization;
- Time required to conduct a thorough assessment of all capital and O&M work requirements and to identify, quantify and prioritize improvement initiatives; and
- Completion of key work products needed to ensure no impact to reliability or resiliency after commencement (such as the Emergency Response Plan, see Form 1.4 Section 1.J).

A written narrative of the transition program activities is included in the following pages, and the more detailed project schedules are in Annex II.



# A. OPERATION TAKE-OVER PLAN: TRANSMISSION & SUB-TRANSMISSION ASSETS

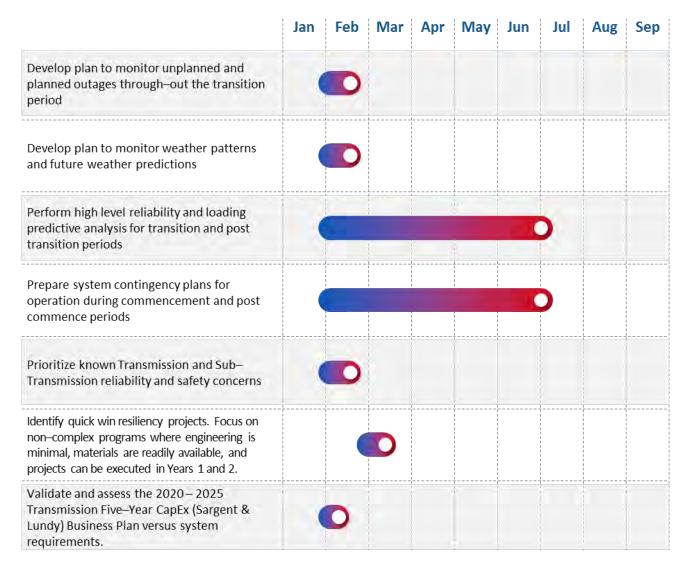


Figure 12: Transmission and Sub-Transmission Gantt Chart

Using our experience and knowledge of operating, constructing and maintaining various transmission systems, we have identified the following steps for the successful takeover of transmission and subtransmission inside and outside plants across the PREPA system:

 Use the Sargent & Lundy Conceptual Transmission and Distribution 10-Year Capital Investment Plan for Reliability, Section 4 and the GridMod Plan, Sections 3 and 4.1 as the foundation to develop the Transmission & Sub-Transmission sections of the take-over plan;



- Perform a system condition assessment through physical inspections of substations, including
  protection and control, transmission and distribution line equipment and supporting
  infrastructure. This review will include identification of critical safety and reliability issues and the
  development of plans to address them. In areas such as substations, this may be done in
  conjunction with environmental reviews;
- Meet with local contractors to obtain their input and assess their resource capacity;
- Identify quick-win resiliency projects. Focus on non-complex programs where engineering is minimal, materials are readily available and projects can be executed in the first two years (e.g., wood pole replacements and guy and anchor replacement/repair);
- Obtain outlines of the transmission circuit and sub-transmission maintenance plan, transmission substation maintenance plan and maintenance completion rate. Determine if these planned programs have been deployed and develop a strategy using our experience to bring the plans current;
- Validate and assess the 2020 2025 Transmission Five-Year CapEx (Sargent & Lundy)
   Business Plan vs. system requirements;
- Determine if life cycle plans have been established for all critical assets;
- Develop a vegetation management program as follows:
  - Evaluate the progress of the existing awarded tender for vegetation management services and select a field-enabled vegetation management system;
  - Conduct a condition assessment on critical sites and assets,. Assess the need to widen or conduct reclamation work on the existing right of way (ROW). Produce preliminary work schedules;
  - Plan for steady-state preventative maintenance on the transmission system based on the principles of Integrated Vegetation Management (IVM); and
  - Develop contracts for specialized IVM services (e.g., mechanized mowing/cutting, herbicide applications) and identify capable service providers. Evaluate and select appropriate herbicide formulations and application methods; and
- Develop a plan for a formalized transmission infrastructure and substation equipment locking program that includes the following:
  - Replacement of equipment locks and other security devices used for substations and other transmission infrastructure (e.g., substation fences, control cabinets, operating handles); and
  - Documentation to support tracking and distribution of keys; and
- Evaluate PREPA's telecommunications plan as follows:
  - Review the existing plan for improving, expanding and modernizing telecommunications, focusing on opportunities to bundle with other capital work, gap identification and mitigation;
  - Inventory and document the existing fiber optic and microwave infrastructure. Determine the fiber connections available for secure utility applications;
  - Analyze the availability and performance of existing communications equipment at substations; and
  - Determine the functionality and locations of boundary metering points (generation and transmission interface points).

Completing and documenting the items identified in the transition checklists will assist us in identifying potential risks during the transition so that they can be eliminated or mitigated after commencement.



#### **OPERATION TAKE-OVER PLAN: ELECTRIC** B. **DISTRIBUTION SYSTEM**

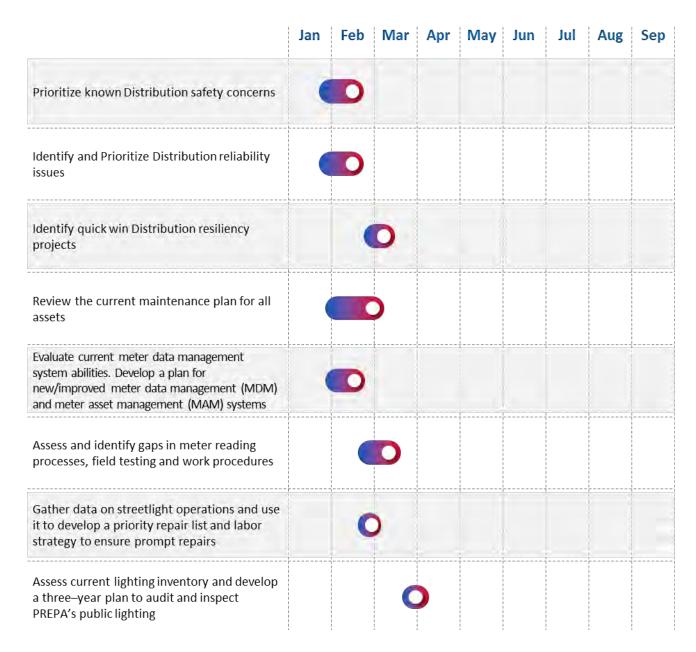


Figure 13: Electric Distribution Gantt Chart

Using our experience and knowledge of operating, constructing and maintaining various distribution systems, we have identified the following steps for successful takeover of the complex PREPA distribution system:



- Use the Sargent & Lundy Conceptual Transmission and Distribution 10-Year Capital Investment Plan for Reliability, Section 3 and the GridMod Plan, Section 4.2 as the foundation to develop the Distribution section of the take-over plan;
- Meet with local contractors to obtain their input and assess their resource capacity;
- Perform a system condition assessment through physical inspections of distribution lines and supporting infrastructure, including transformers, substations, line equipment, metering and public lighting. Develop a strategic plan to address the critical hazards identified, keeping employee and public safety and operational costs as the top priorities;
- Identify quick-win resiliency projects. Focus on non-complex programs where engineering is minimal, materials are readily available and projects can be executed in the first two years (e.g., wood pole replacements, guy and anchor replacement/repair, adding fusing and reclosers/sectionalizers);
- Develop a staged plan to automate the distribution system and some areas on the 38 kV subtransmission system, initially through the use of reclosers, auto-transfer and other sectionalizing equipment to reduce customer exposure to outages;
- Obtain 2019 and 2020 year-to-date customer outage complaint forms. Review this data to develop future CapEx system improvement projects in key areas;
- Validate and assess the 2020 2025 Distribution Five-Year CapEx (Sargent & Lundy) Business Plan vs. system requirements;
- Review the current maintenance plan for all assets. Determine if the planned programs have been deployed and develop a strategy using our experience to bring the plan current;
- Determine if there are established life cycle plans for all critical assets and plans for critical spares;
- Develop a plan for a formalized distribution infrastructure and substation equipment locking program that includes replacement of equipment locks and other security devices used for substations and other distribution infrastructure (e.g., substation fences, control cabinets, operating handles);
- Develop a vegetation management program as follows:
  - Evaluate the progress of the existing awarded tender for vegetation management services and select a field-enabled vegetation management system;
  - Conduct a direct physical vegetation condition assessment on critical sites and mainlines on the distribution system;
  - Plan for steady-state preventative vegetation maintenance on the distribution system based on the principles of Integrated Vegetation Management (IVM);
  - Develop contracts for specialized IVM services (e.g., mechanized mowing/cutting, herbicide applications). Identify capable service providers; and
  - Evaluate and select appropriate herbicide formulations and application methods;
- Develop a priority repair list and labor strategy for streetlights. Complete a light patrol in densely populated and high-volume traffic areas and obtain the following data:
  - A streetlight outage report from T&D operations; and
  - Lighting complaints from Customer Service;
- Create an inventory of lights that have been changed to LED compared to existing high-pressure sodium lights across the system. Develop a list of proposed LED change-outs and prioritize areas based on population density, traffic volume and frequency of customer complaints. Review



- and understand the seven existing awarded contract tenders versus internal manpower complement (LED Conversion Project); and
- Assess current lighting inventory and develop a three-year plan to audit and inspect the existing public lighting. The plan will include the identification of systems and tools for field personnel to gather field data such as billing information, asset data, unique asset identifiers and mapping data.

The completion and documentation of the items identified in the transition checklists, including identification of areas where gaps exist, will assist us in identifying potential risks during the commencement and takeover periods.



### **OPERATION TAKE-OVER PLAN REQUIREMENTS**

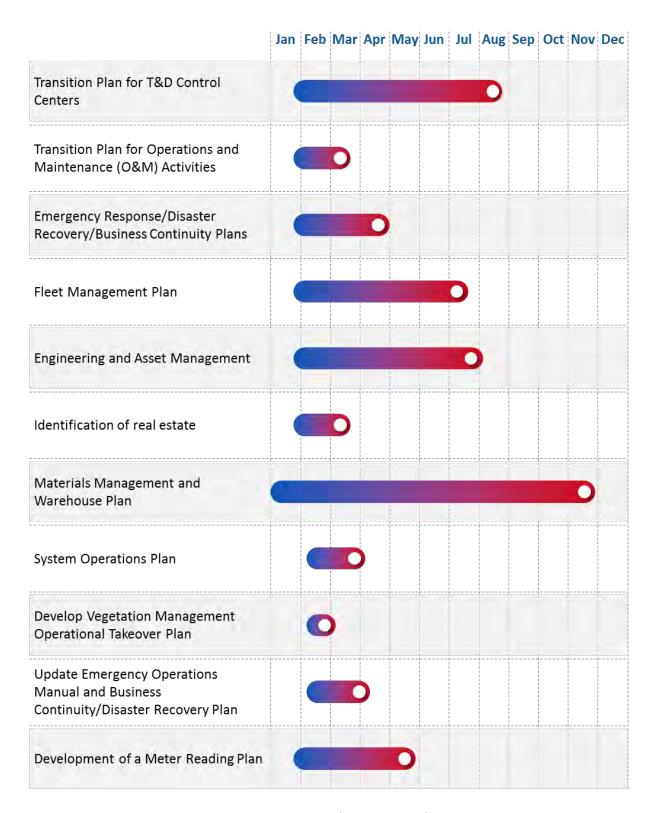


Figure 14: Operation Take-Over Gantt Chart



We conducted a thorough due diligence investigation to ensure a smooth, safe and system-secure transition in the identified general topics that support transmission and distribution operations.

#### 1.0 CONTROL CENTER TRANSITION PLAN

- Use the GridMod Plan, Section 5.3, System Operations, as the foundation to develop the Control Center section of the take-over plan.
- Validate and assess all T&D control center grid monitoring and control functionality as well as inventory of automated devices and SCADA real-time database.
- Review and assess the functionality of vendor support contracts in association with T&D control center applications that could affect system monitoring and control for safe, reliable power delivery.
- Evaluate the energy management systems (EMSs): real-time data, model/data integrity, state estimator, simulator/training and study mode.
- Assess the physical condition of transmission control centers, including backups (located in Ponce). Develop a plan for modernizing facilities, including rebuilding, relocating and hardening existing facilities.
- Evaluate distribution operations and backup control centers. Understand how the five control centers support each other. Develop a strategy to improve continuity of service and customer service.
- Document and assess the Under-Frequency Load Shed Program.
- Evaluate the following:
  - T&D outage planning procedures;
  - The system operator training program and competency assessments;
  - Electrical operating standards (loading, redundancy, interconnectivity, etc.); and
  - The restoration plan (black start).

#### 2.0 O&M ACTIVITIES

- Use the GridMod Plan, Sections 5.1 and 6.1 as input to develop the operational efficiencies section in the take-over plan.
- Implement a reliability improvement program that focuses on processes to restore customers' service quickly (switch before fix), prioritization of customers to restore, vegetation management, automation, data cleansing, animal protection and inspection and maintenance activities.
- Conduct a review of field and operations communications protocol as follows:
  - Review dispatch procedures, voice communication protocol and all communication hardware (radios, phones) to ensure equipment is in working order, authority to direct field activity is understood and phrasing is consistent; and
  - Identify gaps and develop a prioritized plan for closing them.

## 3.0 EMERGENCY RESPONSE, DISASTER RECOVERY & BUSINESS CONTINUITY PLANS

 Utilize the GridMod Plan, Section 6.3 as input to develop the Emergency Response section of the take-over plan.



- Assess the emergency response/business continuity management plan and implement identified improvements:
  - Review and understand PREPA's new ERP/BCMP, identify gaps and develop a plan to mediate short-term gaps;
  - Develop an interim Emergency Response Plan (ERP) to address storm/hurricane season, including interim Incident Command System (ICS) structure, mutual aid and resource plan;
  - Develop hurricane damage scenarios for years 1-5 and estimate manpower requirements.
     Develop plan to meet manpower requirements;
  - Assess mutual aid agreements and meet with mutual aid signatories to assess mobilization, improvements to mutual aid agreements, etc.;
  - Communicate with public/governmental parties, customers and employees. Develop relationships with the Puerto Rico Emergency Management Agency and local Emergency Management;
  - Review ERP employee training. If none is available, develop training for key response team;
     and
  - Review emergency materials levels.

#### 4.0 FLEET MANAGEMENT PLAN

- Reference the Sargent & Lundy Conceptual Transmission and Distribution 10-Year Capital Investment Plan for Reliability documentation in Appendix G.1.2 for vehicle replacement inventories.
- Assess the current Fleet Management Information System (FMIS):
  - Investigate the current FMIS. Determine if it can be used as a go-forward system. If the system is insufficient, investigate an alternative option. The system must have specific capabilities to manage fleet operations effectively; and
  - Obtain and review current fleet preventive maintenance programs, tracking and warranty management. From the identified gaps, implement our top-tier fleet asset management strategy and program.
- Obtain an inventory listing of vehicles by function and work group, including information on vehicle status and any abnormalities noted. Assess the current fleet to ensure it is in safe and roadworthy condition. Review fleet change-out practices and potentially set up a fleet pool financial mechanism
- Ensure vehicles are properly insured and registered.
- Assess effectiveness of shop operations and ability to coordinate in-house and thirdparty services. Identify opportunities to improve efficiency and productivity.
- Evaluate current suppliers (parts, vehicles, equipment, etc.). Use these findings to identify opportunities to leverage long-term suppliers to increase buying power.
- Review the current GPS/telematics system from a fleet management, field operations, employee/public safety and crew dispatch perspective. If gaps are identified, develop an implementation strategy for future GPS/telematics deployment across the fleet.
- Review fuel procurement, fuel cards and tracking systems.



 Investigate/audit the aviation program, pilot accreditation, helicopter fleet health, maintenance program and record-keeping against U.S. Department of Transportation requirements. If gaps are identified, develop an immediate plan to mitigate them.

#### 5.0 ASSET MANAGEMENT PLAN

Our approach to asset management focuses on ensuring prudent and efficient expenditures and delivering affordable, reliable service. We believe in supporting asset management with a robust, structured and transparent planning and governance framework that ensures decisions are well-informed and consistent with regulatory requirements, corporate strategies and good industry practice.

The asset management system we propose adopts a systematic and coordinated approach toward sustainably managing assets and their performance, risks and expenditures through all phases of the life cycle. A more detailed description is included in Form 1.5 Section 2.C.8.0.

#### 6.0 WORKFORCE MANAGEMENT & TRAINING PLAN

- Use the GridMod Plan, Sections 3, 5.2 and 6.1 as inputs to develop this section of the take-over plan.
- Develop an employee talent management plan to support workforce management.
- Understand the type, volume and timelines of work across all T&D operations. Identify required skill sets.
- Develop training curriculum as necessary.
- Identify gaps in workforce competencies and train skilled employees to fill them.
- Monitor productivity. Implement improvements to increase job satisfaction, productivity and safety.
- Assess scheduling and resource planning capabilities as follows:
  - Assess how work is prioritized, scheduled, dispatched and resourced, with consideration of the types of systems used, where accountability lies and material planning (with a focus on identifying gaps); and
  - Develop a strategy resourcing plan for non-complex work vs. complex work based on resource capabilities.
- Implement initial training facility improvements:
  - Identify and develop employee cross-training opportunities to lower operating costs, minimize travel and increase customer responses.



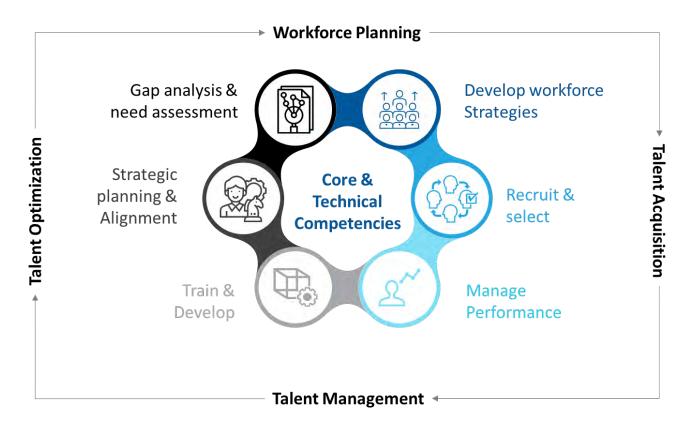


Figure 15: Workforce Management and Training Plan

#### 7.0 SAFETY MANAGEMENT PLAN

Safety is one of our core values, and we believe it is our job to complete every task without incident or injury. Our most valuable asset is our employees, and there is nothing more important than our employees making it home safely. Throughout the transition period, our priority will be the safety of employees. We will closely observe crews and escalate any immediate safety-related issues to Safety and Health leadership.

We perform complex work in a variety of settings around the world. We will draw from these experiences to assess, analyze, and build a plan of action for workforce safety and health and public safety programs.





Figure 16: Safety Management Plan

After assessing the information gathered from the Confidential Information Memorandum (CIM), statistics and employee interviews, we have determined that the current PREPA safety culture is weak and requires an immediate focus. At the beginning of the transition period, we will investigate and identify the serious gaps where we will focus on instilling our strong safety culture in our new teams. The following are our main priorities during the transition period.

- Make safety and health improvements as follows to achieve compliance with Occupational Safety and Health Administration (OSHA) and industry best practices:
  - Assess the existing DuPont incident management systems. From the gaps identified, develop enhanced safety and health management plans that include notification procedures, injury management protocols and incident investigation training and requirements;
  - Review historical incident data. Develop trends and key focus areas for immediate implementation;
  - Conduct a baseline assessment and gap analysis of all work locations;
  - Conduct field assessments and review and assess all written safety and health programs.
  - Develop an improvement plan to address gaps. This plan will be implemented after the commencement date based on level of urgency and impact to immediately increase employees' safety and health; and
  - Investigate the current status and establish refreshed safety and health metrics and leadership accountability to drive positive safety culture from the top down (leading by example);
- Use our proven practices to develop a world-class organization for the existing Safety and Health Group:
  - Use the job descriptions established in coordination with Human Resources as part of the interview process to enhance transparency and ensure we select candidates with the necessary skill sets; and



- Complete a gap analysis on the existing safety and health employee teams and develop a
  plan to supplement with our expertise until all future-state organizational structure roles have
  been filled with local employees;
- Assess and establish a baseline of current public safety program initiatives and internal resources as follows:
  - Prioritize initiatives that will have the most significant impact and develop a five-year strategic plan;
  - Use electrical utility industry best practices to develop and distribute reference materials to promote public safety; and
  - Plan initiatives such as a "call before you dig" campaign, electrical safety awareness events with groups such as first responders and contractor associations, and electrical safety programs in schools; and
- Assess written safety and health programs as follows:
  - Conduct a baseline gap analysis of all written safety and health programs, DOT Driver's Compliance Program, Industrial Hygiene Program, and the Contractor Safety Management Program;
  - Conduct a comprehensive field operational process assessment, assessing work methods, electrical operations standards, grounding practices, lockout/tagout, tools and equipment and inspection;
  - Develop an improvement plan to address gaps. This plan will be implemented over one to five years following the commencement date. It will be based on priority and urgency, aiming for immediate positive impacts on employees' safety and health; and
  - Assess current practices to manage high-hazard risk tasks during the job planning process.

#### 8.0 ENGINEERING & ASSET MANAGEMENT PLAN

- Use the GridMod Plan, Section 6.1 as input to develop the asset management section of the take-over plan.
- Assess the existing Computerized Maintenance Management System (CMMS) and define a preventative maintenance program:
  - Review the existing methods and systems used to document asset information, inspection data, and corrective maintenance as well as scheduling of maintenance, with a focus on currently existing systems; and
  - Develop a best-in-class maintenance management program to formalize the preventative maintenance program for T&D assets.
- Develop a screening process for potential microgrid locations, including measuring customer engagement, evaluating and prioritizing potential sites, and developing interconnection processes.
- Develop a plan to improve resiliency that focuses on hardening of flood-prone substations and developing industry-aligned construction standards for hardening T&D infrastructure.
- Assess system forecasting capabilities as follows:
  - Assess distribution system load, distributed generation, energy efficiency, storage, demand response forecasting process, and tools versus industry best practices; and
  - Assess and evaluate LoadSEER software for load forecasting.



- Assess power flow processes and tools for initiation, prioritization, sponsorship and stewardship of projects. Identify gaps and develop a prioritized plan for closing them.
- Assess T&D system planning criteria, outlining philosophies for equipment loading, circuit configuration and attributes, substation configurations and integration of automation and monitoring. Identify gaps and develop a prioritized plan for closing them.
- Review and assess interconnection processes as follows:
  - Assess existing standards and guidelines for interconnection of distributed energy resources (DER). Develop a plan for creating and maintaining DER hosting capacity maps at the distribution feeder level. Identify gaps and develop a prioritized plan for closing them; and
  - Assess the process for new extensions.
- Develop an asset management policy that includes a strategy to plan and execute programs and manage assets that may be FEMA funded. Evaluate the components necessary for the development of a strategic asset management plan that specifies the following:
  - How to convert organizational objectives into asset management objectives;
  - The approach for developing asset management plans; and
  - The role of the asset management system in supporting achievement of asset management objectives.
- Review SAIFI/SAIDI/CAIDI/MAIFI/CEMI past performance and validate the data between 2012 and present for accuracy. Review data cleansing methods and identify the departments and employees responsible for tracking metrics. Review outages by cause, identifying the worst-performing circuits. Review details on how metrics are calculated and benchmark against the Institute of Electrical and Electronic Engineering standards.

#### 9.0 REAL ESTATE

To initiate operational take-over of T&D real estate, LUMA will review existing T&D-occupied and T&D/Generation co-occupied facilities to determine whether to continue use of the facility. This will be determined by the business need of key operating departments.

We will then conduct a thorough review of existing real estate agreements, abstract leases, critical dates, etc. This will allow LUMA to determine which properties are leased versus owned and which properties are occupied (i.e., contain tenants as opposed to being a laydown yard for materials). Working with our Environmental team, we will ensure that Phase I Environmental Site Assessments (ESA) on all leased, owned and occupied properties are conducted. Based on these Phase I ESA results and appropriate risk reviews, we will finalize which properties have been identified as real estate to be used by the Operator.

Upon identification we will negotiate, draft and execute leases on properties occupied but not under a contracted agreement. This includes any leases that may expire during the Transition Period. If lease assignments or subleases are required or if lessee entity is to change, we will draft agreements and execute. We will also identify any properties that need to be disposed of and develop a strategy to assess costs associated with disposition of such selected properties.



#### 10.0 MATERIALS MANAGEMENT & WAREHOUSE PLAN

We will use the GridMod Plan, Section 6.2 as input to develop this section of the take-over plan. During the transition, we will engage a due diligence process to identify existing personnel, facilities, equipment, functions, processes and procedures. After the existing items have been identified, an evaluation will be made to determine if the current state is adequate or if a change is required. As part of this evaluation, consideration will be given to the resources needed, the cost involved, the risk to operations, and the time involved to make the change. After the evaluation is complete, recommendations and implementation plans will be submitted for review. If concurrence is reached, the recommendations will be implemented according to the plan.

Table 8: Materials Management and Warehouse Milestones

#### TRANSITION - DUE DILIGENCE EVALUATION STAGE

ACTIVITY	ESTIMATED TIMELINE	METHOD
System Capabilities and Limitations	3 months	Test reporting and transaction functionality
Inventory Staff	1 month	Interviews, feedback and past performance
Warehouse Staff	4 months	Interviews, feedback and past performance
Warehouse Level and Location		Service area and distance from Level 1 warehouse
Warehouse Capacities and Limitations		Dimensions, racking, shelving, yard space and safety
Warehouse Equipment Capabilities and Limitations	6 to 12 months	Lift weight, indoor vs. outdoor, and safety
Warehouse Yard Environmental Condition		Soil testing
Catalogue	3 months	Standard description format, number of SKUs
Hazardous SKU Review	1 month	PCB Content, Explosives, Oil and Other Lubricants

#### TRANSITION - ENGAGEMENT AND IMPLEMENTATION STAGE

ACTIVITY	ESTIMATED TIMELINE	METHOD
Due Diligence Evaluation Recommendations Execution	TBD	Business collaboration
Process Refinement	2 months	System capability, user and business collaboration
Training (System and Equipment Operation)	2 months	Skype* and site sessions (*recorded for future reference)
Process Adoption	2 months	Business sign off, training reinforcement, KPI data analysis
KPI data	1 month	Collaborate with business on how it is collected and calculated
System Access Restrictions	1 month	Position, process and location required access only
Inventory 'In Hand' Confirmation	1 month	Site Physical Counts – 3 <sup>rd</sup> party or with business



#### 11.0 SYSTEM OPERATIONS PLAN

We will use the GridMod Plan, Section 4, 5.3 and 6.2 as inputs to develop this section of the take-over plan. Our operational take over plan of System Operations will consist of a number of comprehensive reviews.

The first will be a comprehensive review of safety related equipment, including rubber goods, voltage testers, hot sticks, personal protective equipment, to ensure OSHA standards are met and workers can perform their functions safely.

This review will encompass:

- Safety equipment at all locations and fleet;
- Testing of the safety equipment;
- Work methods; and
- Procedures.

Gaps and deficiencies will be identified, and a plan will be developed to address them. Additionally, tools and equipment used to perform specific tasks, such as equipment testing, cable pulling, conductor splicing, pole setting, and material handling, will be reviewed to understand and determine where opportunities exist to align with industry best practices.

The second will be a review of field and operations communications protocol to include:

- Dispatch procedures;
- Voice communication protocol; and
- All communication hardware (radios, phones).

This will ensure that the equipment is in working order, authority to direct field activity is understood, and phraseology is consistent. Gaps and deficiencies will be identified, and a plan will be developed to address them.

The third will be a review to assess resources responsible for day-to-day T&D infrastructure maintenance and operations. This review will focus on the groups that install, maintain and operate overhead/underground/substation distribution and transmission plant facilities. This review will allow us to understand the roles and responsibilities of:

- Schedules:
- Call out procedures;
- Scheduling of work and materials;
- Time keeping;
- Initial responders to outages;
- Alarms:
- Alerts:



- Equipment trouble; and
- Customer concerns.

This review will be conducted on each operating platform to ensure the necessary processes listed above are in place. Gaps and deficiencies will be identified, and a plan will be developed to address them. This review will allow us to gauge whether operations platforms are consistent in their operating practices and determine where opportunities exist to align with industry best practices.

We will implement a formalized substation and T&D equipment locking program to replace the existing locks and document and track key distribution. In addition, there are aspects of systems operations that relate to dispatch, voltage/Var support, and interactions with the generation fleet, which are discussed in greater detail in 1.5.9.B – Systems Operations Principles.

#### 12.0 VEGETATION MANAGEMENT PLAN

During the transition, we will engage a due diligence process to identify existing vegetation management personnel, equipment, functions, processes and procedures. We will also do an assessment of the current state of the T&D system using the provided Lidar data, publicly available imagery, system maps, employee and contractor knowledge as well as existing outage data. During our diligence period, we performed a spatial analysis of current remote sensing imagery and detailed (2m2) data. Our analysis included information related to vegetative cover (e.g., types, densities, heights), land use, access, and slopes to initially forecast the resources that will be required to effectively manage PREPA's T&D ROWs. As Identified in Form 1.5 Section 9.A.6, a team of industry-leading SMEs will be engaged to complete this complex assessment and planning exercise function.

As part of this evaluation, consideration will be given to the resources needed, the cost involved, the risk to reliability, and appropriate schedules to ensure timely implementation and alignment with the System Remediation Plan. After the evaluation is complete, recommendations and treatment plans will be developed along with the required budget estimate.

Our vegetation management plan for the transition phase includes the following:

- Develop a detailed outline;
- Select field-enabled work management system;
- Conduct vegetation condition assessment on critical sites and assets;
- Use LiDAR on the T-system and directly inspect the D-system;
- Assess the need to widen or reclaim existing rights-of-way and produce preliminary work schedules to do so:
- Plan for steady-state vegetation maintenance based on the principles of Integrated Vegetation Management Plan (IVM);
- Conduct assessment of future need for vegetation management support for capital expenditure projects:
- Develop contracts for specialized IVM services (e.g., mechanized mowing/cutting, herbicide applications, identify capable service providers);



- Create interface documents and service level agreements with key stakeholder support organizations (e.g., engineering, call center, real estate);
- Conduct herbicide efficacy trials to confirm optimal application methods, formulations and rates;
   and
- Develop customer-facing public education plans related to vegetation management activities.



#### **OPERATIONS MANUAL & BUSINESS** D. CONTINUITY/DISASTER RECOVERY PLAN

We will work with existing PREPA operational experts to review their existing operations manual, comparing it against industry best practices, our existing top-quality operations manuals and PREPA's current plan. Once gaps and opportunities have been identified, we will develop an operating manual that meets the highest standards while still covering Puerto Rico's unique operating needs. Our fundamental principles will be safety, customer centricity, affordability, reliability, resilience and sustainability.

We understand the importance of developing a detailed business continuity/disaster plan. We will bring our proven knowledge and experience to ensure these plans meet Puerto Rico's needs.



# E. ENVIRONMENTAL EXPOSURE ASSESSMENT & EXPOSURE MANAGEMENT PLAN

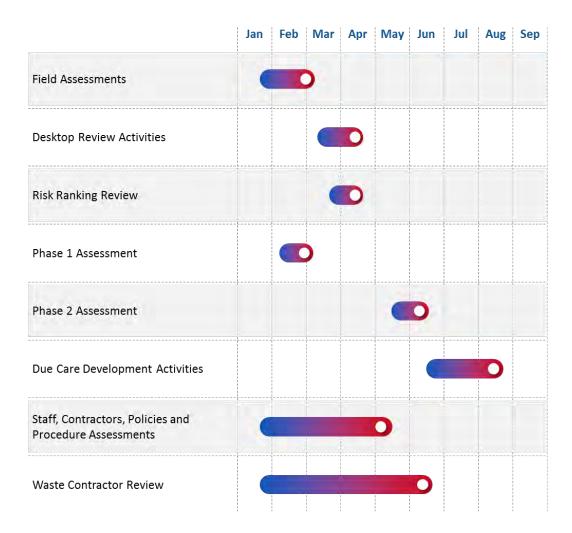


Figure 17: Environmental Assessment Gantt Chart

To fully assess the environmental exposures associated with operation and maintenance of the T&D system, a multi-step assessment process will be used. The process will include field assessments, desktop reviews, possible Phase I and Phase II reviews and due care plans. This process will follow established protocols and checklists to allow for the risk assessment and ranking that will drive the Phase I/Phase II American Society for Testing and Materials International (ASTM) E1527/E1903 processes. This entire process will occur in the preparation phase so that all appropriate recommendations can be planned or addressed during the transition period.

#### 1.0 FIELD ASSESSMENTS

Field assessments will be conducted on all leased and owned properties that the Operator will use to carry out the O&M services after the Service Commencement Date. Field assessments will be conducted by a team that receives level-setting training prior to the start of assessments. At this time,



we expect that the consultant workforce will be supplied by ERM through their local Puerto Rico office using their surge workforce, FlexForce, as needed. The detailed process for field assessments will be designed specifically for the Owner's properties and added as an attachment post-award. We anticipate that the field assessments will be completed in six weeks with a workforce of 10 consultants.

#### 2.0 DESKTOP REVIEW

Once a field assessment is completed, it will flow to the desktop review process. This process, which will also be manned by a team of consultants, will use the information from the field assessment, online data searches in regulatory agency sites, historical photo reviews, the specific forms of protections provided in the T&D operational contract and any operational controls given the circumstance to provide a risk ranking from 0 to 3 for each property. The actual form to be used for the desktop review will be added as an attachment post-award. Level 0 signifies low-concern properties and Level 3 signifies high concern. This process is anticipated to take 10 people six weeks to complete.

#### 3.0 RISK RANKING REVIEW

Subject matter experts from our transition team will confirm the risk rankings, which are based on established criteria, by reviewing reports generated by the desktop reviews. Properties meeting or exceeding a defined ranking post-review will be moved forward into the Phase I process.

#### 4.0 PHASE I

Facilities that require it will receive a fully ASTM E1527–compliant Phase I environmental assessment (desktop review) conducted by qualified consultants. This process is anticipated to take five people eight weeks to complete.

#### 5.0 PHASE I REVIEW

Phase I reports will be reviewed by the transition team subject matter experts and the properties reranked. Based on the findings of the Phase I reports and the site-specific scenario, LUMA will determine whether due care plans must be implemented to reduce liability exposures. Properties that are Superfund sites, polluted locations requiring a long-term response to clean up hazardous material contaminations or that have the potential to be named Superfund sites will require due care plans. Additionally, considering the site-specific scenario and the protections provided in the T&D operational contract, we will determine the need for a Phase II, with the primary focus of such a report being to establish an environmental baseline for future comparisons.

#### 6.0 PHASE II

If required, a fully ASTM E1903–compliant Phase II environmental assessment [field review] will be conducted. This process includes environmental sampling. All properties that have a Phase II will have an associated due care plan to ensure future operations do not impact known contamination. This process is anticipated to take five people eight weeks to complete.



#### 7.0 DUE CARE PLANS

Due care plans, the tailored mitigation plans for each property on which a certain level of environmental risk has been identified during the environmental exposure assessment process, will be developed as the final step of the environmental assessment process and will assist in creating the Environmental Exposure Management Plan (EEMP). Due care plans will be drafted by qualified consultants with oversight from the Environmental transition team. The Environmental transition team will have final approval of the due care plans, in coordination with LUMA's T&D managers. Drafting and review of these plans is anticipated to take six weeks.

#### 8.0 ENVIRONMENTAL EXPOSURE MANAGEMENT PLAN

The EEMP, the process by which all due care plans are collected and executed, will be drafted during the transition period and communicated to the transition team leadership to ensure the necessary measures are taken into consideration by operations after commencement. The template used for the EEMP will be added as an attachment post-award.



## F. DETAILED BUDGET FORECAST FOR TRANSITION EXPENDITURES

#### 1.0 BUDGET FORECAST

The detailed budget forecast for transition is show in Table 9 below.

Table 9: Transition Budget Forecast

WORKSTREAM	INTERNAL FTES	CONTRACTOR FTES	ESTIMATED COST (\$)
Asset Management	9	6	4,503,550
Customer Service	19	1	6,052,425
Federal Funds Management	3	-	1,111,650
Finance	6	4	3,756,210
Generation	3	4	2,899,125
Human Resources	6	41	7,324,500
IT	3	29	13,766,575
Legal	0	6	6,196,175
Regulatory	3	-	854,300
Risk & Insurance	3	1	1,078,850
Safety Management	5	11	4,849,250
Special Teams	3	-	1,084,275
Supply Chain	5	1	1,967,900
T&D Operations	21	2	6,213,625
Transition Administration	3	-	217,075
Transition Coordination	7	-	3,382,575
Grand Totals	97	107	65,258,060

Our assumptions for the Transition Budget Forecast are as follows:

- Travel and out-of-pocket expenses are not included and will be passed through at actual costs incurred with zero markup;
- Special teams are performed by cross-functional teams pulled from functional teams; and
- Contractor costs estimated for each workstream at assumed rates provided in Annex V (Front-End Transition Hourly Fully Allocated Rates). Contractor costs will be passed through and invoiced at actual costs with zero markup.



3. SYSTEM REMEDIATION PLAN MILESTONES



### A. PROPOSED SYSTEM REMEDIATION PLAN TEAM

Our proposed System Remediation Plan Team is illustrated in Figure 18. We will mobilize this team under the direction of the individuals listed in Table 10, which also outlines their backgrounds and experience. Each workstream will be supported by additional team members listed in Appendix 1 and experts found at PREPA, as well as the Energy Sector Office (ESO).

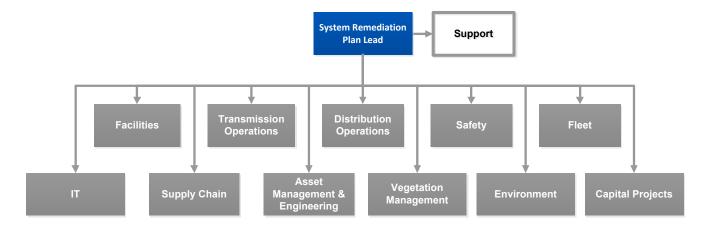


Figure 18: Proposed System Remediation Plan Team

Table 10: System Remediation Team Role & Experience

NAME	ROLE	EXPERIENCE & QUALIFICATIONS
V. Romero	Overall Lead	<ul> <li>Provided consulting services to the electric utility industry, focusing on modernizing and improving the performance of the distribution system</li> <li>Responsible for distribution system reliability including implementing operational and technology enhancements, implementing new hardware and software technologies for field personnel and planners, and oversight of the Corrective Maintenance Program</li> </ul>
A. Orlando	Lead, Facilities	<ul> <li>Director, Real Estate and Environmental Services with Quanta Services, responsible for leadership and oversight of the organization's real estate portfolio and associated transactions including acquisitions, dispositions, long-term leases and ground leases</li> <li>Oversees Quantas real estate portfolio including 3rd party brokerage team, preparation and negotiation of contracts, leases, deeds, mortgages and other real property legal documents</li> </ul>
A. Spachynski	Lead, Transmission	<ul> <li>Supervised and coordinated field resources tasked with observing construction activities to ensure compliance with functional requirement and project permit commitments</li> </ul>



NAME	ROLE	EXPERIENCE & QUALIFICATIONS
		<ul> <li>Disciplines include Health &amp; Safety, Environment, transmission line right-of-way, foundations, tower assembly/erection, conductor stringing, telecommunications and substations</li> </ul>
K. Dasso	Lead, Distribution	<ul> <li>Responsible for T&amp;D planning and reliability for 70,000 square mile service area with approximately 18,000 miles of transmission lines and 100,000 miles of distribution lines</li> </ul>
		<ul> <li>Conducted Transmission, Substation and Distribution asset management including investment strategies, standards and performance management</li> </ul>
D. Carson	Lead, Safety	<ul> <li>Senior Manager – Health, Environmental, and Quality at Quanta Services supporting corporate and operating units in the areas of industrial hygiene, environmental, quality, and overall injury prevention</li> <li>Safety and Health Manager with AEP working directly with</li> </ul>
		regional VPs on all company safety performance measures
J. Lentz	Lead, Fleet	<ul> <li>Senior Fleet Operations Manager providing insight and direction for fleet operations across all operating units inclusive of over 60,000 assets</li> </ul>
		<ul> <li>Identified methods of cost reduction and improved profitably through CapEx forecasting, asset disposition, vendor management, utilization, and management of the internal rental</li> </ul>
D. Halman	Lood Cumply	company  Accounted for Sourcing Specialists through performing corporate
D. Holman	Lead, Supply Chain	<ul> <li>Accounted for Sourcing Specialists through performing corporate procurement, enterprise-wide contracting, and supply chain centre of excellence support</li> </ul>
		<ul> <li>Accountable for legal advisors performing commercial drafting, negotiation, interpretation and dispute resolution</li> </ul>
J. Romero	Lead, Asset Mgmt & Engineering	<ul> <li>Provided leadership to Quanta Technology in the areas of technology and business strategy, grid modernization, utility of the future, distribution systems analysis, planning and engineering, distributed energy resources and emerging technologies</li> </ul>
		<ul> <li>Responsible for Quanta Technology's business strategy, innovation, and partnership activities as well as the execution of special projects</li> </ul>
J. Goodfellow	Lead, Vegetation Mgmt	<ul> <li>Provided expert consulting practice focusing on utility operations, maintenance and construction with specific emphasis on reliability and process efficiency, with emphasis on VM practices and risks trees pose to T&amp;D systems</li> </ul>
		<ul> <li>Supported companys proposals for Business Process Outsourcing (BPO) of utility engineering, construction, operations, maintenance, materials management, and outage restoration services</li> </ul>



NAME	ROLE	EXPERIENCE & QUALIFICATIONS
C. Clark	Lead, Environment	<ul> <li>Developed strategic, consolidated policies and approaches for multiple ATCO companies in conformance with internal management systems and ISO 9001 and 14001</li> <li>Managed a team of supervisors, professionals, and technicians across multiple geographic locations and functional areas in implementation of the management system</li> </ul>
C. Dafoe	Lead, IT/OT	<ul> <li>Senior IT executive focused on leading relationship management, negotiating, planning and strategizing within the IT function. Experienced in customer information systems, workforce management, asset management, meter management, customer care, dispatch, geographic information and land management</li> <li>Former executive with IBM for 30 years working with wide array of business clients addressing various IT-related challenges. Experience extends across IT portfolio management, project accounting, lifecycle upgrades, Windows 10, Oracle Financials, Oracle Cloud, IBM Maximo, application outsourcing (Wipro) and migration to cloud computing</li> </ul>
Q. Nguyen	Lead, Project Manager	<ul> <li>As Vice President, responsible for project, construction, procurement, control and overall execution of all transmission and distribution projects for ATCO Electricity</li> <li>As Vice President, Alberta Powerline, responsible for the engineering, construction, procurement, project control and overall execution of the \$1.6 billion, 500 kV project</li> </ul>

#### SYSTEM REMEDIATION PLAN DEVELOPMENT B.

The current state of the T&D system as viewed through site visits and our review of information in the data room and the Q&A log is that the current T&D system consists of aging infrastructure that has been poorly maintained due to lack of funding and inconsistencies in maintenance practices that are largely undocumented. The control, monitoring and information equipment is aged, underused and in some cases obsolete. Hardware, Information Systems and software are underused, fragmented and unsupported. Therefore, these systems lack the ability to provide the required visibility of the system and implement programs such as Distribution Automation (DA), condition monitoring/analytics and situational awareness regarding outage management. Strategies to manage assets over their life cycle have not been developed. System Planning tools to effectively model the system, which is an industry best practice, are not being used due to a lack of confidence in their accuracy.

Our approach to developing the System Remediation Plan will be a collaborative effort with key stakeholders. The plan should align with various reports such as the GridMod Plan, the IRP, Sargeant & Lundy's Capital Plan, Build Back Better and the Energy Resiliency Solutions for the Puerto Rico Grid (from the Department of Energy). Specifically, the approach will follow the steps below.



#### Step 1: Establish Planning Team

We will establish a Planning Team composed of representatives from the Consortium and PREPA (within 30 days of Effective Date).

#### Step 2: Review Current State of T&D System

Using inputs from the Intralinks data room, Grid Mod Plan, Sargent & Lundy Reports, FEMA worksheets, Consortium SMEs and PREPA SMEs, we will review the current state of the T&D System with the Operations, Systems Operations, Engineering (Distribution, Transmission and Substation) organizations that are knowledgeable and expected to be affected by the System Remediation Plan. The specific areas of interest are:

- Safety;
- Reliability;
- T&D Operations;
- Engineering;
- Asset Condition of Transmission, Distribution and Substations (including protection and control);
- Systems Operations (Control Centers);
- Emergency Planning;
- Fleet:
- Vegetation Management;
- Metering;
- 3<sup>rd</sup> party attachments, and
- Streetlights.

#### Step 3. Identify Gaps

Identify gaps in these areas based on our expertise and industry leading practices and propose solutions to address these gaps. Rank proposed solutions into tiers with tier one being immediate, Tier 2 being medium term and Tier 3 being long term. Solutions to address the gaps may include:

- Additional resources (staffing and contracting);
- Infrastructure deployment;
- Inspection programs;
- Capital projects;
- Analysis and review to understand FEMA vs non-FEMA related projects;
- Utilization of software tools:
- Platforms and applications;
- Implementation of information systems; and
- processes updates.

In addition, we will identify potential demonstration projects such as microgrid/minigrid installations.



#### Step 4: Identify Interdependencies of Proposed Solutions

We will identify interdependencies proposed solutions have with other departments at PREPA (e.g., customer service, engineering, operations, fleet, IT, systems operations, metering, distribution, transmission, generation, safety, training, and labor).

#### Step 5: Identify Key Emerging Areas of Interest & Risks

We will identify key emerging areas of interest and risks (e.g., behind-the-meter, DERs, Internet of Things, and Microgrids) to assess whether they impact proposed initiatives/solutions that require our special attention (e.g., implementation of pilot/demonstration/proof-of-concept projects, allocation of research and development funding, and partnership with external stakeholders and partners).

#### Step 6: Develop Multi-Year System Remediation Plan

We will develop a multi-year System Remediation Plan that can serve as a plan or blueprint to achieve a safe, stabilized T&D System. The System Remediation Plan will detail the scope, resources, timelines, milestones, costs estimates and achievement criteria for each activity or project required to enable the Operator to perform the O&M Services in compliance with Contract Standards, including the deadlines by which each such activity or project shall be fully implemented. Some of the activities or projects will involve capital and operational improvements, the details of which can be found in Form 1.4 Section 1.B. Additionally, the plan will identify initiatives that do not have FEMA funding, and IEM will pursue FEMA and other available sources of funding if the initiative qualifies.

#### Step 7: Identify Potential Key Partners

We identify potential key partners that can assist us in addressing specific areas of interest to facilitate proposed solutions (e.g., utility peers, consultants, research and development organizations, service providers, vendors, academia, national laboratories, and U.S. Department of Energy).

## C. SYSTEM REMEDIATION PLAN TIMELINE & **MILESTONES**

Our proposed timeline and key milestones to drafting, revising and finalizing the System Remediation Plan are outlined below in the following seven (7) tasks and subsequent six-month timeline.

- Task 1: Establish a Planning team composed of representatives from each of the parties. (4 weeks)
- Task 2: Review current state of the system among the team members including utilizing inputs from information provided through the bid process such as IRP, Sargent & Lundy, GridMod Plan, and FEMA worksheets etc. (4 weeks)
- Tasks 3: Identify gaps and propose initiatives/solutions, such as understanding FEMA vs non-FEMA projects and identifying potential demonstration project for development of microgrids etc. (6 weeks)
- **Task 4**: Risk-rank initiatives (4 weeks)



- Task 5: Develop a roadmap for all initiatives/solutions (O&M and Capital Expenditures) (4 weeks)
- Task 6: Identify interdependencies among the different organizations within PREPA (2 weeks)
- Task 7: Development of remediation plan including applicable approvals, cost estimates and a communications strategy to ensure all levels in the organization are engaged to successfully implement the System Remediation Plan (6 weeks)

Subsequent implementation is based on obtaining required approvals, all funding, resource availability and inclusion in the annual business plan. Once these conditions are satisfied, the implementation steps and the associated milestones will be embedded in the yearly plans.

#### Proposed Timeline for Development of System Remediation Plan

Our proposed timeline to develop and finalize the System Remediation Plan is shown in Figure 19 below. Each task corresponds to its specific task number above, with an approximate completion timeline of 24 weeks.



Figure 19: System Remediation Plan Gantt Chart

The estimated costs to be incurred in the development of the System Remediation Plan are detailed in Table 11 below and based on the Proposed Team Organizational Chart in Form 1.5 Section 3.A above.



Table 11: Estimated Costs to Develop the System Remediation Plan						
MAIN WOKRSTREAM	POSITION TITLE		IMATED OSTS	Ε	ESTIMATE	
Asset Management	Sr Distribution Engineer, Sr Transmission Engineer, Sr Substation Engineer	\$	1,560	\$	291,720	
T&D Operations	Sr Distribution Operations Engineer, Sr Transmission Operations Engineer	\$	2,080	\$	388,960	
Safety Management	Safety & Health Oversight Lead	\$	320	\$	59,840	
Safety Management	Environmental Oversight Lead	\$	320	\$	59,840	
T&D Operations	Manager	\$	320	\$	59,840	
Supply Chain	Manager	\$	320	\$	59,840	
Asset Management	Real Estate	\$	320	\$	59,840	
T&D Operations	VM Manager	\$	320	\$	59,840	
T&D Operations	System Remediation Plan Lead	\$	1,040	\$	194,480	
T&D Operations	Coordinator	\$	680	\$	127,160	
Fleet	Manager	\$	320	\$	59,840	
IT	Manager	\$	320	\$	59,840	
	Total	\$	7,920	\$	1,481,040	

### D. METHODOLOGY: T&D SYSTEM NEEDS

#### 1.0 INFORMATION ANALYZED TO DATE

We assigned SMEs from within both Quanta and ATCO to assess the needs and condition of the T&D system. Information we gathered to formulate views of the T&D system included site visits with PREPA management, engineering, control centers and T&D Operations. Additionally, other inputs we reviewed to formulate and validate findings consisted of:

- Condition assessments and evaluations on a sample size of assets completed by Sargent & Lundy;
- The conceptual Transmission and Distribution 10-Year Capital Investment for Reliability Report, dated Oct 2019 created by Sargent & Lundy;
- DOE Energy Resiliency Solutions for the Puerto Rico Grid, dated June 2018;
- Build Back Better: Reimaging and Strengthening the Power Grid of Puerto Rico, dated December 2017;
- Puerto Rico Electric Power Authority CIM, dated February 2019; and
- Data provided through the data room and the Q&A Logs.



Our SMEs used the inputs above and their knowledge of industry best practice to identify gaps and solutions to address those gaps. The team then developed a Road Map that outlines identified solutions which is in the Approach to T&D Services and Approach to Asset Management section of the bid document.

#### 2.0 INFORMATION REQUIRED TO FULLY DEVELOP SYSTEM REMEDIATION PLAN

The inputs used thus far provide somewhat of a limited view of the needs of the T&D system, however we believe a more granular review is required to gain a complete view of the T&D system needs. The Front-End Transition activities will provide a more robust review including condition assessments on a much broader number of assets in the T&D System. The System Remediation Plan will be developed in parallel with the Front-End Transition activities and in collaboration with PREPA employees.



## 4. CUSTOMER SERVICE MILESTONES





Figure 20: Customer Service Gantt Chart

#### **OVERVIEW OF SCOPE AND SCHEDULE**

The Customer Service group's scope and schedule is driven by different needs from most of the other functional areas. In addition to assessing existing operations and identifying opportunities for improvement, the Customer Service group will be fundamentally transforming the manner in which LUMA delivers the customer experience. We will need time to communicate the changes and train the workforce on how things will be different. It is critically important to make customers aware immediately after commencement that a new priority has been established to improve their interactions with LUMA.

The primary critical path activities that determine the schedule for the customer service transition program are as follows:

Use the information in the Intralinks data room as input to develop the customer service plans;



- Visit and assess the large number of physical sites and assets throughout Puerto Rico;
- Interview current customer service employees to identify key leaders who can implement the transformed customer service vision and reorganize and staff the new organization as required;
- Work to instill the culture and values of the transformed Customer Service group throughout the workforce: and
- Ensure a consistent message is communicated to customers beginning on the first day of commencement.

A written narrative of the transition program activities is included in the following pages, and the more detailed project schedules are in Annex II.

The Consortium views Customer Service as an integral component in the electric sector transformation. The front-end transition period will be used to thoroughly assess the Customer Service organization, with a focus on customer experience quality and operational efficiency. We will take the opportunity during the transition period to implement quick wins that will enable customers to see and feel post-commencement improvements in the customer experience. These quick wins will act as a catalyst for customer engagement and the launch of the Voice of the Customer program.

#### **EVALUATING CUSTOMER SERVICE FACILITIES &** $\mathbf{A}_{-}$ **ASSETS**

We will evaluate customer service facilities through on-site visitation and assessment of all locations. In addition to assessing facility operational efficiency, we will ensure employees have a healthful work environment that enables physical and mental safety in performing daily routines. Considerations will include the following:

- The state of the facility;
- The volume and type of work completed at each facility;
- Whether the facility will meet the Operator's needs; and
- Requirements to add additional facilities and/or consolidate existing facilities.

Once the facilities have been assessed and deemed cost effective and necessary for customer service operations, they will be improved to provide efficient workspaces that reduce stress for employees.

#### **CUSTOMER SERVICE POLICIES & PROCEDURES** B.

Standard policies and procedures are required to set expectations for management and employees, meet performance measures, serve as training tools, and form the foundation of process improvement to consistently and continuously deliver an exceptional experience. During the transition period, we will review existing customer service policies, processes and procedures for adherence to applicable regulations, prevalence of quality and financial controls, effectiveness/efficiency of operational



execution and customer centricity. We will identify LEAN opportunities within the processes to remove waste and duplication of services and find opportunities to consolidate efforts. We will also develop process mapping that identifies the need for critical documentation control to meet minimum requirements. Documentation will be adjusted as needed in coordination with transition operating changes, ensuring that quality controls are built into all processes and standard operating procedures.

# METER READING PLAN

We will assess the current meter read data collection and meter data management processes and related IT systems. The goal of this assessment will be to ensure customers are receiving accurate bills and that LUMA is effectively billing all customer usage to maximize revenue and minimize nontechnical losses. To meet the requirements of the Grid Modernization Plan, we will evaluate the Smart Meter Deployment Project and develop a plan for AMI implementation. During the transition, metering employees will be interviewed and their roles and responsibilities evaluated.

# **GAP IDENTIFICATION & ANALYSIS**

We will visit all customer service operating areas to assess and understand the meter-to-cash process flow. Priority will be placed on identifying gaps in financial and quality controls and siloed work processes that impact efficiency and contribute to customer dissatisfaction. The integration of quality assurance/quality control and continuous improvement processes into our transition and gap assessment efforts will lay the groundwork for quality customer service delivery on commencement of the contract. A thorough review of PREPA metrics reporting in comparison to the contract metrics will set a benchmark for missing/required data and reports to meet the contract requirements.

We will also complete a review of employment processes. The aim of this review will be to identify areas for prioritized improvement of performance measurement, employee recognition and accountability that will be built into our employee training programs during the transition period. We will solicit feedback and ideas from leadership and frontline employees on opportunities to improve corporate and individual performance and increase employee engagement.

#### CUSTOMER SERVICE TRANSITION PLAN F.

We will complete a customer service workload assessment to review staffing needs in the call center. back office and commercial offices. The information gathered from this assessment will be used to ensure delivery of exceptional customer service in an efficient, cost-effective manner at contract commencement. Top performers from PREPA will be identified, retrained and integrated into the new Operator organizational model to enable service continuity and create a seamless transition experience for customers.

Employee and customer surveys will be completed to identify and prioritize gaps in customer needs/expectations and service delivery. Customer surveys will inform the creation of our customer



communications plan. All employees will receive training focused on the importance of delivering a high-quality customer experience using quality assurance and quality control processes. Integrating QA/QC training during the transition period will lay the groundwork for a new, customer-centric culture by highlighting organizational goals, directing attention to customer concerns, and emphasizing how decisions can impact LUMA's customers and operations.

# **CUSTOMER SERVICE ASSET ACQUISITION &** F. REPLACEMENT

Except during employee transition, the model that we will use will not require the acquisition of customer service assets. We intend to maximize FEMA funding as appropriate to implement any required asset upgrades. Assets that do not require upgrading will be retained by PREPA and used by the Operator under the contracted operating model. Assignment of established PREPA contracts to the Operator will be required. The Operator will negotiate with external vendors for assignment of contracts or services related to staffing, meter reading, facilities and technology.

#### **SERVICE START & SHUT-OFF PLAN** G.

We will evaluate the current service start and shut-off plan by visiting each office that performs credit and collection functions and frontline account setup. We will benchmark the current processes against the contract metrics and identify areas where they do not meet regulations.

The technology, applications and external vendors involved in the processes will also be assessed. The information gained will be used to pinpoint areas for improvement, with a focus on maximizing outstanding revenue collections, improving the timeliness of meter disconnection and reconnection and identifying opportunities for automation. Processes for collecting arrears and completing account setups and meter reconnections will be improved, which will help re-establish trust between customers and the utility.

#### METER ASSET MANAGEMENT PLAN Η.

We will use the Sargent & Lundy Conceptual Transmission and Distribution 10-Year Capital Investment Plan for Reliability, meters and equipment referenced in multiple areas and the GridMod Plan, Section 5.1 as inputs to develop this section of the take-over plan. We will assess and identify gaps in the current state of meter shop, meter asset management, field testing and work processes. Facilities, meter assets, test equipment and related IT systems will be reviewed to determine the best approach to developing a world-class meter asset management plan.

To meet the requirements of the contract and create value for customers, we will develop and recommend a new meter asset management system, test equipment and quality assurance



procedures. We will evaluate PREPA's smart meter pilot project and build a detailed plan to meet customer needs and lower operating costs.

During the transition, metering employees will be interviewed and their roles and responsibilities evaluated to begin the development of a best-in-class meter management team.

# I. CUSTOMER SERVICE TECHNOLOGY

We will use the GridMod Plan, Section 5.1 as input to this section of the take-over plan. We will review the operational health of PREPA's Customer Service technology to determine if it is meeting operational business needs in meter reading, call center, billing and payment processing. The review will focus on the life cycle of the technology, the level of support provided by the vendor and the rates of failure and error. During transition, we will identify which technologies need to be upgraded immediately to achieve business priorities and which can be upgraded later.

We will develop a technology roadmap and associated capital plan. The plan will focus on maximizing existing investments through strategically timed replacement or partnerships with third-party suppliers to support the attainment of customer satisfaction targets.

# J. ADDITIONAL TOPICS

The following topics, while not specifically referenced in the RFP, are also critical to our transition plan.

# 1.0 DEVELOPMENT & IMPLEMENTATION OF REVENUE ACCOUNTABILITY PLAN

We will review and assess all policies, processes, procedures and technology related to fraud investigation and nontechnical losses (NTL) to determine the additional controls, software/technology/automation and/or manpower needed to reduce NTL to meet the performance metrics set out in the contract and re-establish customer trust.

# 2.0 DEVELOPMENT OF QUALITY CULTURE INTEGRATION PLAN

During the transition period, we will demonstrate a quality culture that increases accountability, decision-making ability, reporting and small-unit leadership throughout the organization. By driving Customer Service employees to seek continuous improvement opportunities and lead and embrace change, LUMA can systematically improve service delivery and reduce operational costs.

We will develop a document retention and storage program that is managed by Quality under Document and Record Control. This program will meet all federal and state regulations on document and record retention policies, including the following:



- Ensuring controls are established for standardized templates, nomenclature and revisions. reducing the risk of duplication and ensuring affected parties can coordinate prior to release;
- Ensuring customer service policies, processes and procedures are captured under the Document and Record Control registrar and follow all guidelines established for compliance; and
- Establishing a template for performance reporting and preparation of a balanced scorecard.

We will ensure quality assurance is built into the new Customer Service Manual, consistent with Contract Standards, Annex I (Scope of Services) and Annex VIII (Performance Metrics). We will enable a quality control process that is built on integrity, is capable of reporting strengths and weaknesses from the field to both the T&D and Customer Service departments and allows for analysis of trends and causal effects. The program will ensure a documentation control process is established to reflect current systems. It will be revised as new systems are implemented and will include a continuous improvement program (including communication, control, accessibility, measurement and lessons learned).

#### 3.0 ESTABLISH INTEGRATION BETWEEN CUSTOMER SERVICE & T&D **OPERATIONS**

We will perform an assessment of cross-departmental processes to identify dependent work processes between Customer Service and T&D Operations, with the goal of creating collaborative processes that eliminate bottlenecks and increase interdepartmental communications to enable improvements in customer service delivery. The development of integrated work management systems will formalize planned work, support requirements and provide continuous feedback on workforce effectiveness, thereby increasing opportunities for knowledge exchange and collaboration.

Collaboration between work groups will also be established through daily meetings (status and plan of the day) between T&D Operations and supporting departments. The goal of these meetings will be to ensure Customer Service and field teams are informed about expected plans, known interruptions and power outages and incidents affecting schedules.



# 5. IT/OT SYSTEMS MILESTONES



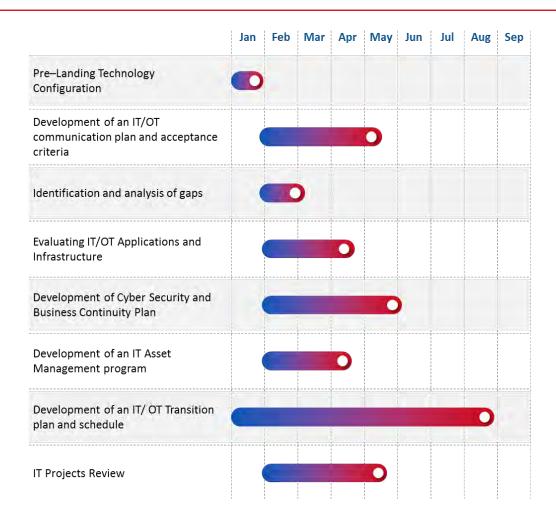


Figure 21: IT/OT Gantt Chart

#### **OVERVIEW OF SCOPE & SCHEDULE**

The IT group's scope and schedule are driven by the need to begin defining new requirements for a large number of critical systems and processes. These new systems and processes will represent a massive degree of change in how every employee performs his or her daily job. This level of change requires a structured, well-defined multi-year time frame for implementation.

The primary critical path activities that determine the schedule for the IT transition program are as follows:

- Use the information in the Intralinks data room as input to develop plans in this section;
- Use Sargent & Lundy Conceptual Transmission and Distribution 10-Year Capital Investment Plan for Reliability, Section 3.6 and Appendix E and the GridMod Plan, Sections 5.1, 5.2 and 5.3 as inputs to develop this section of the take-over plan;
- A comprehensive assessment and due diligence review of over 15 major systems, which begins on Day 1 and includes each team running full out for the first three months;
- A high degree of coordination between the IT team and other functional area teams to ensure the future owners of these new systems have the chance to fully define their requirements;



- A thorough workforce assessment to identify any skill gaps that must be addressed to meet the organization's strategic objectives; and
- A concentrated focus on the large number of system cutovers that will be required to support the transfer after commencement. It is essential that these cutovers be well planned and flawlessly executed.

# A. IT/OT COMMUNICATION PLAN & ACCEPTANCE CRITERIA

Our primary objective will be to maintain public and employee support and engagement during the transition period. IT/OT/Cyber communication plans will be established prior to the transition period. We will develop both a general transition communication plan and a targeted key stakeholder communication plan.

We believe the following steps are necessary to build an effective communication plan:

- Identify key stakeholders;
- Identify the main milestones and trigger events;
- Set up governance and resourcing for the communications team;
- Develop core messages and anchor all communications to transitions objectives;
- Develop a step-by-step plan for each milestone; and
- Establish two-way communications: monitor, gather feedback and adjust.

Table 12 describes the meetings we will hold to begin communicating IT/OT/Cyber transition status and activities.

Table 12: IT/OT/Cybersecurity Communications Meetings

MEETING	DESCRIPTION/PURPOSE	FORMAT
IT/OT/Cyber leadership kickoff meeting	Establish protocols and expectations.	WebEx/in- person
All-hands IT/OT/Cyber kickoff meeting	Construct communication introducing the team, transition activities, timeline and expectations during the transition period.	Townhall
IT/OT/Cyber teams in remote locations	Introduce the new team to those in geographically disbursed locations who cannot make it to the San Juan headquarters.	WebEx/in- person
IT/OT/Cyber all-hands meeting	Discuss the plan, set expectations and communicate project status.	Workshop
Leadership one-on-one meetings	Conduct interviews.	In-person



MEETING	DESCRIPTION/PURPOSE	FORMAT
Key personnel one-on- one meetings	Conduct interviews.	In-person
Transition leadership: PREPA, QUANTA and ATCO	Communicate IT transition status.	WebEx/in- person
Transition web portal	Make project status and key milestones available to all stakeholders.	On demand

#### **GAP IDENTIFICATION & ANALYSIS** B.

A gap analysis is typically a four-step process to come to an organization's expected end state. It comprises:

- Identifying the organization's current state;
- Identifying the organization's expected end state;
- Identifying gaps between the two states; and
- Devising plans to remediate or close the gaps.

Various tools, systems and frameworks are available to aid in this endeavor. We will use a collection of best-practice tools such as SWOT analysis (strengths, weaknesses, opportunities and threats) and the McKinsey 7S framework<sup>1</sup> (shared vision, structure, systems, style, staff,



Figure 22: Gap Analysis Process

skills and strategy). Gap analysis will occur across three domains: people, process and technology.

#### People

Ensuring the right resources are in place is critical to the success of the organization. Our objective will be to transition as many existing PREPA employees as possible and then fill identified gaps with appropriate onshore Puerto Rican citizens. We will use the following framework to assess talent management needs:

- Identify key IT roles and personnel; formulate and implement a retention plan;
- Assess current capabilities to meet transformation objectives;
- Evaluate and document any capability gaps and opportunities for improvement;
- Develop recommendations and plan for PREPA review; and

<sup>&</sup>lt;sup>1</sup> For more information on the McKinsey 7S Framework, refer to https://www.mckinsey.com/business-functions/strategy-andcorporate-finance/our-insights/enduring-ideas-the-7-s-framework.



 Develop and implement a plan for quick backfill of existing gaps or new gaps created by unplanned resource attrition.

#### **Process**

We will evaluate all critical processes and determine if there are opportunities to improve them. Any improvement opportunities identified will be introduced according to an organizational change management process such as the Kotter 8-step change model. The process evaluation will proceed as follows:

- Develop a consolidated list of critical processes and an integrated management plan;
- Perform due diligence to gain an understanding of current processes;
- Assess the suitability of the current processes to meet transformation objectives;
- Evaluate and document any capability gaps and opportunities for improvement;
- Develop recommendations and plan for owner review;
- Implement process change; and
- Complete a vendor management, cost management and contract review.

### **Technology**

Our approach to conducting gap analysis for the technology aspects of the project is described in the following section.

# C. EVALUATING IT/OT APPLICATIONS & INFRASTRUCTURE

## 1.0 APPLICATIONS

We plan to use a framework such as ISO 25011 to evaluate all applications (IT and OT) across five main areas: people, process, technology, information and facilities. Applications will be evaluated based on factors such as age, supportability, maintainability, upgradability and integration possibilities.

- IT:
  - Microsoft Office 365
  - File shares and collaboration platforms
  - Customer information system (CIS)
  - Enterprise Resource Planning System (ERP)
  - Customer care and billing (CC&B)
  - Avaya Interactive Voice Response (IVR) and Automatic Call Distribution (ACD)
  - Oracle Service-Oriented Architecture (SOA)
  - Asset management system
  - End-point configuration management system
  - Business intelligence (BI) and reporting systems
- OT:



- Supervisory control and data acquisition (SCADA)
- Outage management system (OMS)
- Energy management system (EMS)
- Work management system (WMS)
- Meter data management system (MDMS)
- Geographical information system (GIS)
- Dispatch management system

#### 2.0 **INFRASTRUCTURE**

We plan to use a framework such as ISO 25011 to evaluate all IT/OT infrastructure based on factors such as age, supportability, maintainability, upgradability and whether it still meets well-established operating norms. Additionally, a framework such as ISO 22237 will be used to assess the data centers and other physical spaces used to house IT/OT infrastructures.

- Servers (hardware, converged systems, operating systems and management software)
- Storage (hardware and management software)
- Database (RDBMS software, supporting hardware and management software)
- Network physical (switching and routing devices, cabling [fiber and copper], multiplexers and other devices)
- Network logical (IP address schemes, NATs and other Layer 3 functions)
- Network security (firewalls, intrusion detection and other such devices)
- Network voice (T1s and other lines, contact centers)
- Operations Center
- Field services devices and processes (desktops, laptops, workstations, contact center work pods and other such devices)
- Service desk
- Data centers, master data facilities (MDFs), independent data facilities (IDFs) and other facilities at all locations and substations
- SCADA and automated metering infrastructure (AMI) hardware

# CYBERSECURITY & BUSINESS CONTINUITY $\mathbf{D}_{-}$ **PLAN**

#### 1.0 ESTABLISHING A CYBERSECURITY INFORMATION SECURITY OFFICE (ISO)

Cybersecurity and Business Continuity Management Plan will be coordinated under the Emergency response/BCMP Plan. The ISO will recognize security requirements as a critical infrastructure utility and structure the organization around the widely accepted cybersecurity program principles of Identify, Protect, Detect, Respond and Recover. These principles will be supported by formal governance, risk and compliance activities driven by nationally accepted energy sector standards



such as the NIST CSF, NIST SP 800-53, ES-C2M2 and appropriate Information Security Architecture (ISA) guidance.

The ISO team will be divided into the following six distinct suborganizations:

- Security Architecture;
- Security Engineering;
- Security Operations;
- Governance and Compliance;
- Risk Management/Mitigation; and
- Security/Compliance Enablement.

Program strategies and priorities will be guided by the principle of least functionality, which ensures the program build-out seeks to close gaps in order of risk priority. The intended order of any new cybersecurity program will be as follows:

- Identify and communicate what needs to be protected;
- Assess and classify roles;
- Develop and prioritize processes;
- Respond and enforce;
- Assess risk; and
- Ensure continuous improvement.

# 2.0 TRANSITION BUSINESS CONTINUITY PLANNING/DISASTER RECOVERY

#### IT/OT

Disaster Recovery (Crisis Management) and Business Continuity Planning are two areas in great need of positive transformation post-commencement. During the transition period, we will follow gap analysis processes similar to those referenced above to assess IT/OT capabilities in this very important area.

#### Disaster Recovery/Crisis Management

During transition, we will assess the PREPA team's capabilities in disaster recovery/crisis management against the following characteristics of a well-functioning disaster recovery plan (as designed by our dedicated enterprise crisis management teams):

- The plan includes names and contact information for key primary and secondary leadership roles and primary and secondary subject matter experts (organized by function);
- The plan describes procedures for activating the crisis management process, including criteria for activation and levels/severity of crisis;
- The plan includes instructions for logging and documenting aspects of the crisis as it unfolds, including communications stakeholders, assumptions, facts, impact assessments and other important information; and



 The plan describes disaster recovery procedures, including audited tests of critical infrastructure and applications necessary to operate the utility during normal conditions.

Post-analysis, we will develop an action plan in partnership with key business stakeholders and the ISO. We will target a disaster recovery test within the first year post-commencement of the O&M agreement.

# **Business Continuity Planning**

The processes of business impact analysis (BIA) and business continuity planning (BCP) are much larger than technology. During transition, we will assess the organization's capabilities in these important areas by looking at the characteristics of a well-functioning BCP (as designed by our dedicated enterprise business continuity planning and management teams).

As part of the gap analysis process, we will focus on the technology-specific aspects of a functioning BCP, with emphasis on the following:

- A crisis management plan (see above) and facility access plan (post-disaster, no power);
- The viability of an integrated recovery plan that synchronizes activities with the larger enterprise;
- Data backup retrieval processes in the event of a catastrophe;
- The viability of utilizing geographically dispersed operations not impacted by an event;
- Redundant power and cooling capabilities at key locations, especially onshore data centers and master data facilities; and
- Security mechanisms and the integration of Information Security policies.

## 2.1.1 Information Security Office

The ISO has no direct responsibility for BCP/DR operations but has deep stakes in ensuring these operations are effective and integrated directly into the Incident Response Plan (IRP). The ISO is generally accountable for measuring operations effectiveness to ensure alignment with IRP expectations. The ISO risk management function will assess the viability of the combined IT/OT/Business BCP and ensure each entity uses common processes (business impact analysis, risk assessments, etc.).

#### IT ASSET MANAGEMENT PROGRAM E.

Very early in the transition period, there will be a need to conduct a detailed audit of all assets across Puerto Rico and compare to existing documentation. The primary goal of this effort is to ensure sensitive assets are maintained and controlled during the transition period and are either passed properly to the Operator or maintained by the Owner.

The transition core team will use a collection of commercial off-the-shelf, open-source and other software tools for discovery in conjunction with manual visual inspection and other processes.



#### 1.0 PHYSICAL ASSETS

Physical assets such as servers, storage arrays and disks, network devices, racks, cabling, laptops, desktops, workstations and other physical devices will be audited and documented. This inventory will aid the infrastructure and application evaluation process and ensure the integrity of the utility's physical assets.

#### LOGICAL ASSETS 2.0

Logical assets are things such as passwords, documentation, intellectual property and other sensitive data that must be secured to ensure that there is no data leakage. As soon as practicable, the transition team will begin the process of identifying logical assets through group and one-on-one interviews and discovery processes. At discovery, logical assets will be classified and cataloged.

#### IT/OT TRANSITION PLAN & SCHEDULE F

#### 1.0 TRANSITION TEAM

As soon as practicable, we will form a core team to travel to Puerto Rico and begin the process of transition. This team will be made up of Consortium personnel or, in some cases, consultants with specific required expertise.

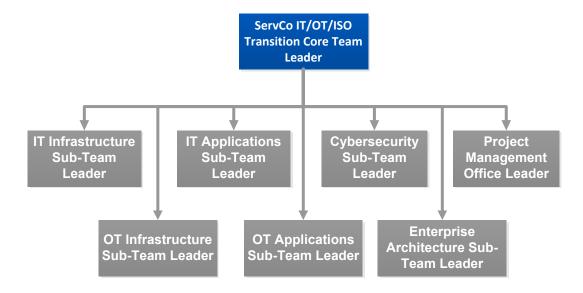


Figure 23: IT/OT Transition Team Organizational Structure

## OpCo IT/OT/ISO Transition Core Team Leader

The core team leader will lead all transition team functions and initiatives and will report to the toplevel Operator transition team executive. This person will be the face of LUMA's IT/OT/ISO organizations and will be expected to host townhalls and other public events for PREPA employees.



#### IT/OT Infrastructure Transition Sub-Team Leaders

IT/OT infrastructure transition sub-team leaders will lead the teams responsible for IT or OT infrastructure. The IT leader will be responsible for areas such as engineering, data center, operations center and field services. The OT leader will be responsible for areas such as SCADA, communications and automated metering infrastructure (AMI). They will be responsible for transition project deliverables and will also help interview and select staff for post-commencement activities.

#### IT/OT Applications Transition Sub-Team Leaders

IT/OT applications transition sub-team leaders will lead the teams responsible for IT or OT applications. They will be responsible for transition project deliverables and will also help interview and select staff for post-commencement activities.

## **Cybersecurity Transition Sub-Team Leader**

The cybersecurity transition sub-team leader will lead the team responsible for Information Security functions during the transition. He or she will be responsible for transition project deliverables and will also help interview and select staff for post-commencement activities in the new ISO.

#### **Enterprise Architecture Sub-Team Leader**

The enterprise architecture sub-team leader will be responsible for reviewing current-state architecture in collaboration with the incumbent team, defining target-state architecture in collaboration with the transition team and initiating architectural frameworks to accelerate transition activities.

#### Project Management Office Leader

The project management office leader will lead the program staff tasked with keeping the whole transition on schedule and on budget.

### 2.0 MOBILIZATION PLAN

We will establish a comprehensive plan that includes mobilization of internal personnel and third-party contractors, identification of key PREPA employees, recruitment to fill resource gaps and migration of all permanent staff to ServCo. The primary objective will be to maintain both public and employee confidence during the transition.

Within the first week of the transition, the core team will initiate both an IS leadership kickoff meeting and a general all-hands IS kickoff meeting to discuss the objectives and high-level approach. The primary goal will be to provide full transparency on the process as we move toward the commencement date.

Within the first two weeks of the transition, we will hold the first IS Transition Planning Workshops with the various teams. These workshops will have the following objectives:

- Review the status of the Commencement Checklist items to be completed;
- Achieve team alignment on priorities;



- Discuss and resolve issues and concerns; and
- Establish communication methods.

The transition core team will begin onboarding the full transition team at the beginning of the transition period. A detailed onboarding plan will be developed to ensure a methodical approach.

#### 3.0 PLAN DEVELOPMENT

The transition core team will be formed as soon as it is known that we have won the award for the O&M agreement. From there, we will develop a detailed project plan and start the acquisition of necessary resources to facilitate the delivery of transition deliverables.

The plan will be developed based on inputs from key business stakeholders and findings from infrastructure and applications evaluation efforts conducted pre-award (due diligence) and postaward.

#### 4.0 **MILESTONES**

#### 4.1 Milestone 1: Due Diligence Assessment of OT/IT Applications

Develop a comprehensive list of all OT/IT applications, including but not limited to the following:

- Supervisory control and data acquisition (SCADA);
- Outage management system (OMS);
- Energy management system (EMS);
- Work management system (WMS);
- Meter data management system (MDMS);
- Geographical information system (GIS);
- Dispatch management system;
- Customer information system (CIS);
- Enterprise resource planning system (ERP);
- Customer care and billing (CC&B): especially meter to cash and billing;
- Avaya IVR and ACD;
- Oracle SOA;
- Asset management system;
- End-point configuration management system; and
- Business intelligence (BI) reporting system(s).

Identify OT/IT resources and skillsets for each application.

Secure administrative accounts, service accounts, backdoors and other privileged access for each application. We will begin an assessment on OT/IT applications as early as possible during the preparation period. Assessment will likely continue into the transition period as we obtain access to applications.



We will develop a comprehensive list of all OT/IT applications and identify respective stakeholders. We will identify OT and IT applications leads who will be responsible for assessments and incorporating applications into the five-year strategy roadmap. Functional and technical requirements will be documented with Operations and Business inputs, and we will provide a go-forward recommendation on each critical application.

# 4.2 Milestone 2: Due Diligence Assessment of IT/OT Infrastructure

- Capture overall infrastructure architecture, including data center, networking, active directory, messaging, shared computing and databases at all facilities and substations, including physical security access processes.
- Capture workstation and end-point architecture, including management systems details.
- Capture telecommunication network details and assets.
- Capture SCADA network details and assets.
- Identify infrastructure resources and required skillsets.

We will begin assessing infrastructure as early as possible during the transition period. Assessment will likely continue throughout the transition period as we obtain access to infrastructure components.

We will identify OT and IT infrastructure leads who will be responsible for assessing the current state of the infrastructure, providing remediation recommendations and building the five-year strategy roadmap for infrastructure. We will also develop a comprehensive understanding, including documentation, of the infrastructure footprint. Functional and technical requirements will be documented with Operations and Business inputs, and we will provide a go-forward recommendation.

# 4.3 Milestone 3: Due Diligence Assessment of Cybersecurity

- Develop an identity access management interim process.
- Develop robust provisioning (in the new system) and de-provisioning (in the old system) processes.
- Create a complete backups strategy for Day 1.
- Complete a detailed cybersecurity readiness exercise and develop mitigation plans.

We will begin assessment on cybersecurity as early as possible during the transition period. Assessment will likely continue into the transition period as we obtain access to systems.

We will develop a comprehensive understanding of the cybersecurity footprint. Functional and technical requirements will be documented with Operations and Business inputs, and we will provide a go-forward recommendation. This recommendation will be incorporated in the five-year strategy roadmap.

# 4.4 Milestone 4: Implement Key IT Systems — Transition Period

- Stand up general ledgers for ServCo and the Owner on the existing PREPA EBS system.
- Stand up the HRIS system to support the hiring process.
- Stand up/configure the payroll system.



- Stand up Kronos; integrate with payroll system.
- Establish push/pull reporting needs.

Evaluation of options will begin within 30 days of selection. Planning and securing resources will occur prior to the contract signing date. Actual implementation will begin immediately following signing of the contract. The completion date will be prior to the commencement date.

We will establish an IT PPMO to manage the execution of new systems implementation. An implementation lead will be identified and made responsible for overall project execution, including identification of resources, building workplans and project status reporting.

#### 4.5 Milestone 5: Service Delivery Integration

## Strategy

- Develop the IT/OT application strategy roadmap;
- Develop the infrastructure strategy roadmap; and
- Develop the cybersecurity strategy roadmap.

#### Prioritization

- Review current IS (IT, OT, cyber) projects for scope, status, staffing and estimates at completion (EAC); and
- Prioritize project portfolio and develop transition plan.

#### **Cutover Plan**

- Develop a comprehensive list of all activities required during the commencement cutover period;
- Identify the required resources to support the cutover period.

#### **Communications**

- Develop IT communication plans, including tools and methods; and
- Develop an IT project status reporting package.

#### Reporting

- Demonstrate the ability to produce reporting on demand as required by the Owner; and
- Confirm Owner transition reporting requirements.

## Organization

- Identify preliminary resources; and
- Decide on mitigation strategy for any known resource gaps.

#### **Budaet**

Review current budgets, actual and forecast; and



Develop a draft budget for the commencement cutover period.

We will begin evaluating the five-year strategy during the transition period. An initial five-year strategy will be complete prior to the commencement date. Other aspects of the integration of service delivery functions, such as cutover planning, reporting needs, organization review, budgeting and in-flight project assessments, will occur during both the planning and transition periods.

We will identify a strategy lead for each of the three areas: applications, infrastructure and cybersecurity. Each lead will be responsible for identifying the resources required to complete the strategy assessment, coordinating with other teams and drafting a proposed five-year strategy. Each proposed strategy will be reviewed by our leadership team prior to presenting to PREPA for approval. Subject matter experts will be engaged as required.

A service delivery lead will work in conjunction with the PMO to develop the final approach and tasks necessary to accomplish the other service delivery deliverables.

#### 4.6 Milestone 6: Talent Management

- Assess staff competency and training needs. Conduct internal satisfaction survey
- Enfranchise key IT talent though one-on-one interviews, informal meetings, etc.
- Implement targeted retention strategies, focusing on those IT staff who are high potential and/or high risk.
- Convey new training and career opportunities to acquired IT staff, particularly those identified as key talent.

Identification of transition core team members will occur prior to the start of the transition period. Additional transition resources will be identified, and onboarding will occur during the preparation and transition periods in alignment with the overall IT transition plan. Assessment of required commencement resources will take place during both the preparation and transition periods.

We will identify the resources required for the preparation, transition and commencement periods. The team leaders will be responsible for assessing the competency of existing personnel, identifying resource gaps and hiring future employees. We will retain existing employees where necessary to eliminate resource gaps. We will develop a key employee retention plan and strategy as part of this milestone.



6. FINANCIAL MANAGEMENT MILESTONES

#### **OVERVIEW OF SCOPE & SCHEDULE**

The Financial Management group's scope and schedule is driven by assessing and improving risk management, the internal control environment and underlying business processes. This is critical to setting the overall financial foundation, evaluating the integrity of the financial compilation and reporting processes, mitigation of fraud and other risks, and the transition, design and implementation of the capital and operating budgets for the organization. This task currently represents a critical path to completion of the transition program.

The primary critical path activities that determine the schedule are as follows:

- Redesign the budgeting process and have each functional team restructure its operational areas and adjust staffing size. Roll these inputs into a new approved budget;
- Beginning on Day 1 and running full-out for the first three months, perform a comprehensive assessment and due diligence review of all major financial systems; and
- Recognize the high degree of coordination that will be required from the IT team and the other functional area teams to ensure that owners of new systems have the chance to fully define their requirements.

A written narrative of the transition program activities is included in the following pages, and the more detailed project schedules are in Annex II.

LUMA's approach to financial management during the front-end transition will continue to evolve as we gain a deeper understanding of PREPA's administrative and operational routines. Our efforts will be focused on understanding and evaluating PREPA's:

- Significant financial risks;
- Management and operational reporting;
- Regulatory reporting and compliance requirements;
- Business processes; and
- Resources for matters that could affect the seamless transition of services at commencement.

Our plan will leverage current PREPA management and financial personnel to analyze the existing state of department processing and output, transition risks and stakeholder needs (customers, operations, regulators) in the following major areas:

- All significant financial statement accounts and assertions;
- All significant accounting and reporting processes, including:
  - Cash management and controls;
  - Payroll and benefits;
  - Transaction processing;
  - Fixed asset management;
  - Job costing for projects;
  - Debt/credit management;
  - Accounting close; and
  - Regulatory reporting.



- All significant judgments and estimates:
- Existing budgeting and forecasting processes, assumptions and scenarios;
- Data and informational flows throughout the organization; and
- Key information interfaces and process dependencies between functional directorates within the organization (e.g., Planning, Project Management and Finance).

# APPROACH TO BUDGETING & REPORTING

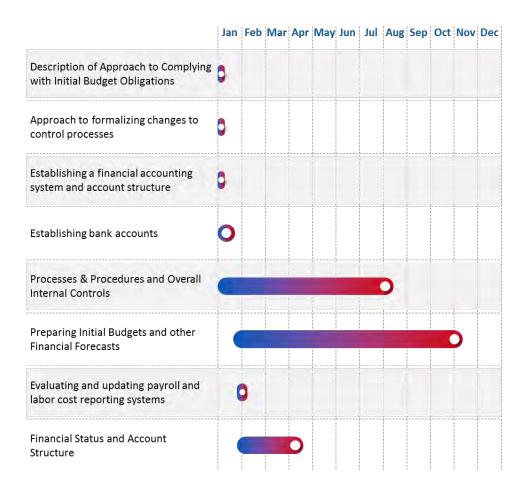


Figure 24: Budgeting and Reporting Gantt Chart

In connection with the proposal process, our approach to the front-end transition budget has been based on the information gained through the due diligence process, including knowledge gathered from the Q&A Log, data room and site visits, and drawn from our own extensive experience in operational integration and financial transformation. However, there is no substitute for living the situation day-to-day, and we expect that the transition budget will require future adjustments as we learn more about the actual processes and systems. Ultimately, our goal is to partner with PREPA to provide transparent, insightful and timely information to stakeholders.

We will provide PREPA with a monthly variance analysis of actual costs incurred compared to the front-end transition budget. We will also provide updated remaining monthly cost forecasts at a level



of detail that enables PREPA's comprehensive oversight and understanding of our transition plan activities, progress, resourcing and timing.

We intend to leverage PREPA's existing reports, reporting processes and structures to the extent they remain complementary and useful to internal and external stakeholders' objectives. As we provide this reporting, we will apply our experience to accomplish the following additional tasks:

- Interview internal and external stakeholders to identify gaps, determine the population and frequency of the existing reports, and compile a list of report expectations not currently being met:
- Begin to address those expectations during the front-end transition period and continue to work on this task through and after commencement;
- As the front-end transition work progresses, identify and align new reporting opportunities that bring value to PREPA; and
- Address quick-win reporting opportunities on a priority basis.

A sample of our proposed budget and milestone reporting is shown in Table 13.

Table 13: Sample Budget and Milestone Reports

				Transit	ion Budget	Monthly Cost	Report						
Transition Budge	t Summary	/	Current	Transition !	<b>Month</b>	Tran	sition to Date	e	Estimate At Completion (EAC)				
Work Stream	Hours	Cost (\$)	Planned	Actual	Variance	Planned	Actual	Variance	Prior Month	Current	Month Change	JTD Change	Notes
Human Resources	71,060	\$7,110,000	\$711,000	696,780	(14,220)	2,346,300	2,299,374	(46,926)	7,038,900	6,967,800	(71,100)	(142,200)	Material items noted
IT	46,920	\$13,708,000	\$1,370,800	1,343,384	(27,416)	4,523,640	4,433,167	(90,473)	13,570,920	13,433,840	(137,080)	(274,160)	Material items noted
T&D Ops	26,340	\$5,768,000	\$576,800	565,264	(11,536)	1,903,440	1,865,371	(38,069)	5,710,320	5,652,640	(57,680)	(115,360)	Material items noted
Asset Management	22,980	\$4,766,000	\$476,600	467,068	(9,532)	1,572,780	1,541,324	(31,456)	4,718,340	4,670,680	(47,660)	(95,320)	Material items noted
Customer Service	29,850	\$5,970,000	\$597,000	585,060	(11,940)	1,970,100	1,930,698	(39,402)	5,910,300	5,850,600	(59,700)	(119,400)	Material items noted
Coordination, Admin & Special	19,820	\$3,964,000	\$396,400	388,472	(7,928)	1,308,120	1,281,958	(26,162)	3,924,360	3,884,720	(39,640)	(79,280)	Material items noted
Finance	14,415	\$3,198,785	\$319,879	313,481	(6,398)	1,055,599	1,034,487	(21,112)	3,166,797	3,134,809	(31,988)	(63,976)	Material items noted
Regulatory, Risk & Insurance	10,160	\$2,100,000	\$210,000	205,800	(4,200)	693,000	679,140	(13,860)	2,079,000	2,058,000	(21,000)	(42,000)	Material items noted
Safety, Health & Environmenta	9,280	\$5,010,800	\$501,080	491,058	(10,022)	1,653,564	1,620,493	(33,071)	4,960,692	4,910,584	(50,108)	(100,216)	Material items noted
Supply Chain	9,055	\$1,862,500	\$186,250	182,525	(3,725)	614,625	602,333	(12,293)	1,843,875	1,825,250	(18,625)	(37,250)	Material items noted
Generation	8,500	\$1,700,000	\$170,000	166,600	(3,400)	561,000	549,780	(11,220)	1,683,000	1,666,000	(17,000)	(34,000)	Material items noted
Legal	8,000	\$5,200,000	\$520,000	509,600	(10,400)	1,716,000	1,681,680	(34,320)	5,148,000	5,096,000	(52,000)	(104,000)	Material items noted
Federal Funds Management	4,000	\$800,000	\$80,000	78,400	(1,600)	264,000	258,720	(5,280)	792,000	784,000	(8,000)	(16,000)	Material items noted
Grand Total	280,380	61,158,085	6,115,809	5,993,492	(122,316)	20,182,168	19,778,525	(403,643)	60,546,504	59,934,923	(611,581)	(1,223,162)	
			,	Transition	Budget Mo	onthly Man Ho	our Report						
Transition Budge	t Summary		Current	Transition !			sition to Date	e		Estimate At C	ompletion (EAC)		
Work Stream	Hours	Cost (\$)	Planned	Actual	<u>Variance</u>	Planned	Actual		Prior Month	Current		JTD Change	Notes
Human Resources	71,060	\$7,110,000	7,106	6,964	(142)	23,450	22,981	(469)	70,349	69,639	(711)	(1,421)	Material items noted
Т	46,920	\$13,708,000	4,692	4,598	(94)	15,484	15,174	(310)	46,451	45,982	(469)	(938)	Material items noted
T&D Ops	26,340	\$5,768,000	2,634	2,581	(53)	8,692	8,518	(174)	26,077	25,813	(263)	(527)	Material items noted
Asset Management	22,980	\$4,766,000	2,298	2,252	(46)	7,583	7,432	(152)	22,750	22,520	(230)	(460)	Material items noted
Customer Service	29,850	\$5,970,000	2,985	2,925	(60)	9,851	9,653	(197)	29,552	29,253	(299)	(597)	Material items noted
Coordination, Admin & Special	19,820	\$3,964,000	1,982	1,942	(40)	6,541	6,410	(131)	19,622	19,424	(198)	(396)	Material items noted
Finance	14,415	\$3,198,785	1,442	1,413	(29)	4,757	4,662	(95)	14,271	14,127	(144)	(288)	Material items noted
Regulatory, Risk & Insurance	10,160	\$2,100,000	1,016	996	(20)	3,353	3,286	(67)	10,058	9,957	(102)	(203)	Material items noted
Safety, Health & Environmenta	9,280	\$5,010,800	928	909	(19)	3,062	3,001	(61)	9,187	9,094	(93)	(186)	Material items noted
Supply Chain	9,055	\$1,862,500	906	887	(18)	2,988	2,928	(60)	8,964	8,874	(91)	(181)	Material items noted
Generation	8,500	\$1,700,000	850	833	(17)	2,805	2,749	(56)	8,415	8,330	(85)	(170)	Material items noted
Legal	8,000	\$5,200,000	800	784	(16)	2,640	2,587	(53)	7,920	7,840	(80)	(160)	Material items noted
Federal Funds Management	4,000	\$800,000	400	<u>392</u>	(8)	1,320	1,294	(26)	3,960	3,920	(40)	(80)	Material items noted
Grand Total	280,380	61,158,085	28.038	27.477	(561)	92,525	90,675	(1,851)	277,576	274,773	(2.804)	(5,608)	

#### **INITIAL BUDGET DELIVERY OBLIGATIONS** B.

It is our view that PREPA's existing directorate and subdirector structure is very similar to our operating structure. Because the operating structures are similar, we believe our existing methods of



developing top-down and bottom-up budgets and forecasts for multi-divisional/multi-entity operations will provide a useful frame of reference with which to evaluate and potentially improve PREPA's existing framework.

As part of the evaluation/assessment of existing budgeting processes and upon consultation with the PREPA team, we will work to develop a longer-term and sustainable budget process that routinely aligns capital, operations and maintenance objectives and priorities with available financial resources and performance management strategies.

In order to accommodate a condensed submission and approval timeline, our initial budget will be completed within 150 days based on an approach that leverages PREPA's current FY2021 budget process. This expedited process will focus foremost on identifying major gaps between PREPA's and Operator's performance plans and ensuring full consideration from changes in PREPA's T&D operations cost structure as a result of the migration to ServCo.

Another integral part of the initial budget will be to sync the budgeted dollars with the anticipated spend from the System Remediation Plan, Data Security Plan, Vegetation Management Plan and all other plans and activities contemplated over the budget period, to the extent such plans and activities are known at the time of budget submission.

# FORMALIZING CHANGES TO CONTROL **PROCESSES**

We view change management as critical to PREPA's transformational objectives, with specific financial focus on:

- Establishing and maintaining an effective system of internal control;
- Compliance with regulatory accounting/reporting requirements; and
- Providing useful information and insightful analysis to management and stakeholders.

Our current financial processes and information suites are Oracle-based and complementary to PREPA's systems. They are believed to be best-in-class and effective at gathering, organizing, processing, reporting and managing data from disparate sources to produce useful information for multiple users.

Formal change control processes and process improvement initiatives will be developed within a standardized internal project management office, developing of a robust and formalized control framework modeled on the U.S. Committee on Sponsoring Organizations (COSO) framework, which views change management as an integral component to a broader framework of effective internal control. COSO is a proven, effective model for internal control frameworks, encompassing both financial and information technology components, and it is used by most public organizations in North America, including the Consortium. Within this developed framework of organizational governance, as managed through the PMO program, the change control process will incorporate cross-departmental collaboration and employee buy-in at all levels.



Key elements of the COSO framework are described in the following sections.

#### **Control Environment**

Generally, the control environment embodies management's strategy to mitigate control risk through an effective organizational structure. It is critical to have competent employees, maintain high ethical standards, promulgate clearly defined roles and responsibilities and maintain constant oversight of fraud prevention and detection efforts. It establishes the overall tone at the top and is foundational to all other elements.

#### Risk Assessment

Risk assessment involves reviewing key business processes for risks that could hinder the achievement of management objectives. Consideration is given to the financial risks inherent to key business processes as well as fraud risks.

#### **Control Activities**

Control activities include policies and procedures that help ensure management's directives are implemented. Preventive, detective, manual, computer and management oversight controls are reviewed, implemented and documented through various control methods.

#### Information and Communication

Information is identified, captured and exchanged in a form and time frame that enables personnel to carry out their responsibilities. Both internal and external data will be considered. Accounting and ancillary services will be reviewed to ensure the organization is able to provide timely and accurate information.

#### **Monitoring**

This is the process management uses to assess the quality of internal control performance over time. It will include activities such as internal audits, management reviews, audit committee activities, disclosure committee activities and self-assessments.

Successful monitoring leads to a well-developed and refined foundational control environment, a highperforming culture and a clear understanding of the tone at the top of the organization. This will be achieved through the following:

- Integrity/ethics, competence and oversight of all key policies and procedures;
- A structured risk assessment program (enterprise risk management and financial risk management) that will include enterprise-wide objectives, process-level objectives and change management procedures that formally and routinely identify key risks that could prevent the organization from achieving its strategic objectives;
- Detailed business process control listings for key policies/procedures, application and network security, process change management and segregation of duties;
- Information and communication best practices regarding the quality of information and communication to business users and stakeholders; and



 Monitoring of the control environment through ongoing improvement, effectiveness evaluations and deficiency management.

# **IDENTIFYING & EVALUATING BUSINESS** D **PROCESSES**

Our method of identifying and evaluating business processes will begin with a thorough review, through the COSO framework, of all significant transaction streams underlying the financial statement accounts. Detailed walkthroughs and procedural documentation of these significant processes will be performed in order to identify key risks, process deficiencies and opportunities for improvement. Significant processes identified, along with remediation recommendations, will be provided as part of the front-end transition plan. It will incorporate our perspective on process risks and assertions, data flow, segregation of duties, information access restrictions, review/approval and recordkeeping. Significant processes that would require evaluation are listed in Table 14.

Table 14: Significant Financial Business Processes

HIGH RISK	MEDIUM RISK	LOW RISK
Revenue recognition and cash receipting	Allowance for doubtful accounts	Inventory
Segregation of duties	Cash disbursements and accounts payable	Payroll
Cost allocations/ capitalization	Commitments and contingencies	Asset impairments
CILT	Non-routine transactions	Fixed assets
Regulatory filing process	Pension/benefits plans	
Insurance/risk	Accrued liabilities	
Financial statement close		
Labor/union reporting		
Financial reporting and adjusting journal entries		

# FINANCIAL ACCOUNTING SYSTEM & ACCOUNT E. **STRUCTURE**

We intend to leverage PREPA's financial accounting systems and account structures to the extent they remain complementary and useful to the organization's ongoing information objectives and reporting requirements. Our front-end transition plan objective to review key business processes and internal/external reporting requirements will be integrated with our approach to mapping PREPA's



financial data and information systems to new ledger entities for LUMA. This process will align identified gaps and recommended changes with the organization's planned information needs at the commencement date. We believe this is the best approach, as it minimizes the impact on employees and keeps error rates to a minimum post transition.

# **INITIAL BUDGETS & OTHER FINANCIAL** F **FORECASTS**

The preparation of initial budgets and financial forecasts for FY2021/2023 will be a key deliverable during the front-end transition. We will carefully review the Fiscal Plan and major initiatives and identify changes to add or subtract items as appropriate from FY2021 budgets as well as FY2022/23 budgets post-commencement. This process will be based on a multi-year strategic operational and financial plan that sets annual goals for the organization that are further refined from the top down into department-level initiatives, resource plans and budgets. These detailed budgets will be used to measure department-level effectiveness and will aggregate into a bottom-up approach to budgeting and measuring organizational performance.

Department-level accountability for budget performance and initiative progress will be monitored on a monthly basis, with updates to revised monthly forecasts and underlying progress/strategies provided to stakeholders in a transparent and timely fashion as part of routine reporting. Throughout the entire organization, budget and spending performance will be tied directly to system planning, administrative infrastructure planning and overall resource planning with linkages to contractual performance metrics as baselines are established.

It is our goal to develop a budgeting structure that enables effective management of PREPA's business activities, aligns reporting with levels of accountability and provides stakeholders with necessary comfort and confidence in the Finance Team's performance. We have a responsibility to ensure that all key budget processes will be functionally effective on the commencement date.

Our goal by the end of the front-end transition period is to have identified, reviewed and improved the key budget processes and practices to provide a sufficient level of assurance to PREPA that all such budgeting requirements can be met without disruption to operations.

#### **ESTABLISHING BANK ACCOUNTS** $\mathbf{G}_{-}$

During the front-end transition, we will work with PREPA to ensure all contractually required bank accounts and governance resolutions are established and tested prior to the commencement date. We will evaluate PREPA's treasury operations and banking platforms to identify gaps and process improvement opportunities prior to the commencement date to ensure funding is thoroughly diagrammed, with strict controls over access, authorization, segregation of duties and contingency planning.



We will also ensure that bank accounts and cash movement processes are documented and in compliance with the O&M Agreement.

#### PAYROLL & LABOR COST REPORTING SYSTEMS Н.

We will thoroughly review PREPA's existing payroll and labor cost reporting systems and processes to identify critical gaps and improvement opportunities. These evaluations will be conducted in collaboration with leadership from Operations, IT and HR to ensure that all constituent interests are considered and that labor cost reporting structures will meet planned data capture requirements and cost management strategies. The focus will be on ensuring labor costs are properly allocated to projects to accurately monitor costs on all construction projects.

This effort will be conducted in concert with establishing new payroll processes for ServCo in connection with employee migration prior to or upon commencement. To minimize cost and disruption and maintain existing project management information flows during front-end transition and after commencement, we will use PREPA's existing payroll systems and labor cost reporting methods to the extent possible.

# **DELEGATION OF AUTHORITY MATRIX &** L **PROCESSES**

Strong controls and processes over delegation of spending and approval authority are key to managing LUMA's budgeted costs during the transition program. Delivering on this strategy to manage resource commitments and spending activities, we will incorporate a matrix of purchasing authority at levels ranging from \$50K to \$250K to oversee both budgeted and unbudgeted activities. Escalating levels of authority within this matrix will be assigned among the transition team leads, the transition program manager, LUMA's executive steering committee and the Administrator.

Detailed project planning, budgeting and forecasting, with monthly variance analysis of actual costs incurred compared to the front-end transition budget and remaining monthly cost forecasts will enable the Administrator a comprehensive oversight and understanding of LUMA's transition plan activities, progress, resourcing and timing.

Table 15 below shows the hierarchy level for the approval of purchases.

Table 15: Authority Matrix

		BUDGETED SPEND				 UNBUDGETED SPEND		
Position Title	Purchases < than USD \$50K	Purchases < than USD \$100K	Purchases < than USD \$175K	Purchases > than USD \$250K	Purchases < than USD \$25K	Purchases < than USD \$75K	Purchases < than USD \$150K	Purchases > than USD \$250K
P3 Authority				X	Х	Х	Х	Х
Executive Steering Committee			X		Х	X	X	X
Transition Program Manager		X						
Team Leads	X							



During the transition period we will work with PREPA's management and the Administrator to evaluate existing procurement guidelines and to develop a long-term operational/administration approval authority matrix to be used after commencement. These delegations of authority will correspond to directorate functions and transaction types and ensure proper alignment between purchasing decisions and directorate budget responsibility. An illustrative example of this type of matrix can be found in Table 16.

Table 16: Post-Commencement Authority Matrix

Operator / ServCo	. (4115						
All Directorates / All Departmer							
Procurment and Accounts Payab	ole Approval Mat	rix					
The attached approval matrix indicate	s the authority level	for the approval o	of invoices. Any invoices	e which exceeds	the dollar amount of		
authority designated for an individual			•				
sensitive payments may be excluded fr	om the secondary at	ıthorization requ	irements. In these circ	rumstances, an a	pproval by the initial		
approver constitutes appropriate appr	oval. An approval by	the secondary a	uthorizer is recommen	ded due to the si	ze of the disbursement		
however, the lack of a secondary does i	not constitute an exc	eption to the app	oval matrix. Only the	se items designa	ited as re-approved may		
be excluded from the standard approve	-	_					
Controller's office and will be designat				O. All purchasii	ng activiites should be		
sourced and processed in accordance v	with Procurment Dep	oartment guidelin	es.				
		Purchase O	rder / Invoice Payment	Approval Level	2		
Job Title	Region / Dept (		Region / Dept (Exa		ion / Dept (Example C		
job Title		Capital Expendi	<u> </u>	inpie b)   neg	ion / Bept (Example C		
VP / Director / Division Manager		ГВD	\$ TBD		\$ TBD		
Controller / Treasurer	\$	\$ TBD		\$ TBD			
Chief Financial Officer		ГВО	\$ TBD		\$ TBD		
Chief Executive Officer		ГВD	\$ TBD		\$ TBD		
P3 Administrator	Unl	imited	Unlimited		Unlimited		
	Oper	ations and Mai	ntenance*				
VP / Director / Division Manager	\$	25,000	\$	10,000 \$	5,0		
VP Operations	\$	250,000	\$	100,000 \$	75,0		
Treasurer	\$	250,000	\$	100,000 \$	75,0		
Chief Financial Officer	\$	500,000	\$	500,000 \$	500,0		
Chief Executive Officer	\$	500,000	\$	500,000 \$	500,0		
P3 Administrator	Unli	imited	Unlimited		Unlimited		
		Fleet					
Fleet Manager	\$ .	ГВО	\$ TBD		\$ TBD		
VP/Director/Division Manager	-	ГВD	\$ TBD		\$ TBD		
Treasurer	\$ 7	ГВD	\$ TBD		\$ TBD		
Chief Financial Officer	\$ 7	ГВD	\$ TBD		\$ TBD		
Chief Executive Officer	\$ 7	ГВD	\$ TBD		\$ TBD		
P3 Administrator	Unli	imited	Unlimited		Unlimited		
	Facil	ities and Admi	nistration				
Office Manager	\$ 7	ГВD	\$ TBD		\$ TBD		
VP/Director/Division Manager		ГВО	\$ TBD		\$ TBD		
Treasurer		ГВО	\$ TBD		\$ TBD		
Chief Financial Officer		ΓBD	\$ TBD		\$ TBD		
	\$ 7	ΓBD	\$ TBD		\$ TBD Unlimited		
Chief Executive Officer P3 Administrator		imited	Unlimited				



# 7. FEMA FUNDS & FEDERAL FUNDING PROCUREMENT MANUAL MILESTONES



# FEDERAL FUNDING PROCUREMENT MANUAL $\mathbf{A}_{-}$ **TEAM**

#### THE CONSORTIUM'S FEDERAL FUNDS MANAGEMENT PARTNER, 1.0 IEM

The Consortium's first step in the transition is to ensure a proper governance framework is established before it can manage a long-term recovery using federal funding on behalf of the Owner. IEM, a Consortium member, has considerable experience with managing federal financial assistance in some of the largest disaster recoveries in the U.S.

IEM is one of only a few contractors to maintain disaster management as its core business, under a single business structure, for over three decades. IEM brings broad federal funds management insights, understanding, and innovations for the Operator.

For more than 34 years, IEM has been on the leading edge of disaster management, providing the full spectrum of services before, during, and after disasters. This includes disaster planning, helping state, local, and federal agencies prepare for both man-made and natural disasters, putting boots on the ground during disaster response, and the complex operations required for disaster recovery. Most importantly, IEM has been on the ground helping both recipients and subrecipients of federal financial assistance prioritize, manage, and most importantly keep federal resources related to disaster recovery.

As Figure 25 below illustrates, IEM provides extensive full spectrum emergency management support to federal, state, and local partners. IEM's largest projects are related to disaster recovery where managing federal funding is central to project success. In addition, IEM has been working with FEMA on several projects including the shaping of its newest Disaster Recovery Reform Act, 2018 (DRRA) mitigation grant program which will amount to 6 percent of total disaster funding obligations annually.



Figure 25: IEM Recovery Continuum

#### 1.1 The Transition Team

By incorporating key IEM experts in the transition team, we will have the best team suited to ensure that LUMA is operating under a federal funds management framework with an effective procurement



policy that is inclusive of all federal, territorial, and COR<sup>3</sup> requirements that also emphasizes performance. Further, our own monitoring and internal controls included in the newly created PREPA Disaster Recovery Federal Funds Management Guide (DRFFMG) we discuss above will ensure that the procurement policy is not merely aspirational but in fact is used for procurement and for the management and monitoring of LUMA's contractors.

We believe the staff who create the Federal Funds Procurement Manual, including Chapter 3: Procurement, must have broad experience and training in grants and federal requirements. Our Federal Funds Management Project Manager, Christian Montz and Dora Pleasant will lead this effort. Mr. Montz, a Certified Fraud Examiner, is a former GAO auditor and FEMA grants director. Ms. Pleasant is a CPA, a Certified Grants Management Professional and Project Management Professional with direct experience assisting COR<sup>3</sup> with its grant compliance framework.

Our transition team will consist of experienced staff that will work with other LUMA transition team members to support the standup of a more permanent team that will be focused on a variety of grant programs. For the purposes of transition, the most pressing issues will be the grant governance framework, which includes procurement policies and procedures as well as the implementation tools that will be developed by our skilled grants manager, Tabatha Ballard. Additionally, to ensure a seamless transition of PA program activities, we will ensure an effective handoff of all PW activity that will be led by David Luke.

While proven processes and technologies are important, high-quality people are the key discriminator in determining a project's success. Understanding this, IEM has structured its Federal Funds Management Team to provide outstanding experience and capabilities in each required technical area. Our project personnel will be supported by a Project Manager with considerable expertise managing large projects. Table 17 shows our proposed team.

Table 17: IEM Proposed Team

NAME	ROLE	EXPERIENCE & QUALIFICATIONS
Bryan Koon	CoTeam Lead	<ul> <li>Former Director of Florida Department of Emergency         Management Division (FDEM)</li> <li>Current Chair of the Multihazard Mitigation Council (MMC)</li> </ul>
Christian Montz	CoTeam Lead	<ul> <li>Former Regional Division Director for FEMA Region VI overseeing HMA and PA grant activities</li> </ul>
		<ul> <li>Technical expert on FEMA 428 Alternate Procedures</li> </ul>
Beth Zimmerman	Sr. Advisor	<ul> <li>Has led response and recovery operations at 400 declared disasters</li> </ul>
		<ul> <li>Nationally recognized expert in emergency management has directed multiple Response, Recovery, Logistics, and Field Operations Directorates for FEMA</li> </ul>
Pam Patenaude	Sr. Advisor	<ul> <li>Former COO of Department of US Housing and Urban Development (HUD)</li> </ul>
		<ul> <li>Former Director of Housing Policy at Bipartisan Policy Center</li> <li>Former Assistant Secretary for Community Planning and Development</li> </ul>



NAME	ROLE	EXPERIENCE & QUALIFICATIONS
Frank Pagno	Sr. Advisor	<ul> <li>Managed \$2 billion of regional HMGP grants in FEMA Region VI</li> <li>Recent experience helping FEMA assist applicants integrating Section 406 mitigation related to Harvey</li> </ul>
Mike Womack	Sr. Advisor	<ul> <li>Former Director of FEMA's Louisiana Recovery Office and managed all PA and HMGP activities for Katrina and Rita</li> <li>Assisted FEMA Region VI Administrator in developing procedures which increased large project closeout by 300%</li> </ul>
Tabatha Ballard	Support-Grants Mgmt	<ul> <li>Assisted the Louisiana Governor's Office for Shelter at Home (SAH) Program</li> <li>Seasoned grant manager with over 15 years' experience</li> </ul>
David Luke	Support-PW Status Analysis	<ul> <li>Former policy advisor to NY State Exec Liaison to the Chief of PA; instrumental in getting millions of dollars of PA projects approved suing Section 428 Alternative procedures</li> </ul>
Robert Leslie	Support-HMA Status Analysis	<ul> <li>Has carried out dozens of BCA's for FEMA for HMA projects over \$100 million</li> <li>Has managed several environmental site investigations and remediation projects</li> </ul>

The IEM corporate structure including Bryan Koon and four IEM Senior Advisors are represented to show the back-end support that the IEM Federal Funds Project Manager, Christian Montz, will be able to rely upon for assistance and guidance but are not part of the day-to-day Federal Funds team.

# Bryan Koon

IEM VP of Homeland Security & Emergency Engagment

Mr. Koon has 20 years of experience in emergency operations, planning, management and response. He served for six years as the Director of the Florida Department of Emergency Management Division (FDEM), providing executive direction to ensure that Floridians were prepared for emergencies, recovered from them and mitigated against their impacts. Mr. Koon currently serves as the Chair of the Multihazard Mitigation Council (MMC), an independent, non-governmental entity of leading experts in mitigation that helps inform policy and advocates for smart mitigation practices nationwide.

#### **Christian Montz**

Disaster Recovery Team Program Manager

Mr. Montz is a certified fraud examiner with experience in federal grants management and oversight. He has nine years of experience in disaster recovery and 18 years of federal grant experience. He served as regional division director for FEMA Region VI, overseeing HMA and PA grant activities. During his tenure at FEMA, he provided technical expertise on such topics as FEMA 428 Alternative Procedures and others, such as indirect cost plans, audit resilience and records retention. Mr. Montz is a former GAO auditor with an emphasis on disaster recovery programs.

#### Beth Zimmerman

428 Senior Advisor

Ms. Zimmerman is a seasoned recovery program advisor with 33 years of experience in disaster recovery operations. She has led response and recovery operations of over 400 major disaster



declarations and 70 emergency declarations at the state and federal government levels. Ms. Zimmerman directed, coordinated and synchronized the programs and operations of FEMA's Response, Recovery, Logistics and Field Operations Directorates during steady-state and major disaster and emergency activations. She is a nationally recognized leader in emergency management.

#### Pam Patenaude

**HUD Senior Advisor** 

Ms. Patenaude has more than 35 years of experience in housing, community economic development, real estate and public policy. She serves as senior community liaison at IEM, and served as the chief operating officer for the U.S. Department of Housing and Urban Development (HUD), where she oversaw a \$52 billion budget and 7,000 employees. Ms. Patenaude served as director of Housing Policy at the Bipartisan Policy Center and executive vice president and founding executive director of the J. Ronald Terwilliger Center for Workforce Housing at the Urban Land Institute. She was nominated by President George W. Bush and confirmed by the U.S. Senate to serve as assistant secretary for Community Planning and Development.

#### Thomas Mike Womack

Recovery Senior Advisor

Mr. Womack is a seasoned technical advisor with 17 years of experience in emergency management, specializing in public-assistance and hazard-mitigation programs. He served as executive director of FEMA's Louisiana Recovery Office for five years unitl 2018, managing all PA and HMGP activity for Hurricanes Katrina and Rita. As a leader on the FEMA Region VI HQ Disaster Closeout Team, Mr. Womack assisted the Region VI Administrator and Louisiana Recovery Office staff in establishing PA project closeout goals and procedures resulting in a 300% increase in the pace of closeout of large projects during the last half of 2012.

#### Frank Pagano

406 Mitigation Senior Advisor

Mr. Pagano has 40 years of experience with disaster preparedness, recovery, emergency management, long-term recovery and community resilience. He has provided expert advice to support grants and studies that assist public safety/emergency management with critical infrastructure protection to foster disaster resilience outcomes. His experience includes managing over \$2.0 billion of regional HMGP grants in FEMA Region VI, with the majority of grants located in Texas and Louisiana. Recent experience includes helping FEMA assist applicants with integrating Section 406 mitigation related to Hurricane Harvey.

#### Dora Pleasant

Governance, Compliance & Oversight Workstream Lead

Ms. Pleasant has extensive experience administering and overseeing grant funding and program implementation at the federal, state and local levels, with an emphasis on emergency management, preparedness and disaster recovery grant programs, such as CDBG-DR and FEMA grants. She has tested thousands of federal grant expenditures and has extensive FEMA PA grant accounting



experience. She has intimate knowledge of the Grants Management Body of Knowledge (GMBoK) and is technically proficient with grant-related requirements found in selected titles such as 2, 24, and 44 of the Code of Federal Regulations (CFR).

#### David Luke

Public Assistance Workstream Lead

Mr. Luke brings 17 years of extensive of FEMA policy, rule and regulation experience, including Title 44 of the CFR, FEMA's PAPPG, Hurricanes Katrina/Rita-specific policies (disaster-specific guidelines, information sheets), Coastal Barrier Resources Act (CBRA) and Coastal Wetlands Planning, Protection and Restoration Act. He served as a policy advisor to the New York State Executive Liaison to the Chief of PA, providing policy guidance and insight. Mr. Luke was instrumental in getting millions in PA projects approved using Section 428 Alternative Procedures, inclduing for the Long Island Power Authority (LIPA). Mr. Luke is a civil engineer.

#### Tabatha Ballard

Grants Management Workstream Lead

Ms. Ballard is a seasoned grants manager with 15 years of experience in progressively responsible roles. She was selected by the Lieutenant Governor's Office to assist in organizing recovery and volunteer efforts across the State of Louisiana. As deputy program manager, Ms. Ballard assisted with staffing and successfully implementing the Shelter at Home (SAH) program for Louisiana residents. She led four managers and 68 employees assigned to several departments, including the call center, scheduling, QA/QC and senior site inspection teams.

#### Robert Leslie

HMA Status Analysis

Mr. Leslie has managed environmental site investigation and remediation projects, regulatory agency coordination and design/construction management of environmental restoration projects in excess of \$20 million. He has carried out dozens of BCAs for FEMA for HMA projects over \$100 million. Mr. Leslie is adept at finding and using data from across a wide spectrum to justify investments in mitigation. He is a licensed civil engineer and a certified flood plain manager.

The DRT will be divided into four major workstreams — grant management, grant accounting & compliance oversight, hazard mitigation and public assistance — and each workstream lead will report directly to Christian Montz, the Disaster Recovery Team's program manager.

Bryan Koon will support Mr. Montz, with the latter elevating issues that require corporate attention. Advisors to Mr. Montz will include Elizabeth Zimmerman for PA 428 issues and Frank Pagano for all issues related to hazard mitigation, whether HMGP, PA 406, FMA, PDM or any other mitigation grant program FEMA implements. Pam Patenaude will support with issues related to CDBG-DR funding, which will be used as match funding. Lastly, Mike Womack, whose experience managing Hurricane Katrina and Rita issues will be important, will assist the team as necessary with ongoing recovery strategic issues.



# FEDERAL FUNDING PROCUREMENT MANUAL В. **APPROACH**

The Consortium fully understands the Puerto Rican Government's election to use only Section 428 for FEMA PA permanent projects. We also understand the Section 428 process for Puerto Rico and the roles FEMA, the Recipient and the subrecipient will play as well as the Center of Excellence and Expert Panel in the applicant PW Section 428 Process which is depicted in Figure 26.

IEM knows firsthand the importance of uncovering all damages and ensuring those damages are accurately and completely described in detail in Damage Descriptions and Dimensions (DDD) prior to submission to FEMA. It is from the DDD that FEMA will prepare the scope of work (SOW) for the eligible permanent work associated with the project and prepare the cost estimate in accordance with the factors developed by the Center of Excellence. In preparing its certified cost estimate, FEMA may consider cost information provided by the applicant and its subapplicants.

LUMA understands how imperative it is to comprehensively and accurately account for costs in the fixed-price cost estimates. Given that the agreed upon cost estimate will ultimately represent the restorative project fixed-cost subaward, it is critical to have sufficiently captured all of the damages. The Operator should have a clear picture of the scope of work and reliable cost estimates in order to ensure that the final agreed upon cost estimate is as complete and accurate as possible to prevent and/or minimize incurring costs that will not be reimbursed by FEMA.

Applicant Section 428 Process Puerto Rico Electric Power Authority SUBMIT DAMAGE DESCRIPTION AND **DIMENSIONS TO FEMA THROUGH GRANTS PORTAL** AGREE ON DAMAGES SUBMITTED, DAMAGE **DESCRIPTION AND DIMENSIONS** PREPA OPERATOR DEVELOPS **SOW & COST ESTIMATE** EXPERT PANEL REVIEW OF **PROJECT & COSTS** APPLICANT OR FEMA, RECIPIENT, & RECIPIENT APPEAL IF APPLICANT AGREE ON **COST ESTIMATE NECESSARY** FULL PROJECT OBLIGATION OF **FUNDS TO RECIPIENT** 

Figure 26: Applicant PW Section 428 **Process** 

IEM also understands the flexibilities offered to Puerto Rico to ensure that infrastructure is not just built back to pre-disaster condition but rather to build back better, which in the case of LUMA, will be critical to electric grid modernization and reliability. As such, we understand the need to incorporate Section 406 mitigation efforts (which provide for funding for mitigation of structures that are already damaged) for recovery projects and that according to the Public Assistance Alternative Procedures (Section 428) Guide for Permanent Work FEMA-4339-DR-PR, September 2019, approved Section 406 mitigation opportunities can be inserted into the restorative PWs even after the restorative PW has been approved and obligated. This means that those capped project estimates for recovery projects that include activities that qualify under Section 406 are eligible for a single amendment after FEMA's approval of the estimate. This is an important



distinction to note because activities qualifying under Section 406 are eligible to receive up to 100% of the damages listed in the original capped project estimate.

To increase the resiliency of the T&D system as it recovers, we will establish a Section 406 mitigation goal of at least 60% for all PA projects. That is, 60% or more of the total number projects should have some degree of mitigation woven into the projects for future resiliency. This represents a forward thinking and value-for-money approach to system recovery. From hurricane rated composite transmission poles to elevated substation buildings, we will work closely with infrastructure design teams to ensure that the mitigation strategies deployed are eligible and cost effective.

# 1.0 TRANSITION APPROACH FOR PA, PW AND HMGP ACTIVITIES

A simultaneous step in the transition will be our passing of the baton from current COR³ and/or PREPA vendors assisting PREPA with FEMA PA and HMGP activities to LUMA's Federal Funds Management Office. To ensure as smooth a transition as possible, LUMA may retain the option of hiring certain key staff who are currently in position. Our goal in this step is to understand the status of all identified projects including PREPA's decisions as to whether to move forward with the project and/or any Section 406 mitigation or to complete alternative projects in lieu of the restorative project. In addition, we will gain an understanding of which projects PREPA has decided to aggregate into a larger alternative project. After understanding the status of the projects as a whole, we will work to understand task-level PW and to any extent any HMGP progress made.

As part of this process, we will assess PREPA's current document management to support these activities such that we are assured we have gained all documents and insights from current vendors and PREPA staff. It will be essential that there are no missteps in this handoff. We foresee at least a short-term overlap of these vendors to help the IEM recovery team gain a comprehensive understanding of the tasks completed to the date of the Consortium's transition into PREPA. To assist with a smooth and effective transition, we are already reviewing the status of PWs, and the DDDs and cost estimations included in the PWs.

Our PW Analysis team will also, if necessary, conduct site visits if there are questions regarding PWs that arise after reviewing documents and photographs to ensure a complete picture of damages. The team will also be examining the extent of the inclusion of Section 406 mitigation since we intend to establish a 60% goal as previously discussed. Frank Pagano, one of IEM's Mitigation Senior Advisors currently manages, on behalf of FEMA, a FEMA Hazard Mitigation technical assistance project, in Houston, Texas, designed to ensure that PA projects have comprehensive inclusion of Section 406 mitigation. Mr. Pagano will advise the transition team from his vast mitigation experience to ensure every effort is undertaken to include mitigation on the Operator's PA projects. The transition review of Section 406 mitigation already achieved will be reviewed by the PW Status Analysis Team under the technical direction of Mr. Pagano.

Additionally, as soon as we land at PREPA, we will establish a SharePoint site (Figure 27) that is easy to use and can also be used on mobile devices. This site will be the entry point for everything related to the T&D system's disaster recovery. Stakeholders will be provided access and will be able to see the latest information for each project, the tempo of reimbursements, and all activities related to grants management and procurement. Figure 28 is an illustrative example of what LUMA's disaster recovery



SharePoint site may look like. This tool is not meant to replace COR<sup>3</sup>'s Puerto Rico Disaster Recovery Solution (PR DRS) application or COR<sup>3</sup>'s Automated SharePoint and FEMA's EMMIE which are used for reporting to the public through the Transparency Portal (https://www.recovery.pr/). Nor is this SharePoint site intended to replace how PREPA interfaced with COR<sup>3</sup> but instead, this is an enhancement tool. COR<sup>3</sup> strives for transparency in grant funding and so will we.



Figure 27: Suggested SharePoint Site

We know that PWs are currently at various stages of the submission process shown in Figure 28.



Figure 28: Key PA Project Formulation Steps

We analyzed the current status of PWs in all PA categories and we know that COR<sup>3</sup>, the Administrator, PREPA customers, and other stakeholders are anxious to get permanent work underway. Currently, as of October 28, 2019, we know that there is only one Category F: Utility PW



obligated, and we are now into year three post-Hurricane Maria. We know that COR<sup>3</sup> expects quick but high-quality action to start and complete projects, and we stand ready to do so.

Figure 29 below shows a snapshot of our monitoring of the recovery efforts and funds spent so far. This monitoring that we have been doing for the last six months means we understand the current state of the recovery, which will allow us to quickly accelerate the recovery after the commencement date.

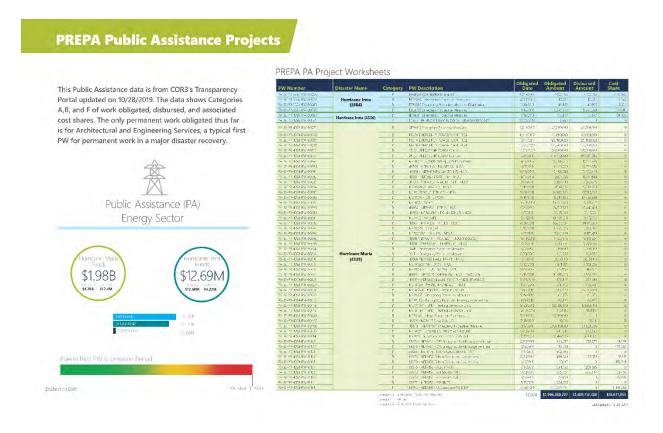


Figure 29: Our PREPA Public Assistance Projects Snapshot

# C. PROCUREMENT PROCESS VIEWS & MANAGING GOVERNMENT GRANTS & SIMILAR FUNDS

COR³ uses a leading-practice guide for grants management. Too often, states and other applicants/subrecipients, use multiple guides that are not a single compendium and at times can conflict. Our north star for governance will be the Federal Funds Procurement Manual with chapters consistent with COR³'s. Of course, there will be nuanced changes and the perspective will differ since the Owner resides at the subrecipient level.

Generally, the compendium will include the following chapters familiar to COR<sup>3</sup>'s:

Chapter 1: Disaster Recovery Federal Funds Assistance;



- Chapter 2: Application and Award Management;
- Chapter 3: Procurement;
- Chapter 4: Cost Principles;
- Chapter 5: Property and Equipment Management and Disposition;
- Chapter 6: Insurance and Duplication of Benefits;
- Chapter 7: Federal Funds Cash Management;
- Chapter 8: Record Retention and Access;
- Chapter 9: Performance and Reporting;
- Chapter 10: Federal Audits and Sanctions;
- Chapter 11: Subrecipient Management and Monitoring;
- Chapter 12: Closeout;
- Chapter 13: Appeals and Arbitrations; and
- Chapter 14: Fraud, Waste, and Abuse Hotline and Initial Complaint Analysis.

Most importantly, since procurement will be central to the T&D system's recovery, the Transition Team will ensure that Chapter 3: Procurement meets all Federal, Territorial, and O&M Agreement requirements between the Consortium and the Administrator. In addition, we will add the procedural guidance — the "how to" for conducting procurements. We also plan to include key measures to avoid and mitigate any possible Organizational Conflict of Interest (OCI) at the Operator. We have included in Appendix 3 a summary of OCI Avoidance and Mitigation Principles to more fully describe our approach to OCI avoidance and mitigation.

Our policies will comply with all applicable requirements for procurement relating to contracting with small businesses, minority-owned businesses and women-owned businesses.

Our approach will ensure a consistent application of LUMA's polices and compliance with Federal, FEMA and COR<sup>3</sup> rules and regulations. Together with a procurement planning team comprised of COR<sup>3</sup> and Administrator representatives, we will produce an effective and compliant process that will withstand oversight scrutiny.

We also understand the critical procurement prohibitions in Title 2 of the Code of Federal Regulations at 2 CFR 200.317-326. The procurement chapter will include such topics as:

- Prohibition of cost plus a percentage of cost contracts;
- Prohibition of sole source contracting without justification and approval from COR<sup>3</sup>;
- Bid solicitation process;
- Employee and organization conflicts of interest;
- Avoiding acquisition of unnecessary or duplicative items;
- Awarding only to responsible contractors;
- Maintaining records of procurement history;
- Managing time and materials contracts properly;
- Resolving disputes;
- How to decide whether a contract is necessary;
- Conducting technical evaluations; and



Exigent contracting in emergencies that are compliant.

Key to the success of reimaging Puerto Rico's electric grid and managing its fixed cost subawards is effective procurement of goods and services. We will incorporate managing fixed cost subawards through accountable contracting and management into LUMA's Procurement policy and procedures. It is imperative accountable project budgeting be passed on to LUMA's contractors who will ultimately carry out the construction work for LUMA. Too often infrastructure projects have been completed late and/or over budget. We intend to mitigate against this by using contracts that require the fixed price methodology to be properly used. A proper fixed price contract fixes prices after undertaking a lot of analysis and not by putting a high arbitrary price ceiling. The contracts will also use tools that will incentivize performance and penalize a lack of performance.

Additionally, we will update the COR<sup>3</sup> Chapter 11 (Subrecipient Management and Monitoring) to reflect contractor and construction management and monitoring policies and procedures to address the effective management of its contractors, construction schedule and budget. This is another critical success factor for LUMA's management of its fixed cost subawards. Given the substantial number of concurrent infrastructure projects, it is critical that effective management of project schedules and budgets leveraging appropriate project management tools and techniques are used to ensure projects are completed on schedule and within budget. We will incorporate these into LUMA's Procurement and Construction Management policy and procedure. In addition, we intend to keep projects on pace and within budget by using only the most experienced construction project managers who will accept some of the risks and benefits of performance through our compensation structure. In other words, our construction project managers' success will be tied to contract vendor performance.

## FEDERAL FUNDING PROCUREMENT MANUAL $\mathbf{D}_{-}$ **DEVELOPMENT TIMELINE**

Key milestones and dates to complete Chapter 3: Procurement are outlined in Table 18 below:

Table 18: Chapter 3: Procurement Milestones

ACTIVITY	KEY DATES*
Develop <b>Chapter 3: Procurement</b> of the Disaster Recovery Federal Funds Assistance Guide, periodic reviews by COR <sup>3</sup> and Administrator representatives	March 5, 2020
Submit for Administrator review and comment	March 6, 2020
Make changes based on Administrator review and comments	April 17, 2020 – April 23, 2020
and resubmit to Administrator as necessary	



Submit for COR³ review and comment	April 24, 2020 – June 11, 2020 (or earlier if Administrator does not require to see the draft a second time)
Submit to FEMA and DHS OIG for concurrent review	June 12, 2020 – June 14, 2020
Receive comments from FEMA and DHS OIG and make edits as necessary	July 31, 2020 – August 2, 2020
Finalized Chapter 3: Procurement	August 3, 2020

<sup>\*</sup> Assuming Effective Date of January 20, 2020

To stay current with changes in federal or territorial requirements, we will continually update this manual, but at a minimum, we will do so every three years.

In addition to procurement, we recommend and are prepared to enhance certain chapters such as Chapter 5: Property and Equipment Management and Disposition to include the procedural guidance to ensure a consistent application of LUMA's polices in these areas and ensure compliance with Federal, FEMA and COR<sup>3</sup> rules and regulations.



# 8. STAFFING FOR FRONT-END TRANSITION **PERIOD**



## **GENERAL ORGANIZATIONAL STRUCTURE** A.

The organization chart for our transition team is shown in Figure 30 below.

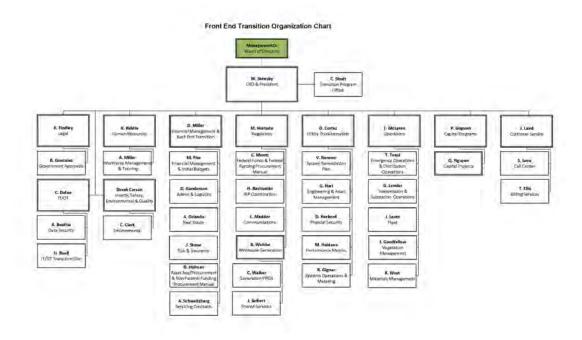


Figure 30: Front-End Transition Organization Chart

Wayne Stensby CEO & President

Wayne Stensby brings over 30 years of experience in the energy and electricity industry. He is the Executive Vice President of Corporate Development for Canadian Utilities Limited (an ATCO Company) and is currently responsible for the leadership, strategy and direction of Canadian Utilities global corporate development, including its Canadian midstream business and its LATAM operations.

Most recently, Wayne held the role of Managing Director, Electricity Global Business Unit for Canadian Utilities Limited, where Wayne was responsible for the operations, strategy and development of Canadian Utilities electricity related businesses.

Prior to leading the electricity businesses, Wayne was Managing Director and Chief Operating Officer for ATCO Australia where he led ATCO's Australian operations.

Wayne joined ATCO in 1988 and has held a wide variety of increasingly senior operational, commercial and engineering leadership positions, including multiple assignments in Australia, Canada, and the U.K.

Wayne holds a Bachelor of Science in Electrical Engineering from the University of Alberta and is registered as a Professional Engineer.

## Derek Carson

Health, Safety, Environmental & Quality

Derek Carson has more than 20 years of experience in safety, health, environmental and quality leadership roles within the electric utilities industry. In his current role at Quanta Services, Derek provides support to all of Quanta's operating units in the areas of industrial hygiene, environment, quality and overall injury prevention. His experience includes expertise implementing safety and environmental management systems, developing behavior-based safety programs that reinforce good safety behaviors and drive down the number of safety incidents, implementing vehicle accident reduction initiatives, conducting incident investigations, developing risk assessments and using rootcause analysis methodologies to drive permanent change.

In addition to the years spent at multiple utility companies, Derek worked for the U.S. Department of Labor in the OSHA division and brings with him a strong background in regulatory compliance.

Derek holds a Bachelor of Science in Industrial Hygiene from Ohio University and has Certified Safety Professional (CSP) and Certified Professional Environmental Auditor (CPEA) designations.

Donato (Don) Cortez **Utility Transformation** 

An experienced utility operations executive and business development professional, Don Cortez has a proven track record in creating and implementing strategic plans to improve business. Currently, Don is responsible for developing electric and gas utility business opportunities for Quanta Services. He brings with him significant amount experience in utility operations step-change management, both



nationally and internationally, with positive results, increasing shareholder value and customer satisfaction. Specifically, Don has experience leading the operations and maintenance of utilities in multiple Latin American countries.

While at IBM, Don developed large business deals in the global utilities market, collaborating with executives in China, Taiwan, Oman, Australia, Brazil, Chile, South Africa, Mexico, Korea and the U.S.

At CenterPoint Energy, Cortez oversaw the electric and gas business technology strategy including the smart grid program, which encompassed the major equipment selection, overall architecture direction, contract negotiations and Public Utility Commission of Texas smart meter deployment agreements. He managed and coordinated with personnel to oversee process improvement in gas and electric utilities, telecom services, fleet services, land and field services, geographical information systems (GIS), central shop services, contractor services, distribution engineering, central metering and safety and environmental services.

Lastly, Don led and managed emergency response planning within electric utilities, including developing a utility asset damage prediction model used to estimate labor resources for power restoration, storm restoration duration, power system actual storm damage assessment processes and procedures and emergency operating plans to minimize the power system outage time.

Don holds a Bachelor of Science in Electrical Engineering from Texas A&M University. He is fully English-Spanish bilingual and thrives in leading diverse individuals and teams.

Cam DaFoe IT/OT Planning

As an IT executive for ATCO, Cam DaFoe applies his extensive background in relationship management, influencing, negotiating, problem-solving, oral and written communications, executive selling, planning and strategizing within the IT function. Cam has built and led a team of trusted advisors for his client organization. He works with multiple functional areas in organizations, including customer information systems, workforce management, asset management, meter management, customer care, dispatch, geographic information and land management. Cam's IT experience extends across IT portfolio management, project accounting, lifecycle upgrades, Windows 10, Oracle Financials, Oracle Cloud, IBM Maximo, application outsourcing (Wipro) and migration to cloud computing.

Formal training and on-the-job experience have given Cam exposure to — and a broad perspective on — numerous aspects of utility operations including business functions, regulatory environment, application systems, capitalization and revenue generation.

Prior to his work at ATCO, Cam spent over 30 years with IBM Canada Ltd. where he worked with business clients on managing business priorities, scheduling, dependencies and resources over complex project portfolios to build and execute governance programs in support of proper IT management.



Cam earned a Bachelor of Science in Psychology from University of Alberta and completed a number of executive programs through Harvard Business School (IBM Certification Program), the University of Michigan (Stone and Webster Utilities Executive Program) and Queen's School of Business (Public Executive Forum). Cam is certified as a Certified Client Executive from IBM and as a Business Relationship Manager from the Business Relationship Management Institute.

Kari Findley Legal

Kari Findley currently serves as Senior Legal Counsel Lead for strategic transactions at Quanta Services. In this role, she has immense experience in structuring corporate operations, bidding on concessions, devising tax structure and preparing agreements between publicly traded companies for limited partnerships in both the utility and telecommunications space.

Kari has over 25 years of experience in mergers and acquisitions, drafting and negotiating documents and working closely with executive leadership to close strategic corporate acquisitions. Kari has an extensive history working with foreign and domestic corporations and joint ventures.

Kari has a Bachelor of Arts in Economics, Managerial Studies and Political Science from Rice University and earned her Doctor of Jurisprudence from the University of Texas School of Law.

Paul Goguen Capital Projects

Paul Goguen has more than 32 years of utility experience in progressively responsible engineering, project management and executive roles. He is skilled with executive management and oversight of major electricity transmission and distribution projects and programs, and with managing and coordinating planning, operations and maintenance activities of transmission, distribution and telecommunications systems.

In his current role as Senior Vice President, Project Development, Paul's has overall responsibility for providing integrated direction, management and leadership in the business planning efforts of major projects for ATCO. His strengths include identifying, evaluating and implementing projects to grow ATCO in existing and new strategic markets. Paul provided regulatory oversight on the deferral application for the \$1.35 billion Eastern Alberta Transmission Line (EATL) project and served as the Director responsible for the operations and divestiture of the West Fort McMurray 500 kV Transmission Line — Alberta Power Line project.

Previously, Paul was the Senior Vice President and General Manager for Transmission and Distribution at ATCO. His overall responsibility comprised of ATCO's transmission and distribution business, including; system operations, maintenance, asset and work management, quality management, risk management, project and construction management, engineering, procurement, commercial, finance and accounting, regulatory, health & safety, environment, customer care and billing and metering and meter data management functions.



Paul holds a Bachelor of Science (Hons) in Mechanical Engineering from Queen's University and a Master of Business Administration from the University of Alberta. In addition, Paul is a Professional Engineer, earning and maintaining his designation since 1986.

## Mario Hurtado Regulatory

Mario Hurtado has over 25 years of experience in the electric utility, renewable energy and natural gas sectors. As a Co-Founder and Executive Vice President of Clean Line Energy Partners, Mario led the development of a \$2.5 billion transmission line to connect 4,000 MW of renewable energy produced in the Oklahoma Panhandle to utilities in the Southeast U.S. In this role, Mario managed teams that received public utility commission and environmental approvals in Oklahoma and Tennessee and created and managed a public-private partnership with the U.S. Department of Energy. His team obtained permits and hundreds of miles of easements necessary to construct this 720-mile project.

Hurtado also managed operations for and new project development at a regional power generation business in Central America and the Caribbean. He has negotiated and executed large utility acquisitions and led transitions for several former public electric utilities in Brazil and Colombia. He is fully English-Spanish bilingual, is fluent in Portuguese and proficient in French, and has led diverse teams across multiple countries.

Mario received his Bachelor of Arts in Political Science from Columbia University. He pursued his Master of Arts in International Relations with concentrations in International Economics and Latin American Studies at the Nitze School of Advanced International Studies, Johns Hopkins University.

## Jessica Laird Customer Service

Jessica Laird brings over 15 years of specialized experience in customer service, billing and retail. In her various roles at ATCO, Jessica has led and implemented change for the ATCO retail business, ATCO Energy Ltd., as well as ATCO Electric. She focuses on the ongoing development of the customer experience using Lean Six Sigma methodologies.

In her career, Jessica has set up new billing systems from the ground up; developed and documented all customer service policies, processes, procedures and training modules for staff; created customer satisfaction surveys; and implemented process improvements based on these results.

To enhance the customer experience, Jessica focuses on driving key metrics across customer service teams, decreasing customer call times and increasing customer satisfaction by implementing a wide variety of innovative programs.

Jessica holds a Bachelor of Commerce in Organizational Analysis & Marketing from the University of Alberta.



## Todd McLaren

**Operations** 

Todd McLaren has over 25 years of utility experience in varying roles and over 11 years in an executive capacity on transmission, large distribution and substation construction projects. In his current role as Vice President, Engineering and Construction, Todd is responsible for the overall operations and maintenance of ATCO's transmission, distribution and telecommunication system, as well as project management, supply chain, project construction, commissioning, asset management, land and property functions.

Todd has successfully executed and managed challenging, multidisciplinary projects to completion. He is skilled in providing management and oversight through the full lifecycle of significant large-scale utility projects, including major storm and wildfire response.

Most notably, Todd was responsible for the construction planning, tender development and award, contractor management and regulatory matters for ATCO's \$1.8 billion Eastern Alberta Transmission Line.

Todd majored in Finance at Olds College and minored in Law at Texas State University.

## Darren Miller

Financial Management

With more than 30 years of experience as a financial and accounting leader, Darren Miller most recently served as the Chief Financial Officer of Quanta Marine Services, LLC. Darren is a proven financial executive with multi-faceted experience in fast-paced entrepreneurial environments. He specializes in areas of financial analysis and management, operational accounting, administrative services, mergers and acquisitions, risk assessment and management, internal controls and auditing, and process improvement.

Darren has successfully led change implementations in energy, marine, industrial service and construction companies, both nationally and internationally. Most recently, Miller managed the setup of a permanent establishment in Mexico, enabling Quanta Marine Services to be a key contractor for the Sur de Tejas offshore pipeline from Texas to Mexico.

Darren holds a Bachelor of Business Administration in Accounting from Lamar University and is a Certified Public Accountant.

**Quyen Nguyen** Capital Projects

An electrical industry executive, Quyen Nguyen has over 25 years of experience in project development and execution. In his current role as Vice President, Projects and Construction, at ATCO, he manages and oversees all aspects of major transmission and worker accommodation projects and programs. He has expertise in managing and coordinating all maintenance activities of both transmission and telecommunication systems, as well as completing engineering design for all aspects of transmission line, substation and telecommunication facilities.



Most recently, Quyen was responsible for the engineering, construction, procurement project control and overall execution of the \$1.6 billion Fort McMurray West 500 kV Transmission Line project and the \$1.8 billion, 500 kV Eastern Alberta Transmission Line (EATL) project. In addition, Quyen led the Site C Worker Accommodation project, a \$580 million 1,800-person lodge. His vast experience and record of delivering projects on schedule and on budget were key to meeting the compressed schedules of these projects.

Quyen holds a Bachelor of Science in Electrical Engineering from the University of Alberta and is a licensed Professional Engineer.

## Kim Riddle

Human Resources

Kim Riddle currently serves as the Vice President of Human Resources (HR) for Quanta Services. In this role, she leads all HR functions, including full accountability for \$130 million in consolidated benefits, retirement plans, HR compliance, diversity and inclusion, organizational performance, employee retention and other critical areas. Kim collaborates closely with the CEO, Board of Directors and senior management, assessing business objectives and designing global HR strategies and initiatives. She coordinates a full range of support tasks for 46,000 employees globally, including workforce planning, internal training, workforce development, employee relations, executive/staff compensation, auditing and onboarding processes. Kim is responsible for the enhancement of company culture and influence in the community, a mission that she cares deeply about.

Kim has headed due diligence for over 20 acquisitions at Quanta and has facilitated rapid integration into the Quanta organization. Prior to joining Quanta, Kim held various HR leadership positions, including Vice President of Human Resources for Hercules Offshore. Over her 25 years in the HR field, she has specialized in energy-, utility- and healthcare-related industries. In these fields, Kim has driven strategies that maximize organizational performance and accelerated growth. She excels at creating employee motivational programs that start from the top down, helping managers embrace styles that are proactive in employee retention.

Kim earned her Bachelor of Arts in Journalism from the University of Houston and possesses both Senior Professional in Human Resources (SPHR) and SHRM Senior Certified Professional (SHRM-SCP) designations.

Brian has a Master of Business Administration from the University of Michigan and a Bachelor of Science in Civil Engineering from Northeastern University.

## **Craig Schutt**

Transition Program Manager

Craig Shutt has over 30 years of experience in project management leading large scale EPC projects. In his various project management roles with ATCO, Craig has been responsible for leading and directing the design build, the direction of EPC and routing/regulatory contractors, overall project management and project controls. He has prior knowledge and experience with managing the



requirements of P3 projects and successful completions. Specifically, the West Fort McMurray 500 kV Transmission Project was energized 90 days in advance of the Target Energization Date.

In addition, Craig was responsible for the North East Transmission Development Project (NETD), a \$600 million project to increase the transmission system capability around Fort McMurray, Alberta. In this role, he provided leadership and direction to project teams for NETD. He has a large amount of experience in developing and implementing project processes and management tools required for any project, including master contract management systems, inter-project material appropriation systems, resource planning, progress reporting requirements and integration with the project management offices.

Craig has a Bachelor of Science in Engineering from the University of Alberta and achieved his Project Management Professional (PMP) certification from the Project Management Institute.

## Brian Walshe

Wholesale Generation

Brian Walshe has over 25 years of experience across a wide range of areas within the energy and utility industries. He has primarily focused on power plant and transmission and distribution operations, renewable energy strategies, generation wholesale markets and business integration planning. Brian has provided services to over 300 electric power generation plants of all technologies around the world. These services include leading or supporting technical or commercial due diligence on scores of thermal and renewable projects and providing expert witness testimony in utility regulatory proceedings.

For over 12 years of his career, Brian has lived and worked outside of North America and is English-Spanish bilingual. Prior to forming ION Consulting, Brian was employed with McKinsey & Company, Navigant/Metzler & Associates and Stone & Webster Inc. In all of these positions, he focused exclusively on the energy and utility industries and provided consulting services to over 80 utility and regulatory clients on four continents.



The list of subcontractor candidates that may be involved with transition is shown in Figure 31<sup>2</sup> below, which illustrates the activities that each subcontractor will potentially be performing by workstream.

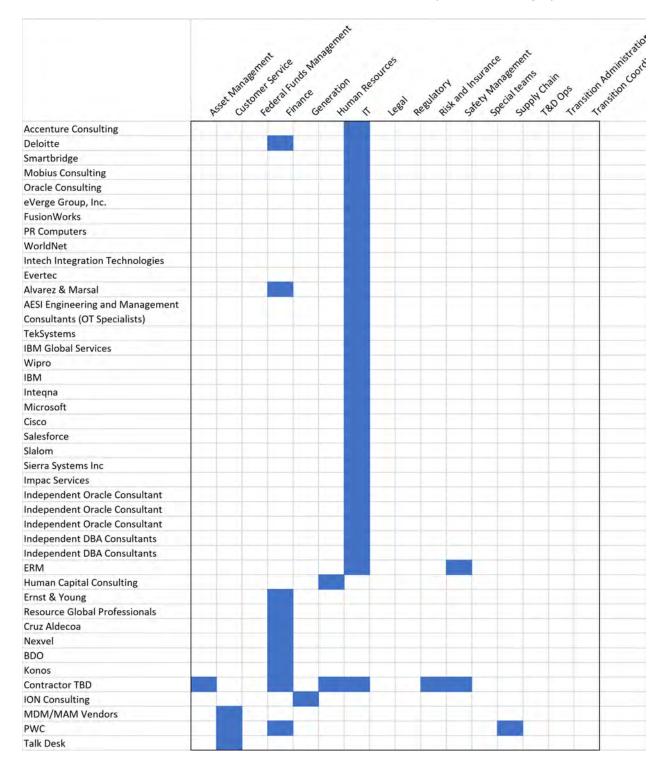


Figure 31: Subcontractor Candidates by Workstream



The strategy used to select contractors is to staff all key workstream leads with our internal employees wherever possible and to supplement this team with specialized SMEs where appropriate. In some cases, we also populated some support positions on a given workstream with additional contracted SMEs where his or her particular skill set was required. Some teams, such as IT, relied more heavily on contractors because of their specialized expertise, and HR will utilize a large force of local contractors to provide translation and interview-support services.

To identify and select contractors to be used during transition, we also used three primary selection groups. The first selection group is comprised of certain specialized contractors who have worked with our internal teams before and are familiar with our approach and work expectations. These contractors are generally individual solo-consultants, not part of a larger firm, who have worked with a Consortium member company many times over previous years, are well known to us and have been included on our project teams.

The second selection group is comprised of larger, specialized firms that we have worked with repeatedly in the past and have the skill set and depth of personnel needed to support transition project schedules. For example, one of our chosen Safety/Environmental consultants is one in which we have a relationship with from previous engagements, have a high confidence in their ability to perform the work, and they have a pool of labor resources that can be engaged in a shorter calendar time frame. For this selection group, we considered and, where possible, contacted different vendors to inquire about cost and ability to support our schedule. We have reached a tentative agreement on which contractor will perform the scope of work, but we have not formally signed a contract.

The third selection group is comprised of candidates for larger scopes of work, which require greater depth of labor resources to support early schedule milestones, and in whom we have confidence in their ability to perform the work. The primary example of this selection group is IT. In these larger scopes, we have the opportunity to select from a number of different firms that could provide comparable services. We have had preliminary conversations about scope and timelines, have narrowed our list to two to three alternatives, and intend to obtain competitive price bids from different providers after contract award.

We routinely impose the same oversight and reporting requirements on all contractors, including written contracts with defined scopes of work and defined expectations for deliverables.

<sup>&</sup>lt;sup>2</sup> We acknowledge that Ernst & Young is identified on PREPA's restricted parties list. However, it is our understanding that this entity will cease to be a restricted party upon completion of the award process.

# **B. TRANSITION TEAM OVERSIGHT**

The key personnel who will lead the various workstreams are shown in Table 19 below.

Table 19: Workstream Lead & Role

WORKSTREAM	NAME	ROLE
Recruiting and Staffing	K. Riddle	Lead
IT/OT	C. Dafoe	Lead
T&D Field Services	T. McLaren	Lead
T&D Ops: District Operations	T. Tonsi	Lead
T&Substation Ops	G. Lemler	Lead
T&D Ops: District Control Center	R. Gignac	Lead
T&D Ops: Emergency Response	T. Tonsi	Lead
T&D Ops: Fleet	J. Lentz	Lead
T&D Ops: Vegetation Management	J. Goodfellow	Lead
T&D Ops: Public Lighting	P. Quan	Lead
T&D Ops: Governance	D. Cortez	Lead
T&D Ops: Asset Management	G. Hari	Lead
T&D Ops: Real Estate	A. Orlando	Lead
T&D Ops: System Operations	R. Gignac	Lead
T&D Ops: Metering	R. Gignac	Lead
Regulatory	M. Hurtado	Lead
Risk and Insurance	J. Stone	Lead
Safety and Health	D. Carson	Lead
Asset Acquisition	D. Holman	Lead
Customer Service	J. Laird	Lead
Finance	D. Miller	Lead
Supply Chain	K. West	Lead
Generation	B. Walshe	Lead
Legal	K. Findley	Lead
Transition Program Coordinator	C. Shutt	Lead
Special Teams	D. Cortez	Lead
System Remediation Plan	V. Romero	Lead
- ,		



WORKSTREAM	NAME	ROLE
Systems Ops Principals	B. Walshe	Lead
Fed. Funding Procurement Man.	C. Montz	Lead
Non-Fed. Funding Manual	D. Holman	Lead
Initial Budgets	M. Fite	Lead
Back-End Transition Plan	D. Miller	Lead
IRP Coordination	J. Romero	Lead
Workforce Management	A. Miller	Lead
Environment	C. Clark	Lead

## C. TRANSITION EMPLOYEES & SUBCONTRACTORS

Our transition estimate was built on a manhour basis and was estimated as 306,400 total hours. These total hours are estimated to be split approximately 50% each to internal and contracted workers. However, the percentage of internal employees to contractors does vary between the individual workstreams, with IT relying heavily on IT contractors and HR using extensive contractors for translators and interviewers, who will be contracted locally. This breakdown of hours estimated for internal employees and contractors by workstream is illustrated in Figure 32 below.



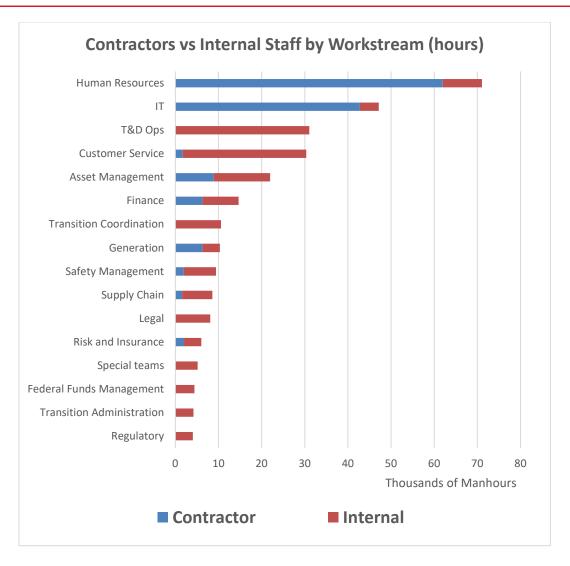


Figure 32: Transition Employees and Subcontractors

To convert the hours into full-time equivalents (FTEs), we assumed that the hours will be expended over a 9 month "field work" period. Therefore, we divided the 306,400 hours by 1500 available hours over the nine months of field work. This gives a total of approximately 205 FTEs required for field work. Of this total, approximately half, or 100 FTEs will be for internal employees, and that total of 100 employees is also split approximately equally between Quanta and ATCO.

## APPROACH TO EMPLOYMENT REQUIREMENTS

To be eligible for employment, all applicants must:

- Be legally authorized to work in the United States;
- Be at least 18 years of age (some positions may have other age requirements);
- Be able to pass a thorough background check (including criminal history record checks, previous employment verifications and references);



- Ba able to pass a drug screening and medical assessment (where necessary); and
- Have a safe driving record (if applicable to the position).

In addition to the above list, a comprehensive list of individual job requirements will be listed on each job description. A preliminary listing of job descriptions for core, strategic and support jobs are outlined in Annex IV: Operator Employment Requirements. These job descriptions have been assembled to reflect the needs of the business.

#### **EMPLOYMENT REQUIREMENT TIMELINE** F

We believe there will be two necessary milestones that need to be achieved in order to finalize the Operator Employment Requirements (job classifications and descriptions) for commencement. The two milestones are described in detail below

## Timeline and Milestone 1: Redesign new organization

Critical to the success of LUMA, this task is the foundation for the entire Recruiting and Staffing plan. Although we have a preliminary organizational design developed, we will need to confirm our assumptions immediately after award and make any necessary adjustments. To complete this, we will continue to coordinate with each department to enhance the comprehensive, department-specific people strategy/staffing plan that complements the overall business strategy. The plan will include finalizing the number of roles needed in each department and their job classifications/descriptions (Operator Employment Requirements) as well as selecting and implementing pre-hiring recruitment, assessment and evaluation criteria tools. We anticipate this process will take 1-2 months during the Transition period.

## Timeline and Milestone 2: Recruitment and staffing execution

Once the new organizational design is finalized and job descriptions have been created, recruiting and staffing will become our critical priority. Though multi-faceted, this task broadly includes the following:

- Posting all job classifications/descriptions on Operator's website;
- Communication campaign encouraging legacy PREPA employees to apply;
- Engaging key personnel at PREPA throughout the process;
- Interviewing and coordinating evaluations of qualified applicants; and
- Issuing offer letters with Operator's new Employment Requirements for successful candidates.

We anticipate this process will take two to three months during the Transition period.



9. ADDITIONAL FRONT-END TRANSITION PERIOD MILESTONES



## ADDITIONAL FRONT-END TRANSITION PERIOD $\mathbf{A}_{-}$ **MILESTONES**

#### 1.0 GENCO SHARED SERVICES & RELATED SHARED SERVICES

The team focused on creating and negotiating the Shared Services Agreement (SSA) will be led by Jim Seibert and supported primarily by Marcia Kosko and Brian Walshe. These three team members will form a "core group" to ensure design and execution of the SSA. They will be supported by members of the broader transition organization as appropriate for each of their specific sub-functions. This core group will coordinate with other team members assessing management systems, which will involve reviewing issues with the current PREPA organization and developing a process to implement to the new Operator organization.

Tahle	20.	GenCo	Shared	Services	Team
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NAME	ROLE	EXPERIENCE & QUALIFICATIONS
B. Walshe	Overall Lead	<ul> <li>Former Managing Director in Navigant's Transaction Practice, conducted assessments and commercial due diligence at over 250 thermal generation plants</li> <li>Supported wholesale market redesign projects in U.S., U.K., Switzerland, and South Africa, including wholesale price modeling and corporate restructuring into stand-alone GenCos</li> <li>Extensive IRP experience including expert witness testimony</li> </ul>
J. Seibert	Finance, Accounting, IT, Environment, Fleet, Capital Improvements	<ul> <li>Conducted extensive financial and operational analyses of the publicly traded electric and gas T&amp;D infrastructure construction industry for a private equity investor</li> <li>Led a series of engagements with an international T&amp;D electric power and pipeline construction firm, including planning and building of a new unionized electric T&amp;D construction business to serve the Western U.S.</li> </ul>
M. Kosko	Human Resources, Legal, Procurement, Supply Chain, Outage Support, Real Estate, Facilities, Security	<ul> <li>Responsible for change management requirements as the OCM Lead for the Customer Workstream including Business/Technical Role Maps, Change Impact Logs, Change Agent Network, Business Readiness Assessments, Communication Plan, and Cutover and Go-Live Support</li> <li>Developed content and supported the creation of proposals, RFP responses, documentation required for orals, engagement letters, contractual documents, and presentation decks</li> </ul>

Our SSA core group has deep experience in the area of shared services and has assessed and created shared services business models in several other utility environments. While detailed resumes are included in Appendix 1, their specific shared services experience is summarized below.



## James Seibert

Jim will be the overall lead for the shared services team. He has extensive experience implementing shared services units as part of major utility mergers and acquisitions and restructuring initiatives. This includes process analysis, benchmarking, and implementation of all shared services functions. He has served as the project manager on several 6- to 18-month major business transformation initiatives for utility clients in the U.S., UK, and Middle East since 2005

## Marcia Kosko

Marcia will be the primary support for the shared services team. She has extensive shared services in all shared services functional areas. She has experience developing resource management creating ramp plans and managing implementation including onboarding resources, IT, telephony, training, reporting, workforce management, operations, quality assurance, escalations, metrics, and service level agreements. Marcia also has extensive experience evaluating operational requirements and developing transition plans within customer operations, procurement/supply chain, field services, and revenue management

## Brian Walshe

Brian will be the support for the Regulatory and Public Affairs aspects of shared services team. He has extensive shared services experience, including t developing market-entry strategy for Shell Shared Services, a 5,000-employee business providing outsourced shared services to multiple industries. He has also served eight public utility commissions, proving diagnostic assessments of all utility operating functions, including a heavy emphasis on back-office and shared services functions.

In addition to our SSA core team's individual shared services experience, both ATCO and Quanta have extensive institutional experience, and both operate in a shared or common services business model. They have the procedures and written agreements in place to execute a shared service approach. ATCO undertook a major corporate reorganization four years ago, which included adoption of a shared services business model. ATCO will draw upon its personnel with recent "lessons learned" on the people-side to apply best practices to our reorganization into shared services model dealing. Quanta has a corporate headquarters group that provides various corporate and back-office services to over 200 subsidiary companies. They possess a wealth of experience related to procedural compliance and control as well as the flexibility needed to apply a model that meets the specific needs of the operating subsidiary

#### 2.0 EMERGENCY RESPONSE PLAN

We have determined that a team of three will be required to review existing Emergency Response/Business Continuity Plans. This team will form an interim Office of Emergency Management (OEM) which will be key to LUMA's success to respond to any emergency or disaster. This office will ensure all plans will be developed to the highest standards, employees are trained on the application of the plan, strong execution of the plan when activated, and that all Incident Command Systems are followed. The OEM will be led by an Emergency Management manager and two Emergency Management leads. These important roles will be filled by individuals with the right experience, training and knowledge, as well as history of demonstrable competence. They will be



hired from within the Consortium, and we are confident of a deep bench of candidates from within our

Table 21: Emergency Management Team

NAME	ROLE	EXPERIENCE & QUALIFICATIONS
T. Tonsi	Emergency Mgmt. Manager	<ul> <li>Conducted project oversite for bid proposal, performing key focus on the T&amp;D Operations</li> <li>Reviewed and provided guidance to all aspects of the project</li> </ul>
D. Cortez	Emergency Mgmt. Leader	<ul> <li>Director of Operations overseeing utility operations for approximately 3,600 professional and union employees serving Sao Paulo, Brazil</li> <li>Chief Operating Officer for EPSA, serving 750k electric customers in Cali Colombia, managing annual budget of \$500 mil</li> <li>Division Vice President of CenterPoint Energy in charge of electric &amp; gas technology strategy, smart grid program management, and smart meter deployment</li> </ul>
T. McLaren	Emergency Mgmt. Leader	<ul> <li>VP, Engineering &amp; Construction responsible for the overall operations and maintenance of ATCO's transmission, distribution and telecommunication system, as well as project management, supply chain, project construction, commissioning, asset management, land and property functions</li> <li>Former VP roles overseeing several functions including Maintenance &amp; Construction, Transmission Construction &amp; Standards, Eastern Alberta Transmission Line, Line Construction, Large Distribution Projects, Special Projects, and Customer Care &amp; Billing</li> </ul>
M. Hurtado	Regulatory Interface	<ul> <li>Developed complex energy infrastructure projects (electric transmission, power generation and LNG) and led M&amp;A transactions in difficult regulatory environments across western hemisphere.</li> <li>Negotiated project and transaction documents for successful energy investments in the US, Colombia, Brazil, Panama. El Salvador, Dominican Republic and other markets.</li> <li>Co-Founder of merchant electric transmission company focused on development and construction of long-haul lines to connect the best wind energy resources in the United States with large demand centers; helped grow company from two-person office to 50 plus employees, overseeing development of five greenfield transmission projects in eleven states, and raising over \$200 million.</li> </ul>
G. Lamier	T&D Specialist	<ul> <li>Leadership role with Quanta technologies in areas of T&amp;D planning, asset management, system maintenance and emergency response</li> </ul>



NAME	ROLE	EXPERIENCE & QUALIFICATIONS
		<ul> <li>Former VP of electric transmission operations with PG&amp;E responsible for over 18,600 miles of transmission and 960 substations</li> </ul>
		<ul> <li>Oversaw the PG&amp;E's emergency response organization, developed a new electric vehicle charging program, developed a new energy storage program, and competitive transmission business</li> </ul>
C. Montz	Federal Funding Specialist	<ul> <li>Former Regional Division Director for FEMA Region VI overseeing HMA and PA grant activities</li> <li>Technical expert on FEMA 428 Alternate Procedures</li> </ul>

#### NON-FEDERAL FUNDING PROCUREMENT MANUAL 3.0

We will assemble a planning team to develop the Non-Federal Funding Procurement Manual. The ManagementCo's planning team will consist of the following representatives:

Table 22: Non-Federal Funds Procurement Team

NAME	ROLE	EXPERIENCE & QUALIFICATIONS
D. Holman	Procurement, Sourcing, Contract Negotiations, Legal, Contract Strategy	<ul> <li>Accounted for Sourcing Specialists through performing corporate procurement, enterprise-wide contracting, and supply chain centre of excellence support</li> <li>Accountable for Legal Advisors performing commercial drafting, negotiation, interpretation, and dispute resolution</li> </ul>
K. West	Procurement, Sourcing, Contract Negotiations, Warehousing, Contract Administration, Contract Strategy, Materials Management, Logistics	<ul> <li>Led and directed supply chain with areas of focus from the end-to-end supply chain, sourcing, inventory management, procurement and warehousing support, logistics, and oracle optimization</li> <li>Led transition in a shared services model, meeting the needs of the organization and delivering value while focusing on process optimization</li> </ul>
M. Fite	Financial Interface	<ul> <li>Chief Financial Officer for Quanta Utility         Engineering Services; led implementation of new         accounting system, communicating new company         policy, developing employee incentive         compensation and benefit plans, for \$250M+         platform company</li> <li>Senior Manager – Assurance with PWC and Arthur         Anderson where he planned and led public and         private company financial statement and internal         control audits</li> </ul>
DLA Piper	Legal Counsel	■ N/A



To supplement the above ManagementCo's planning team, there will be required representatives from PREPA and the Administrator. Each Party will nominate qualified candidates with relevant expertise to support the initiative of preparing and developing the Non-Federal Funding Procurement Manual as well as supporting/leading negotiations as required. Representation from the Parties must include but not be limited to individuals with the following areas of expertise:

- Procurement/Sourcing:
  - RFP, Tendering, Bidding;
- Contract Administration:
  - Payment Approval Process; and
  - General Contract Management;
- Finance:
  - Working Capital/Cash Flow Payment Disbursement;
- Legal, Local & U.S. Law experience:
  - Contract Structure; and
  - Governance requirements;
- Contract Negotiations;
- Safety, Health and Environment:
  - Contractor Safety Requirements; and
  - Standards Work Methods;
- Subject Matter Expertise:
  - T&D Operation and Maintenance requirements;
  - Contract Implementation Requirements: and
- Consultants as required.

The assigned team will be responsible for developing the requirements for their respective areas. ManagementCo will coordinate and drive the required timelines, and collaboration efforts that develop deliver the Non-Federal Funding Procurement Manual in a timely manner.

## 4.0 PHYSICAL SECURITY PLAN

We propose a team comprised of representatives from System Planning/Engineering, T&D Operations, Substation Engineering, Protection/Telecom Engineering, Control Centers, Facilities and Security be assembled with an individual assigned as the Physical Security Team lead. Examples of the department-specific tasks respective members will be assigned are:

Table 23: Physical Security Plan Team

NAME	ROLE	EXPERIENCE & QUALIFICATIONS
E. Fishe	System Planning/Engineering	<ul> <li>Director of planning and engineering for Quanta</li> <li>Utility Engineering Services in charge of design and engineering group projects and operations</li> </ul>
		<ul> <li>Responsible for project implementation and execution</li> </ul>
M. Schad	T&D Operations	<ul> <li>Division manager with Quanta Utility Engineering Services, responsible for leading continuous</li> </ul>



NAME	ROLE	EXPERIENCE & QUALIFICATIONS
		improvement programs for clients and project teams  Former Director of Engineering & Surveying, leading a team of 70 surveyors
M. Mielke	Substation Engineering	<ul> <li>Overall accountability for the technical team executing HVDC &amp; FACTS projects, in ATCO and externally, including contracted services to Nalcor</li> <li>Supported HVDC &amp; FACTS engineering and operations and maintenance services, in ATCO and externally, including contracted services to Nalcor</li> </ul>
J. Orlando	Control Centers	<ul> <li>Oversaw and coordinated ISO/RTO orders and rules and present opinion to MISO and PJM to bring real world working knowledge from a utility standpoint into an engineering environment where new rules were being written</li> </ul>
		<ul> <li>Played a lead role in the update of NAEMA by-law rewrite</li> </ul>
P. Quan	Protection and Controls	<ul> <li>Process engineer with Quanta Utility Engineering Services responsible for Corporate Quality management systems for construction and engineering</li> <li>Leads Quality Assurance &amp; Control program for regulatory processes</li> </ul>
L. Sanche	Telecom Engineering	<ul> <li>Promoted a positive health and safety culture of all employees with yearly development of group Health and Safety Leadership Plan</li> </ul>
		<ul> <li>Ensured all employees in safety-sensitive positions are trained and completed the health and safety orientations</li> </ul>
D. Harbord	Security	<ul> <li>Provided expert advice and consultation on security-related matters for all Global Business Units at ATCO, including threat and risk assessments for personnel and property, investigations, physical security of sites, special events, security management and executive protection</li> </ul>
		<ul> <li>Directed several teams dedicated to developing and executing strategies to mitigate physical and logical security risks</li> </ul>
A. Orlando	Facilities	<ul> <li>Director, real estate &amp; environmental services with Quanta Services, responsible for leadership and oversight of the organization's real estate portfolio and associated transactions including acquisitions, dispositions, long-term leases and ground leases</li> </ul>



NAME	ROLE	EXPERIENCE & QUALIFICATIONS
		<ul> <li>Oversees Quantas real estate portfolio including 3rd party brokerage team, preparation and negotiation of contracts, leases, deeds, mortgages and other real property legal documents</li> </ul>

## System Planning/Engineering

Perform appropriate vulnerability studies to determine criticality of substations to the Transmission system and regions they supply. If vulnerabilities are detected, NERC Physical Security Standards (e.g., NERC CIP Standard 14 for Physical Security and NERC CIP 002-009 Version 5 for Cyber Security) will be applied to primary and backup control centers, transmission stations and substations, GenCo, and systems and facilities critical to system restoration

## **T&D Operations**

Implementation of new substation and T&D fencing, equipment, control house locking program, and substation logging entry and exit procedures. Determine physical security plan requirements of shared or common spaces (e.g., plant facilities, substations, offices) with GenCo. Identify physical access and restrictions for PREPANet assets and facilities.

## Substation Engineering

Engineering and Design of required security enhancements to meet NERC-CIP requirements and other enhancements deemed necessary for protection of substations (e.g., fencing standards, camera installations, and engineering and design of secondary protection and telecom control systems).

## **Control Centers**

Specify a physical security plan in alignment with NERC-CIP security enhancements (e.g., CIP-006-06, CIP-014-1) and other enhancements necessary to manage physical access to control centers.

## Protection and Telecom Engineering

Engineering of cyber security required for protection and telecom control systems.

## Security

Responsible for maintaining overall physical and cyber security of all facilities and equipment within the T&D System.

## **Facilities**

Implementation of physical security (e.g., fencing and locks) at facilities.

#### **DATA SECURITY PLAN** 5.0

## **Team**

The CSAT will require a broad and very specialized knowledge of information and digital systems technology. The CSAT will need to have digital systems knowledge, power operations, engineering,



safety experience and technical expertise. The personnel selected for this team will require additional training in these areas to ensure adequate capabilities to meet the cyber requirements. They will all be found from a deep pool of candidates within our ranks.

Table 24: Data Security Plan Team

NAME	ROLE	EXPERIENCE & QUALIFICATIONS
A. Beattie	Overall Lead	<ul> <li>20+ years of experience in progressively sophisticated roles in various cyber security domains, including pre-sales management, team management, solution architecture and risk management</li> <li>Acts as a "Trusted Advisor" to client stakeholders by advising on best practices to protect information</li> </ul>
N. Buell	IT Processes	<ul> <li>Operations Systems Support Program Manager with Quanta Services leading implementation of portfolio, program, and project governance frameworks</li> <li>Sr. Manager with Deloitte responsible for all aspects of finance and technology transformation projects</li> </ul>
R. Phillips	Cybersecurity	<ul> <li>Senior Innovation Adviser experienced in all utility applications and managing Azure Cloud Infrastructure</li> <li>Manager – IT/OT Integration responsible for Industrial Internet of Things (IIOT) initiatives, IT/OT Integration, and Connecting operational systems to business systems to provide real time business analytical data for business decision making</li> </ul>
M. Humphreys	Cybersecurity	<ul> <li>Led team of IT professionals implementing enterprise IT systems in matrix organization</li> <li>Oversaw IT project delivery resources, including Oracle HCM, Office 365, Work &amp; Asset Management, Meter Data Management, Customer Information Systems, GIS and IAM</li> </ul>
C. Jubinville	Enterprise Architecture	<ul> <li>Developed architectural principles and building codes for key areas of architecture including application, data and business architecture</li> <li>Developed and maintained key architectural artifacts</li> </ul>
J. Kindrachuk	Applications	<ul> <li>Solutions architect in charge of Customer Billing, Service Initiation Billing, and Distribution Configuration System Replacement</li> </ul>



NAME	ROLE	EXPERIENCE & QUALIFICATIONS
		<ul> <li>Led the collection, validation, and publication of electricity measurement data. To support Meter Data Management Upgrade / AMR Upgrade / AMI Implementation</li> </ul>
		<ul> <li>Responsible for several other utility IT project deployments including meter asset management, customer outage notification, and application roadmaps</li> </ul>

CSAT will be led by Albert Beattie. Albert will serve as the overall leader for CSAT- the transition team responsible for Information Security functions during the transition. He will be responsible for transition project deliverables and will also help interview and select staff for post-commencement activities in the new Information Security Office. He is responsible for the proper management of varying information security architectures. Proper management includes but is not limited to engineering, implementing and monitoring security measures for the protection of computer systems, networks and information.

Albert is also is the top-level leader of the organization responsible for the development and maintenance of information security architectures. Albert has over 20 years' cyber-security experience, including in solution architecture and risk management. He has extensive experience carrying out threat and risk assessments and developing security architecture

Members of Albert's CSAT team will have responsibilities in the following areas:

- Identifying and defining system security requirements and computer security architecture and develop detailed cyber-security designs;
- Preparing and documenting standard operating procedures and protocols;
- Configuring and troubleshooting security infrastructure devices;
- Developing technical solutions and new security tools to help mitigate security vulnerabilities and automate repeatable tasks; and
- Routinely preparing and communicating comprehensive reports including assessment-based findings, outcomes and propositions for further system security enhancement.

#### 6.0 **VEGETATION MANAGEMENT PLAN**

We will rely on a core group of vegetation management (VM) SMEs during the Front-End Transition Phase of the engagement. The VM Team composed of representatives from the Consortium and PREPA will be in place within 30 days of Effective Date.

Table 25: Vegetation Management Plan Team

NAME	ROLE	EXPERIENCE & QUALIFICATIONS
John Goodfellow	VM Team Lead	<ul> <li>Provided expert consulting practice focusing on utility operations, maintenance and construction with emphasis on reliability and process efficiency,</li> </ul>



NAME	ROLE	EXPERIENCE & QUALIFICATIONS
		with emphasis on VM practices and risks trees pose to T&D systems
		<ul> <li>Supported companys proposals for Busine ss Process Outsourcing (BPO) of utility engineering, construction, operations, maintenance, materials management, and outage restoration services</li> </ul>
J. Donnie	VM Processes & Procedure	<ul> <li>Leveraged utility client network for business development and growth</li> </ul>
		<ul> <li>Led complete transformation and differentiation of ECI through utility and technical domain expertise, leveraging industry relationships</li> </ul>
P. Rice	VM IT Systems	<ul> <li>Directed efforts in developing UVM business requirements and to-be business processes</li> </ul>
		<ul> <li>Led the request for proposal and vendor evaluation due diligence process based on both UVM industry experience combined with years of IT experience</li> </ul>
K. Eckert	VM Condition Assessment	<ul> <li>Provided expert consulting practices pertaining to utility vegetation management in tropical and temperate environments</li> </ul>
		<ul> <li>Performed duties as lead consultant for US Forest Service and Hong Kong government in tropical tree-related storm hardening initiative</li> </ul>
S. Walker	VM Field Execution	<ul> <li>Assessed patrol data, reviewing with Senior Coordinators/Coordinators to prepare scheduled vegetation control programs</li> <li>Directed quality assurance inspections on</li> </ul>
		completed projects and programs

A VM Team Leader will be responsible for the development of a VM plan during the Front-End Transition Phase and be the designated representative on matters related to the VM program. Three additional SMEs will provide support in development of the VM plan and program. One SME will focus on developing VM processes and procedures that will be included in the plan. Another SME will develop data and IT systems that will be used to measure and manage the work. The third SME will focus on field-related issues, including condition assessment, workload estimates, and VM practices.

This core team will be augmented as necessary.

#### 7.0 SYSTEM OPERATION PRINCIPLES

The System Operation Principles (SOP) will be developed in coordination with the teams supporting the GridCo-GenCo PPOA negotiation and Systems Operations, due to the high overlap in issues and analysis required for each.



PREPA currently plans to carve out the generation assets into a separate entity, GenCo, which will enter into a separate PPOA with GridCo post-commencement. As a result, we will not have a direct role in the operation of generation facilities other than dispatching units in accordance with the PPOA. However, we are required to act as agent for GridCo in the development and negotiation of the GenCo-GridCo PPOA. To perform this task and to develop the new SOP, we will need to fully understand the regulatory priorities and timelines, as well as to understand the condition and reliability of existing generation assets that produce the electrical output governed by the PPOA and the SOP.

Our proposed team has extensive experience in wholesale generation markets around the world as participants, operators and consultants in wholesale market design. Their resumes are included in Appendix 1 and brief summary included in Table 26 below.

Table 26: System Operation Principles Team

NAME	ROLE	EXPERIENCE & QUALIFICATIONS
Brian Walshe	Overall lead, generation PPOA negotiations	<ul> <li>Former Managing Director in Navigant's Transaction Practice, conducted assessments and commercial due diligence at over 250 thermal generation plants</li> <li>Supported wholesale market redesign projects in U.S., U.K., Switzerland, and South Africa, including wholesale price modeling and corporate restructuring into stand-alone GenCos</li> <li>Extensive IRP experience including expert witness testimony</li> </ul>
Raphael Gignac	Lead, Systems Operations	<ul> <li>Lead for the Systems Operation Principles team</li> <li>Operated three control centers while employed by Hydro Quebec</li> <li>Extensive experience as Superintendent of the Eastern Alberta Transmission Line project for ATCO</li> </ul>
Eric Markell	PPOA negotiations	<ul> <li>Former CFO, Chief Energy Supply, and Chief Regulatory Officer at Puget Sound Energy (PSE)</li> <li>Led negotiation and management of over 70 PPA agreements and/or plant acquisitions</li> <li>Led ring-fencing effort required by regulator when PSE was acquired by private equity</li> </ul>
Chuck Walker	Physical Plant Assessment	<ul> <li>Created private equity fund and personally responsible for purchase and refurbishment of 7 operating units and 3 generation project demolitions</li> <li>Responsible for development and sale/acquisition of over 50 power plants and related PPAs</li> </ul>
Roger Garrett	PPOA negotiation	<ul> <li>Former Director of Resource Planning and Acquisition at Puget Sound Energy (PSE); led the acquisition and PPA negotiation for \$2 billion of generation assets</li> <li>Primary responsibility for construction and commission of Tacoma LNG facility, approximately ¾ the size of San Juan 5&amp;6 requirements</li> </ul>
Jim Orlando	PPOA negotiations	Senior power dispatcher at Commonwealth Edison



NAME	ROLE	EXPERIENCE & QUALIFICATIONS
	Systems Operation	<ul> <li>Senior reliability coordinator at MAIN Independent System Operator (MAIN-ISO) and PJM ISO.</li> </ul>
	Principles	<ul> <li>Extensive experience running wholesale trading operations and as director of origination at several leading energy trading companies.</li> </ul>
Mike Delisio	Physical Plant Assessments	<ul> <li>Former power plant manager for Commonwealth Edison; led the implementation of decision support tools for the Fossil Generating Portfolio's transition, to a deregulated competitive business</li> <li>Led assessment teams at dozens of power plants on multiple occasions</li> </ul>



# B. MEETING/DEVELOPING TRANSITION MILESTONES

## 1.0 SHARED SERVICES AGREEMENT

Our approach to developing transition period milestones is based upon our team's experience in designing and assessing multiple shared services models for different utilities. PREPA's shared services situation is unique, and our first step will be to meet with the members of PREPA, the Administrator, and PREB.

Our view on the provisions set forth in Annex VI (Genco Shared Services) of the O&M agreement is that these represent a reasonable first draft of the major services that will need to be provided to GenCo in a shared services model. There are of course, many details still to be worked out that will be more fully explored during transition. These are not expected to be overly complex and it should be easy to incorporate any minor changes that could be required. It will be important to develop a well-grounded understanding of the issues and concerns of all stakeholders, which might include, but not necessarily be limited to:

- Regulatory concerns with issues of cross-subsidization, affiliate interests, financial transparency and the need for auditable records;
- Internal discipline inside PREPA related to tracking time codes, time sheet preparation, accuracy and accountability;
- Priorities and requirements of GenCo and how it will operate its business in the future, including their expectation on service level standards;
- Adequacy of existing IT and financial systems to administer a new shared services organization model: and
- Issues related to the transitory aspects of GenCo. The ultimate duration of the SSA has an impact on training, capital investment and other organization topics that need to be resolved.

## 2.0 EMERGENCY RESPONSE PLAN

Over the past months, we have conducted in-depth due diligence on PREPA's current emergency response plans as well as their past actual responses. This was completed through management meetings, on island site visits and information in the data room. We concluded from past extreme weather disasters that PREPA's current emergency management and business continuity capabilities and readiness require extensive changes and development to respond to future severe weather events.

We also completed a high-level gap assessment of PREPA's current emergency management and business continuity program. It identified many opportunities to improve PREPA's readiness and capabilities that will enable the utility to better coordinate response and restoration efforts with municipalities, federal governments, agencies and mutual assistance partners. PREPA faces many challenges when responding to and recovering from disaster events including communications issues, limited employee competencies, lack of training, non-current emergency response plans, not using



proven incident management systems and complex logistics due to limited shipping options to Puerto Rico. These challenges require a comprehensive Emergency Management and Business Continuity Program to manage response and recovery plan development, employee training, plan exercises and the management of mutual assistance agreements.

We will use our proven experience to ensure an industry leading plan for the T&D System. Our priorities as we build this plan will be:

- Protecting human life;
- Protecting the environment;
- Protecting assets;
- Protecting corporate reputation;
- Providing detailed communications internally and externally; and
- Restoration planning, operations and logistics.

We will use our previous developed "Emergency Planning" procedure to guide us through our assessment and plan improvements.

## 2.1 Emergency Planning Procedures

The Consortium has broad experience with jurisdictions of all sizes and capacities. We understand the importance of plans, teams, training and exercises that build readiness and capacity within an organization and will apply lessons learned from past disasters and emergency management exercises.

We take a bottom-up approach to planning and will maximize input from stakeholders such as the Puerto Rico Energy Commission (PREC), Puerto Rico Emergency Management Bureau (PREMB), local municipal emergency and disaster management representatives and emergency first responders. Owners and operators of critical infrastructure in Puerto Rico will also be invited to participate in the planning process to ensure that LUMA's emergency response priorities for critical infrastructure are understood and documented. Our planning philosophy will ensure alignment with FEMA's National Incident Management System (NIMS), Incident Command System (ICS) principles and framework, FEMA's Comprehensive Preparedness Guide (CPG 101) and other applicable federal, commonwealth and local doctrine, guidance, laws, standards, regulations, ordinances and executive orders.

We recognize the need for alignment to industry best practices and International Organization for Standardization (ISO) and Disaster Recovery Institute International (DRII) professional practices, and we have adopted the following definitions from ISO and the DRII.

• Emergency management (ISO 22320) is an overall approach to prevent emergencies and manage those that occur. In general, emergency management uses a risk-management approach to prevention, preparedness, response and recovery before, during and after potentially disabling and/or disruptive events. The OEMT's emergency management scope includes emergency operations plans (EOPs), EOC activations and senior policy group and multi-agency coordination and crisis communications.



- Business continuity management (ISO 22301) is a holistic management process that identifies potential threats to an organization and the impacts threats would have on business operations were they to be realized. This provides a framework for building organizational resilience with capacity for effective response that safeguards the interests of key stakeholders, reputations and brand- and value-creating activites.
- Disaster recovery (DRII) is the technical aspect of business continuity and encompasses the resources and activities needed to re-establish IT services at an alternate site in the event of an IT service disruption. The OEMT's disaster recovery scope includes critical business function recovery planning and IT disaster recovery planning for systems that support critical business functions.

The OEMT will follow the six-step planning process as outlined in FEMA's Comprehensive Preparedness Guide (CPG 101) but tailored to align with Puerto Rico's stakeholders, priorities and requirements. The Consortium's expertise will be of considerable benefit to this process: IEM was instrumental in the development of CPG 101.



Figure 33: The Six-Step Planning Process<sup>3</sup>

## Step 1: Form a Collaborative Planning Team

The OEM will work with the Owner to identify members of the planning team specific to each planning project. We recognize that the success of the planning depends heavily on identifying the right planning team members to engage at the right time in the planning process. Stakeholders who bring a complete understanding of the planning project will serve on the Planning Team and have a hands-on role in guiding the planning project, identifying additional stakeholders and providing resources and

<sup>&</sup>lt;sup>3</sup>The latest edition of CPG 101 recommends this planning process. The Consortium is particularly familiar with this process as IEM supported the drafting and updating of CPG 101, and developed and Business Continuity Planning and delivered training for those updates



input for the plan. Ensuring that the various steady state departments of the Operator are incorporated in the Emergency Response Plan and Emergency Management Program planning will be critical for disaster response. It will provide the structure for a seamless conversion of steady state to emergency response. Extended Planning Team members will include those the Planning Team identifies as having a secondary role in plan implementation.

## Step 2: Understand the Situation

Reviewing After-Action Reports (AAR) will identify past issues that hindered the PREPA's ability to provide services and generate solutions that will be incorporated into the emergency management program. Identifying threats and hazards and assessing risk — using a Threat and Hazard Identification and Risk Assessment (THIRA) — will be essential for both the emergency management program and the Emergency Operations Procedure (EOP); THIRA will be a useful tool to understand the situation.

PREPA was recently a member of the Joint Operational Catastrophic Incident Plan (JOCIP) development team that designed a plan to ensure successful interaction between non-government organizations and local, state and federal governments before, during and after a catastrophic incident. The plan documents the organizational structures that will govern how FEMA, the Puerto Rico Department of Public Safety (DSP) and Puerto Rico Emergency Management Bureau (PREMB) operate together during the different phases of an emergency. PREMB will coordinate nongovernment organizations, local governments and state agencies to prepare for, respond to and recover from catastrophic incidents that impact Puerto Rico. The OEM will ensure that all Operator tasks and responsibilities identified in the JOCIP are clearly defined within their emergency management priorities and detailed plans.

The steps needed to gain full knowledge of the situation in Puerto Rico will be a critical link between reviewing existing plans and determining the objectives that will drive plan development going forward. At this step, planners look beyond procedures themselves to the entire operating environment, including the organization and operation of the business and its approach to fulfilling its mission.

The OEM will work with the planning team identify gaps, redundancies, contradictions, anomalies, deficiencies and shortfalls in planning, response and general preparedness in existing plans and procedures.

## Step 3: Determine Goals & Objectives

The planning team will use information from the risk profile and engage senior leadership to establish how a hazard or threat would evolve, ultimately defining successful outcomes. Using the scenarios developed in the THIRA, OEM planners will identify gaps in resources and capabilities to establish requirements for improvement. The planning team restates those requirements as priorities and seeks approval from senior leadership. This process leads to the establishment of operational priorities, goals to achieve operational priorities and objectives to implement established goals.



## Step 4: Develop Plan

The planning team will develop actions to achieve the goals and objectives identified in Step 3. Assessing how an operation develops, defining critical actions or tools required, establishing key decision points and defining support resources or organizations and their roles is critical. The actions proposed will address the "what, when, where, why and how" of each solution.

It is essential to assess the resource needs for action implementation and to identify information and intelligence needs in the form of Critical Information Requirements (CIRs). CIRs provide senior leaders with the information to make effective decisions. They also establish metrics for action points and triggers for plan implementation or Emergency Operations Center activations. Essential Elements of Information (EEIs) support the development of CIRs.

The most important part of plan development is engaging the stakeholders to understand their current processes, roles and responsibilities, and how they fit into the plan.

OEM will use a variety of methods to engage community stakeholders. Our planners not only facilitate group discussions; they also develop a comprehensive Stakeholder Engagement Strategy that considers the scope and timeline of the plan as well as stakeholder needs. To ensure comprehensive and accurate data, the OEM planners will conduct phone interviews, webinars, virtual meetings, surveys and document review and validation. It is important to select an effective stakeholder engagement strategy that uses the planning team members' time efficiently.

## Step 5: Prepare, Review & Approve Plan

The OEM will develop both draft and final plan documents using information collected during the stakeholder engagement process; this step is crucial to the plan's success and will take approximately two to three months. Planners will provide the Core Planning Team with the initial draft of the plan and, once updated, it will be circulated to the Extended Planning Team for review. All stakeholders will be invited to an in-person Plan Review Workshop that provides an enhanced understanding of the plan. At the workshop, the OEM will facilitate scenario-based discussions to help demonstrate the plan's implementation. Having all stakeholders in the room for a dynamic discussion provides another level of refinement. After the workshop, the OEM will incorporate workshop feedback and submit the final draft to the Core Planning Team for acceptance.

## Step 6: Implement & Maintain Plan

In this final step, the OEM will work with senior leadership of LUMA to finalize and approve the plan. Each plan will include a maintenance schedule and process to keep it up to date and ensure that is continues to meet LUMA's needs. Plans will be disseminated, and the appropriate personnel trained. We will acquire the equipment needed to support processes and train appropriate staff in their use. Once training has occurred, plans, procedures and facilities must be practiced. Any FEMA grant funding used to support exercises must use HSEEP processes; HSEEP provides a standardized format for planning, conducting and evaluating exercises.

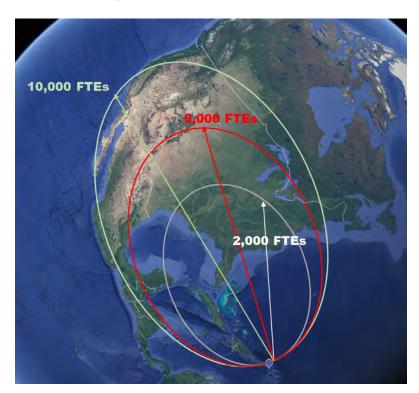


#### 2.2 **Prior Experience**

We will develop and deliver Emergency Response and Business Continuity Plans that will ensure an industry leading response to any disasters that may affect the T&D Utility System. Our years of experience, knowledge and expertise will be applied to these plans which will allow Puerto Rico to be as a leading example of emergency response. We have set the experience of different members of the Consortium, to demonstrate how our individual strengths combine to make an industry standard setting capability for emergency response and business continuity.

## 2.2.1 Quanta

As the largest utility contractor in North America, Quanta is an industry partner to all utilities, municipalities and cooperatives in the continental U.S. The partnership extends to emergency restoration, for which Quanta can deploy thousands of line workers in a 24-hour period. In the last few years, after multiple major hurricanes made landfall within a short period of time, Quanta has had up to 6,000 linemen, at one time, performing storm restoration work for partner utilities. For several decades, Quanta has provided restoration support as a member of EEI's National Response Event, the American Public Power Association (APPA) Mutual Aid Network and various regional mutual assistance groups. These include the Southeastern Electrical Exchange, North Atlantic Mutual Assistance Group, Midwest Mutual Assistance Group, Great Lakes Mutual Assistance Group, Texas Mutual Assistance Group and the Western Energy Institute. Were a future event to impact Puerto Rico's electrical grid, Quanta commits the full support of all available resources, and will collaborate with these groups to release as many resources to support restoration efforts.



Resource availability for North American utilities subject to release authorizations

Figure 34: Emergency Response Resources



### 2.2.2 ATCO

Public safety and emergency preparedness are vital to ATCO's operations. With millions of people relying on its natural gas and electric utilities, ATCO's emergency response and incident management must be effective and efficient. Minutes matter. That's why ATCO takes a proactive approach to potential incidents, tracking risks such as extreme weather and readying our response. ATCO works quickly to restore services and support first responders. After incidents, ATCO's team debriefs to learn how we can improve.

To further support its residential and commercial customers, ATCO launched an online outage notification system in 2017. The system provides information on all planned and unplanned outages and updates to status and estimated restoration time every 15 minutes, based on real-time information provided by our people.

ATCO demonstrated its emergency response capabilities following a significant wildfire in 2016 that affected northeastern Alberta. The fire burned 1.5 million acres in and around Fort McMurray, a major oil and gas region. ATCO's understanding of emergency response plans and rigorous preparation allowed 3,000 employees to quickly respond to restore damaged electrical infrastructure after 80,000 residences were evacuated. The total loss and damages to the T&D system amounted to more than \$21 million. In less than four weeks, ATCO's crews replaced more than 790 powerline structures and restored all mainline and critical feeder. This event was the largest of its kind for insurable claims in Canadian history.

Another example was in 2017, when a significant winter storm hit central Alberta. The storm damaged significant infrastructure across 10,000 square miles of land. ATCO's teams worked around the clock in frozen conditions to repair all the homes and businesses within three days, without any safety incidents.

For decades, ATCO has had emergency coordination and incident management plans that are overseen by crisis management teams within its business units and escalated to its enterprise-wide Crisis Management Committee when required. Following the 2016 Fort McMurray wildfire, ATCO reviewed its response and updated the Crisis and Incident Management System. It now provides a framework for an integrated "One ATCO" response that leverages ATCO's full organizational capabilities, coordinating efforts and resources across our electricity, natural gas and structures/logistics business units for deployment anywhere in the world.

ATCO Frontec — a business line dedicated to disaster and emergency management services — has been a valued partner in countless responses, from the 2005 earthquake in Pakistan to Hurricanes Maria and Irma in Puerto Rico. It has also supported the Canadian Armed Forces, NATO and various non-government organizations in areas of humanitarian need. As extreme weather events become more frequent, ATCO's consulting and training services are a growing dimension of Frontec's operations, as it shares its expertise from preparedness planning to disaster recovery efforts.



## 2.2.3 IEM

IEM is a North Carolina-headquartered comprehensive emergency management and disaster recovery firm. As the largest woman-owned firm specializing in these areas in the U.S., IEM has over 30 years of experience supporting states and localities in enhancing their level of preparedness, responding effectively, mitigating their risks and implementing disaster recovery programs funded by federal, state and local funding sources. IEM's core mission of helping government and critical infrastructure sector agencies prepare for, respond to and recover from natural, technological and human-caused disasters is important. IEM understands the elements needed to make public sector entities and the communities they serve whole again — speed, accuracy and compliance. IEM will focus on these elements as it works closely with all stakeholders should a disaster occur.

## Speed

Following any major disaster, survivors want desperately to get back to their lives. Government and major public institutions must be prepared to deal with immediate needs, resuming operations as quickly as possible to minimize impact and recover quickly. The estimated damage to the U.S. from Hurricane Maria was \$91.61 billion, most of which occurred in Puerto Rico. By February 2018, an estimated 28 percent of customers remained without power, and power was not officially restored to all customers until August 2018, 11 months after Maria's landfall. With our expertise of managing emergency funding, supplemented with the Consortium's workforce and equipment, we will mobilize quickly, targeting disaster zones and efficiently restoring power by executing emergency response plans. This organized effort will allow for quick re-energization of significantly large customer outages.

## Accuracy

Quality management and a focus on thoroughly gathering and storing the right data ensure a solid basis for data-driven decisions. Improving processes and providing more accurate data to clients, the state and FEMA reduces costs for rework, and more grant money is used for recovery.

## Compliance

Federal mitigation and recovery funds come with stringent regulations and rules. Compliance is necessary to ensure that, at the end, no funds are clawed back. IEM ensures that our staff are properly trained on federal grant program requirements and guidance associated with the services we provide. They know what types of projects are eligible under FEMA, U.S. Department of Housing and Urban Development (HUD) and other grant programs. They are also experts at helping our clients leverage all federal funds to not just build back, but build back better and more resilient than before. As a result of our expansive experience in managing grant funding, supporting FEMA in technical assistance programs and working with state and local emergency management agencies in planning support, we not only know how to ensure compliance for disaster relief in Public Assistance and Hazard Mitigation FEMA funding, but we also understand the FEMA process for acquiring planning funding, such as Community Development Block Grants (CDBGs) and the State Homeland Security Grant Program (SHGP).

IEM's core business is emergency management and homeland security. For many of our competitors, these are simply two of the many business areas where they operate. The IEM team offers significant



experience with projects spanning the full range of natural and technological hazards. IEM staff are supporting the City of Fayetteville, North Carolina, and the Fayetteville Public Works Commission with post-Hurricane Matthew recovery efforts. In addition, we developed operations plans and Emergency Operations Center (EOC) training for the Raleigh-Durham International Airport and are currently supporting the CDBG-DR Rebuild NC program that administers assistance to homeowners throughout the state.

IEM brings local planning best practices from dozens of communities across the country. IEM has provided support to FEMA's planning technical assistance (TA) program for over 10 years. As part of this contract, IEM developed more than 600 information resources, models, templates, samples and delivery tools for local governments to implement 60 different planning areas. IEM planners and SMEs used these tools to conduct more than 290 onsite planning workshops spanning 46 states, the District of Columbia, four U.S. territories and several Indigenous tribal nations. As part of IEM's development of the Recovery Planning TA program, planners created 27 products and conducted workshops for eight local and state jurisdictions. A sampling of the 60 different planning areas is as follows.

- Emergency Planning for Higher Education
- Emergency Operations Planning
- Capability Assessment & Gap Analysis
- Critical Infrastructure Mitigation
- Local Hazard Mitigation Planning
- Regional Disaster Housing Planning
- Debris Management Planning

- Planning for Persons with Disabilities, Access & **Functional Needs**
- Continuity of Operations Planning
- Mass Casualty/Mass Fatality Planning
- Mass Care/Mass Feeding Planning
- Social Media in Emergency Management
- Pandemic Influenza Planning
- Logistics & Resource Management Planning

#### 3.0 NON-FEDERAL FUNDING PROCUREMENT MANUAL

ManagementCO's will leverage its collective experience to develop the planning team and to develop and operationalize the Non-Federal Funding Procurement Manual. The planning team's proposed composition as well as the detailed documented milestones are a good foundation that will require extensive collaboration between the parties to achieve the desired success. We have the leadership to govern the process of developing the Non-Federal Funding Procurement Manual in a timely manner, using the key milestones as our guidelines to deliver a high-quality, compliant and operational product that is approved by the governance and oversight committees.

#### 4.0 PHYSICAL SECURITY PLAN

Our proposed approach to develop and implement a plan for physical security are as follows.

Our proposed approach to the development and implementation of the physical security is designed around eight primary activities. The first activity in the development process will be the establishment of a team that focuses on physical security. Once the team has been established, we will focus on the following.



NERC Physical Security Standards: Review applicability and implementation of current NERC Physical Security Standards (e.g., NERC CIP Standard 14 for Physical Security and NERC CIP 002-009 Version 5 for Cyber Security) to primary and backup control centers, transmission stations and substations, GenCo and systems and facilities critical to system restoration. Review current facility security practices and policies which will include activities like fencing, inspection of facilities for potential security issues and reporting security issues. Review current substation security practices and policies in place, including elements like fencing, inspection of facilities for potential security issues, reporting security issues, documentation and entry and exit procedures. Conduct Vulnerability Inspections of critical facilities. In the event we discover a significant security breach, we will advise PREPA on how to make the necessary repairs.

Current Gap Analysis: Identify gaps in these areas with respect to our expertise, industry leading practices and applicable NERC CIP Standards. Propose solutions to address these gaps. We will rank proposed solutions into tiers with tier one being immediate, tier 2 being medium term and tier 3 being long term.

Substation Locking: Implement new substation locking program including the documentation and distribution of keys.

Interdependency Identification: the team will ensure that all interdependencies of our proposed solutions are identified with other departments or areas within PREPA (e.g., customer service, engineering, operations, fleet, IT, systems operations, metering, distribution, transmission, generation, safety, training, labor etc.)

Trend Identification: Identify key trends and emerging areas of interest and risks regarding security (e.g., behind-the-meter DER, Internet of Things). Assess whether they impact proposed initiatives/solutions that require our special attention (e.g., implementation of pilot/demonstration/ proof-of-concept projects, allocation of research and development funding and partnership with external stakeholders and partners).

Mid-Term Planning: Develop a 5-year Physical Security Plan (with special focus on the first 2 years) that can serve as a plan or blueprint to achieve a safe, secure T&D System.

Partnering: Identify potential key partners that can assist us in addressing specific areas of interest to facilitate proposed solutions, such as utility peers and security consultants.

#### **DATA SECURITY PLAN** 5.0

#### 5.1 **Establishment of Data Security Plan**

Data moves through a number of states throughout its lifecycle. Accounting for the security of the data during each of these states is a reliable way to ensure the confidentiality and integrity of the data and is frequently required to meet compliance standards affecting institution or researcher eligibility for funding and cross-organization data sharing.



By addressing and documenting the controls below, the objective is to establish a comprehensive data security plan. Subsets of documentation and data generated by this plan will be used to protect company data moving forward.

#### 5.2 Identification

The first step in establishing our security plan is to identify all of the assets and data that are covered by the plan. We will document the responsible parties, locations and unique identifiers for these assets, as this provides an auditable record that may be referenced as needed for implementing security measures and investigating incidents.

Below are two sets of inventories that will be completed and expanded as appropriate.

During transition, we will assess the organization's data security capability by first looking at the cyber Information Inventory with emphasis on inventory.

## Asset Inventory

The information captured should be stored in a central location so that all stakeholders can have access to view or update the information (if authorized).

## Data Investory

The information below should be stored in a central location so that all stakeholders can have access to view or update the information (if authorized).

#### 5.3 Secure Storage

Data and the assets containing that data will be stored in a manner commensurate with their sensitivity. There are several categories of control for data "at rest." The areas of focus will be as follows.

## Physical Security Controls

Physical security controls address all aspects of in-person access to data or computing resources. They can be used to deter or prevent unauthorized physical access to assets.

## Security Features/Configurations

In addition to physical protections, technological protections should be installed or configured on assets containing sensitive data. We also look to leverage off of existing security features if applicable

## Backup & Retention

To protect against the loss of integrity or availability of data, backup and retention policies and controls should be in place.



#### 5.4 **Secure Transmission**

In addition to protecting data in its storage location(s), the transition team will review how data is moved between systems to better understand how to protect in transit data between systems.

### Secure Transmission Controls

Once the flow of data between systems is understood, security controls that protect the data in transit can be employed.

#### **Authentication & Authorization** 5.5

Access to sensitive data will be reviewed and restricted to a specific set of individuals with a specific set of permissions. Access control is the key to managing the data security program it will help limit the access to systems and virtual resources. The key 6 areas of focus will be as follows.

## Least Privilege

The principle of least privilege requires that each user be assigned the minimum permissions level required in order to perform job functions. This includes both the breadth of access (what data is accessible) and the depth of access (what actions the user is able to perform on that data).

## Individual Login Credentials

Separate login credentials (vs. shared accounts) allow data access and activities on a system to be traced to individuals and permissions to be granularly assigned on a need-to-know basis, down to n individual's specific tasks and duties. It may be appropriate to give some individuals two sets of login credentials: one for administration duties and one for general data access and use.

## Strong Password Requirements

Strong password requirements ensure that authentication credentials used to access sensitive data cannot be easily guessed or brute-forced.

## **Authentication Checkpoints**

Authentication checkpoints are used to affirm or reaffirm access permissions at various stages of data access.

### Audit Logs

A record of both failed and successful login attempts can help identify attempts to breach a system and gain unauthorized access to data.

#### 5.6 Secure Hiring, Termination & Role-Change Practices

Securing hiring, termination and role change practices ensure that access to data is appropriately granted, altered and revoked through the duration of the company.



#### 5.7 **Vulnerability Management Program**

We define Vulnerability Management as the practice of identifying, classifying, remediating and mitigating vulnerabilities. A vulnerability management program will help PREPA proactively understand the risks to every asset in order to keep them safe. A Vulnerability management program requires an ongoing, cyclical process that will ensure:

- New vulnerabilities are regularly identified and made public; and
- Previously identified vulnerabilities are still mitigated, since they still may:
  - Cause problems if not promptly remediated; or
  - Allow their re-introduction through poorly configured or mismanaged devices and systems (see Unsecured Configurations).

For the Operator we would implement Five core process steps to help the organization implement and maintain a reasonable vulnerability management program. Specifically, we would:

- Understand their current Cyber environments (IT and OT) by tracking hardware and software assets, including current versions and applied patches (see Development of a Data Security Program);
- Set standards for the hardware and software components that we would use to avoid creating unnecessary vulnerabilities;
- Stay abreast of newly identified vulnerabilities in the hardware and software products that are in use or planned to be in use;
- Remediate or at least mitigate the effects of identified vulnerabilities according to the risk and exposure levels that they create; and
- Continuously monitor the cyber environments to identify vulnerable assets and avoid reintroduction of known vulnerabilities.

## 5.7.1 Program Details

The vulnerability management program we will develop for LUMA will consist of the following eight components.

## Risk & Patch Management

This is risk management process that correlates vulnerabilities discovered during the scanning with threats and exploits that pose the most danger to an enterprise.

The risk program will contain processes to:

- Prioritize risks and vulnerabilities;
- Apply required security patches;
- Prevent vulnerabilities from being exploited before a patch has been released;
- Manage exceptions; and
- Remediate, avoid, transfer and/or accept the risk.



## Asset Management/Discovery

The asset management program will be used to discover, classify and document assets.

## Configuration & Change Management

We will develop a secure configuration process in place to ensure misconfigured systems do not become a bridge for malicious attackers to exploit an enterprise.

## **Vulnerability Management Policy & Processes**

The developed policies will dictate the scope and frequency of scans. They will include a process of assembled components such as the notification, assessment, analysis and action.

## **Vulnerability Scanning**

Vulnerability scanning will be one of the pieces included in the vulnerability management process. It will be designed as an automated process that assesses systems, networks or applications for vulnerabilities and weaknesses. The scans will conduct both internal and external vulnerability scanning.

## Penetration Testing

Penetration testing will be deployed to exploit weaknesses and vulnerabilities within applications and live systems and requires both automated and manual testing.

The Penetration testing program is another important piece of the vulnerability management program and will be performed on targeted systems (and applications) at least annually.

## **Vulnerability Assessments**

Vulnerability assessment, including vulnerability scanning, will be performed on key systems within PREPA. In addition, we will also assess vulnerabilities not particular to technology such as policies, processes and standards.

## Tracking, Metrics & Reporting

We will be tracking metrics and reporting to demonstrate the value and effectiveness of the vulnerability management program to executive management.

#### 6.0 VEGETATION MANAGEMENT PLAN

The elements of a state-of-the-art VM plan are well recognized by our SMEs. Their work will begin by establishing an outline that will become a table of contents for the comprehensive VM plan. We expect that the initial VM plan will be in place prior to the end of the front-end transition phase of the engagement.

The VM plan will include the following sections:

Overarching vision, goals and objectives;



- Estimates of VM workload and resource requirements, projected budgets and schedules;
- Policies and procedures for preventive and corrective vegetation maintenance, tree risk assessment, support of capital construction projects, post incident investigations and responding to customer requests;
- Maps of the operating environment, inputs and outcomes and communications with other stakeholder groups;
- Project management system;
- Performance measurement and management system;
- Quality Control and Quality Assurance;
- Required records and documentation; and
- Provisions for customer and stakeholder engagement.

In addition to creating the formal VM plan, several other tasks will be undertaken during the Front-End Transition Phase of the engagement:

- Develop contracts for augmenting current tree crews for routine D-VM line clearance maintenance and specialized IVM services (e.g. mechanized mowing/cutting, herbicide applications, etc.);
- Identify capable service providers;
- Create Interface Documents and Service Level Agreements with key stakeholder/support organizations (e.g. engineering, call center, real estate, etc.);
- Conduct herbicide efficacy trials to confirm optimal application methods, formulations and rates;
- Plan for initial rapid risk assessments as intended for implementation in stage 1 of the engagement;
- Define IT requirements, evaluate "off the shelf" VM software solutions and select cloud-based, field-enabled VM work management system; and
- Assess PREPA's current safe VM work practices, identify gaps in knowledge and skill between current work force and future work assignment and develop plans to close any gaps.

#### 7.0 SYSTEM OPERATION PRINCIPLES

Our approach to the review of generation and development of the SOP will consider the following areas.

Understand Legal & Regulatory Requirements & Complexities from Unbundling

Our transition team will meet with members of PREPA, the Administrator and PREB to develop a more informed understanding of the restructuring model that is anticipated for the generation fleet. This introductory meeting is necessary to provide insight for our assessment of expected timelines and other issues that have not yet been fully defined at the time of this proposal.

Assess the Physical Condition of Each Generation Plant

During transition, we will develop a more informed perspective of the capabilities and issues related to the existing PREPA generation assets. This is critical to our responsibilities as the agent of GridCo



and dispatch manager, since we will need this understanding before we can prudently be a party to the GridCo-GenCo PPOA discussions.

We will perform a physical assessment of every plant's condition during transition. Walk-throughs will be completed at each generation facility to identify any major safety or operational issues that require immediate action. Any operations factors limiting production will be reviewed to understand how they might affect terms of the PPOA.

We will also determine the status of ongoing capital modification or major maintenance projects at each facility. Any near-term planned capital projects will be reviewed to validate their rationale and their impact to GenCo's cost structure. We will review emerging perspectives on ring-fencing assets, systems and people and we will assess any issues with common facilities or staffing between generation and T&D (e.g., substations, warehouses, data centers), which will be coordinated with other workstreams.

## Develop the Systems Operations Principles

As the PPOA negotiations are conducted, several elements of the SOP will be developed simultaneously. These elements will be completed by the core group of the Systems Operation team, the generation group involved with the PPOA and the systems operations group within the T&D workstream.

The development of operations inputs to the SOP includes operating procedures (switching, dispatch, volt and var support), unit scheduling (target dispatch, non-scheduled outages, compensation) and reserve operations (reserves, deviations from forecast, MATS compliance).

We will also define expanded system planning requirements, including how the various short- and long-term planning studies are performed and how the results are integrated across departments. We will develop formal, written procedures for all appropriate job functions to transition from an ad-hoc organization that is constantly reacting to break-downs in the system, to a rules-based organization that operates within pre-defined procedures to ensure the optimal response and to enable procedure compliance to be measured and enforced.

## Review & Formalize Dispatch Procedures

We will review and formalize dispatch procedures, algorithms and contingencies as well as review how economic merit dispatch priorities are calculated. We will evaluate the recent forecast-to-actual track record to assess the accuracy of generation forecasting and determine the underlying variances by cause (e.g., generation vs. transmission limitations). We will evaluate the fuel cost impacts (procurement, logistics or availability) of inaccurate generation planning assumptions and identify key bottlenecks or operations limits that increase costs or limit production.

## Support the Completion of the GridCo-GenCo PPOA Acting as Agent for GridCo

As our team develops a firm understanding of the regulatory expectations, plant conditions and dispatch requirements, we will be able to support the development and negotiation of the PPOA and the Systems Operations Principles. Our team will act as agent for GridCo and ensure that terms and



conditions in the PPOA properly represent the interests of GridCo and the ratepayers. We will review generation product definitions, pricing terms, penalty enforcement and other issues to incentivize the proper behavior today and to incentivize proper behavior in a more decentralized grid design with large amounts of variable generation.

Our viewpoint is based upon the observation that several questions are still undefined, such as whether PREPA's reorganization will result in one single GenCo or multiple GenCos. These types of uncertainties potentially have profound impacts on the transformed generation sector and the benefits to ratepayers and they will also be factors in the PPOA. In restructured electric markets around the world, where lower cost wind and solar generation have entered the wholesale market, thermal generation output declines commensurately and 24-hour production cycles of legacy thermal plants are changed significantly, which increases their operation cost and degrades material condition.

In many utility jurisdictions worldwide, low cost renewable resources are seen by legacy generators as a threat to their economic viability. Many renewable developers have claimed that an "unfair playing field" is created when these legacy generators have too much influence on market design that prevents renewables from fully participating on an equal basis. The GridCo-GenCo PPOA will need to be carefully designed to not impose these types of structural impediments that could preclude emergence of new solar developments, which are critical to CO2 reduction targets required by law.

Our preliminary views on the indicative System Operations Principles (SOPs) contained in Schedule 1 to Annex I are that they represent a useful initial compilation of many of the key issues that will need to be defined to effectively operate the generation supply function.

Several aspects of implementation of these SOPs, as amended during transition, will depend on the existing generation fleet and dispatch center's near-term capabilities and also on several policy level questions that still need to be resolved. These uncertainties do not critically affect generation today, and so the SOPs required for commencements should be readily available. However, if Puerto Rico is going to achieve its climate change obligations under the law, many of these uncertainties will need greater discussion and debate.

We would anticipate that the discussion around many of these elements will involve public meetings and several developers and stakeholders will have firmly held opinions on how the SOPs should address these issues. Our team has deep experience in working in collaborative forums with many public constituencies and look forward to bringing this expertise to Puerto Rico. The issues that we expect to discuss include but are not limited to:

- Perceived conflicts of having a single GenCo own all the legacy PREPA assets and be responsible to competitively solicit offers for new IPP supply in a fair RFP procurement process that does not favor legacy fleet
- Process to determine value of various electric products (energy, capacity, ancillary services) and to adjust these prices in future as market operations become more stabilized s that these values can provide the necessary price signals to incent future investment in generation and transmission
- Enforcement and penalty provisions under SOP



- Valuation of future generation supply output that will be dedicated to expected eight mini-grids during normal and emergency conditions; this would include direct electric generation as well as energy stored and deployed via batteries
- How the SOPs will deal with curtailments which are likely to increase as greater amounts of variable solar generation comes on-line
- How the SOPs will facilitate the new interconnection process and ensure proper incentives to stimulate new market-priced solar facilities

## **ADDITIONAL TIMELINES & KEY MILESTONES**

#### 1.0 GENCO SHARED SERVICES & SHARED SERVICES AGREEMENT

The following are the key milestones and related timeline of our shared services implementation.

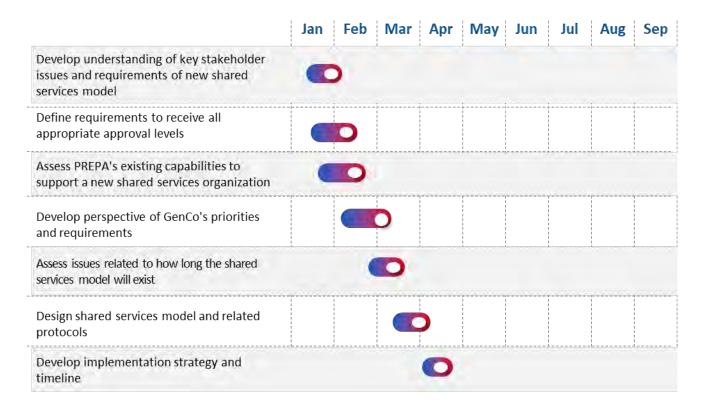


Figure 35: Shared Services Implementation Gantt Chart

#### 2.0 **EMERGENCY RESPONSE PLAN**

As a competent operator, we will need to follow a detailed timeline to ensure all critical steps are completed- enabling a smooth transition into the commencement date.

Listed are the tasks that need to be complete early during the transition period, so LUMA and its employees can be thoroughly prepared for any emergency or disaster that may occur.



- Task 1: Review and understand PREPA's new ERP/BCMP
- Task 2: Identify gaps and develop a plan to mediate short-term gaps.
- Task 3: Develop an interim Emergency Response Plan (ERP) to address storm/hurricane season. The plan should include interim ICS structure, mutual aid and resource plan (men, equipment, material, etc.)
- Task 4: Meet with the Puerto Rico Emergency Management Agency (PREMA), Puerto Rico Energy Board (PREB) and the administrator; share plans and develop working relationships.
- Task 5: Meet with local communities/municipalities; share plans and develop working relationships.



Figure 36: Emergency Response Planning Gantt Chart

#### 3.0 NON-FEDERAL FUNDING PROCUREMENT MANUAL

The following is the timeline for the non-federal fund procurement transition plan.

- ManagementCO will assemble Planning Team to develop Non-Federal Funding Procurement Manual. The planning team will consist of representation from each of the Parties. The Parties consist of: Owner, Administrator, ManagementCO and Servco. The team will be established within (60 days of Effective Date).
- ManagementCO will assess existing reference materials from ManagementCO, Servco, Owner and Administrator and put forth an appropriate collection of information for inclusion. Internal reference materials from ATCO/QUANTA such as ATCO Affiliate agreement, Conflict of Interest and ISO Procurement Rules will be included in this review. (30 days)
- Develop the "Non-Federal Funding Procurement Manual" which will be inclusive of the **Procurement Guidelines and Procedures** 
  - Procurement Guidelines including Contractual Provisions for any contract for a Non-Federally Funded Capital Improvements (30 days)



- Glossary
- Definition of inclusions to Non-Federal Procurement Manual
- Approval Matrix
- Delegation of Authority
- Development Team RACI
- Vendor Management
- Contract Implementation
- Procedures for Contract Administration, Oversight and Standards and Methods that will address the following: (60 days)
  - Conflicts of Interest: Organization and employee
  - Avoiding acquisition of unnecessary or duplicative items
  - Granting Awards to Responsible Contracts
  - Maintaining Records of Procurement History
  - Managing time-and-material Contracts
  - Dispute Resolution
  - Selecting transactions for Procurement
  - Conducting Technical Evaluations
- Upon ManagementCo finalizing the Non-Federal Funding Procurement Manual, ManagementCo shall submit such Non-Federal Funding Procurement Manual to Administrator for its review and approval. Revise as required. (45 Day process from final submission).
- Revisions or Updates to the Non-Federally Funding Procurement Manual will be completed as necessary to reflect any changes in Applicable Law that affect Non-Federally Funded Capital Improvements.

#### 4.0 PHYSICAL SECURITY PLAN

Our proposed timeline to develop and finalize a Physical Security Plan is show in Figure 37 below. Each task corresponds to its specific task above, with an approximate completion timeline of 24 weeks.



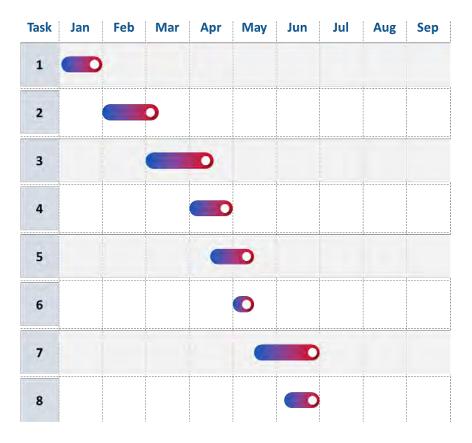


Figure 37: Physical Security Plan Gantt Chart

#### 5.0 **DATA SECURITY PLAN**

The transition will work to the milestone tasks and schedule laid about below. The milestones cover the transition period as well as the immediate period after commencement of operations.

Task 1. Transition: Train & Qualify Cyber Security Assessment Team (CSAT)

The CSAT will require a broad and very specialized knowledge of information and digital systems technology. The CSAT will need to have digital systems knowledge, power operations, engineering, safety experience and technical expertise, all of which can be found in candidates from within the Consortium. The personnel selected for this team will require additional training in these areas to ensure adequate capabilities to meet the cyber requirements.

By the completion date, the following task should be performed:

- Cyber-security assessment procedures/tools will be developed and available;
- Qualifications for CSAT will be developed; and
- Internal Training of the CSAT will be completed.

Task 2. Transition: Identify Critical Systems (CSs) & Critical Digital Assets (CDAs)

By the completion date, critical systems and critical digital assets will be identified.



## Task 3. Transition: Develop Data Security Defensive Strategy (Defensive Model)

The Defensive Strategy expands upon the high-level model in the Cyber Security Plan and requires the assessment of existing site and corporate policies, comparison to new requirements, revisions as required and communication to personnel.

By the completion date, the following should be performed:

- Documenting the defense-in-depth architecture and defensive strategy;
- Revisions to existing defensive strategy policies will be implemented and communicated; and
- Planning the implementation of the defense-in-depth architecture.

For details see the "Details of the Data Security Plan" listed in Form 1.5 Section 9.B.5.0 above.

## Task 4. Transition: Implement Data Security Defense-in-Depth Architecture

The implementation of communication barriers protects the most critical functions from remote attacks on company systems. Isolating the critical systems from the Internet as well as from less critical business systems is an important milestone in defending against external threats.

While the deployment of the barriers is critical to protection from external cyber threats, it also prevents remote access to core monitoring and data systems from internal users. Users will have to go through established security processes to gain access.

Vendors may be required to develop software revisions to support the model. The modification will be developed, prioritized and scheduled. Since software must be updated on (and data retrieved from) isolated systems, a method of patching, updating and scanning isolated devices will be developed.

By June 2020, one-way devices that determine your ability to access crucial systems to implement defensive layer boundaries for critical systems should be installed. For details see the "Details of the Data Security Plan" listed in Form 1.5 Section 9 B.5.0 above.

By June 2021, the following element of this milestone will be complete.

 Implementation of the management, operational and technical cyber-security controls for all systems that address attacks promulgated by use of portable media, portable devices and portable equipment.

For details see the "Details of the Data Security Plan" listed in Form 1.5 Section 9 B.5.0 above.

## Task 5. First-Year Operations: Establish Data Security Program Policies/Procedures

The implementation of the cyber-security program is expected to require policy/procedure development and/or upgrades for nearly every department. The procedural development for the cyber-security program requirements and all of the individual security controls will be far-reaching. Many of the security controls will require development of the technical processes for implementing the controls including development of new procedures for surveillances, periodic monitoring and reviews.



Procedure development will begin early in the implementation of the program and continue until the specified completion date.

By the completion date, the following should be performed:

- Policies/procedures will be updated to establish the Data Security Program;
- The Data Security Assessment Procedure will be issued:
- New policies/procedures or revision of existing policies/procedures in areas affected by data security requirements will be developed and implemented;
- Common controls are identified, documented and implemented; and
- The training of staff and the steps to add signs of internal data security-related tampering.

Task 6. First-Year Operations: Perform & Document Cybersecurity Assessment Described in Data Security Plan

Based on the existing cyber-security program, it is known that the number of digital assets requiring assessment is extensive. As previously discussed, the CDA assessment methodology required for this regulation is extremely rigorous and deterministic. The completion of these assessments will require a significant commitment of resources. The assessments begin after the CSAT and required procedures are fully established.

By the completion date, the cyber-security assessments will be performed and documented. For details see the "Vulnerability Management Program" listed above in Form 1.5 Section 9 B.5.0.

Task 7. First-Year Operations: Implement Security Controls Not Requiring Any Infrastructure Modificatio; Cyber Security Program Is Implemented & Has Entered Maintenance Phase

Each of the individual CDA remediation actions will need to be planned, resourced and executed. The completion date commits us to remediation actions not requiring a change.

Changes requiring any modification may be implemented during the ongoing maintenance of the cyber-security program. A rigorous planning process is used to ensure safe execution of refueling outage work. The potential system modifications required by this regulation need to be carefully planned and executed to ensure no detrimental effect to safe operations.

The Data Security Program will be considered implemented and transitioned to the maintenance phase if modifications have either been implemented or are budgeted and scheduled for implementation.

By the completion date, the following should be performed:

- Security controls will be implemented in accordance with the Plan. The application of security controls requiring modifications will be planned, budgeted and scheduled;
- The requirements of the Plan will be effective; and
- The transition period will allow for CDA remediation plans not requiring modification to be implemented, with those plans requiring modification to be implemented after the completion date as part of normal operations.



For details see the "Details of the Data Security Plan" listed above in Form 1.5 Section 9 B.5.0.

8. First-Year Operation: Implement Security Controls Requiring Modification.

By the completion date (if there are outstanding modifications or controls that required a scheduled outage), the following should be performed:

- Implement modifications as needed;
- Update of procedures;
- Complete User Training; and
- Implement all management, operational and technical security controls.

#### 6.0 **VEGETATION MANAGEMENT PLAN**

We propose the following schedule for initiation and completion of each of the seven tasks described in the Vegetation Plan and Program Milestones, found in Form 1.5 Section 9.B.6.0.

- Task 1: Develop formal vegetation management plan;
- Task 2: Plan for use of VM contractors;
- Task 3: Identify and confirm critical interfaces with other stakeholders;
- Task 4: Conduct herbicide efficacy trials;
- Task 5: Plan for initial rapid assessment of VM risks and systems constraints;
- Task 6: Evaluate and select IT system for VM; and
- Task 7: Assess existing VM resources, identify gaps and plan to close them.





Figure 38: Vegetation Management Plan Gantt Chart

#### 7.0 **SYSTEM OPERATION PRINCIPLES**

Our proposed schedule to perform the key milestones — described in Form 1.5 Section 9.B.6.0 — is included below.

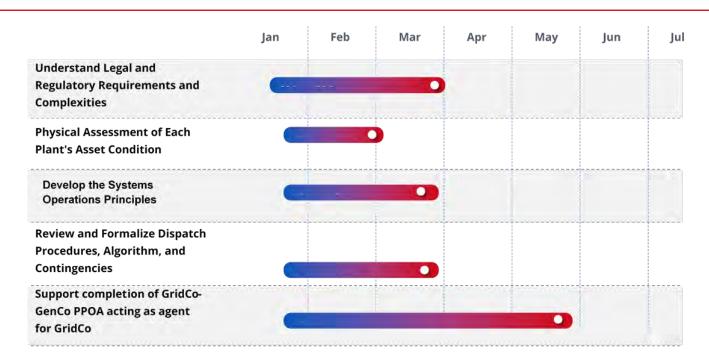


Figure 39: System Operations Principles Gantt Chart

## 10. ASSET ACQUISITION



## **EVALUATING EXISTING PROCUREMENT &** $\mathbf{A}_{-}$ **SUBCONTRACTING POLICIES, PROCEDURES & SYSTEMS**

The Procurement Team will review existing procurement and subcontracting policies, procedures and systems governing and implemented by PREPA. Once we are able to execute a more granular review of the contracts, procedures and systems that are in place, we will develop a more robust plan and recommendation for enhancements or improvements. Upon completion of procurement procedure documentation for goods and services, a training plan will be established for procurement staff as required. Subsequently, documentation will be integrated into the compliance strategy and Procurement Procedure Manual.

The steps we will take to evaluate existing procurement and subcontracting policies, procedures and systems will include:

- Identifyin and documenting a list of current procurement and subcontracting policies and systems governing and being sued by PREPA;
- Evaluating the existing procurement team staffing and reporting structure;
- Developing a plan and recommendation for operational integration and compliance with existing policies, procedures and systems — including Approval Matrix (see Steps for Non-Federal Funding Procurement Manual);
- Submitting our plan for Owner and Administrator review and approval;
- Documenting our integration and compliance strategy and objectives in the Non-Federal Funding Procurement Procedures Manual; and
- Coordinating with the Owner on executing the approved plan.

## SECURING USE OF ASSETS, FACILITIES, IT/OT

LUMA will collaborate with PREPA to identify assets related to the facilities, furnishings, material, supplies, equipment and IT systems required for T&D operations. Upon completion of asset identification, LUMA, by performing due diligence in each functional area, will identify and document these assets and develop a detailed plan and recommendation for securing them. The plan will be submitted to the Owner and Administrator for review and approval. Operator will coordinate with the Owner on executing the approved plan. The completion of this activity is dependent on timely alignment between the Operator and the Owner on the assets required to run the operation. The duration of this activity will be 12 months, beginning in the first year of transition.

The four plans noted below are all similar in nature but correspond specifically to individual areas of focus.



## Facilities & Furnishings

- Identify and document the list of facilities and furnishings being used by PREPA that are required for the Operator to perform T&D operations;
- Assess the health and condition of identified facilities and furnishings for use by the Operator;
- Review and document existing facility and furnishing arrangements to determine the appropriate transfer process to the Operator;
- Develop a plan and recommendation for the Operator to secure access and use of facilities and furnishings;
- Submit our plan for Owner and Administrator review and approval; and
- Coordinate with the Owner on executing the plan.

## Materials & Supplies

- Identify and document the list of materials and supplies (and respective vendors) being used by PREPA that are required for the Operator to perform T&D operations;
- Assess the health and condition of identified materials and supplies for use by the Operator;
- Develop a plan and recommendations for access, control and use of material and supplies;
- Submit the plan for Owner and Administrator review and approval; and
- Coordinate with the Owner on executing the plan.

## Assets & Equipment

- Identify and document the list of assets and equipment (and respective subcontractors) being used by PREPA that are required for the Operator to perform T&D operations;
- Assess the health and condition of identified assets and equipment for use by the Operator;
- Develop a plan and recommendation for securing access, control and use;
- Submit a plan for Owner and Administrator review and approval; and
- Coordinate with the Owner on executing the plan.

## IT/OT Systems

- Identify and document a list of IT/OT systems being used by PREPA that are required for the Operator to perform T&D operations;
- Assess the health and condition of identified IT/OT systems for use by the Operator;
- Review and document the existing IT/OT system arrangements to determine appropriate transfer process to the Operator;
- Develop a plan and recommendations for securing access, control and use of the IT/OT systems;
- Submit a plan for Owner and Administrator review and approval; and
- Coordinate with the Owner on executing the plan.

## C. ASSUMING EXISTING SUBCONTRACTS

Upon completion of the identification and assumption of responsibility for existing subcontracts, the Operator will evaluate all subcontracts and vendors and perform outreach and evaluation. We will



work with PREPA and the applicable Operator functional areas to determine which contracts should be continued and assumed by the Operator or provided by other means. The Procurement Team will develop a plan and recommendation for assuming responsibilities for existing subcontracts and submit the plan for Owner and Administrator review and approval. Upon approval, the Procurement Team will assume the existing subcontracts with appropriate assignment and further develop LUMA approval process for subcontractors. This activity will occur over a 15-month period, beginning in the last quarter of the first year of transition.

## **Steps**

- Identify and document a list of existing subcontracts (including active purchase order commitments) being used by or on behalf of PREPA;
- Assess which existing subcontracts will be assumed as system contracts, retained by PREPA or discontinued:
- Determine assignment requirements for each system contract (e.g., notice, consent, amendment);
- Develop a plan and recommendation for assuming system contracts (assignments) and renew or replace subcontracts to address gaps in immediate needs of T&D Operations;
- Submit a plan for Owner and Administrator review and approval;
- Document subcontracting strategy and objectives in contract administration manual; and
- Coordinate with the Owner on executing the plan.

## D. VIEWS ON EXISTING PROCUREMENT POLICIES & **GUIDELINES**

Through the development process of the Non-Federal Funding Procurement — see 1.5 Section 9.A.3.0/9.B.3.0/9.C.3.0 — manual the existing procurement policies and guidelines will be considered and evaluated to identify opportunities for enhancement and improvement to existing practices. Using the results of that evaluation, coupled with an integrated compliance strategy approach, we will identify areas of the procurement processes that may require modifications to meet compliance. regulatory, standards, financial or oversight requirements and will address accordingly.



## 11. BACK-END TRANSITION PLAN



A key component of the O&M Agreement is the development and execution of a Back-End Transition Plan (Plan). The plan will enable the seamless, safe and effective transfer of the management of the T&D System and O&M Services either back to the Owner or to a successor operator at the expiration of the contract or, under certain conditions, an earlier time.

#### **BACK-END TRANSITION TEAM** Δ

The first step in the process is building a team to prepare the Plan. We anticipate significant senior involvement in the development of the Plan. Team members are expected to include:

- Don Cortez (Operations);
- Todd McLaren (Operations);
- Mario Hurtado (Regulatory);
- Darren Miller (Finance);
- James Stinson (Information Technology);
- Kari Findley (Legal); and
- Ashley Miller (Human Resources)

In preparing the Plan, we will draw upon our vast knowledge and transition experience of assimilating acquired companies and decoupling certain significant divestitures.

As a starting point, we intend to approach the Front-End Transition and commencement of operations with the forethought that a Back-End Transition could occur at some point in the future. This mindset will permeate our decision-making process as we plan and execute our information technology platforms, negotiate contracts and make numerous decisions to act as an agent for Owner or on our own behalf. Our intention is to keep the services performed under the O&M Agreement, ManagementCo and ServCo as isolated as possible, not to be commingled with Consortium legacy operations as much as possible to facilitate an easier and quicker Back-End Transition.

Subject to further due diligence, it is our intent to use, to the extent possible, Owner's existing Oracle e-suites systems for the payroll and accounting of Servco, GridCo and GenCo (the latter two the services will be covered under the Shared Services Agreement). To the extent we can leverage this existing software, it will make a de-coupling and back-end transition much cleaner, faster and easier than other alternatives.

To the extent we are able to transfer ownership of Servco to the Owner or the successor operator, it will facilitate stability for ServCo employees and enable the transition of certain inventory, supplies, contracts, etc., in a quick and expeditious manner. ServCo shall satisfy all obligations, imposed by contract or law. In the event that ServCo is succeeded by another manager and/or the Owner, ServCo will negotiate with the successor employer and unions (where applicable) to achieve fair and appropriate treatment of the ServCo employees upon conclusion of their ServCo employment on the T&D Project. ServCo will also evaluate all circumstances at the time and consider other appropriate options to facilitate employee stability in transition.



# B. APPROACH TO DEVELOPING BACK-END TRANSITION PLAN

The Plan will include certain services, activities, budgets and milestone reporting deemed instrumental to accomplishing the overall objective of a smooth and efficient back-end transition to a new operator or to Owner, with minimum disruption.

The development of the Plan will start within each of the individual workstreams as they are laid out in Form 1.5 Section 1.C. The respective workstream leads will be tasked with developing a Back-End Transition Plan for his or her respective workstream. These individual workstream plans will be modified or tweaked throughout the development of the Front-End Transition Plan as more information is gathered and processes are altered and improved based on that information.

During the development of the Front-End Transition Plan, the individual workstream back end plans will be combined into an overall Plan and reviewed for redundancies and identification of potential conflicts within the streams. The Plan will be reviewed, modified and evaluated by the members of the assigned team as well as any Owner reviews. As part of the process, a detailed list of Owner and Operator rights and responsibilities will be compiled and incorporated into the Plan. Some of these are outlined below.

## 1.0 RIGHTS OF OWNER

It is anticipated that Owner will have the following rights, among others, under the Plan.

- At any time and from time to time during and until the expiration of six (6) years following the end of the period during which Operator performs the Back-End Transition Services, Administrator may, upon reasonable prior notice, Audit (or cause to be Audited) the books and records of Operator or any Subcontractor in connection with any requests for payment of the Back-End Transition Service Fee, together with the supporting vouchers and statements and the calculation of the Back-End Transition Service Fee.
- Owner shall have the right to engage Subcontractors to perform certain Back-End Transition Services.

## 2.0 RIGHTS OF THE CONSORTIUM

It is anticipated that the Consortium would have the following rights, among others, under the Plan.

- Contract to have a baseline environmental study prepared as of the Termination date of the O&M Agreement.
- Engage Subcontractors to perform certain Back-End Transition Services.
- Use personnel from its Affiliates to perform certain Back-End Transition Services.

## 3.0 RESPONSIBILITIES OF OWNER

It is anticipated that Owner would have the following responsibilities, among others, under the Plan.



- To take all such actions as may be reasonably necessary to enable or assist ManagementCo in providing the Back End Transition Services, including (i) providing ManagementCo's Representatives with a designated space and facilities at Owner's principal offices for their use throughout the Back End Transition Period, (ii) allowing access, during normal business or operational hours (as may be applicable and relevant) and at such other times as are required, to Owner's premises for the purpose of providing the Back End Transition Services, (iii) cooperating with and assisting, and causing its Representatives to cooperate with and assist, ManagementCo in its performance of the Back-End Transition Services (iv) encouraging and facilitating a positive and cooperative working relationship with respect to the implementation and completion of the Plan and the performance of the Back End Transition Services.
- Establish bank accounts for the purpose of redirecting customer deposits to such accounts.
- Notify all customers of any new mailing instructions or online instructions for the delivery of payments to the new bank accounts.
- Pay the Back-End Service fees in the timeframe stated in the O&M Agreement. No later than the tenth (10th) Business Day of each month during the Back-End Transition Period, Owner shall replenish the Back-End Transition Account so as to maintain a balance in the Back-End Transition Account at the end of each calendar month equal to the sum of the anticipated Back-End Transition Service Fees for the subsequent four and a half (4.5) months, subject to Owner Credit Rating, and so on subsequently until the Back-End Transition Services conclude.

#### 4.0 RESPONSIBILITIES OF THE CONSORTIUM

It is anticipated that the Consortium would have the following responsibilities, among others, under the Plan.

- Review the current state of the T&D System with the Owner or, at Administrator's discretion, successor operator, including the control, monitoring and information equipment, systems, practices, services (including related hardware, Information Systems and Software) and general operating and administrative practices used in connection therewith.
- Deliver to Owner an estimate of the anticipated Back-End Transition Service Fee for the following four and a half (4.5) months (or such shorter period under certain conditions in the O&M agreement).
- On or prior to the tenth (10th) day of each month during which Operator is performing the Back-End Transition Services, Operator shall provide Owner with a monthly invoice describing in reasonable detail the prior calendar month's Back End Transition Services and the corresponding Back End Transition Service Fee for such prior calendar month.
- Remove all branding of Operator.
- Review the current budgets with Owner or, at Administrator's discretion, the successor operator.
- Review the safety program, practices and any known safety deficiencies with Owner or, at Administrator's discretion, the successor operator.
- Preparation and delivery of information to Owner or, at Administrator's discretion, the successor operator relative to the staffing of Servco, benefit information, work rules and labor contracts.
- Review and transfer of the System Operations Principles, Procurement Manuals, Data Security Plan, Emergency Response Plan, Physical Security Plan and the Vegetation Management Plan to Owner or, at Administrator's discretion, the successor operator.



- If applicable, terminate any shared service agreements in place as of the termination date of the O&M Agreement.
- Review the status of the System Remediation Plan, to the extent any such items in the Plan have not been completed, with Owner or, at Administrator's discretion, the successor operator.
- Familiarize the Owner or, at Administrator's discretion, the successor operator with the document management program.
- Develop and execute a Handover Checklist.
- Collect all documentation and materials in Operator's care, custody or control associated with work in progress and provide a reasonably detailed status report on each such item to Owner or, at Administrator's discretion, the successor operator.
- Sell at fair market value all existing materials and supplies used by Operator in the operation and maintenance of the T&D System (to the extent not owned by Owner or paid for as a T&D Pass-Through Expenditure) to Owner or, at Administrator's discretion, the successor operator, if any.
- In accordance with Prudent Utility Practice, promptly take all action as reasonably necessary to protect and preserve all materials, equipment, tools, facilities and other property at the T&D System Sites.
- Remove from the T&D System Sites all equipment, implements, machinery, tools, temporary facilities of any kind and other property owned or leased by Operator, if any, which are not to be transferred to Owner or, at Administrator's discretion, successor operator, and reasonably repair any damage caused by such removal.
- In accordance with Prudent Utility Practice, leave the T&D System Sites in a neat, safe, orderly and fully operational condition, subject to reasonable wear and tear.
- Leave the T&D System Sites with consumables and spare parts in quantities consistent with Prudent Utility Practice and return to Owner any of Owner's fixed assets in good working order and condition, subject to reasonable wear and tear.
- Remove all employees of ManagementCo or its Affiliates (excluding ServCo) and any Subcontractors from the T&D System Sites.
- With respect to any ongoing Capital Improvements, promptly deliver to Owner or, at Administrator's discretion, the successor operator a list of all material supplies, materials, machinery, equipment, property and special order items previously delivered or fabricated by Operator or any Contractor or Subcontractor but not yet incorporated in the T&D System Sites.
- Deliver to Owner or Administrator all computer programs used at the T&D System Sites in the performance of O&M Services under the care, custody or control of Operator, including all revisions and updates thereto.
- Deliver to Owner or Administrator a list of all books, records, customer lists, account information, personnel information, drawings, reports, plans and other data in Operator's possession or control relating to the performance of the O&M Services and copies thereof.
- Deliver to Owner or Administrator copies of current maps of the T&D System in the custody of Operator.
- Provide Owner or Administrator with a list of all files, and access and security codes under Operator's care, custody or control with instructions and demonstrations which show how to open and change such codes.
- Promptly deliver to Owner or Administrator copies of all Contracts and Subcontracts, together
  with a statement of (A) the items ordered and not yet delivered pursuant to each such Contract



- or Subcontract, (B) the expected delivery date of all such items, (C) the total cost of each agreement and the terms of payment and (D) the estimated cost of canceling each Contract or Subcontract.
- As Owner or Administrator shall direct, terminate or assign to Owner all Contracts and Subcontracts and make no additional agreements with Contractors or Subcontractors with respect to the T&D System without the prior written approval of Administrator.
- Advise Owner or Administrator promptly of any special circumstances that might limit or prohibit cancellation of any System Contract, Contract or Subcontract.
- As reasonably directed by Owner or Administrator, transfer to Owner by appropriate instruments
  of title and deliver to the T&D System Sites (or such other place as Administrator may specify),
  all special order items pursuant to this Agreement for which Owner has made or is obligated to
  make payment.
- As directed by Owner or Administrator, transfer or assign to Owner all warranties given by any manufacturer, Contractor or Subcontractor with respect to particular components of the O&M Services.
- Notify Owner or Administrator in writing of any legal proceedings against Operator by any Contractor, Subcontractor or other third parties relating to the termination of the O&M Services or any Contracts or Subcontracts.
- As directed by Owner or Administrator, provide written notice of termination, effective as of the date of termination of the Contract, under each policy of Required Insurance (with a copy of each such notice to Owner and Administrator); provided that if Administrator elects to continue such policies in force thereafter for Owner and at Owner's expense, Operator shall use its commercially reasonable efforts to ensure that Administrator is able to do so.
- To the extent requested by Owner or Administrator, and at the sole cost and expense of Owner, retain any or all senior management employees and make them available, for up to six (6) months following expiration or earlier termination of the Term, to provide on-site, real time consulting advice to a successor operator for the T&D System or Owner.
- Provide Owner, Administrator and, at Administrator's discretion, successor operator with copies of and access to all System Information, Customer Databases and other Work Product or tangible embodiments of Intellectual Property of Owner in Operator's care, custody or control in a form and medium that is reasonably acceptable to the successor operator and in a manner that such information and material may be accessed and used on same basis by the successor operator that it was used and accessed by Operator.
- Provide reasonable technological and design advice and support, for up to six (6) months following expiration or earlier termination of the Term, and deliver any plans, drawings, renderings, blueprints, operating and training manuals, computer programs, spare parts or other information in ManagementCo's care, custody or control useful or necessary for Owner or, at Administrator's discretion, any successor operator to perform the O&M Services.
- Develop a process for tracking and managing the execution of the Back-End Transition Services, including milestone reporting thereon.
- Review the Integrated Resource Plan with the Owner or, at Administrator's discretion, the successor operator.
- Deliver to Owner or, at Administrator's discretion, to successor operator a list of all fleet vehicles.
- Deliver to Owner or, at Administrator's discretion, to successor operator a list of all facilities.



- If applicable, review the status of any federally funded projects with the Owner or, at Administrator's discretion, with the successor operator.
- Take such other actions, and execute such other documents as may be necessary to effectuate and confirm the foregoing matters or as may be otherwise necessary or desirable to provide for a safe, effective and efficient transition of the O&M Services to Owner or a successor operator, minimize Owner's costs and take no action which shall increase any amount payable to Owner under this Agreement.
- Upon completion or the earlier expiration of the obligation to provide the Back-End Transition Services in accordance with this Article 16 (Back-End Transition), Operator and, if and to the extent Administrator requests, its Contractors and Subcontractors shall peaceably leave and surrender the T&D System to Owner or its designee in a condition consistent with Operator's responsibilities hereunder.

## C. BACK-END TRANSITION PLAN OUTLINE

Below is an outline of the Back-End Transition Services Plan. This plan will be completed during the Front-End Transition period and will include the following major topics:

## **Owner Rights**

- Audit
- Engagement of Subcontractors

## **Operator Rights**

- Baseline Environmental Study
- Engagement of Subcontractors
- Use of Affiliate Personnel

## **Owner Responsibilities**

- Access to Office Space, Facilities
- Cooperation with Operator
- Establishment of New Bank Accounts
- Notification of Customers to New Payment Accounts
- Timely Payment of Back-End Transition Fees

## **Operator Responsibilities**

- Safety
  - Review of Overall Safety Program
- T&D Operations
  - Review of Current State of System
  - Review of System Operator Principles and Emergency Response Plans
  - Review of Vegetation Management Plan and Physical Security Plan
  - Review of Integrated Resource Plan



- Delivery of List of Fleet Vehicles
- Review of System Remediation Plan (if Applicable)
- Sale of Materials and Supplies
- Preservation of Materials, Tools and Equipment
- Removal of Equipment and Tools from T&D System Sites
- Maintenance of Consumable and Spare Part Inventory at Sites
- Removal of Operator Employees from T&D Sites upon Exit
- Condition of T&D Sites Upon Exit
- Delivery of Current Maps of the T&D System
- Provision of Technological and Design Support
- Regulatory
  - Review of any Regulatory Reporting and Compliance Requirements and Open Discussions with PREB
  - Review of Regulatory Filing Priorities and Timeline
- Customer Service
  - Review of Policies, Processes and Procedures Captured Under the Document and Record Control Register
- Human Resources
  - Delivery of Information Regarding Staffing, Benefits and Labor Contracts
  - Retention of Senior Management for Six Month Period
  - Stability of ServCo employees fair and appropriate treatment of the ServCo employees, including possible sale of ServCo to facilitate stability
  - Evaluate circumstances and consider other appropriate options to facilitate employee stability in transition
- Capital Projects
  - Delivery of List of Materials and Equipment Delivered to Work Sites
  - Status of Federally Funded Projects
- Information Technology
  - Review of the Data Security Plan
  - Delivery of all Computer Programs used at T&D Sites
  - List of Files, Access and Security Codes
  - Delivery of System Information and Customer Databases
  - Delivery of a Document Management Program
- Finance
  - Estimate of Back-End Transition Service fee for 4.5 Months
  - Monthly Invoice for Back-End Transition Services
  - Review of Current Budgets
- Risk Management
  - Notice of Termination of Insurance Policies
- Environmental
  - Review of Status of Environmental Work
  - Review of Pending Permitting and Reporting
- Legal
  - List of Legal Proceedings Involving Contractors or Subcontractors



- Provision of Work Product and Owner Intellectual Property
- Supply Chain
  - Review of Procurement Manuals
  - Delivery of Copies of All Contracts and Subcontracts
  - Termination or Assignment of Contracts and Subcontracts
  - Cessation of Entering into New Contracts
  - Transfer of Title to Special Order items
  - Transfer of Warranties
- Administrative
  - Removal of Branding
  - Termination of Shared Service Agreements (if Applicable)
  - Milestone Reporting
  - Delivery of all Books, Records, Customer Lists and Other Information
  - Delivery of List of all Facilities
  - Develop and Execute a Handover Checklist



**Annex II: Front-End Transition Plan** 



#### INTRODUCTION

Our transition plan emphasizes building a schedule that is well-organized, focused on

We see the transformation of the electric utility in Puerto Rico as both a challenge and a truly unique and exciting opportunity. A timely and well-managed Front-End Transition Period will be a pivotal building block of our efforts. Our transition plan includes measures that drive short- and long-term improvements. In the short term, our priorities are to address the most serious safety and security shortfalls, as well as ensuring a robust storm response plan. We will also lay the foundation for longerterm priorities such as more efficient operations, higher levels of customer satisfaction and more resilient, modern and clean electric infrastructure. These longer-term priorities will be included in the System Remediation Plan and other transition deliverables.

The main features of our transition plan are:

- Developing a post-commencement strategy that appropriately balances near- and longer-term initiatives:
- Immediately addressing the urgent issues of storm response planning as well as critical safety and operational deficiencies;
- Accelerating the transition schedule by drawing upon our combined workforce of approximately 50,000 employees to supplement the transition team during the initial months;
- Using the proven internal processes Consortium members have employed, which includes more than 200 acquisitions around the world, to support the acquisition strategy;
- Using the collaborative, proven P3 model that our Consortium has perfected over 10 years and multiple projects, including the \$1.2 billion Fort McMurray West 500 kV Transmission Project, an award-winning P3 project that was also the largest in Canadian history;
- Developing a strong internal culture around project management skills, including accountability, elevating issues as they occur, developing work-around solutions and communicating frequent status updates to internal and external stakeholders; and
- Sending a well-orchestrated and consistent message to employees to define expectations for the new T&D Operator.

#### **MOBILIZATION**

The transition team will immediately ramp-up with a relatively large resource pool in order to quickly complete critical path activities. Team leaders will be drawn from our pool of experienced managers. A number of these professionals will also be designated to serve as senior leadership for LUMA after commencement and will be moving to Puerto Rico on a permanent basis.

The manhour budgets assigned to each team reflect the level of change management associated with most of the workstreams. These are illustrated in the figure 1 below:



# IT Resources Federal Funds T&D Ops Management. Legal. Asset Management Generation. Supply Chain, Customer Service Safety, Health & Environmental Coordination, Admin & Regulatory, Risk., Finance Special Teams

# Transition Estimate by Workstream (hours)

Figure 1 – Transition Estimate by Workstream

The overall transition plan has been divided into three primary phases: Assess > Analyze > Act. These are not distinct phases with clear separation between them, but rather they indicate the general focus of activities that will gradually evolve as we arrive on site, complete our assessments and work with the PREPA employees to develop our improvement initiatives.

This approach is summarized in figure 2 below.



	Phase 1	Phase 2	Phase 3
	Assess	Analyze	Act
Tasks:	<ul> <li>Detailed data review</li> <li>Interview PREPA rank and file</li> <li>Assess performance trends and issues</li> <li>Confirm or modify hypothesis</li> </ul>	<ul> <li>Understand root causes of performance issues</li> <li>Identify potential solutions</li> <li>Work with employees to understand constraints and implementation challenges</li> </ul>	<ul> <li>Consolidate solutions into initiatives</li> <li>Quantify costs and benefits of solutions</li> <li>Prioritize initiatives into near and longer-term schedule</li> </ul>
Major attributes of each phase:	<ul> <li>Large team supplemented from OpCos</li> <li>Compile performance data on a consistent basis for future</li> <li>Set expectations that there is transformation underway in how business will be conducted</li> <li>Identify internal champions and leaders</li> </ul>	<ul> <li>Investing time to understand local constraints, but always driving schedule progress</li> <li>Catalog potential issues and initiatives</li> <li>Starting to work in collaborative teams with rank and file; internal champions emerging and assuming more active roles</li> <li>Business process reengineering requirements being identified</li> </ul>	<ul> <li>Internal champions taking leadership roles as new attitude becomes understood</li> <li>Developing implementation plans that cut across organization for efficiency</li> <li>Gathering input and perspective from broad set of internal and external stakeholders</li> </ul>

Figure 2 Assess, Analyze, Act Framework

Our staffing ramp-up plan recognizes the phased approach and is designed to coordinate staff resources, logistics, and to interface with PREPA employees to support the required deliverables.

The transition schedule is aggressive, but achievable. Equally important to meeting the aggressive timeline is the meaningful participation by PREPA employees including PREPA management. The time to receive regulatory approvals creates a schedule where most workstreams quickly ramp up to full resource loading, then work full-time to achieve the mid-year milestones. While there is a critical path to completion, there are several other secondary and tertiary critical paths that are not far behind. When viewed on a roll-up basis by consolidating major activities, it can look as if each workstream is running full-out to completion since activity scheduling is done on a "finish as early as possible" basis. Nevertheless, there are a number of key activities that drive the overall timeline. These key activities are:

- Mobilization of transition team members after contract award (i.e., early kick-off);
- Several IT-related system development tasks, but most critically, the path to implement and stand up the new HR systems necessary at ServCo, includingpayroll module;
- Development of the System Remediation Plan and approval;
- Development of the Federal and Non-Federal Procurement Manuals and approval;
- Development of the Systems Operations Principles and approval;
- Initial budget submission and approval;
- Initial Rate case submittal and approval; and



Development of performance metrics and approval.

# Views on Feasibility of 2020 Target Commencement

It is the Consortium's view that with an effective date in mid-January 2020, transition activities can be completed before December 2020.

In order to achieve commencement in 2020, the Consortium, the Administrator and PREB will all need to share the same sense of urgency to achieve this target. If all three parties are not aligned on this issue, then commencement could be delayed until sometime in 2021.

This schedule has been carefully constructed to ensure that each workstream has a separate and realistic schedule for the time and activities required to complete its work. In addition, predecessor and successor activities have been identified and a critical path analysis has been conducted to ensure the robustness of the overall transition schedule.

#### **Transition Communications Plan**

A robust communications strategy is a critical element of the transition plan. The communication plan will need to be developed and implemented early as this period is likely to be a time of stress and uncertainty for the workforce. A well-designed communications plan, which will deliver communications in Spanish, will reduce this stress and build a bridge to both the workforce and the general public that will help long after the transition has been completed.

Key milestones in the transition period will be identified and targeted messages delivered to coincide with those milestones. At a very high level, these messages will include introductory materials, periodic status updates and a report on transition period achievements that includes a plan for the future.

The Transition Communications Plan will be our first opportunity to define our management vision and expectations, mission statement and core values. We will coordinate with Owner to provide a plan that will feature the following:

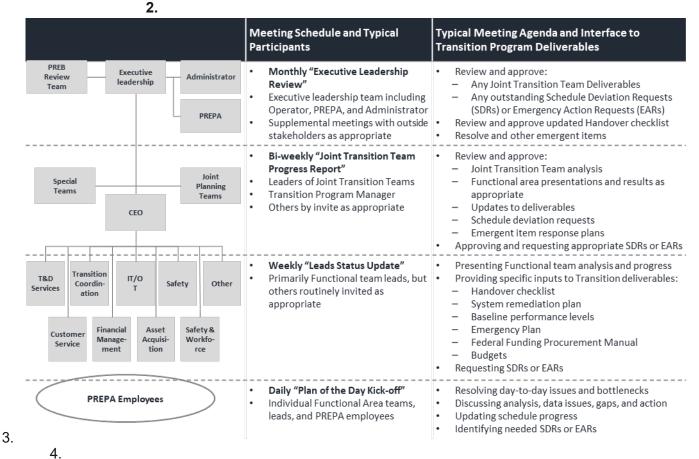
- A commitment from LUMA's senior leadership to communicate with employees transparently and frequently. Communications will express empathy for employees facing uncertainty and change. LUMA will also communicate plans for increased dialogue with employees to keep them motivated and productive.
- The use of multiple communication channels to reinforce our key messages. This will include townhall meetings, one-on-one meetings with employees, group sessions, intranet updates and posting of frequently asked questions (FAQs), memos and other forms of media to communicate applicable information.
- The development of an employee value proposition that defines the Operator and ServCo and why employees will want to stay and join the organization if offered employment.

To enhance communications, we will include the following meetings and status reporting:

Daily meetings between transition team leaders and the transition program manager to identify and resolve any emergent items and assist with other teams' data, analytical or other issues



- Biweekly progress meetings between LUMA and PREPA leads involved with the transition program. These meetings will be action oriented, with summary progress reported. Materials widely reported may be edited to protect confidential information.
- Monthly progress meetings with PREPA, the Administrator and LUMA's transition program leadership
- Supplemental progress meetings with PREPA and Administrator executives as appropriate
- General public progress reporting updates every three months with other stakeholders as determined by PREPA and the Administrator (likely to include PREB and interested policymakers)
- 1. Figure 3 below shows the structure, purpose and proposed frequency of transition program meetings.



5. Figure 3 - Transition Program Meetings

#### MANAGEMENT TRANSITION PLAN

To set a new management tone, and to increase expectations of how LUMA will operate in the future, our management transition plan reflects our philosophy, approach and major themes. The drivers behind PREPA's operating track record are well documented and accepted by most stakeholders. The Consortium will not be another outsider coming to the island to point out faults, but rather a new



permanent organization focused on improving service and rebuilding the system together with former PREPA team members.

We believe, based on our site assessment and field interviews, that PREPA field forces are knowledgeable about what their system requires and are highly frustrated that they have not been able to address these problems. The transformation of the utility requires that talented and resourceful PREPA employees choose to join LUMA. We will work to improve the employee experience in order to stem the rate of attrition and increase employee morale. We envision LUMA coming to be seen as one of the best career opportunities on the entire island. We are determined to convince employees of this by the manner that we interact with them during transition

# APPROACH TO INTERACTING WITH SPANISH-SPEAKING WORKFORCE

Our transition team has a number of fluent Spanish speakers, including several senior members who have lived and managed businesses in several different Latin American countries. These bilingual senior team members should be able to handle most interactions with senior officials, regulators, politicians, or members of the media where important internal employee messaging in the Spanish language would be more productive. We anticipate that those meetings could be led by our nativespeaking or fluent non-native senior team members as necessary.

Interacting with the broader PREPA workforce does represent some potential challenges, but these can be overcome by our detailed planned approach. Part of our plan will require mandatory internal training sessions for all transition members regarding personal and professional manners and expectations, an orientation on Puerto Rico's history and culture, and sensitivity to language issues. In addition, we are also planning on making Spanish-language instruction training available to those of our team members who plan to develop fluency. Other team members will attend a Spanish instruction class at least once per week in order to develop some basic Spanish skills.

#### HANDOVER CHECK LIST

Our plan to manage the Handover Checklist is to continually maintain a checklist and submit updates on or before the 10<sup>th</sup> of every month to the Administrator. These updates will include reporting checklist items that have been completed, as well as identifying any checklist items that might have emergent issues or problems that need to be escalated for resolution. In addition, if any new emergent items are identified that are not currently known, they will be proposed to be added to the handover checklist to be reviewed with Administrator.

The preliminary handover checklist is shown in figure 4 below

Figure 4: Preliminary handover checklist

PRELIMINARY HANDOVER CHECKLIST ITEM	
I. General & Transition Management	
I Government Approvals	



PRELIMINARY HANDOVER CHECKLIST ITEM			
K Plan to Address Gaps in Assets, Technology, Processes			
M PREB Rate Order Filling			
II. T&D Services Milestones			
Development and Implementation of an Operations Takeover Plan for Transmission and     Sub-Transmission Inside and Outside of the Plant			
Development and Implementation of an Operational Takeover Plan     for the Electric Distribution System			
Development and Implementation of Additional Take-over plans			
A. Transition Plan for T&D Control Centers			
B. Transition Plan for Operations and Maintenance (O&M)     Activities			
C. Emergency Response/Disaster Recovery/Business Continuity Plans			
D. Fleet Management Plan			
<ul><li>E. Asset Management (included in 8. Engineering and Asset Management)</li></ul>			
F. Workforce Management & Training Plan			
G. Safety Management Plan			
H. Engineering and Asset Management			
Identification of Real Estate			
J. Materials Management & Warehouse Plan			
K. System Operations Plan			
L. Vegetation Management Plan			
<ol> <li>Update Emergency Operations Manual and Business Continuity/Disaster Recovery Plan</li> </ol>			
Environmental Exposure Management Plan			
6. PREB Rate Order Filling			
III. System Remediation Plan Milestones			
Remediation Plan			
Development of Improvement Initiatives			
Consolidate Plans from All Areas			
Development of System Remediation Plan			
Approval of System Remediation Plan			
IV. Customer Services			
Evaluating Customer Service Facilities and Assets			
<ol> <li>Evaluating and Updating Customer Service Policies and Procedures</li> </ol>			



PRE	LIMINARY HANDOVER CHECKLIST ITEM	
3.	Development of a Meter Reading Plan	
4.	Develop a Customer Service Transition Plan	
5.	Development and Implementation of a Service Start and Shut-Off Plan	
6.	Develop a Meter Asset Management (MAM) Plan	
7.	Development of a Customer Service Technology	
8.	Develop a Non-Technical Energy Loss Reduction Plan	
9.	Establish Integration Between Customer Services & T&D Ops	
V.	IT	
1.	Development of IT/OT Communication Plan and Acceptance Criteria	
В	Identification and Gap Analysis	
С	Evaluating IT/OT Applications and Infrastructure	
D	Development of Cyber Security and Business Continuity Plan	
Е	Development of an IT Asset Management Program	
F	Development of an IT/OT Transition Plan and Schedule	
G.	Commencement Cutover Planning	
2.	Training and Communication Plan	
VI.	Financial Management	
1.	Detailed Description of Approach to Budgeting and Reporting	
2.	Description of Approach to Complying with Initial Budget Obligations	
3.	Approach to Formalizing Changes to Control Processes	
4.	Establishing a Financial Accounting System and Account Structure	
5.	Preparing Initial Budgets and Other Financial Forecasts	
6.	Establishing Bank Accounts	
7.	Evaluating and Updating Payroll and Labor Cost Reporting systems	
8.	Establishing a Delegation of Authority Matrix and Process	
9.	Processes & Procedures and Overall Internal Controls	
VII.	FEMA Funds and Federal Funding Procurement Manual	
1.	Set Up Governance Framework	
2.	Policies and Procedures	
3.	Staffing Plan	
4.	Surge Staffing	
5.	Project Worksheet Assessment (also covered under Section 4.3)	
6.	Handoff of Project Worksheet Activity from COR <sup>3</sup> and Vendors	



PRE	LIMINARY HANDOVER CHECKLIST ITEM	
7.	Project Procurement Planning	
8.	Drafting, Revising and Finalizing Federal Funding Procurement Manual	
VIII. St	affing for Front-End Transition Period	
1.	Draft, Revise and Finalize Operator Employment Requirements	
2.	Recruiting and Staffing	
3.	Redesign and Staff New Organization	
4.	Proposed Recruitment and Staffing Plan	
5.	Stand Up Human Capital Management (HCM)	
6.	Communication Plan	
7.	Training (Workforce Development) Plan	
8.	Develop Employee Retirement Plan	
9.	Occupational Health and Wellness	
10.	Compliance Plan	
11.	Engagement Plan	
12.	Develop a Community Investment Plan	
IX.	Additional Front-End Transition Period Activities	
	1 Genco Shared Services Agreement Approval	
	2 Emergency Response Plan Approval	
	3 Non-Federal Funding Procurement Manual Approval	
	4 Physical Security Plan Approval	
	5 Data Security Plan Approval	
	6 Vegetation Management Plan Approval	
	7 System Operation Principles Approval	
X.	Asset Acquisition (Supply Chain)	
1.	Evaluating Existing Procurement and Subcontracting Policies, Procedures and Systems	
2.	Assuming Responsibility for Securing Use of Assets, Facilities, IT / OT, etc.	
3.	Assuming Existing Subcontracts	
XI.	Back-End Transition Plan	
I. D	evelop Back-End Transition Plan	
XII.	FRONT-END TRANSITION PLAN (ADDITIONAL REQUIREMENTS)	
1.	Confirmation of Acceptable Operator Security	
2.	Required Insurance	
3.	Baseline Performance Levels	



PRELIMINARY HANDOVER CHECKLIST ITEM	
4. Back End Transition Plan	
5. Representations	
6. Operator Representations and Warranties	
7. Section 4.3: Owner and Administrator Responsibilities	
Owner Representations and Warranties	
9. Section 4.4 Governmental Approvals	
10. Section 4.5: Conditions Precedent to Service Commencement Date	
11. Section 4.7: Closing the Front-End Transition Period	
12. Service Commencement Begins	

#### **D.P. 1.5.1 GENERAL TRANSITION MANAGEMENT**

The General Transition Management text is not applicable inf this Annex.

# **D.P. 1.5.2 T&D SERVICES MILESTONES**

The T&D group will be one of the largest team during the transition in terms of the number of people involved and sites and facilities visited. The primary critical path activities that determine the schedule for the T&D transition program are as follows:

- Logistical requirements to visit and assess the large number of physical sites and assets throughout the island;
- Time required to interview and assess the large employee base currently in PREPA's T&D Directorate and to reorganize and staff the new T&D organization;
- Time required to conduct a thorough assessment of all capital and O&M work requirements and to identify, quantify and prioritize improvement initiatives; and
- Completion of key work products needed to ensure no impact to reliability or resiliency after commencement (such as the Emergency Response Plan).

Within this section (T&D services), we have developed a comprehensive operational takeover plan for all the identified items. Our fundamental approach is to assemble a highly experienced team to finalize the necessary due diligence, identify any gaps, and develop a robust plan to ensure continuity of service to the business, employees and our customers. We understand that with a large volume of activity occurring from workstream to workstream seeking similar information may put a burden on the organization and additional cost. We will ensure a high level of control by our Front-End Transition Project Office to avoid duplication of effort.

#### D.P. 1.5.3 SYSTEM REMEDIATION PLAN MILESTONES

The current state of the T&D system as viewed through site visits and our review of information in the data room and the Q&A log is that the current T&D system consists of aging infrastructure that has



been poorly maintained due to lack of funding and inconsistent maintenance practices that are largely undocumented. The control, monitoring and information equipment is aged, underutilized and in some cases obsolete. Hardware, Information Systems and software are underutilized, fragmented and unsupported. Therefore, these systems lack the ability to provide the required visibility of the system and implement programs such as Distribution Automation (DA), condition monitoring/analytics and situational awareness regarding outage management. Strategies to manage assets over their life cycle have not been developed. System Planning tools to effectively model the system, which is an industry best practice, are not being used due to a lack of confidence in their accuracy.

Our approach to developing the System Remediation Plan will be a collaborative effort with key stakeholders. The plan should align with various reports such as the GridMod Plan, the IRP, Sargeant & Lundy's Capital Plan, Build Back Better, and the Energy Resiliency Solutions for the Puerto Rico Grid (from the Department of Energy).

# **D.P. 1.5.4 CUSTOMER SERVICE MILESTONES**

The Consortium views Customer Service as an integral component in the electric sector's transformation. The front-end transition period will be used to thoroughly assess the Customer Service organization, with a focus on customer experience quality and operational efficiency. We will take the opportunity during the transition period to design and plan quick wins that will enable customers to see and feel post-commencement improvements in the customer experience. These quick wins will act as a catalyst for customer engagement and the launch of the Voice of the Customer program.

The Customer Service group's scope and schedule is driven by different needs from most of the other functional areas. In addition to assessing existing operations and identifying opportunities for improvement, the Customer Service group will be fundamentally transforming the manner in which LUMA delivers the customer experience. We will need time to communicate the changes and train the workforce on how things will be different. It is critically important to make customers aware immediately after service commencement that improved customer service is a priority.

The primary critical path activities that determine the schedule for the customer service transition program are as follows:

- Visit and assess the large number of physical sites and assets throughout the island.
- Interview current customer service employees to identify key leaders who can implement the transformed customer service vision, organize and staff the new organization as required.
- Work to instill the culture and values of the transformed Customer Service group throughout the workforce.
- Ensure a consistent message is communicated to customers beginning on the first day of commencement.

# D.P. 1.5.5 INFORMATION TECHNOLOGY (IT)/OPERATION TECHNOLOGY (OT) **SYSTEMS**



The IT group's scope and schedule are driven by the need to begin defining new requirements for a large number of critical systems and processes. These new systems and processes will represent a massive degree of change in how every employee performs his or her daily job.

This level of change requires a structured, well-defined multi-year time frame for implementation that will take place after service commencement. The primary critical path activities that determine the schedule for the IT transition program are as follows:

- A comprehensive assessment and due diligence review of over 15 major systems, which begins on Day 1 and includes each IT/OT team during the first three months.
- A high degree of coordination between the IT team and other functional area teams to ensure the future owners of these new systems have the chance to fully define their requirements.
- A thorough workforce assessment to identify any skill gaps that must be addressed to meet the organization's strategic objectives.
- A concentrated focus on the large number of system cutovers that will be required to support service commencement. It is essential that these cutovers be well planned and flawlessly executed.

#### D.P. 1.5.6 FINANCIAL MANAGEMENT MILESTONES

The Financial Management group's scope and schedule is driven by assessing and improving risk management, the internal control environment and underlying business processes. This is critical to setting the overall financial foundation, evaluating the integrity of the financial compilation and reporting processes, mitigation of fraud and other risks, and the transition, design and implementation of the capital and operating budgets for the organization.

The primary critical path activities that determine the schedule are as follows:

- Redesign the budgeting process and have each functional team restructure its operational areas and adjust staffing size. Roll these inputs into a new approved budget;
- Beginning on Day 1 and during the first three months, perform a comprehensive assessment and due diligence review of all major systems; and
- Recognize the high degree of coordination that will be required from the IT team and the other functional area teams to ensure that owners of these new systems have the chance to fully define their requirements.

LUMA's approach to financial management during the front-end transition will continue to evolve as we gain a deeper understanding of PREPA's administrative and operational routines. Our efforts will be focused on understanding and evaluating PREPA's:

- Significant financial risks;
- Management and operational reporting;
- Regulatory reporting and compliance requirements;
- Business processes: and
- Resources for matters that could affect the seamless transition of services at commencement.



Our plan will leverage current PREPA management and financial personnel to analyze the existing state of department processing and output, transition risks and stakeholder needs (customers, operations, regulators) in the following major areas:

- All significant financial statement accounts and assertions;
- All significant accounting and reporting processes, including:
  - Cash management and controls;
  - Payroll and benefits;
  - Transaction processing;
  - Fixed asset management;
  - Job costing for projects;
  - Debt/credit management;
  - Accounting close:
  - Management; and
  - Regulatory reporting

#### D.P. 1.5.7 FEMA FUNDS AND FEDERAL FUNDING PROCUREMENT MANUAL

The Consortium's Federal Funds Management partner is IEM. LUMA's first step in the transition is to ensure a proper governance framework is established before it can manage a long-term recovery using federal funding on behalf of the Owner. The IEM team will focus to ensure that LUMA after Service Commencement Date operates under a federal funds management framework with an effective procurement policy that is inclusive of all federal, territorial, and COR3 requirements that also emphasizes performance. Further, the monitoring and internal controls included in the newly created PREPA Disaster Recovery Federal Funds Management Guide (DRFFMG) will ensure that the procurement policy is used for procurement and for the management and monitoring of the LUMA's contractors.

#### D.P. 1.5.8 STAFFING FOR FRONT-END TRANSITION PERIOD MILESTONES

The organization chart for our transition team is shown in the figure 4 below.



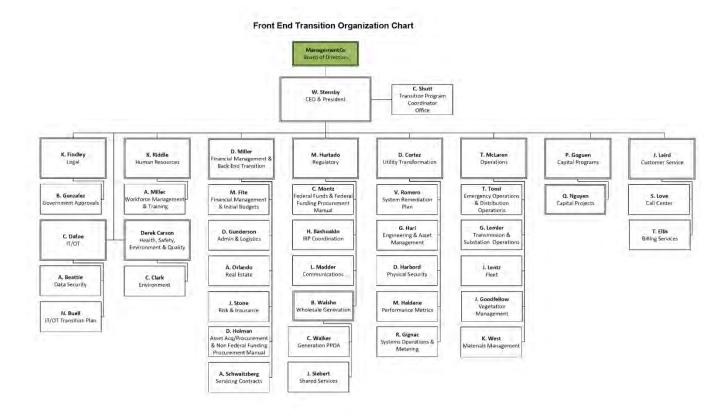


Figure 4 - Front-End Transition Organization Chart

#### D.P. 1.5.9 ADDITIONAL FRONT-END TRANSITION PERIOD MILESTONES

As requested by the administrator, we will create specific teams to provide focus on seven key additional items that are important to a successful transition which are:

- GenCo Shared Services
- Emergency Response Plan
- Non-Federal Funding Procurement Manual
- Physical Security Plan
- Data Security
- Vegetation Management Plan
- System Operation Principles.

#### **D.P. 1.5.10 ASSET ACQUISITION**

The Procurement Team will review existing procurement and subcontracting policies, procedures and systems governing and implemented by PREPA. Once we are able to execute a more granular review of the contracts, procedures and systems that are in place, we will develop a robust plan and recommendation for enhancements or improvements. Upon completion of procurement procedure documentation for goods and services, a training plan will be established for procurement staff as



required. Subsequently, documentation will be integrated into the compliance strategy and the relevant procurement manual.

LUMA will collaborate with PREPA to identify assets related to the facilities, furnishings, material, supplies, equipment and IT systems required for T&D operations. Upon completion of asset identification, LUMA, by performing due diligence in each functional area, will identify and document these assets and develop a detailed plan and recommendation for securing them. The plan will be submitted to the Owner and Administrator for review and input. Operator will coordinate with the Owner on executing the approved plan. The completion of this activity is dependent on timely alignment between LUMA and the Owner on the assets required to run the operation.

Upon completion of the identification and assumption of responsibility for existing subcontracts, LUMA will evaluate all subcontracts and vendors and perform outreach and evaluation. We will work with PREPA and the applicable Operator functional areas to determine which contracts should be continued and assumed by the Operator. The Procurement Team will develop a plan and recommendation for assuming responsibilities for existing subcontracts and submit the plan for Owner and Administrator review and input. The Procurement Team will assume the existing subcontracts with appropriate assignment and further develop LUMA's approval process for subcontractors.

# **D.P. 1.5.11 BACK-END TRANSITION PLAN**

A key component of the O&M Agreement is the development and execution of a Back-End Transition Plan (Plan). The plan will enable the seamless, safe and effective transfer of the management of the T&D System and O&M Services either back to the Owner or to a successor operator at the expiration or termination of the contract.

We have identified the members of the team, our approach and implementation, and proposed a detailed outline of the plan. This Back-End Transition Plan outline can be viewed in Annex III of the **O&M Agreement** 



**Annex III: Back-End Transition Plan Outline** 



The Back-End Transition Services shall include any of the following.

# **Owner Rights**

- Audit
- Engagement of Subcontractors

### **Operator Rights**

- Baseline Environmental Study
- Engagement of Subcontractors
- Use of Affiliate Personnel

#### **Owner Responsibilities**

- Access to Office Space, Facilities
- Cooperation with Operator
- Establishment of New Bank Accounts
- Notification of Customers to New Payment Accounts
- Timely Payment of Back-End Transition Fees

# **Operator Responsibilities**

- Safety
  - Review of Overall Safety Program
- T&D Operations
  - Review of Current State of System
  - Review of System Operator Principles and Emergency Response Plans
  - Review of Vegetation Management Plan and Physical Security Plan
  - Review of Integrated Resource Plan
  - Delivery of List of Fleet Vehicles
  - Review of System Remediation Plan (if Applicable)
  - Sale of Materials and Supplies
  - Preservation of Materials, Tools and Equipment
  - Removal of Equipment and Tools from T&D System Sites
  - Maintenance of Consumable and Spare Part Inventory at Sites
  - Removal of Operator Employees from T&D Sites upon Exit
  - Condition of T&D Sites Upon Exit
  - Delivery of Current Maps of the T&D System
  - Provision of Technological and Design Support
- Regulatory
  - Review of any Regulatory Reporting and Compliance Requirements and Open Discussions with PREB
  - Review of Regulatory Filing Priorities and Timeline
- Customer Service
  - Review of Policies, Processes and Procedures Captured Under the Document and Record Control Register



#### Human Resources

- Delivery of Information Regarding Staffing, Benefits and Labor Contracts
- Retention of Senior Management for Six Month Period
- Stability of ServCo employees fair and appropriate treatment of the ServCo employees, including possible sale of ServCo to facilitate stability
- Evaluate circumstances and consider other appropriate options to facilitate employee stability in transition
- Capital Projects
  - Delivery of List of Materials and Equipment Delivered to Work Sites
  - Status of Federally Funded Projects
- Information Technology
  - Review of the Data Security Plan
  - Delivery of all Computer Programs used at T&D Sites
  - List of Files, Access and Security Codes
  - Delivery of System Information and Customer Databases
  - Delivery of a Document Management Program
- Finance
  - Estimate of Back-End Transition Service fee for 4.5 Months
  - Monthly Invoice for Back-End Transition Services
  - Review of Current Budgets
- Risk Management
  - Notice of Termination of Insurance Policies
- Environmental
  - Review of Status of Environmental Work
  - Review of Pending Permitting and Reporting
- Legal
  - List of Legal Proceedings Involving Contractors or Subcontractors
  - Provision of Work Product and Owner Intellectual Property
- Supply Chain
  - Review of Procurement Manuals
  - Delivery of Copies of All Contracts and Subcontracts
  - Termination or Assignment of Contracts and Subcontracts
  - Cessation of Entering into New Contracts
  - Transfer of Title to Special Order items
  - Transfer of Warranties
- Administrative
  - Removal of Branding
  - Termination of Shared Service Agreements (if Applicable)
  - Milestone Reporting
  - Delivery of all Books, Records, Customer Lists and Other Information
  - Delivery of List of all Facilities
  - Develop and Execute a Handover Checklist



# Annex IV: Operator Employment Requirements – **Proprietary Information**



# ANNEX IV OPERATOR EMPLOYMENT REQUIREMENTS



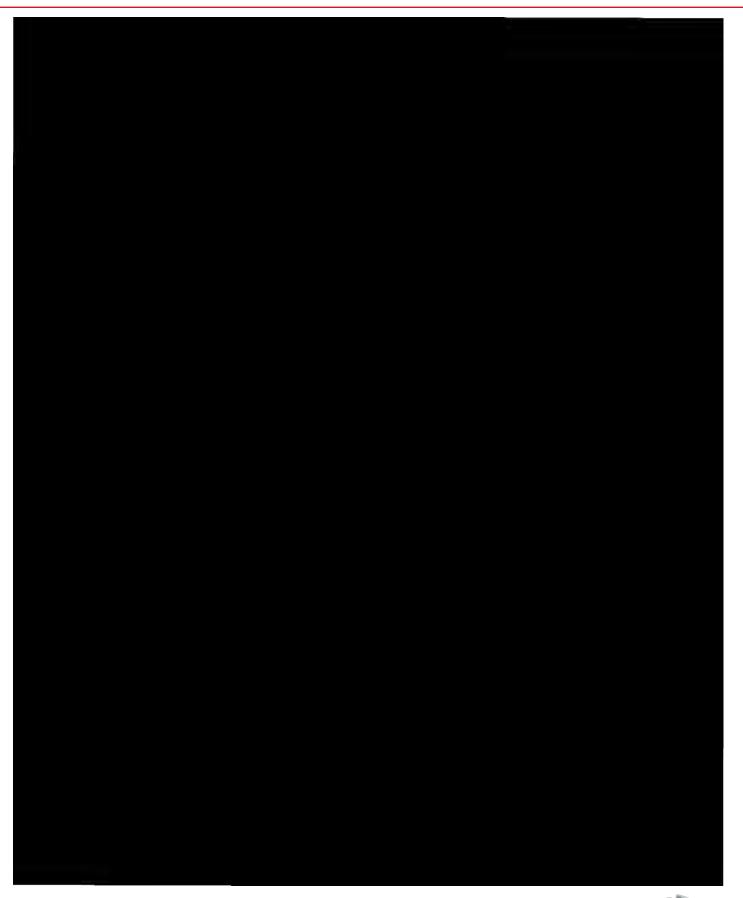


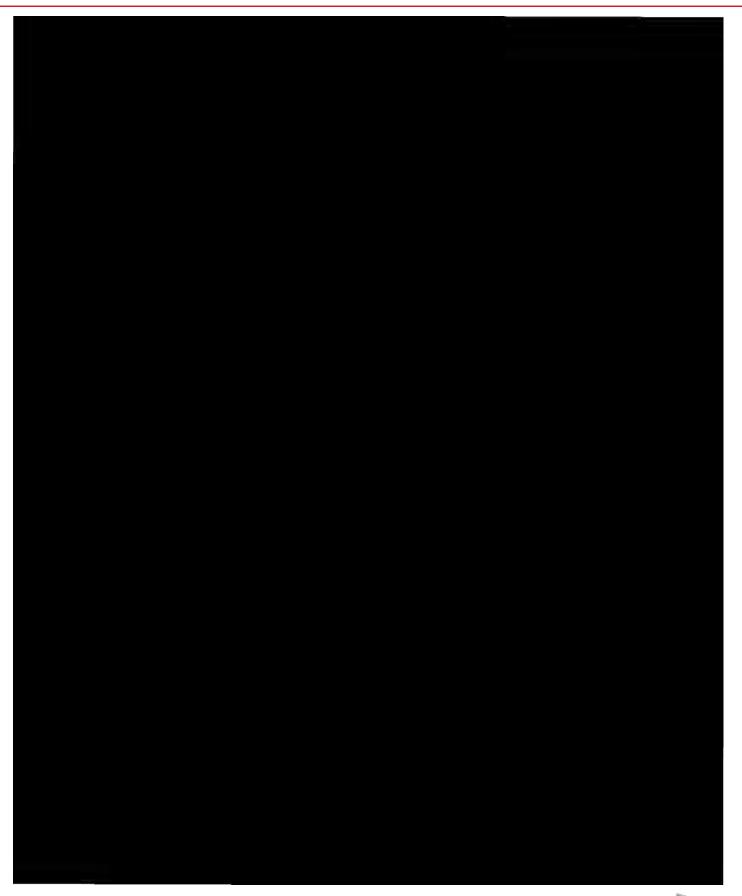




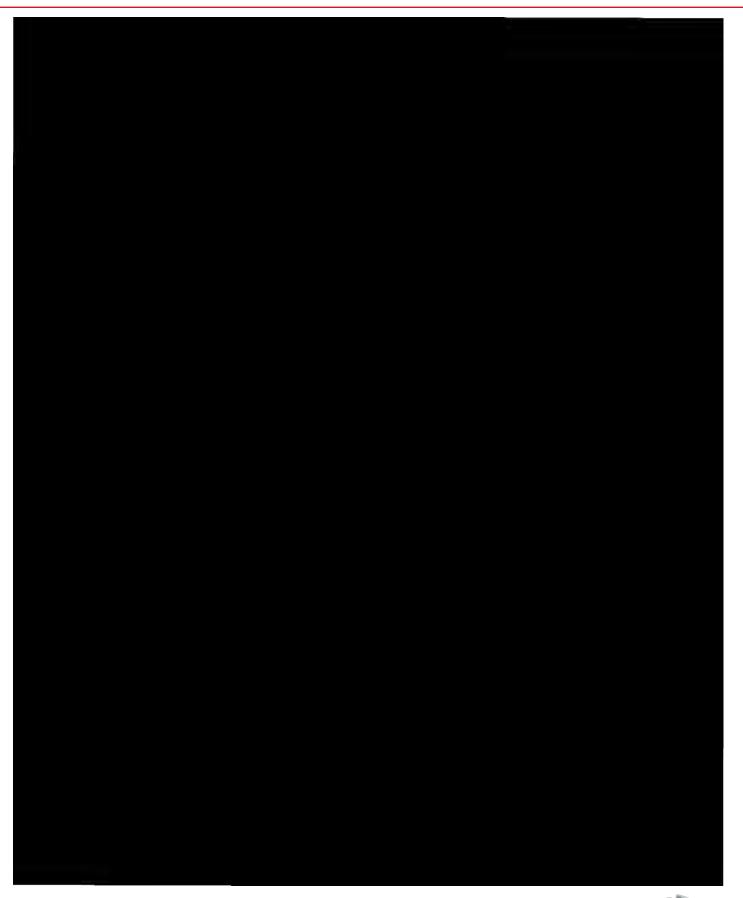




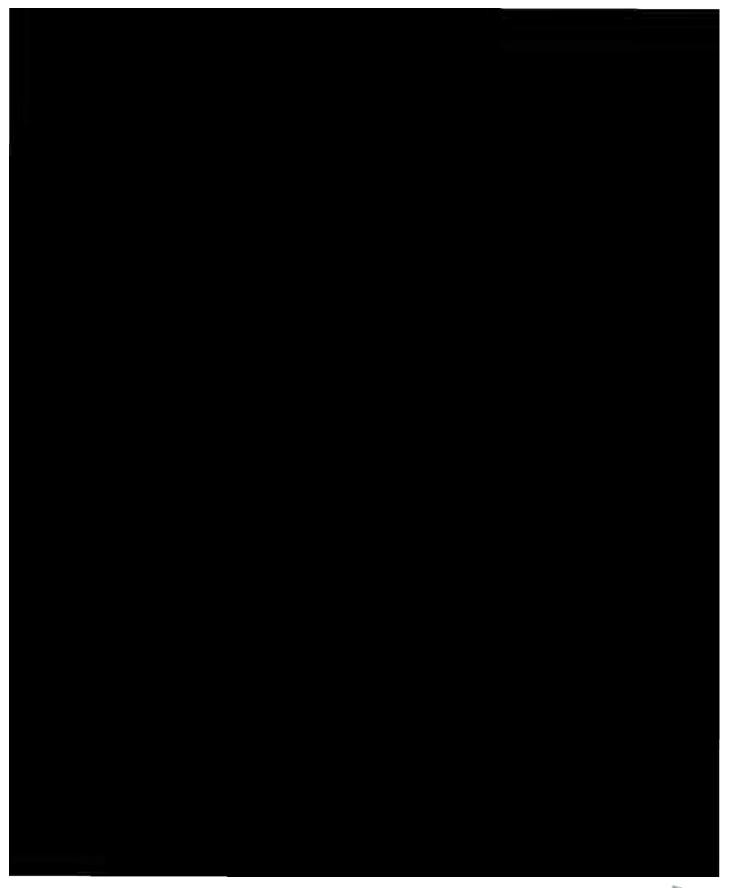


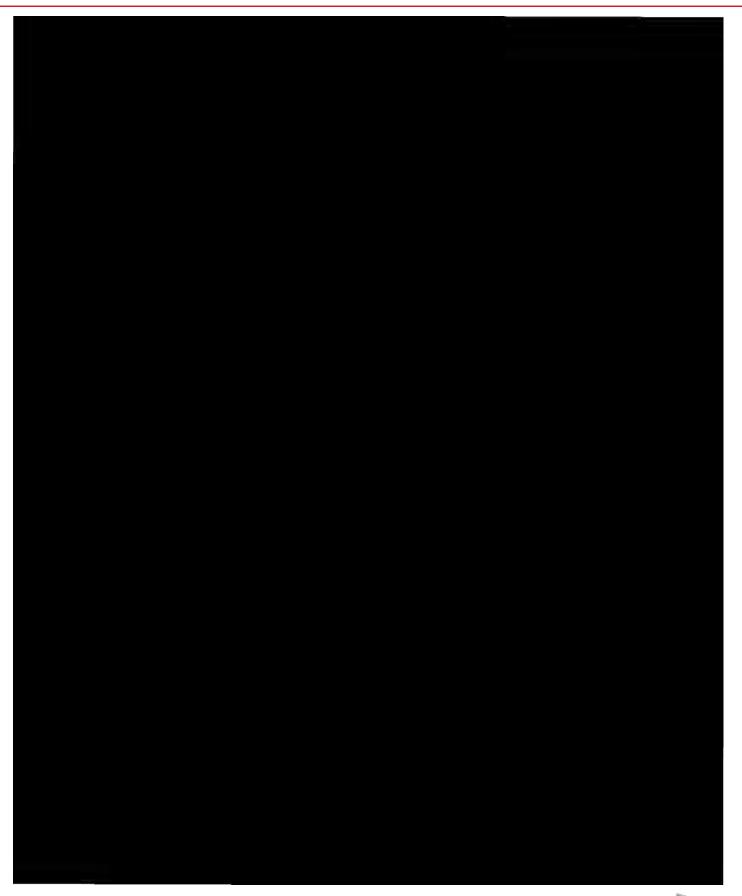


















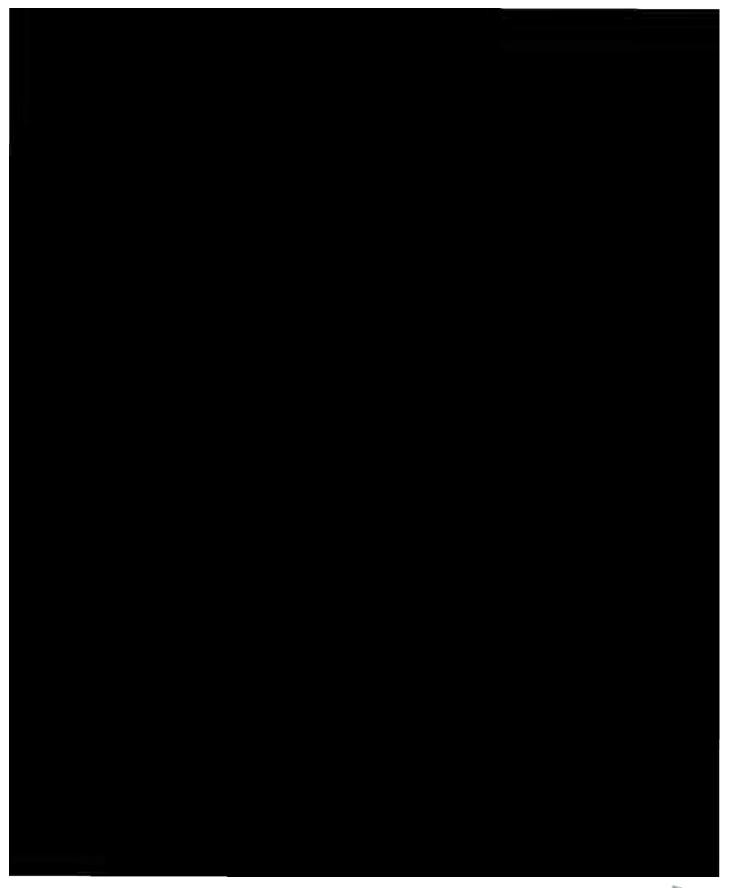


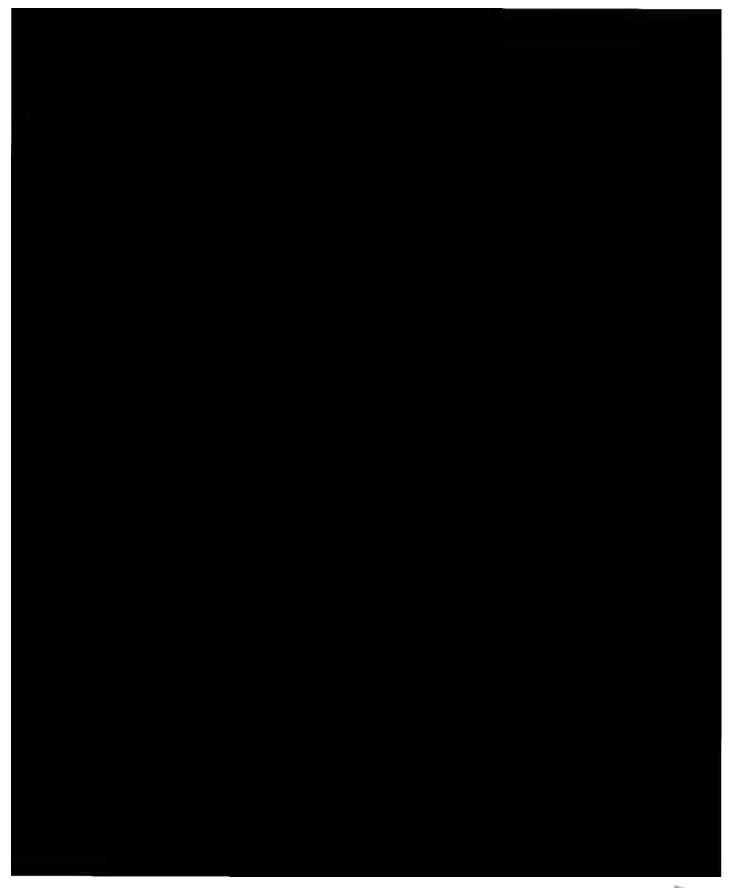


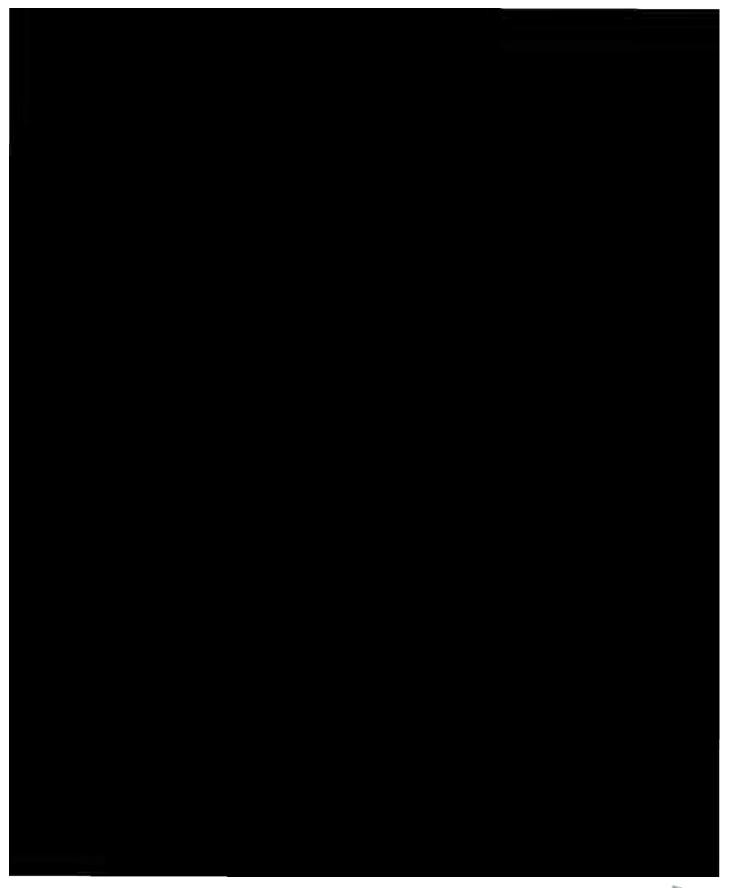
















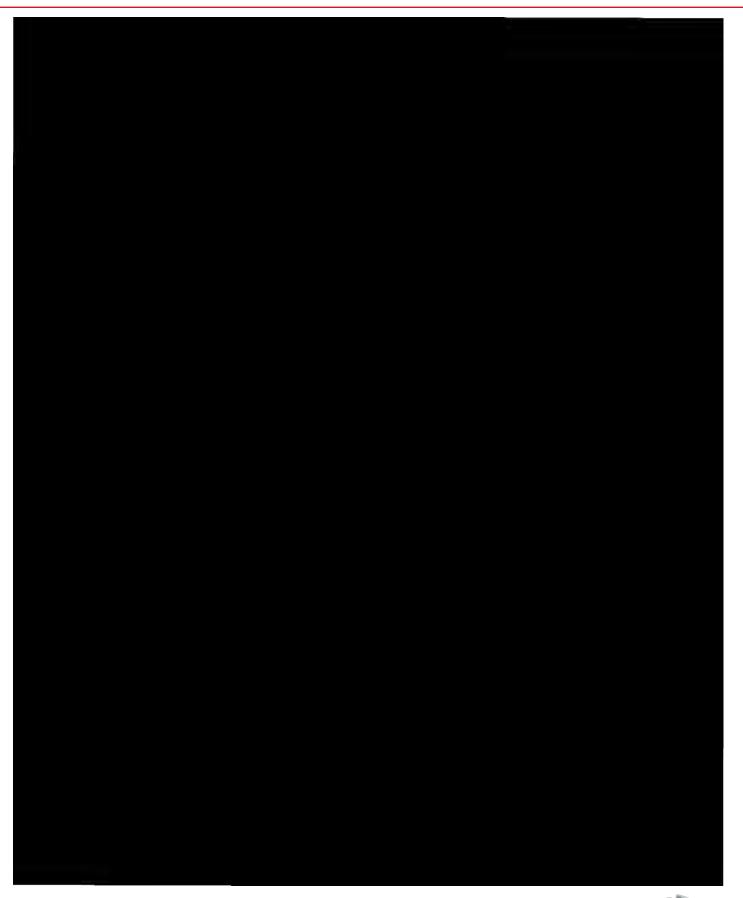




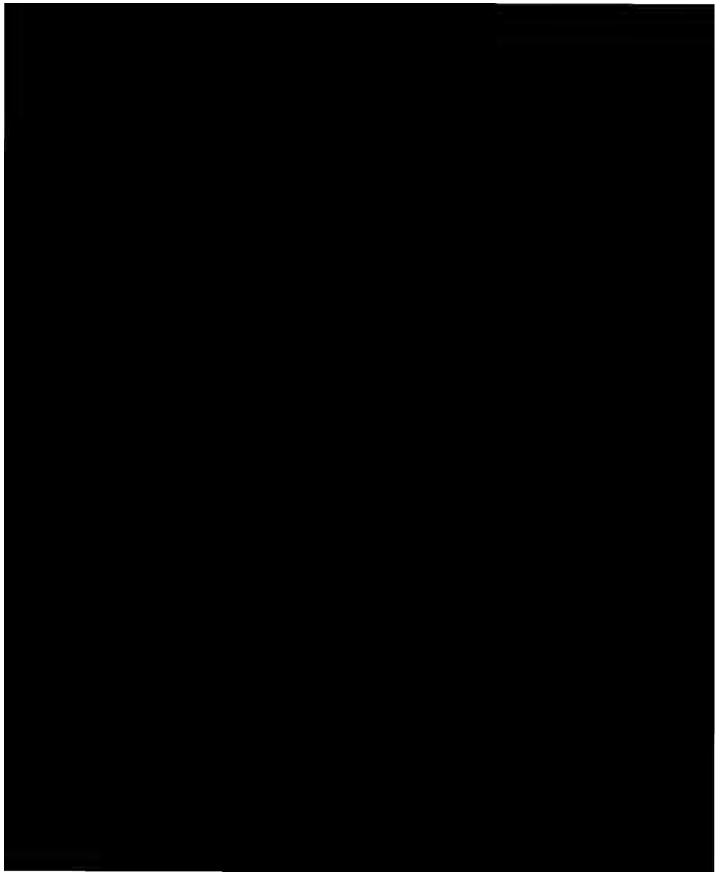


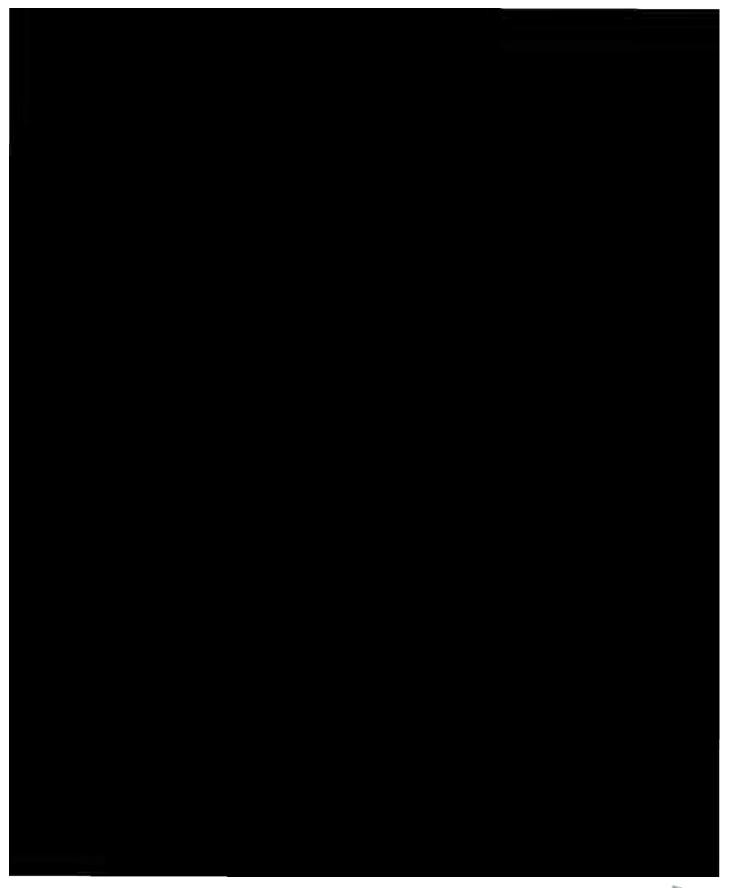


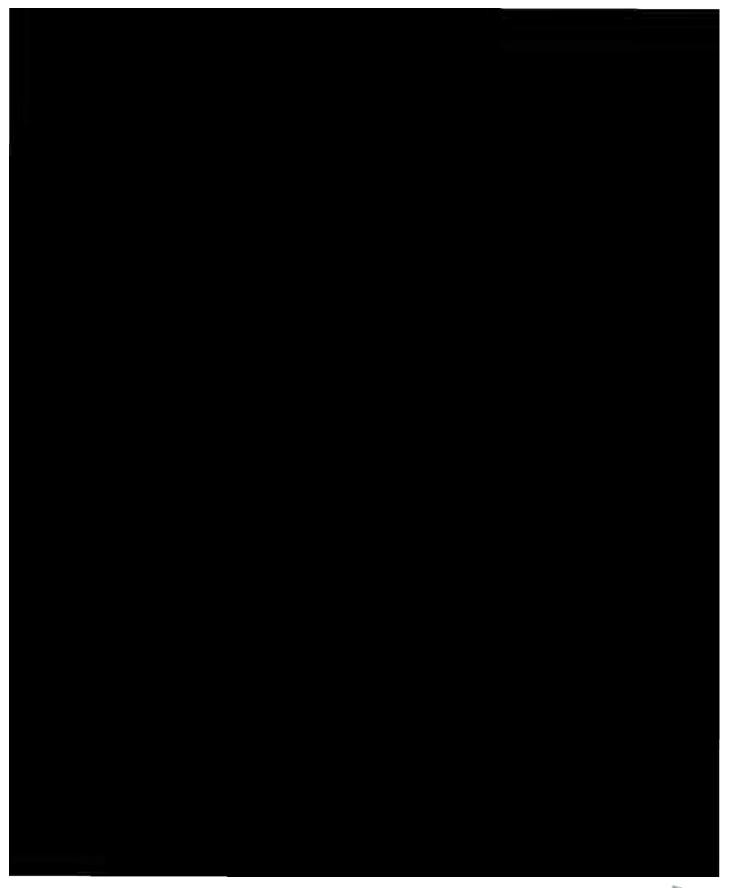






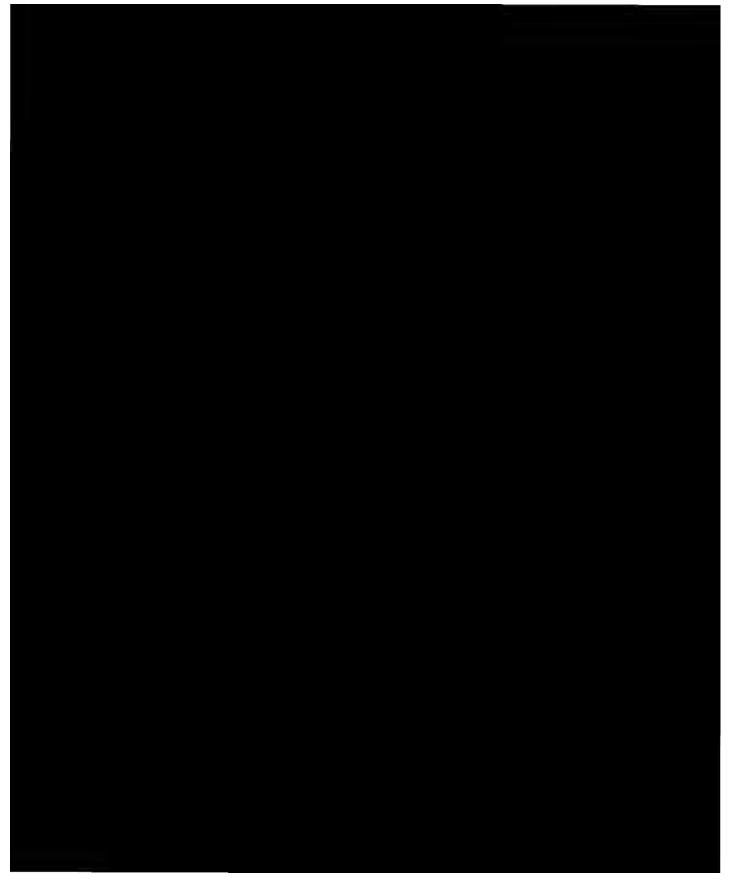


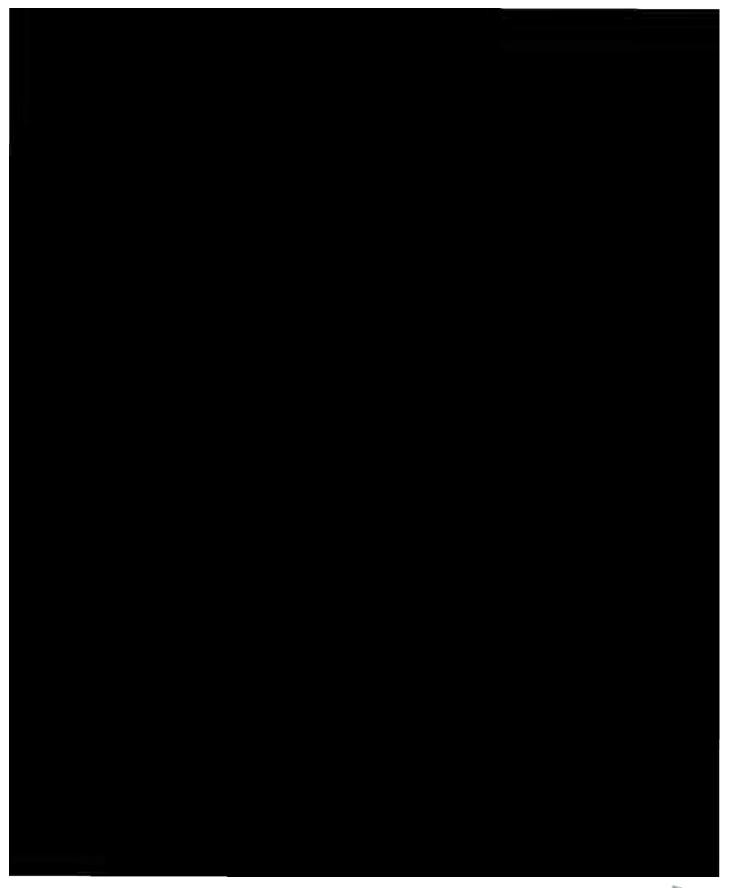


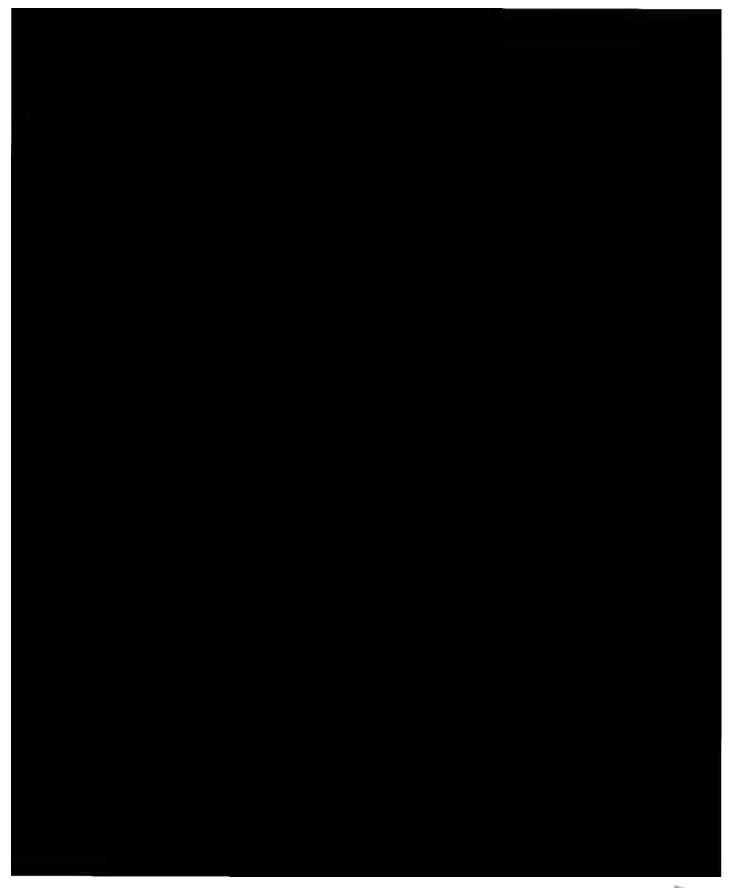


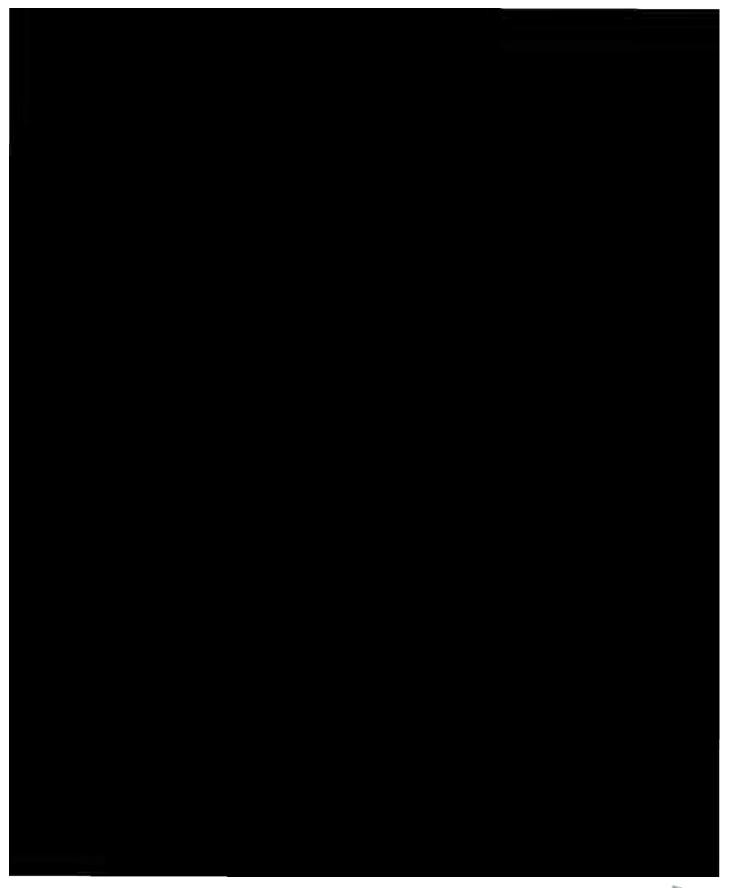




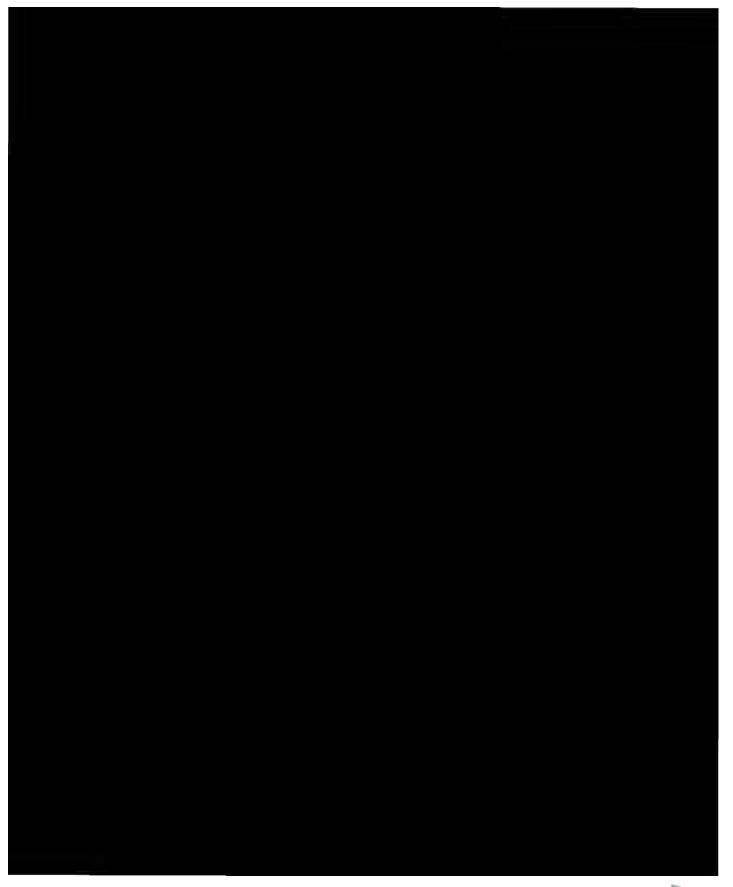


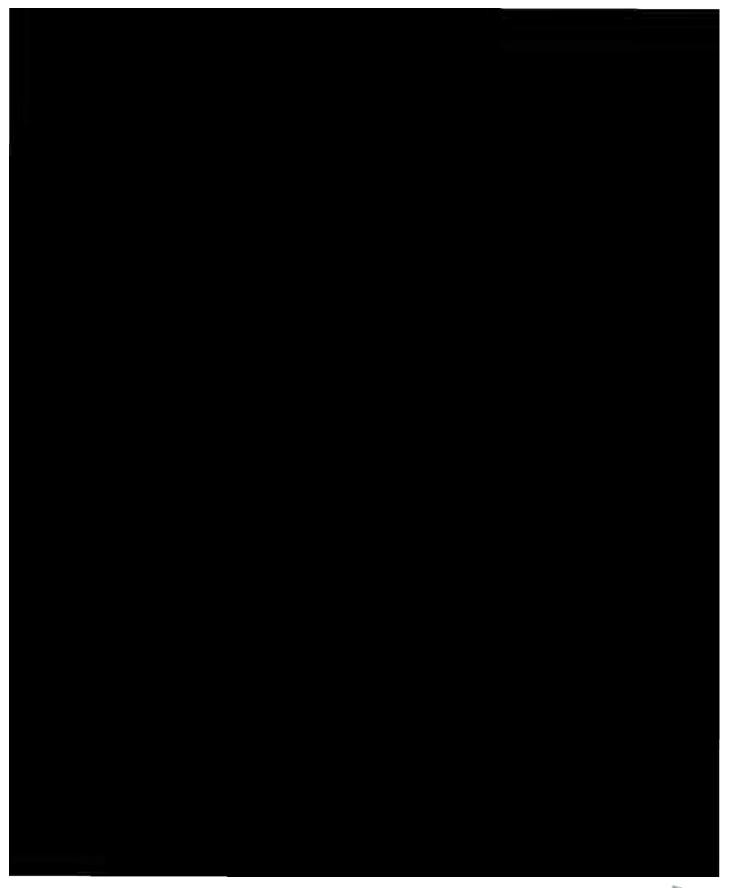








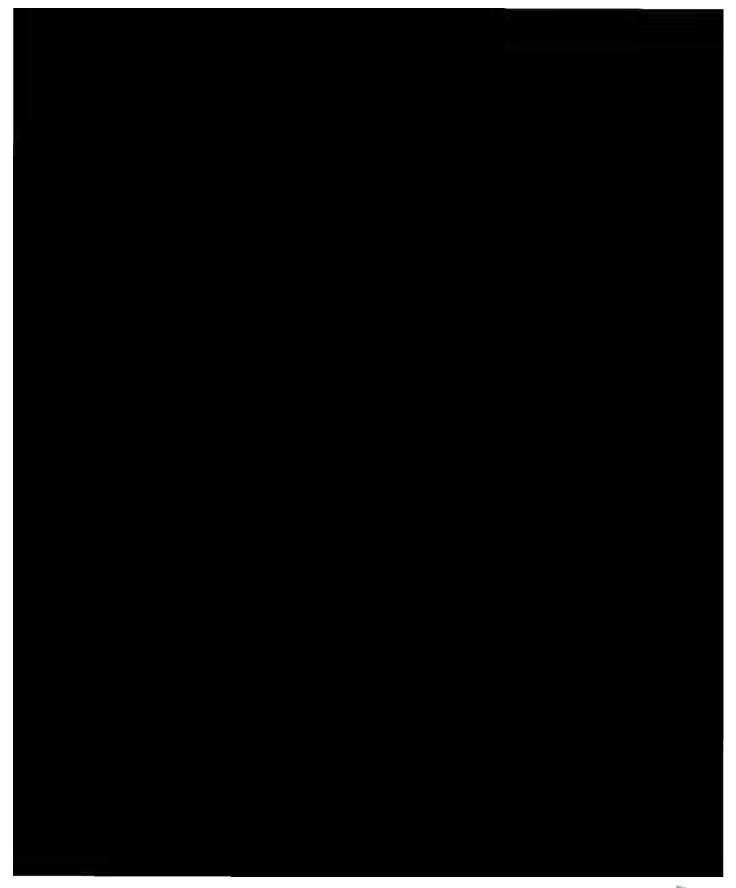


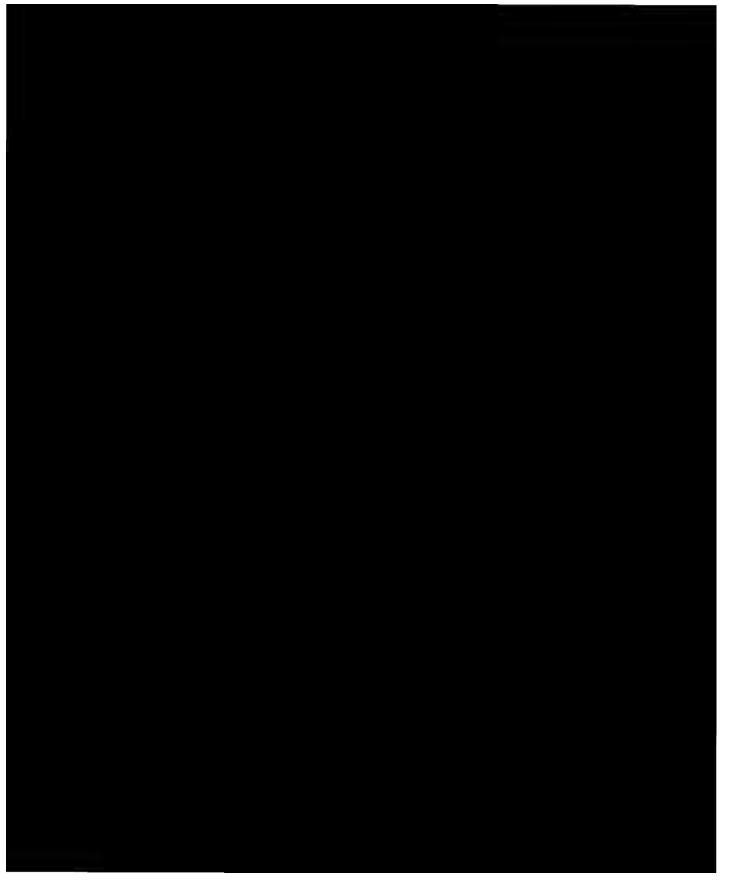


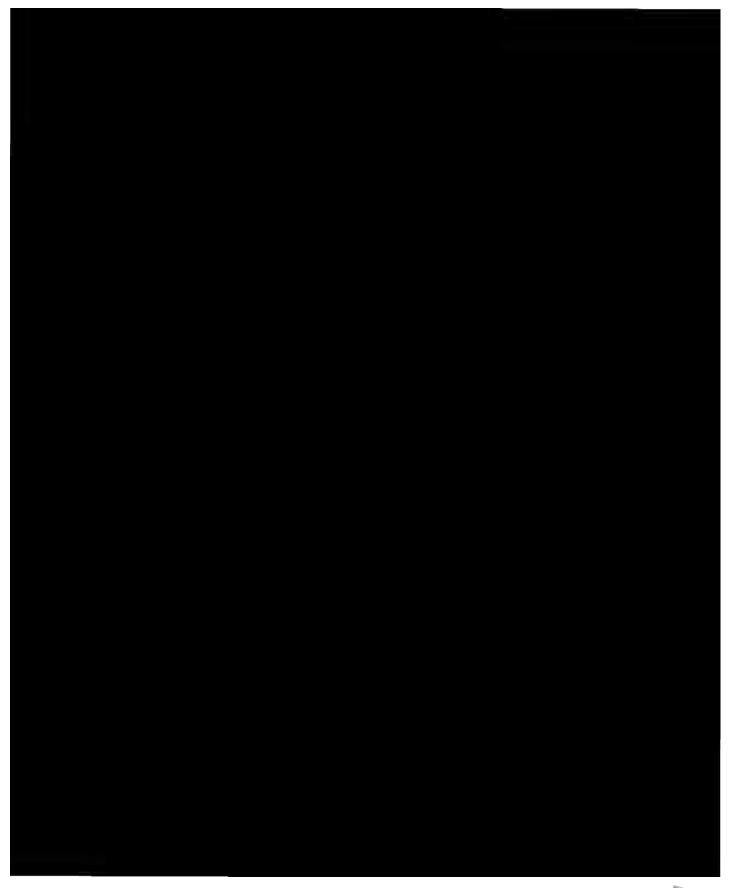


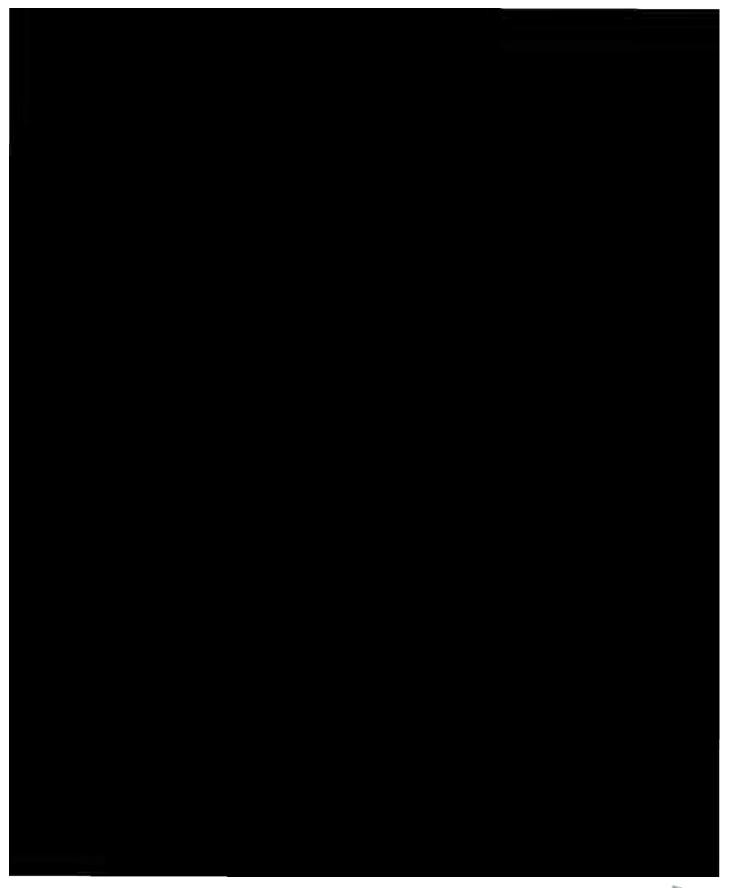








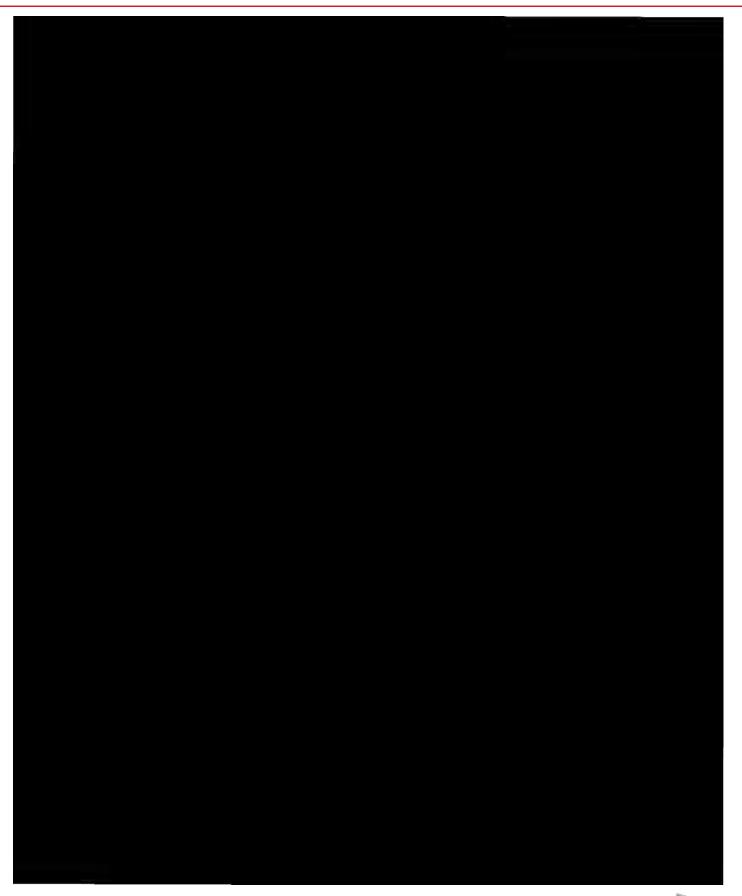




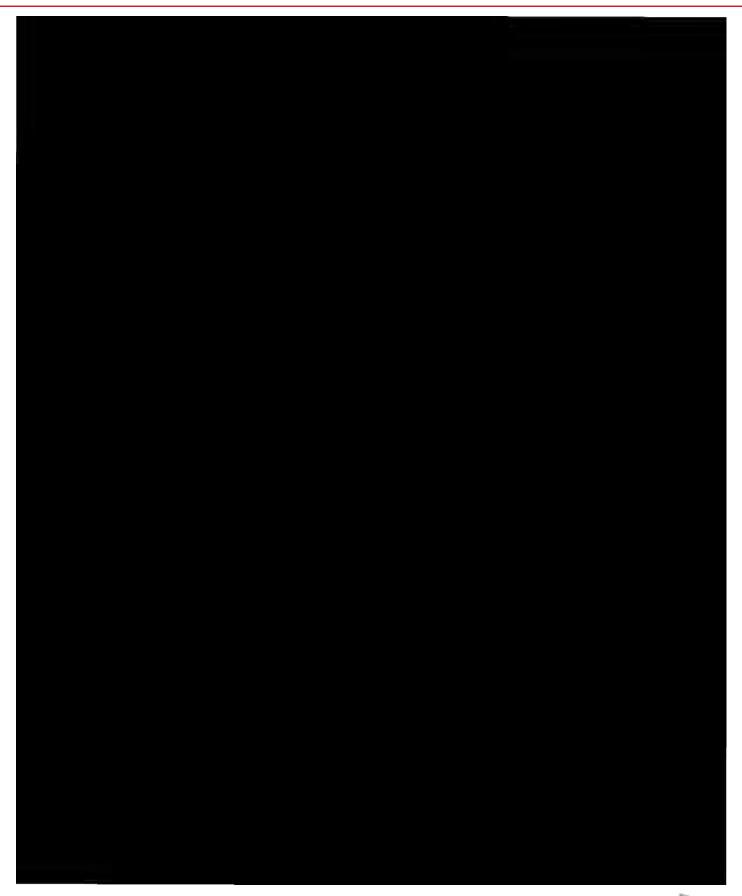






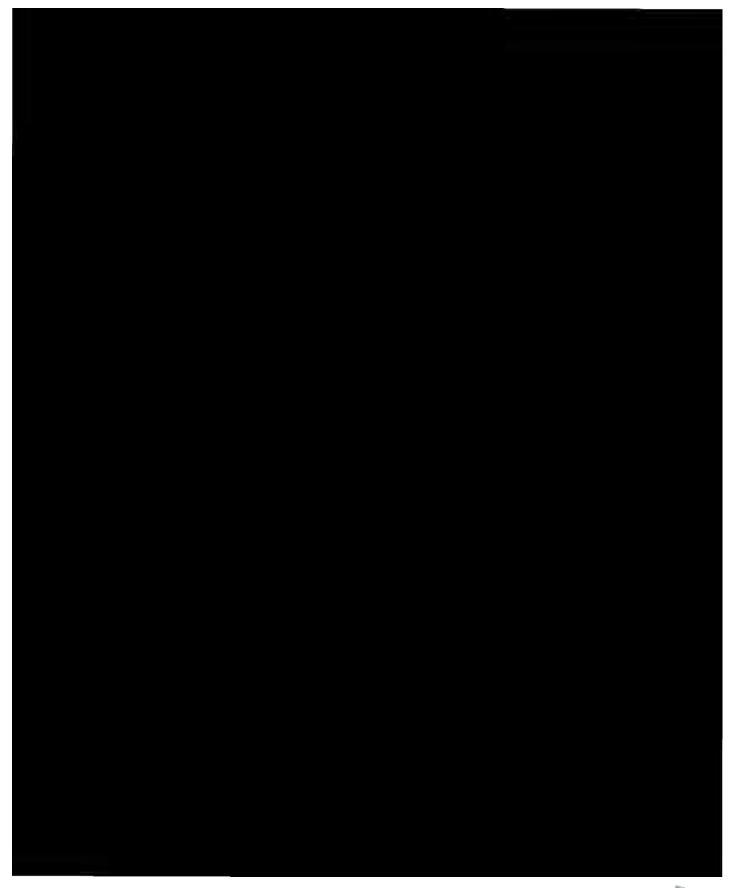












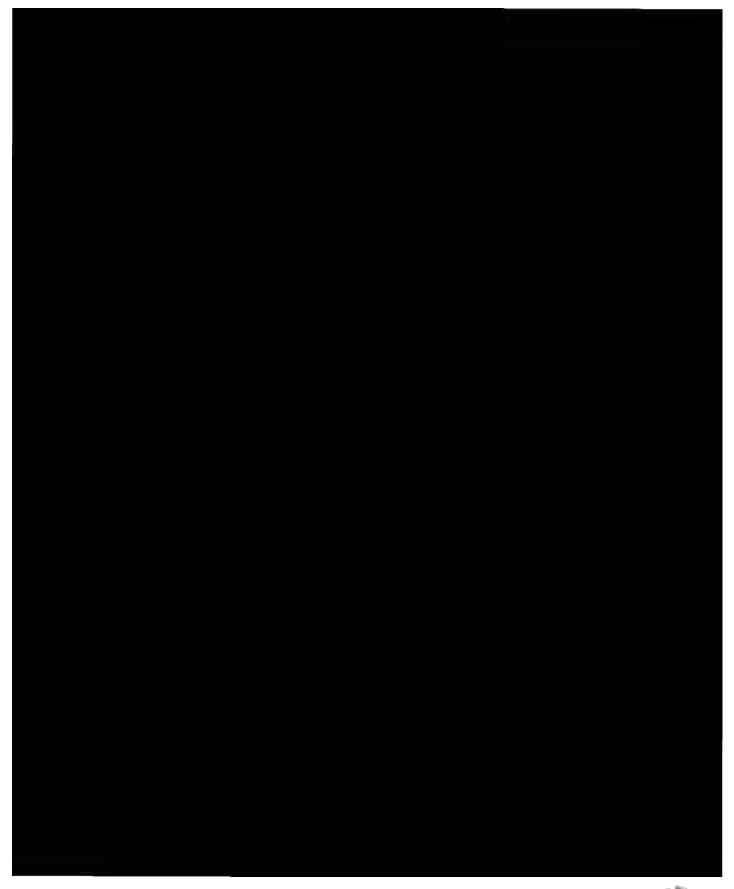




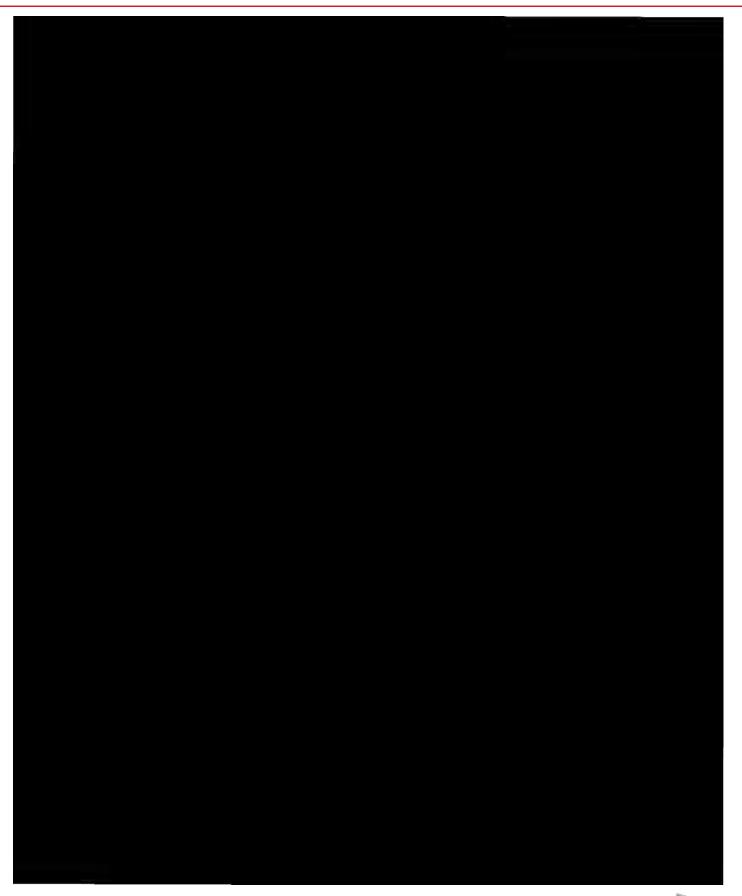


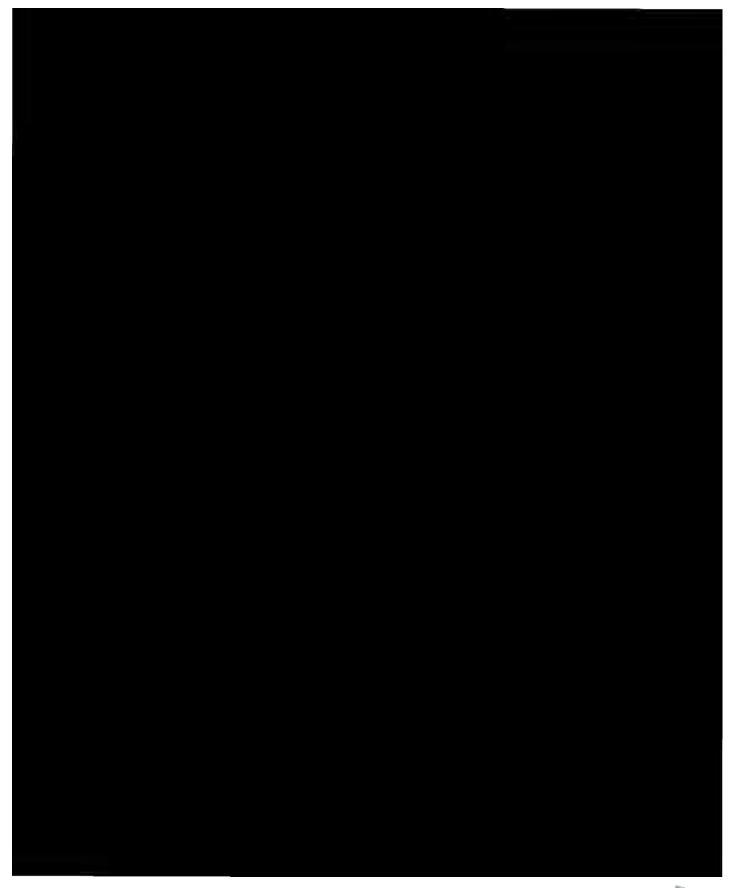




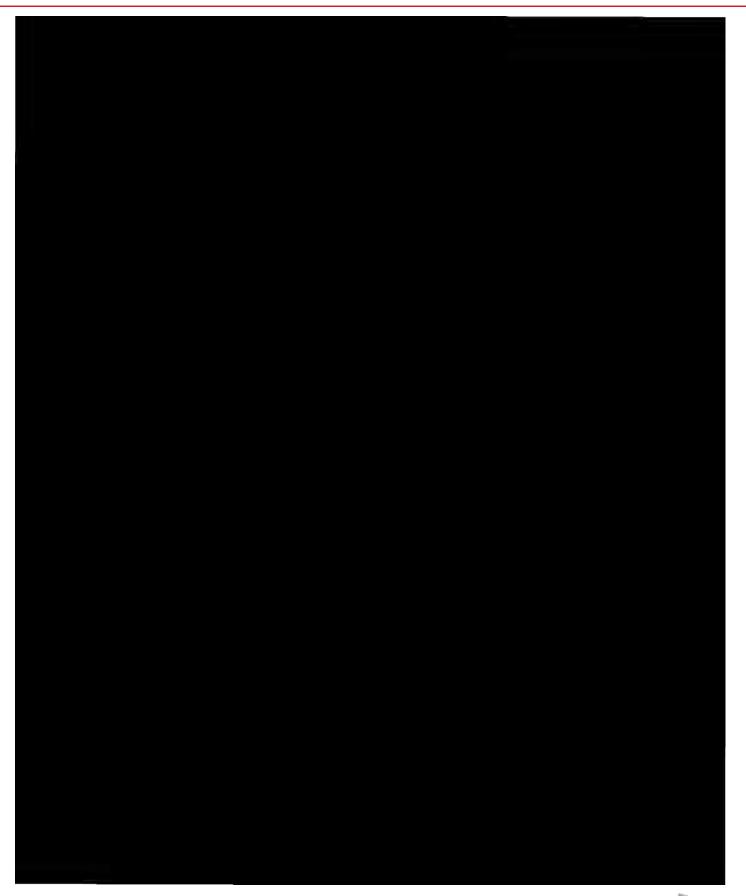


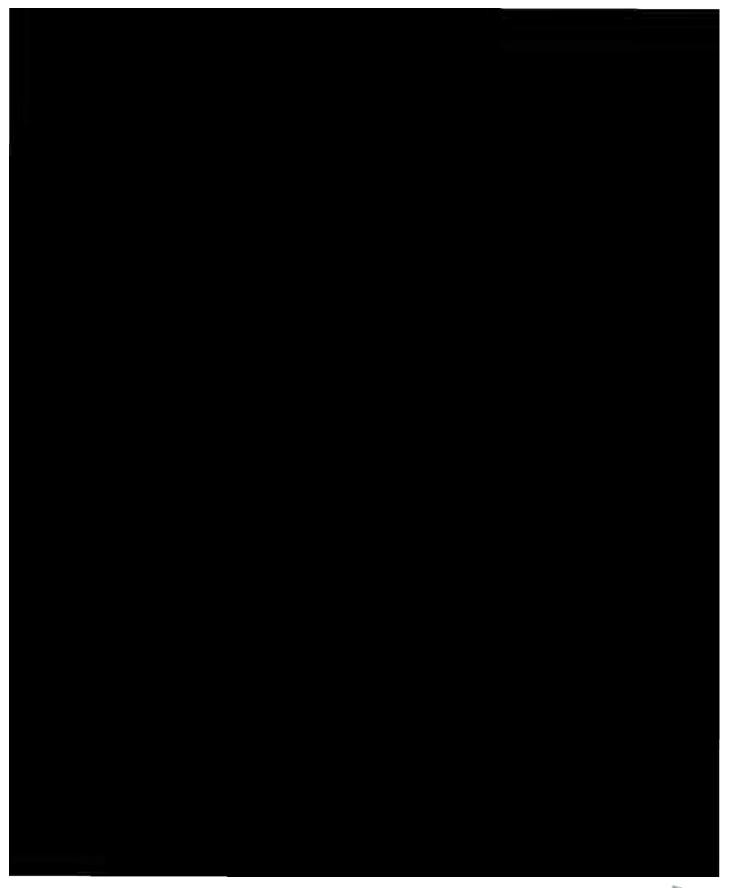














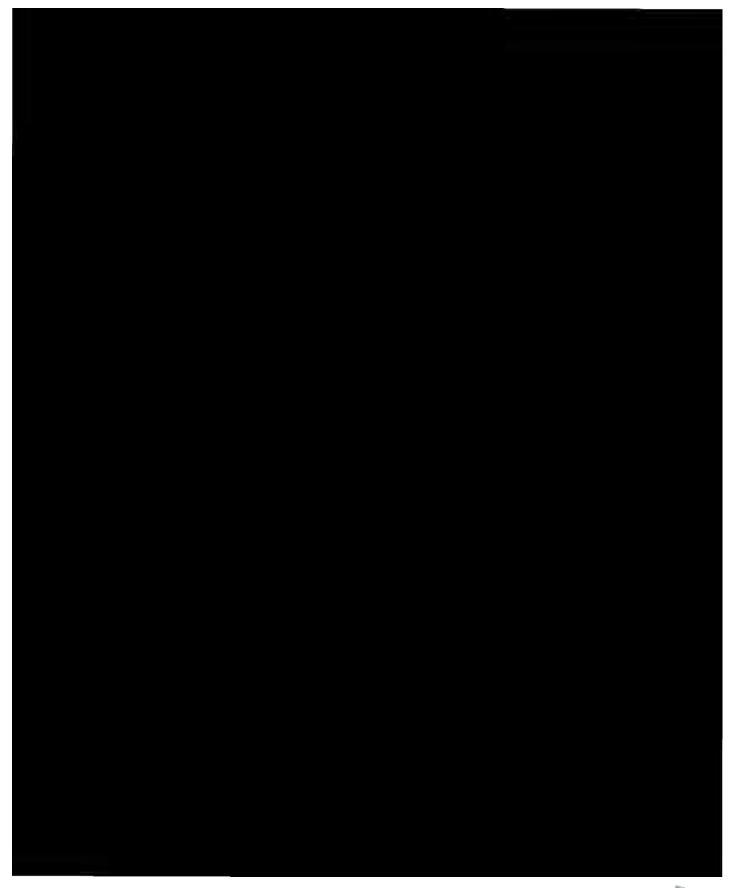


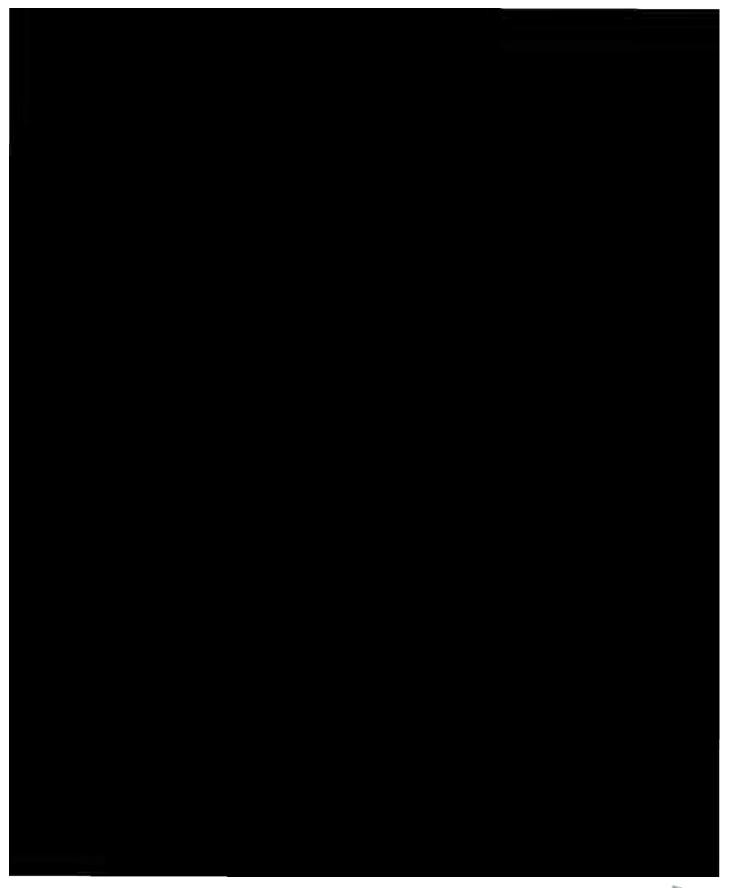














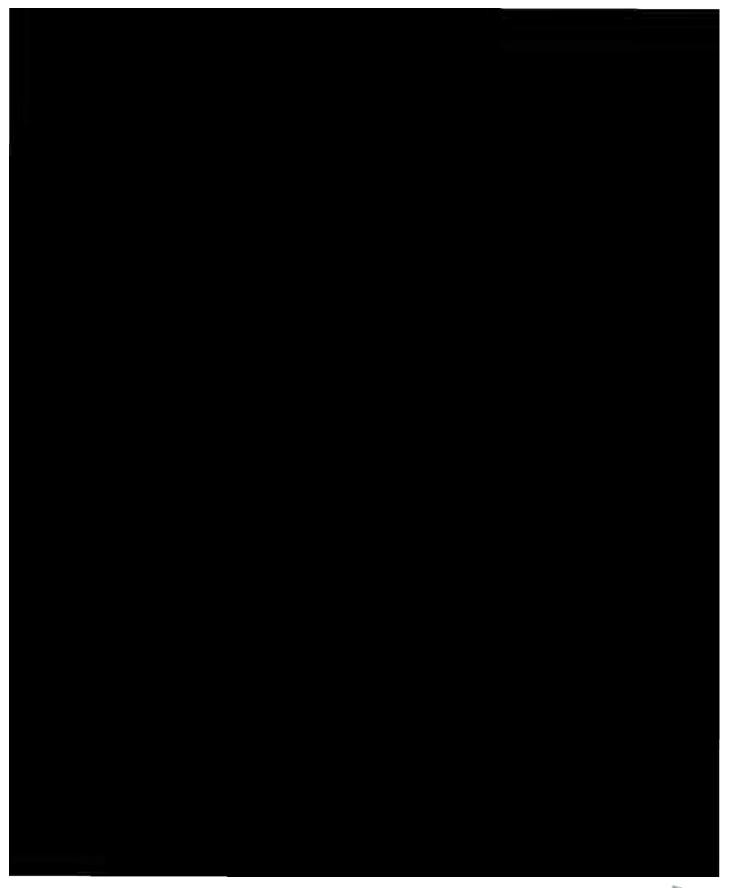














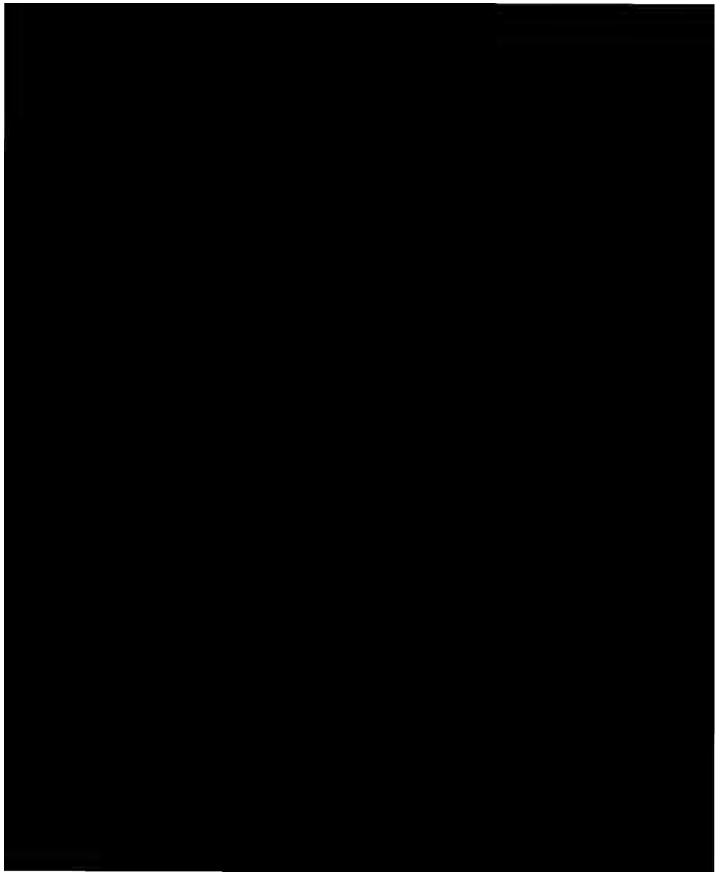




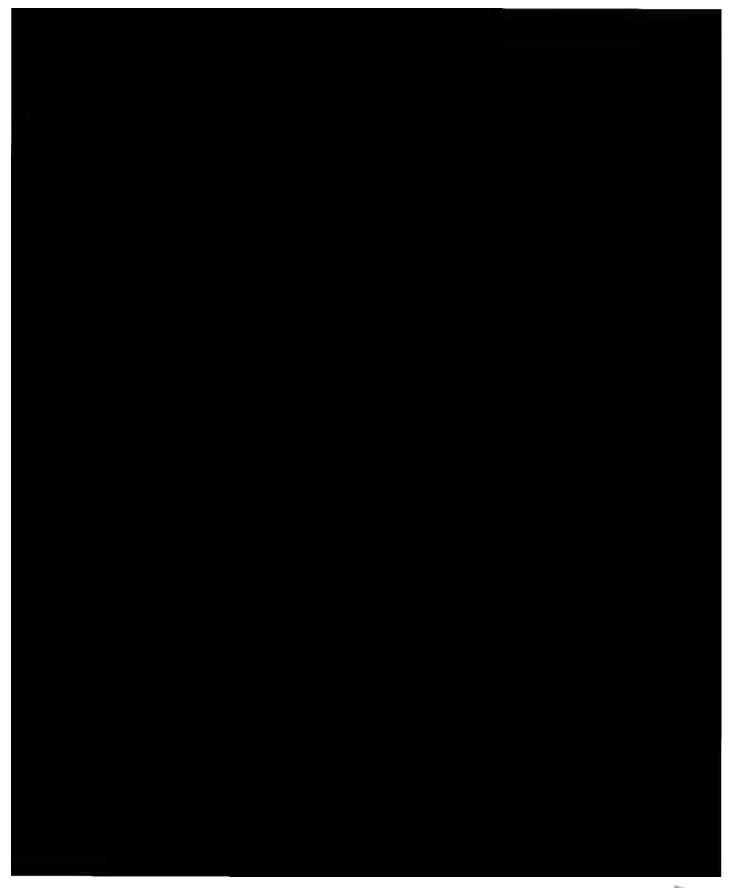








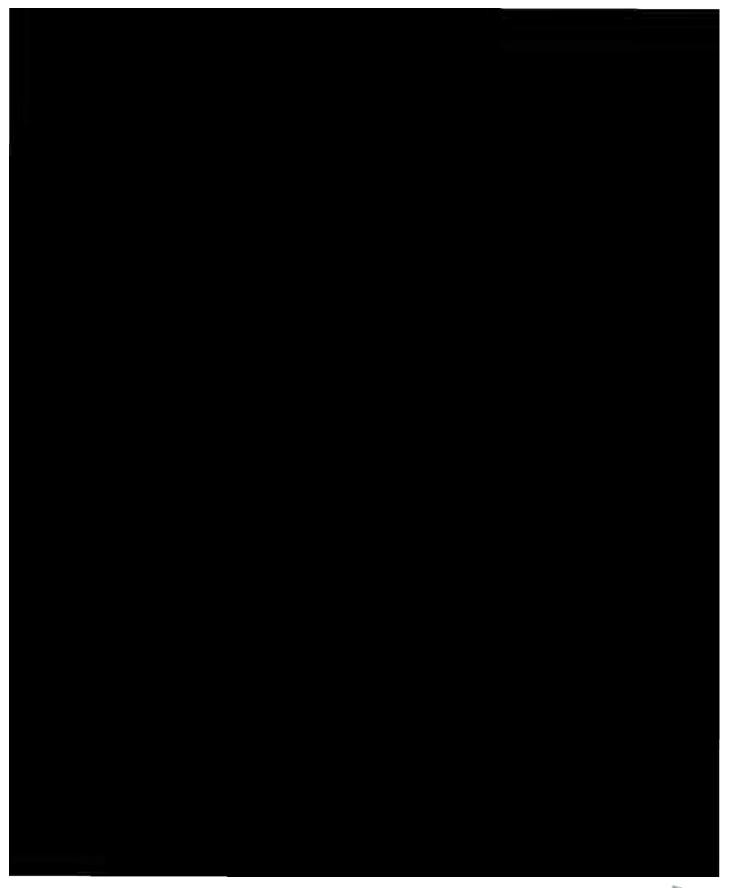


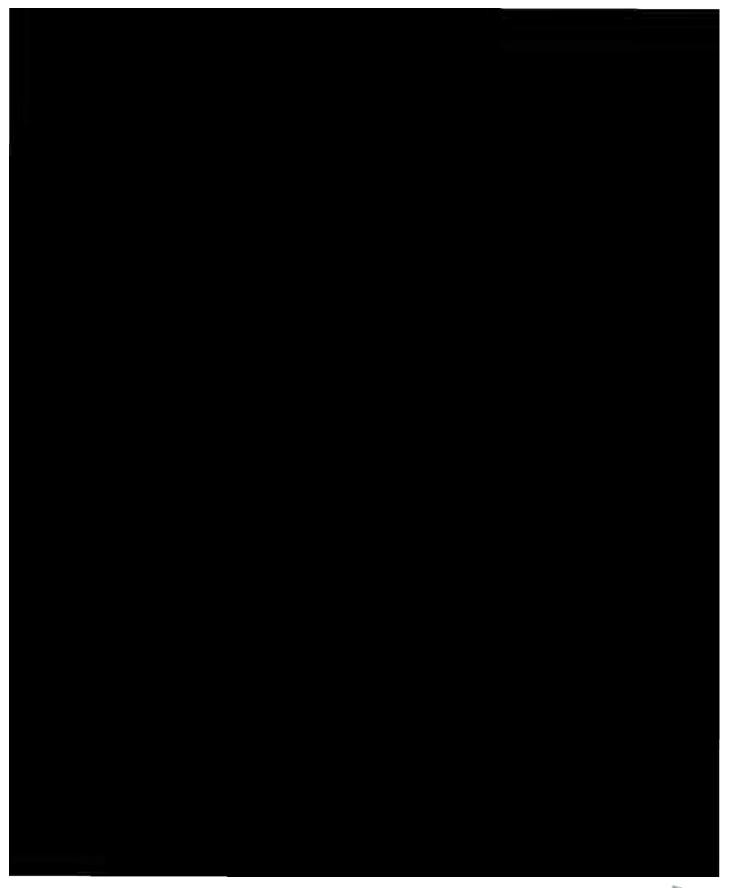


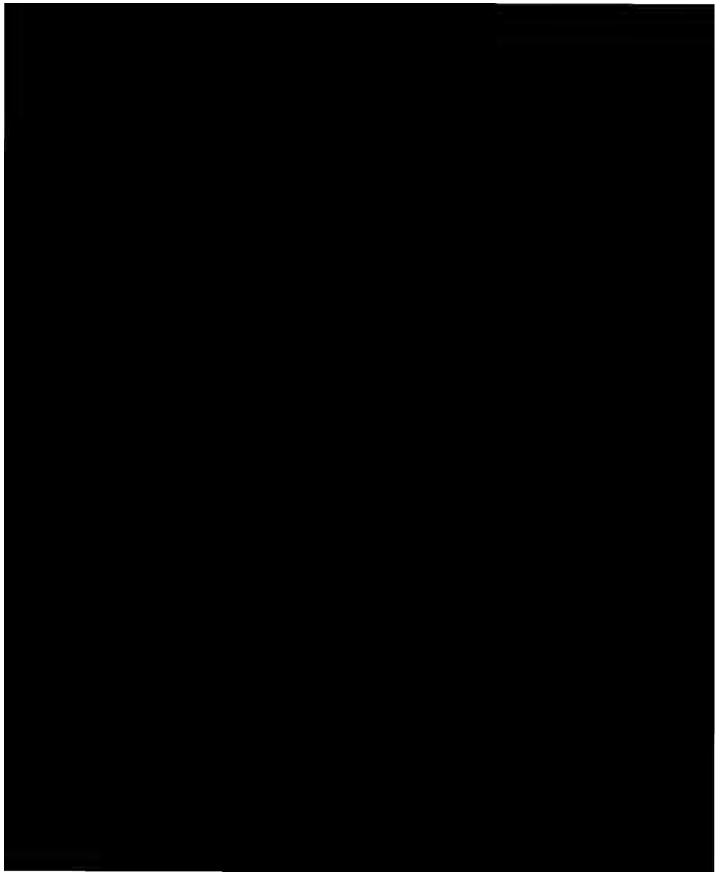


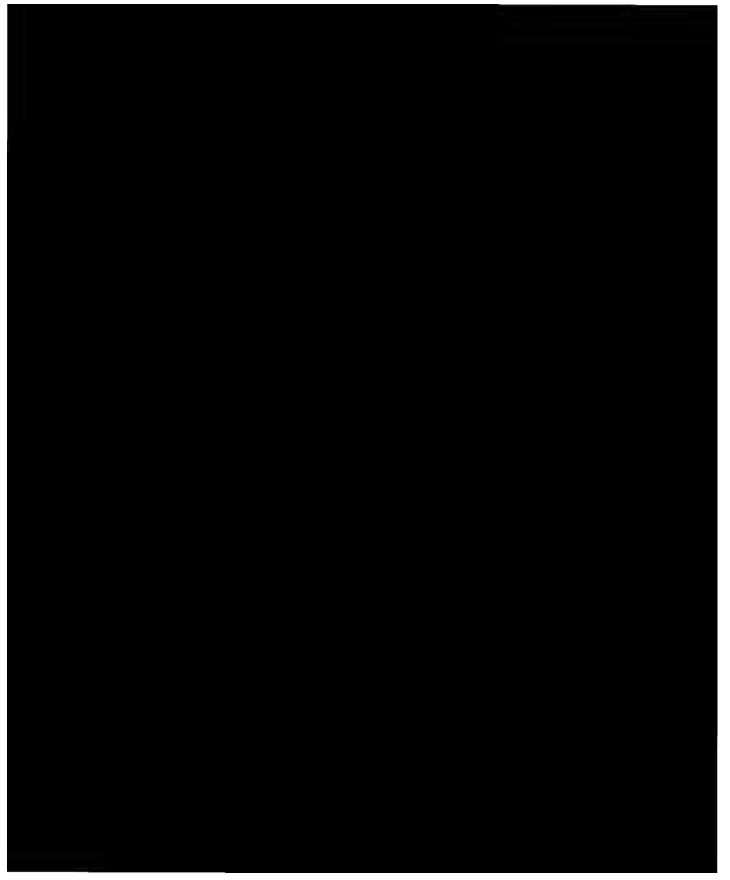


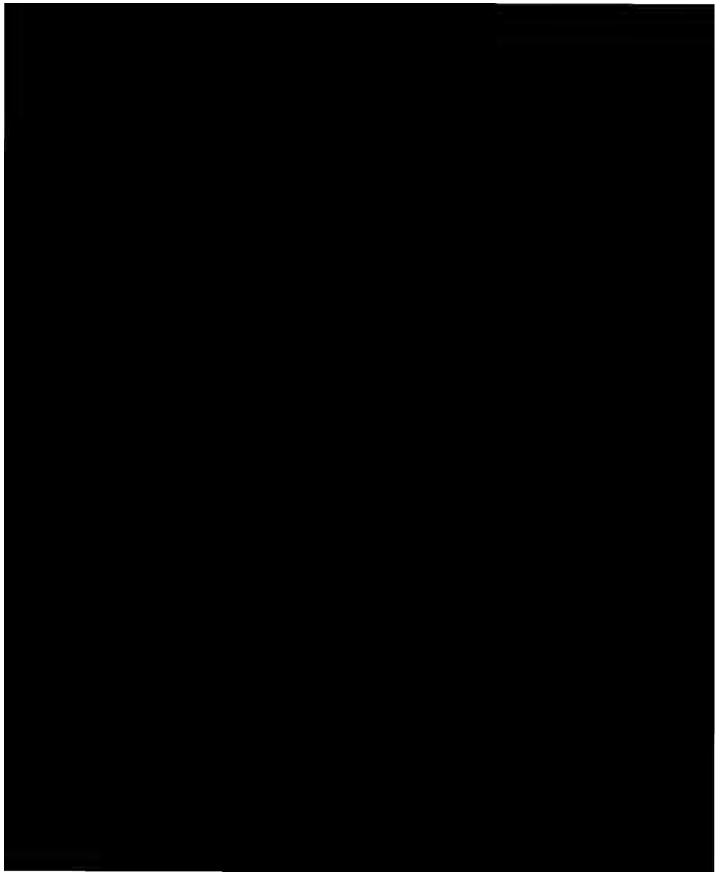






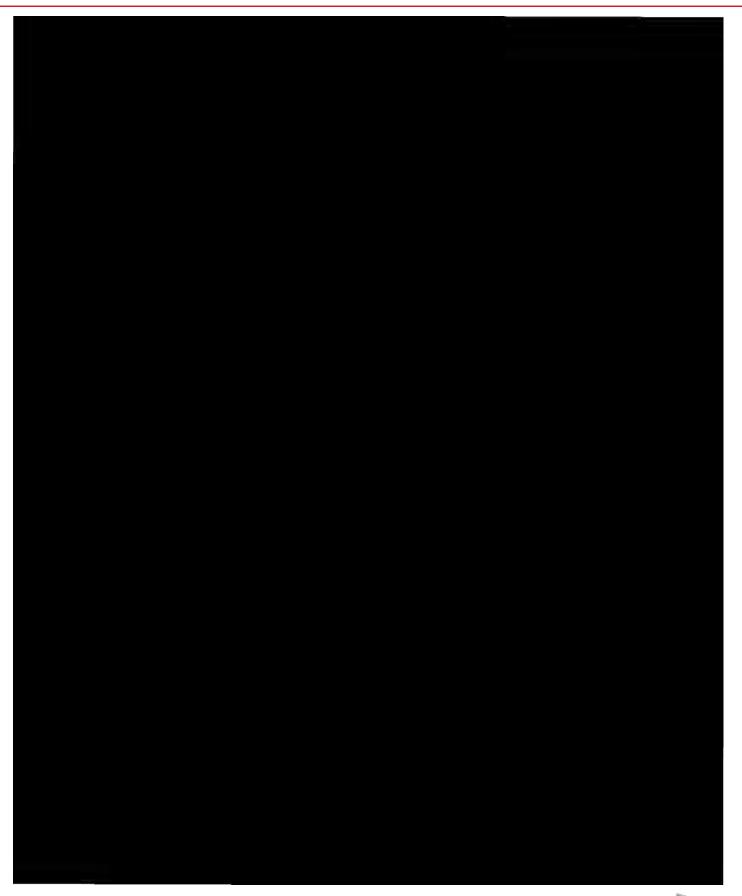


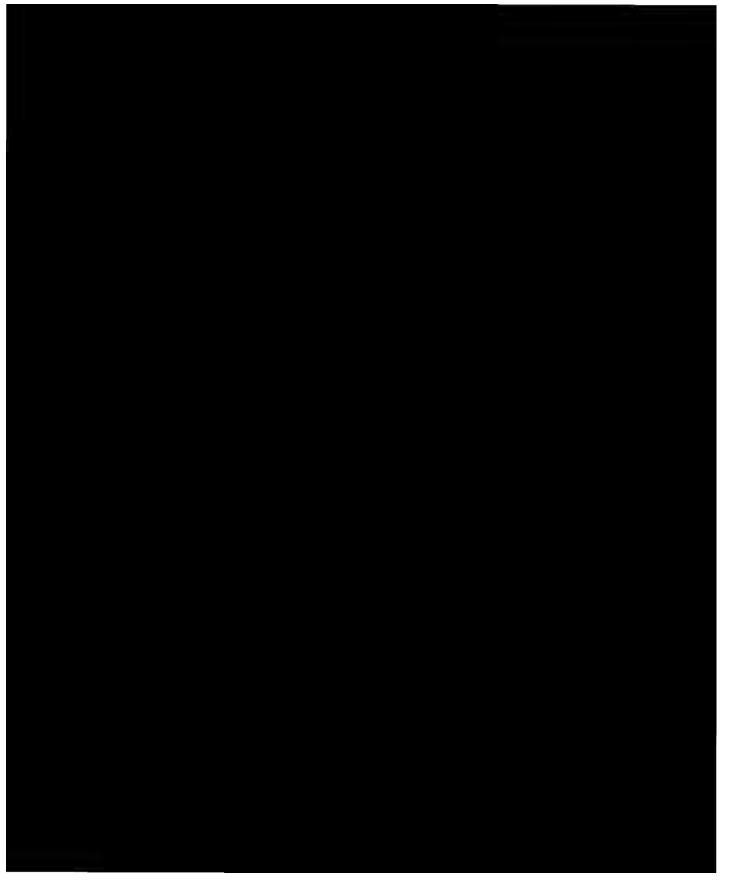






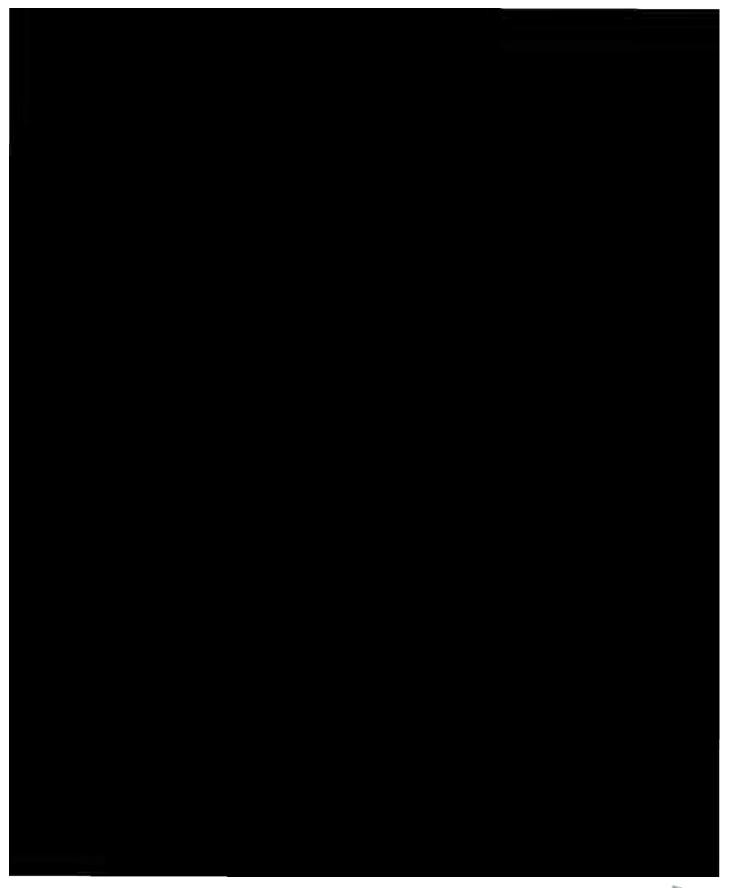




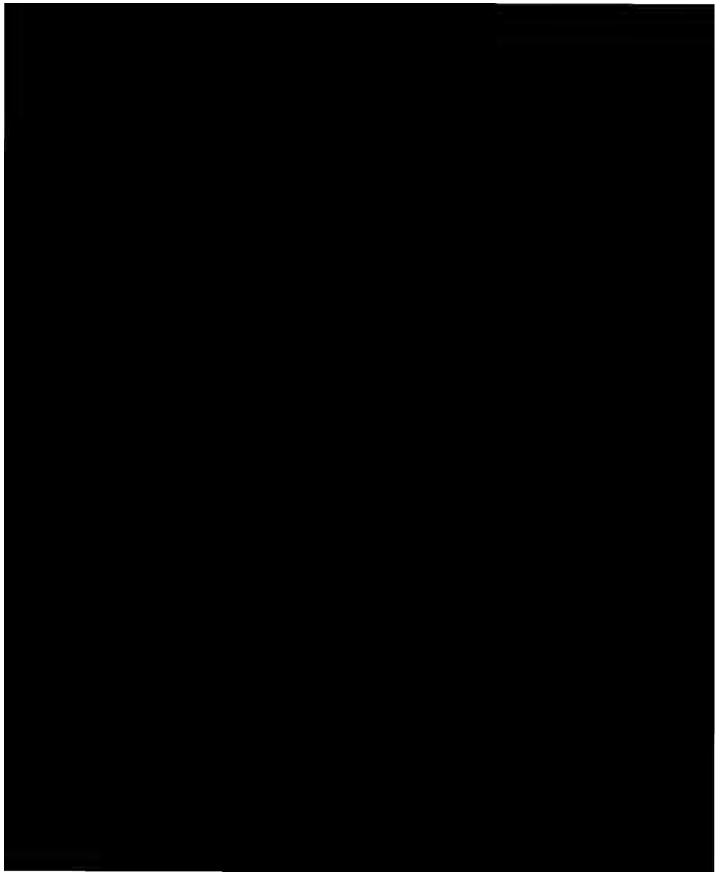


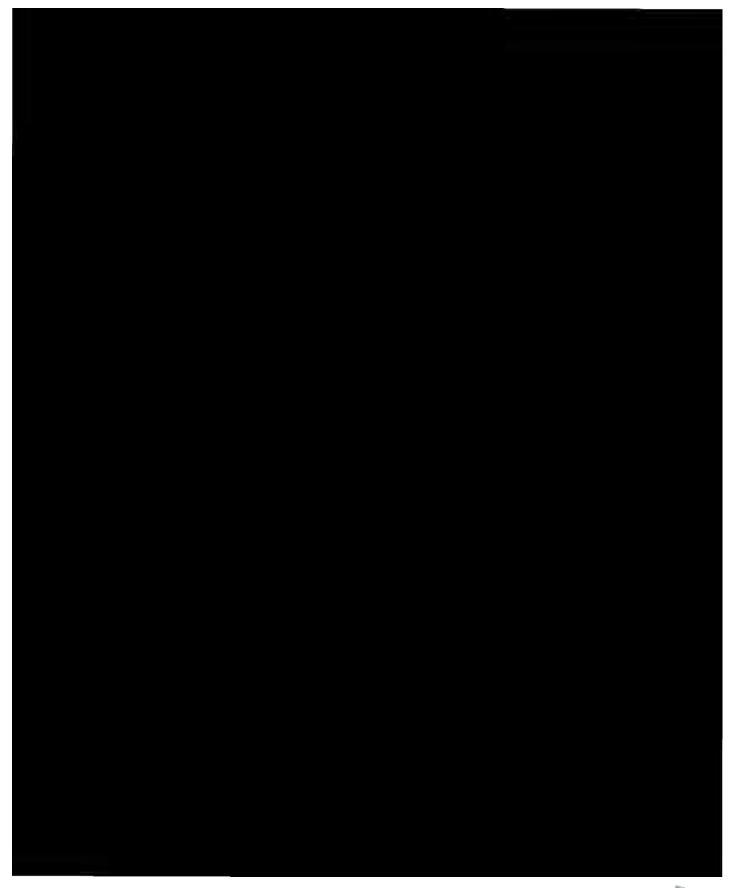


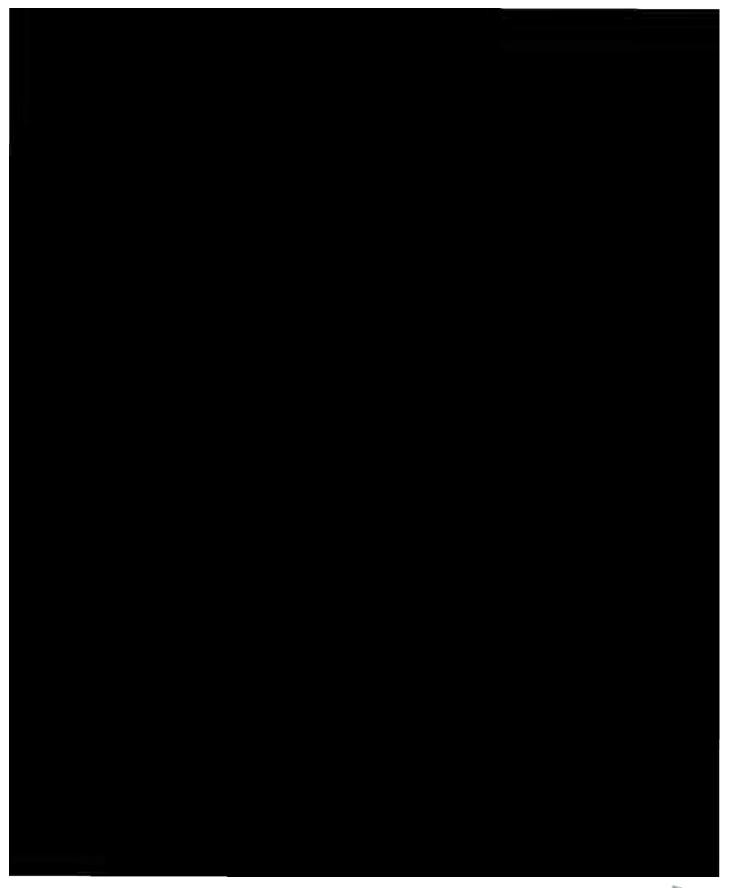










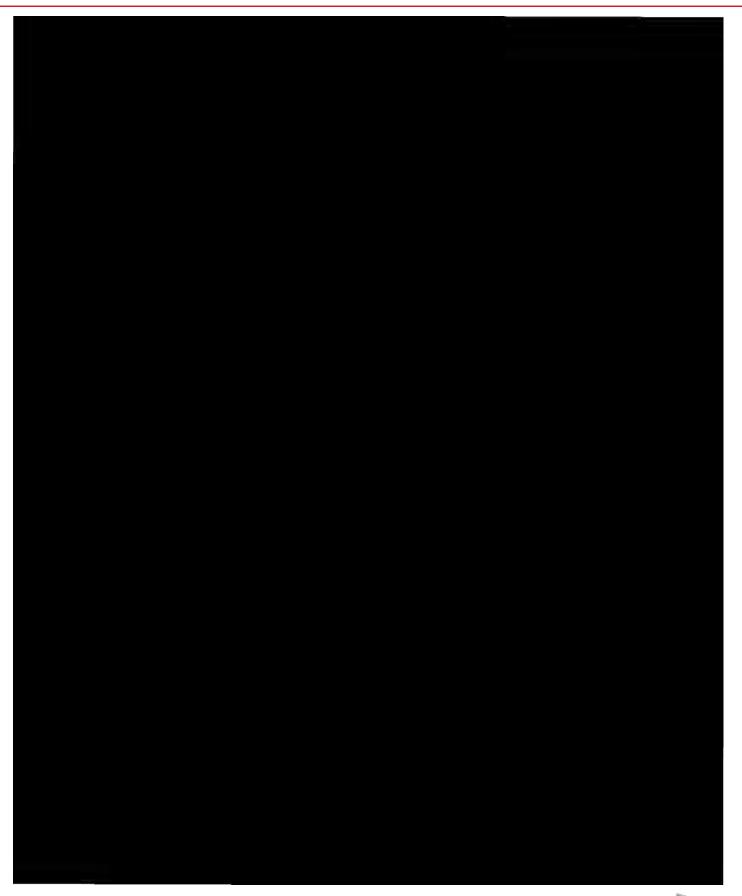




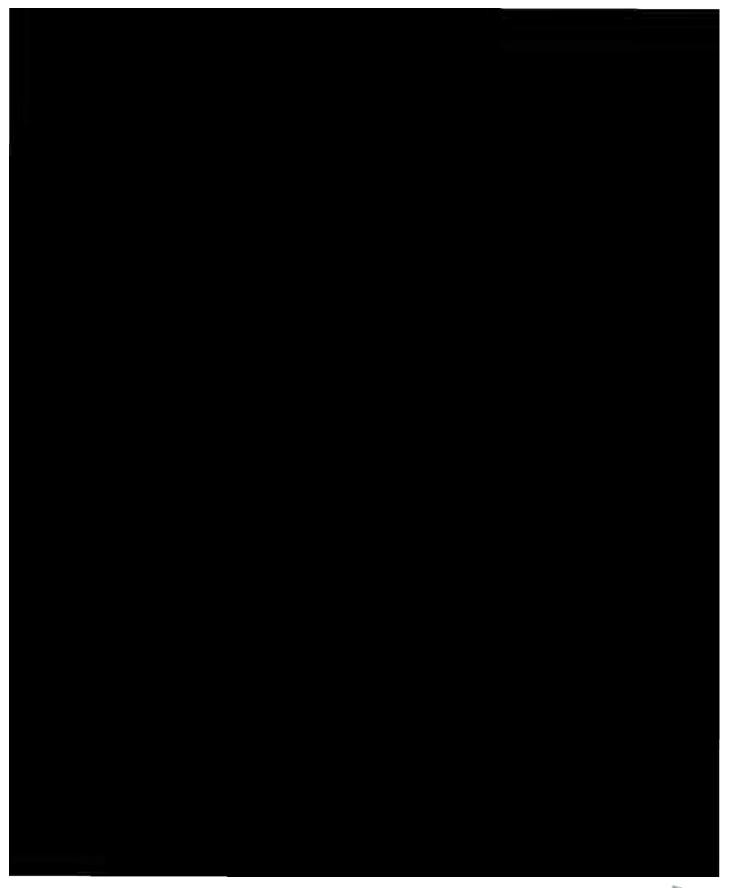




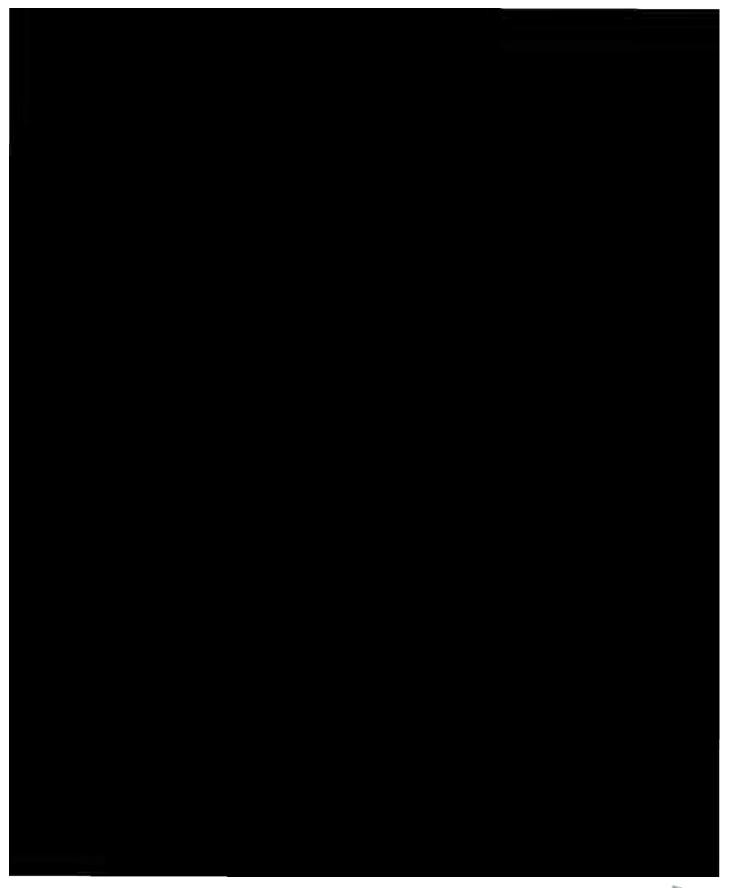














## **Annex V: Front-End Transition Hourly Fully Allocated Rates**



Table 28: ManagementCo or Affiliate Personnel

EMPLOYEE CATEGORY	HOURLY RATES (\$)
Vice President	325
Sr. Director	300
Director	275
Senior Manager	210
Field Crew Leader	205
Trainer	200
Manager	200
Field Technician	195
Senior Analyst	160
Engineer / Field Supervisor	160
Analyst	125
Administrative Support	50



**Appendix 1: Resumes** 



Stensby will support both the transition and management teams leading the entire organization as CEO & President

#### **KEY EXPERIENCE**

#### **ATCO**

2019 – Present Alberta, Canada

## **Executive Vice President, Corporate Development**

 Responsible for Corporate Development, LATAM businesses, Canadian midstream, Government Relations, Indigenous Relations and Aviation

#### **ATCO**

2015 – 2019 Alberta, Canada

## **Managing Director, Electricity**

 Responsible for all electricity operations and growth for ATCO globally Responsibilities included generation, transmission and distribution across Canada and Mexico

#### **ATCO Australia**

2010 – 2012 Australia

## **Managing Director & Chief Operating Officer**

- Led the ATCO Australia business, including the western Australia gas distribution network and the power generation portfolio
- Served as chair of the ATCO Australia Structures and Logistics board

#### **ATCO Power**

2012 – 2013 Ontario, Canada

## **Vice President, Engineering & Construction**

Responsible for ATCO Power's project engineering and construction activities

#### **ATCO Power**

2010 – 2012 Alberta, Canada

## **General Manager, IPP Operations**

- Held full accountable for HSE, financial and regulatory performance of ATCO's Canadian IPP fleet
- Acted as ATCO representative on numerous management, owners and operating committees associated with these Joint Ventures

#### **ATCO**

1988 – 2009 Ontario, Canada, Queensland, Australia, London, UK Various Roles – Maintenance & Engineering Services Manager, Deputy Project Manager/Construction Manager, Lead Control and Instrumentation Engineer, Station Control & Instrumentation Engineer, Various Engineering Roles

### **DESIGNATIONS**

Chartered Engineer (UK)

Project Management Professional (PMI)

Senior Member, Institute of Electrical and Electronics Engineers (IEEE) Member, Institution of the institution of Engineering and Techonology (IET)

## **EDUCATION**

**Bachelor of Science**, Electrical Engineering, University of Alberta **Leadership Program**, Ivey Business School **Executive Program**, Ivey Business School

Findley will serve on both the transition and management teams as the lead for legal, insurance, risk and communications.

#### **KEY EXPERIENCE**

# **Quanta Services,** Inc.

2012 – Present Houston, Texas

## Senior Counsel, Strategic Transactions

- West Fort McMurray \$1 Billion; structuring corporate operations, bid on concession, structure for tax, prepare agreements between Quanta entities and its Canadian partner, ATCO to form Alberta PowerLine, a limited partnership to design, procure, build and operate a 500 kilometer 500 kV transmission line from Wabamun area to Fort McMurray with two substations
- Peru Telecom Concessions \$300 Million; structuring corporate operations, bid on concession, structure for tax, prepare agreements between Quanta entities and its Peruvian partner to bid on and build and operate wireless networks in Piura Tumbes and Cajamarca, Peru
- Sale of Sunesys, Quanta's fiber optic licensing operations- \$1 Billion
- Hartburg-Sabine Junction 500-kV competitive transmission project Structuring corporate operations, bid on MISO competitive transmission project under FERC Order 1000, structure for tax, prepare agreements between Quanta entities and its partner Entergy to design, procure, build, own, operate and maintain a 500 kV transmission line and substation

## Weatherford International 1999-2004 Houston, Texas

## **Corporate Counsel**

- Responsible for drafting and negotiating documentation for merger and acquisition transactions. Worked closely with business unit Presidents, Vice-Presidents and M&A specialists to negotiate, document and close strategic corporate acquisitions for Weatherford
- Worked on technology development agreements to procure the development of key technologies
- Drafted and negotiated domestic and international distribution agreements and agency agreements
- Advised on and drafted employments agreements and consulting agreements
- Worked on real estate, bank and financing issues

## **Griggs & Harrison P.C.**

1996-1999 Houston, Texas

## Shareholder, Transactional Section

- General corporate and transactional practice
- Expertise in acquisitions including mergers, stock purchases and asset purchases and contract drafting, negotiation and review
- Advised clients on issues of general corporate and partnership law and prepared and reviewed loan documentation on behalf of lenders and borrowers
- Specialized expertise in vessel construction contracts, vessel purchase and chartering, ship financing, vessel documentation and other maritime regulatory issues
- Employment law practice included preparation of employment, consulting and non-competition agreements, advising clients regarding hiring and termination decisions and personnel practices, development and implementation of corporate employment policies and handling charges of discriminating at the administrative level
- Industry focus on oil and gas service companies, offshore oil and gas industry and shipping and maritime interests

## Bell & Murphy, P.C.

1988-1996 Houston, Texas

## **Shareholder** 1993-1996; **Associate** 1988-1993

- Experience with foreign and domestic corporations and joint ventures
- General contract drafting, negotiation and review including stock and asset purchase and sale agreements, corporate documents, legal opinions, loan and security documents and general business contracts on behalf of domestic and international corporations
- Extensive experience in vessel sales, charters, financing and registration and other maritime issues
- Limited work in commercial real estate including sales and leasing
- Counseled clients regarding employment practices and handled employment discrimination charges at the administrative level
- Industry experience included foreign companies structuring operations in the United States as well as oil and gas service companies, offshore oil and gas industry and shipping and maritime interests

### **EDUCATION**

**Doctor of Jurisprudence,** Law, University of Texas at Austin **Bachelor of Arts**, Economics, Managerial Studies and Political Science, Rice University

Dafoe will serve on both the transition and management teams as the lead for information and operations technology planning.

#### **KEY EXPERIENCE**

#### **ATCO**

2019 – Present Alberta, Canada

## **Business Relationship Manager**

- Focus onrelationship management, influencing, negotiating, problemsolving, oral and written communications, executive selling, planning and strategizing.
- Leads a team of trusted advisors the the organization
- Functional areas include customer information systems, workforce management, asset management, meter management, geographic information and land management
- IT areas includ IT portfolio management, project accounting, lifecycle upgrades, Windows 10, Oracle Financials, Oracle Cloud, IBM Maximo, application outsourcing (Wipro), and migration to cloud computing

## City of Edmonton

2015 – 2015 Alberta, Canada

## **Business Relationship Manager**

- Managed the internal relationship between Corporate IT and the City departments of Sustainable Development, Communications and Engagement and City Clerks office
- Included strategic business planning, prioritization, risk identification, resourcing, budgeting, business casing and governance
- Focused on achieving common and shared goals and successful enterprise outcomes
- Supported strategic goals within the constraints of budgets and risk tolerance. Particular areas of focus included CRM (citizen), digital experience, work management, electronic content management and meeting management

#### IBM Canada Ltd.

2010 – 2015 Alberta, Canada

#### **Associate Partner**

- Established and delivered IBM application management, integration, business consulting and application development services to Alberta public sector clients
- Sought to understand client business directions and priorties and presented aligned IBM business services to fulfill needs
- Developed proficiency and emminence in business management, delivery management, client negotiations, services sales, structuring business deals, pricing, profitability, legal considerations, scope definition, statements of work, discrete projects and long term support contracts

## **CAM DAFOE**

#### IBM Canada Ltd.

2001 – 2010 Alberta, Canada

#### **Client Executive**

- Developed and maintained overall client relationships in the Alberta Public Sector
- Managed sales across IBM's portfolio of product and services
- Developed understanding of client business and priorities, and brought the resources of IBM to bear on client issues, challenges and opportunities
- Held relationships with client business executives, CIOs and IT management
- Managed a virtual team of IBM specialists and practitioners to address client needs and opportunities
- Developed and executed strategic plans and communications coverage for client accounts
- Built IBM product and service offering awareness and sales programs

## IBM Canada, Ltd.

1987 – 2000 Alberta, Canada

## **Client Manager**

- Delivered IBM product and service sales to a variety of sectors including Public, Utilities, Pipeline, Distribution, Wholesale, Communications and Manufacturing
- Developed and executed territory coverage and opportunity plans
- Developed and maintained client relationships from business executives to IT

#### **DESIGNATIONS**

Certified Client Executive, IBM

Business Relationship Manager, Business Relationship Management Institute

## **EDUCATION**

**Bachelor of Science**, Psychology, University of Alberta **Executive Program**, IBM Certification Program, Harvard Business School **Executive Program**, Stone and Webster Utilities Executive Program,
University of Michigan

**Executive Program**, Public Executive Forum, Queens School of Business

Riddle will serve on both the transition and management teams leading HR

#### **KEY EXPERIENCE**

# Quanta Services, Inc.

2016 – Present Houston, Texas

### **Vice President Human Resources**

- Manage all HR functions with full accountability for consolidated benefits, retirement plans, HR compliance, diversity & inclusion, organizational performance, employee retention and other critical areas
- Collaborate closely with CEO, Board of Directors and senior management, assessing business objectives and designing global human resources strategies and initiatives that advanced the company's mission as well as maximize organizational performance, retention and engagement
- Establish and monitor critical HR metrics to drive continuous improvement.
   Coordinate full range of support tasks for 40,000 employees globally, including spanning workforce planning, internal training, personnel development, employee relations, executive/staff compensation, auditing and on-boarding processes

#### **Hercules Offshore**

2008 – 2015 Houston, Texas

#### **Vice President Human Resources**

- Worked with CEO, Board of Directors and senior management, assessing business objectives and designing global human resources strategies and initiatives that advanced the company's mission as well as maximized organizational performance, retention and engagement
- Created and continually monitored HR metrics to drive continuous improvements in HR programs and processes
- Led 60-member HR function, supporting over 5,000 employees, in managing areas spanning workforce planning, training and organizational development, employee relations, executive/staff compensation, benefits and staffing for the US, Nigeria, Angola, Singapore, Netherlands, Scotland, India, Malaysia and Indonesia

## Deloitte Consulting

2006 – 2008 Houston, TX

#### Consulting Manager

- Worked with executive level clients in the Oil and Gas, Healthcare, Technology, Industrial and Education industries – conducting needs analyses and developing global total rewards programs (i.e., base compensation, variable pay plans, recognition programs and health and welfare benefits)
- Performed due diligence related to potential mergers and acquisitions to gauge fit between companies. Managed and mentored analysts, consultants and administrative staff

#### **DESIGNATIONS**

SPHR Certification SHRM – SCP Certification

#### **EDUCATION**

Bachelor of Arts, University of Houston

#### **ROLE**

Carson will serve on both the transition and management teams as the lead for health, safety, environmental and quality

#### **KEY EXPERIENCE**

# Quanta Services, Inc.

2019 – Present Houston, TX

## Senior Manager – Health, Environmental, and Quality

- Provides support to Quanta Corporate and Operating Units in the areas of industrial hygiene, environmental, quality, and overall injury prevention
- Manages, mentors, supports and develops direct report(s) including the Corporate Industrial Hygienist, the Corporate Environmental Manager, and the Corporate Quality Manager
- Oversees the Quanta Safety, Health, Environmental, and Quality internship program
- Represents the Corporate Safety, Health, Environmental, and Quality Department on the Mergers and Acquisitions team
- Travels to Operating Units to provide guidance and support in the areas of Industrial Hygiene, Environmental, and Quality
- Assists in the development, evaluation and upgrading of the Quanta Corporate Industrial Hygiene, Environmental, and Quality programs.
- Participates and represents the company in industry meetings including the Edison Electrical Institute (EEI)

## EC Source Services

2017 – 2019 Phoenix, AZ

## **Director of Safety**

- Responsible for all aspects of the EC Source safety and health program including injury prevention, vehicle accident reduction initiatives, and regulatory compliance
- Worked directly with EC Source Operations Executives and senior leadership team on all EC Source safety and health performance measures and initiatives
- Oversaw the development and implementation of the EC Source Safety Leadership and Skill Development program
- Provided direct supervision and oversight for all Field Project Safety Directors working on EC Source projects

# American Electric Power (AEP)

2014 – 2017 Columbus, OH

## Safety and Health Manager – Generation

- Served as a Corporate Safety and Health Manager supporting Generation, Fuels, Operations, and Mining (FOM), and River Operations
- Worked directly with the Region Vice Presidents and respective Plant Managers in Generation, FOM, and River Operations on all company safety performance measures
- Responsible for providing corporate support for Generation, FOM, and River Operations in all aspects of the AEP corporate safety and health programs
- Provide safety oversight for contractors working at Generation, FOM, and River Operations locations.

## American Electric Power (AEP) 2011 – 2014

2011 – 2014 Gahanna, OH

## Safety and Health Manager – AEP Ohio

- Served as the Corporate Safety and Health Manager supporting the AEP Ohio operating company
- Worked directly with the AEP Ohio President and Vice President of Operations on all operating company safety performance measures.
- Provided direct supervision for 5 field safety and health coordinators supporting AEP Ohio
- Responsible for all aspects of the AEP Ohio safety and health program including injury prevention, vehicle accident reduction initiatives, and regulatory compliance
- Responsible for leading efforts to incorporate Human Performance initiatives into the AEP Ohio safety culture
- Provided safety oversight for all Distribution and MRO contractors working on AEP Ohio property
- Received the 2012 President's Award for Safety Performance Improvement after reducing the operating company OSHA incident rate and severity rate by over 37% from 2011 to 2012

## American Electric Power (AEP) 2009 - 2011

Gahanna, OH

## Transmission Contractor Safety Administrator

- Directed, managed, and administered AEP's Transmission Contractor Safety Program including program development, assessment, and execution
- Served as the lead AEP interface with contractors on matters regarding safety qualification and performance
- Responsible for the enforcement and administration of all aspects of AEP Transmission's Safety Terms and Conditions for all contracted capital construction across 11 states and over 100 contract companies
- Provided necessary training and active direction regarding contractor safety oversight for Transmission Construction Representatives, Project Managers and Project Lead Engineers
- Served as AEP Transmission's primary interface with contractor senior executive management

## American Electric Power (AEP) 2006 - 2009 Columbus, OH

### **Health and Safety Audit Consultant**

- Responsible for conducting health and safety audits of AEP facilities system-wide to determine regulatory compliance and evaluate the effectiveness of the supporting ESH management systems
- Prepare formal reports for facility and upper management to determine corporate risk and liability from health and safety compliance issues
- Develop and implement audit protocol check sheets utilized for the evaluation of company health and safety programs and procedures

## Georgia Pacific Corporation 2003 - 2006

Circleville, OH

## **EHS and Quality Manager**

- Responsible for the development and coordination of all policies and procedures relating to the plant's environmental, quality, and safety programs
- Responsible for the tracking of all environmental, quality and safety performance data to identify trends and develop improvement plans
- Coordinated all facility environmental, quality, and safety training programs
- Received zero audit findings during biannual Corporate Environmental Audits in 2005 and 2003
- Received zero NOV's and Excursions during oversight of the plant's environmental programs
- Facilities improved their OSHA Incident Rate by an average of 33% each year, including a rate of less than 1.0 during 2004 and 2005
- Facilities improved their credit and return dollars due to quality defects by an average of at least 25% per year
- Served as a primary contact between the Georgia Pacific plant and customer manufacturing facilities for product performance and service issues
- Responsible for the contractor safety training program and daily oversight during the closure of the Philadelphia, PA facility

## International Paper

1999 - 2003 Statesville, NC

## **Environmental, Health, and Safety Coordinator**

- Reduced the facility OSHA Incident Rate from 4.86 in 1999 to 2.44 in 2000, 0.66 in 2001 and 1.20 in 2002
- Developed and coordinated all facility environmental, health, and safety training programs
- Responsible for the tracking of all health and safety performance data to identify trends and develop improvement plans
- Facilitated all activities of the hourly employee safety team
- Responsible for managing all facility workers' compensation claims
- Received the 2001 International Paper Container Division EHS Award for Significant Improvement
- Supported the Operations Group by filling in as the Plant Production Scheduler during vacations and/or illnesses

## South Carolina Dept. of Labor -OSHA

1995 - 1999 Statesville, NC

### **Industrial Hygiene Compliance Officer III**

- Conducted inspections to determine compliance with all federal and state occupational safety and health regulations
- Performed Industrial Hygiene monitoring to determine exposure levels to regulated chemicals and/or elevated noise levels
- Evaluated employer written safety and health programs and training material for compliance and effectiveness
- Provided detailed reports of inspection findings, citations, and corrective action recommendations
- Assisted in the training and development of Industrial Hygiene and Safety Compliance Officers

#### **DESIGNATIONS**

Certified Safety Professional (CSP)
Board of Certified Safety Professionals (BCSP)
Certified Professional Environmental Auditor – Health and Safety
Designation (CPEA)
Board of Environmental, Health, and Safety Auditor Certifications (BEAC)

**EDUCATION** 

Bachelor of Science in Industrial Hygiene, Ohio University; Athens, OH

## **DARREN MILLER**

#### **ROLE**

Miller will serve on in both the transition and management teams as the lead for overall financial management; finance, treasury, tax, accounting, procurement and real estate.

#### **KEY EXPERIENCE**

## Quanta Marine Services, LLC / Bisso Marine, LLC 2013 – Present Houston, Texas

#### **Chief Financial Officer**

- Private company experience working for a Company which, in addition to it's fleet, chartered three barges from Quanta Services.
- Managed the finance, accounting, supply chain and information technology functions as well as a Sarbanes-Oxley implementation
- Managed the start-up of Quanta Marine Services which became a successor company to Bisso Marine, a private entity while also overseeing, as CFO, two other Quanta operating units in the Oil & Gas industry
- Managed the set-up of a permanent establishment in Mexico enabling the Company to be a key contractor for the Sur de Tejas pipeline from Texas to Mexico
- Key participant in the sale of the fleet and management of Quanta's exit from the marine business

# Quanta Services, Inc.

2003 – 2012 Houston, Texas

### Vice President – IT and Administration

- Managed the Risk Management, Information Technology and Human Resources functions during a significant growth phase from \$1.6 billion to approximately \$6 billion in revenues
- Directly participated in securing surety capacity ranging upward to \$2.5 billion
   Managed ongoing relationship with both brokers and underwriters
- Provided oversight of procurement, claims management and accounting for a high deductible insurance program with annual exposure activity of approximately \$45 million
- Co-managed the successful selection, global design and implementation of an integrated accounting system (ERP) for multiple operating units
- Managed the building of the information technology infrastructure platform for connecting all of the Company's operating units
- Managed the initial implementation of the Information Technology portion of the Sabanes-Oxley controls framework
- Key participant in the divestiture of the Company's telecom business, including the subsequent decoupling of the unit from Quanta and the transition to buyer
- Rationalized the Corporate office of an acquired company following a \$1 billion transaction
- Served on the Quanta Services, Inc. disclosure committee and as the primary management liaison with the Compensation Committee of the Board of Directors

## **DARREN MILLER**

Encompass Services Corporation 1996 - 2003 Houston, Texas

## Senior Vice President, Chief Financial Officer

- Led all aspects of accounting, finance, tax and treasury for company grown from a start-up operation to Fortune 500 status with over \$4 billion in annual revenue
- Negotiated numerous new senior financings or amendments to senior credit agreements ranging in size from \$8 million to \$800 million; including the ongoing management of bank groups ranging from three to approximately 40 institutions
- Directly involved in over 50 mergers, acquisitions and divestitures individually ranging from under one million into the hundreds of millions in transaction value. Extensive experience in virtually all aspects of transactions including due diligence, negotiations, documentation, financing and integration
- Directly involved in an initial public offering of common stock, which raised over \$100 million in capital, and two public debt offerings, which raised a total of \$265 million in additional capital
- Participated in raising \$150 million through a preferred stock investment from a large private equity firm
- Directly involved in the creation of business processes, operational and financial reports and internal control processes and procedures for a start-up enterprise. Later participated in the streamlining or replacement of many of the aforementioned processes to accommodate maximum efficiency and functionality along the growth path to becoming a multi-billion dollar organization
- Numerous public and private presentations to debt and equity investors, bond rating agencies, Boards of Directors, banks and other financial institutions
- Significant investor relations and public speaking experience

Allwaste, Inc. 1989 - 1996 Houston, Texas

#### Vice President, Treasurer and Controller

- Primarily responsible for all aspects of accounting and finance for this \$400 million company, including numerous public filings of financial information and other corporate governance requirements
- Co-managed the successful global design and implementation of an integrated accounting systems (ERP) for multiple operating units
- Managed the Company's public debt ratings and associated relationships with the rating agencies

# Arthur Andersen, LLP

1982 - 1989 Houston, Texas

#### **Audit Manager**

- External auditing experience in the following industries: environmental or industrial services, oilfield services, offshore drilling contracting, light manufacturing and private universities
- Public Company experience, including an initial public offering

### **DESIGNATIONS**

Certified Public Accountant (CPA)

#### **EDUCATION**

Bachelor's of Business Administration – Accounting, Lamar University

## **MARIO HURTADO**

### **ROLE**

Hurtado will serve on both the transition and management teams as the lead for regulatory; including rates, land access, government relations and O&M agreement administration

## **KEY EXPERIENCE**

## ZUA CONSULTING, 2018 – Present Houston, TX

## **Principal**

- Management consulting on infrastructure development, renewables and other energy projects
- Assignments include:
  - Project management and lead for qualified consortium to manage and operate Puerto Rico electric system under a public-private partnership to rebuild electric grid and implement 100% renewable energy standard
  - Work for NextEra Energy on regulatory, project management and transition to new ownership of 350-mile electric transmission project in Oklahoma;
  - Evaluation for major European owner/operator on acquisition of wind and solar projects in Mexico; and
  - Analysis for private financial investor on restructuring opportunities for natural gas-fired project reaching PPA termination in competitive power pool

# Clean Line Energy Partners

20009 – 2017 Houston, TX

## **Co-Founder and Executive Vice President**

- Co-Founder of merchant electric transmission company focused on development and construction of long-haul lines to connect the best wind energy resources in the United States with large demand centers
- Member of management team that grew company from two-person office to 50 plus employees, oversaw development of five greenfield transmission projects in eleven states, and raised over \$200 million
- Direct project execution and development for the Plains & Eastern Clean Line, a \$2.5 billion, 4000 MW high voltage direct current transmission line to deliver renewable energy in western Oklahoma and the Texas Panhandle to utilities in Arkansas, Tennessee and throughout the Southeast
- Managed teams that received public utility approvals in Oklahoma and Tennessee and created a public private partnership with U.S. Department of Energy. Obtained all permits necessary for construction
- Created and managed project development team that oversaw budget, schedule, regulatory approvals at local, state and federal level, environmental permitting, community outreach efforts, and public and government affairs for 720-mile transmission line involving four states and 28 counties

## **MARIO HURTADO**

#### 4GAS

2008 – 2009 Houston, TX

## **Consultant, Project Development**

- Project management and structuring for venture capital-backed company developing liquefied natural gas import terminals
- Established project development processes, risk mitigation and project finance plans for regasification and storage projects in Texas and Netherlands

## Globeleq 2002 – 2007 Houston, TX

#### Vice President, Americas & Director, Americas

- Created shareholder value of more than \$200 million by leading growth and management of regional business in Central America and Caribbean
- Within 4 years, transformed Globeleq from a minority financial investor start-up into one of the top developer/owner/operators in the region through acquisition and greenfield development
- Exceeded all financial and operational metrics for Central America and Caribbean regional assets totaling approximately 600 MW and EBITDA of \$50 million
- Supervised commercial management, operations, capital investment plans, and operating budgets; oversaw local management performance and identified areas for growth and improved return on investment
- Oversaw operation of \$500 million Latin American portfolio during transition to new ownership

## Duke Energy North America

2000 – 2002 Houston, TX

## **Director, Acquisitions & Divestitures**

- Closed five U.S. merchant energy transactions totaling more than \$1 billion, achieving average returns of 25%
- Managed multiple aspects of transactions from origination through closing, including negotiations with counter parties, oversight of financial valuation, legal and technical due diligence, regulatory approvals, as well as coordination and internal negotiation with commodity origination and trading areas

## Reliant Energy International

1996 – 2000 Houston, TX

### **Director, Business Development**

- Negotiated and closed three major enterprise acquisitions in South America totaling nearly \$3 billion in investments, including two of the top electric utility M&A deals in Latin America in 1998. Directed acquisition teams and oversaw valuation, due diligence, and negotiation with counter parties
- Initiated and maintained relationships with strategic partners and governmental authorities including negotiation of joint bidding and joint venture agreements. Led takeover and transition to new ownership of privatized companies, including hiring of senior staff, personnel and financial restructuring and board oversight

# **Coastal Power Company**

1994 – 1996 Houston, TX

# Manager, Project Development & Associate Manager, Project Development

 Developed independent power projects in Mexico, Central America and the Caribbean, including acquisition of independent power project in the Dominican Republic with +20% realized return

## **MARIO HURTADO**

## **DESIGNATIONS**

Languages – Fully bilingual English/Spanish. Fluent in Portuguese. Proficient in French.

## **EDUCATION**

**Bachelor of Arts**, Political Science, Columbia University **Master of Arts**, International Relations with Concentrations in International Economics and Latin American Studies, Johns Hopkins University

Walshe will serve on both the transition and management teams as the lead for wholesale, generation and shared services.

#### **KEY EXPERIENCE**

ION Consulting 2003 – Present Global

#### **President**

Walshe has extensive expertise in utility regulatory and public policy forums serving regulatory commission clients. He has been involved in early stage regulatory restructuring efforts in emerging markets around the world related to unbundling the vertical utility model and developing renewable energy strategies.

## **Regulatory Support Services to Public Utility Commissions**

- Led or supported eleven utility management audits for eight separate state
   Public Utility Commission clients
- Led or conducted Prudence investigations for Public Utility Commission (PUC) clients
- Authored the "Strategic and Renewable Energy Plan" (STAR Report) for the Colorado Governor's Energy Office
- Authored the "Expanding the Role of Renewables in a Power Portfolio" Report for the American Public Power Association
- Conducting dozens of strategy workshops focused on deregulation models and lessons learned from US regulatory experience, as well as workshops related to renewable energy issues

## **Expert Witness and Rate Case Support**

- Provided expert testimony or expert witness testimony:
  - To the Maryland Public Service Commission related to the Natural Gas Pipeline accelerated Replacement Program of Washington Gas Light
  - On valuation of portfolio of 23 landfill gas plants as part of bankruptcy proceedings for U.S. Biogas
  - In the minority owner litigation of the Comanche Peak Nuclear Electric Station I and II testimony I in the area of construction management and the comparison of industry cost trends for nuclear plants construction
  - On the rate case for Limerick Nuclear Generating Station I and II in the area of construction management and the comparison of industry cost trends for nuclear plants construction
- Served as non-testifying witness in rate case investigating the replacement purchased power cost associated with the extended forced outage of:
  - Davis Besse Nuclear Station
  - Calvert Cliffs I and II Nuclear Station
- Engagement manager:
  - Supporting Puget Sound Energy in their Power Cost Only Rate Case associated iwht the acquisition of the Freferickson Gas Electric Station

 For confidential client preparing analysis in support of hart-Scott-Rodino review associated with the acquisition of a \$1 billion specialty electrical contractor

## **International Utility Regulation and Public Policy**

- Served SwissGrid in their negotiation to unbundle Transmission business from their vertically-integrated electric utility structure
- Led an engagement for the Office of the Heir-Apparent of Qatar, to develop a strategy to increase the national commitment to renewable energy
- Conducted several workshops in People's Republic of China in the early 1990's regarding establishment of Private Power Development projects
- Supported Eskom in its strategy development with the National Regulator, to restructure the South African Electric Sector in the mid 1990's

## **Energy Infrastructure and Advanced Technology**

- Contributor and reviewer for the book "Securing Utility and Infrastructures" and mentioned in acknowledgements by Dr. Larry Ness, copywrite 2006 by John Wiley & Sons Inc
- Supported Cisco Systems in the development of their Smart Grid strategy
- Supported First Energy in development and regulatory treatment of proprietary technologies related to Electro-Mechanical Flux (EMF) mitigation

## **Power RFP Support and Transaction Advisory Services**

- Assisted Puget Sound Energy in management and analysis of the competitive solicitation process for new power supplies in 2002 and 2006
- Assisted Puget Sound Energy in development of valuation models for multiple engagements. These engagements have culminated in the acquisition of almost \$700 million of generation assets including gas, wind, and Purchase Power Agreements (PPAs)
- Assisted a merchant utility as it refined its generation growth strategy.
- Assisted the Lincoln Electric System to review production cost modeling software required for implementation of nodal market inside SPP
- Supporting a confidential electric IOU in the assessment of potential corporate acquisition candidates as part of a limited partnership with private equity funding
- Assisted a confidential combination gas and electric utility to value and prioritize other regulated "wires" companies in deregulated states as potential merger and acquisition candidates
- Assisted an energy holding company to develop a strategic plan for its regulated operations
- Established a new sales and marketing function designed to focus on strengthening relationships with large wholesale customers, and evaluating the long-term viability of existing diversified operations

**EDUCATION** 

**Master of Business Administration**, Finance, University of Michigan **Bachelor of Science**, Civil Engineering, Northeastern University

## **DONATO CORTEZ**

#### **ROLE**

Cortez will serve on both the transition and management teams as the lead for utility transformation, including; engineering, asset management, common services, IRP planning, metering, loss reductions and physical security

#### **KEY EXPERIENCE**

## Quanta Services,

October 2016 – Present Houston, TX

## **Executive Business Development**

- Develop electric and gas utility business opportunities
- Coordinates expertise across operating units as needed for major project opportunities
- Supports operating units by providing content to reinforce consistent message to marketplace

### **Avra Energy**

2015 - 2016 Houston, TX

## Vice President Sales and Marketing – LATAM

- Developed marketing strategies and create sales for renewable energy in Latin America
- Created marketing and sales plans currently under execution
- Developed renewable energy purchases to follow energy sales
- Developed green field renewable energy partnerships and business plans

#### **IBM**

2010 – 2015 Houston, TX

## **Global Business Development Executive**

- Developed large business deals in the global utilities market collaborating with executives in China, Taiwan, Oman, Australia, Brazil, Chile, South Africa, Mexico, Korea, and the United States
- Created strategies for smart grid and renewables, identifying and validating opportunities to apply IBM technology solutions, and coordinating with utility executives to ensure success throughout entire sales cycle
- Worked with utility executives to create strategies for smart grids, new business opportunities, and renewables
- Developed opportunities for smart grid applications (asset management, analytics, mobility systems, customer service and smart meter management) in utilities globally
- Gained thorough understanding of IT systems to apply to utility operation systems then collaborated with different IBM areas to identify utility smart grid technology solutions
- Created business plans for utilities to implement smart grids

## CenterPoint Energy Houston Electric

2001 – 2010 Houston, TX

## **Division Vice President**

- Oversaw the electric and gas business technology strategy including the smart grid program, which encompassed the major equipment selection, overall architecture direction, contract negotiations and PUCT smart meter deployment agreements
- Manage and coordinate with personnel to oversee process improvement gas and electric utilities, Telecom Services, Fleet Services, Land and Field Services, Geographical Information Systems (GIS), Central Shop Services, Contractor Services, Distribution Engineering, Central Metering, and Safety and Environmental Services

## **DONATO CORTEZ**

- Managed 350 employees; projected and managed annual budgets of up to \$350M
- Implemented the smart grid by developing and installing the first smart meter with Itron, obtaining a rate increase approval from PUCT for \$800M for smart meter deployment and a \$200M federal grant to initiate the smart grid implementation at CenterPoint Energy Houston
- Reduced operating costs \$200M within six months by developing and implementing numerous sustainable innovative initiatives
- Reduced safety incidents by implementing a behavior based safety program adopted by the entire workforce
- Developed the technical communication (telecom) strategy, Network Operation Center, maintenance, and capital replacement/ implementation plans, implementing plans that included an upgrade of the fiber optics backbone network, and installation of a WiMax system, field force voice and data radio system, and a smart metering last mile communication system
- Developed and implemented an electric network damage assessment model that predicts storm impact and storm restoration workforce requirements to meet set reliability and restoration targets
- Created and managed the Emergency Operating Plan and led the hurricane restoration plan enacted during Hurricane Rita

## Electropaulo

1998 – 2000 Sao Paulo, Brasil

### **Director of Operations**

- Oversaw utility operations for approximately 3,600 professional and union employees working with telecommunication, transmission, and distribution grid engineering and operations serving one of the largest cities in the world, Sao Paulo, Brazil
- Reduced operating costs over 40% through incorporating business culture change, process improvement, and newer technology. Reduced professional and union personnel from 6,300 to 3,800 within two years.
- Developed and managed annual capital and operating improvement budgets of up to \$400M
- Reduced commercial losses from 18% to 8% by developing and implementing technical and community programs
- Improved electric service reliability by a factor of 4 and fully automated 99 substations in one year
- Received two awards from ADVB for Top Company in Human Resources 1999 for recognition of the worker retraining program and Top Company in Environmental for designing and implementing a program tasking Electropaulo employees with improving a section of riverbank that crossed the city

## **DONATO CORTEZ**

#### **EPSA**

1997 – 1998 Cali, Colombia

## **Chief Operating Officer**

- Oversaw utility operations encompassing commercial and communications areas, transmission and distribution grid engineering and operations, and generation (gas and hydro) serving approximately 750K customers in Cali, Columbia. Managed a staff of 1,800 and annual budgets of up to \$500M
- Implemented generation forecast and availability strategic, energy forecast, and operating plans
- Implemented asset and environmental management plans
- Reduced operations cost over 30% through business culture change, process improvement, and technology implementation; managed an approximately 40% reduction of professional and union personnel within one year
- Implemented a meter read to instant bill print system to mitigate hyperinflation effects and improve billing costs and revenue collections

## Houston Industries Energy, Inc.

1996 – 1997 Houston, TX

## **Manager of Operations**

- Managed operations oversight for HIEI companies operating in South America and provided due diligence and business plans fore new utility acquisitions. Created 15-year company budgets, takeover plans, and operating plans for acquisition targets
- Developed successful business plans used in the winning bids for two Argentinian Discos (EDELAP & EDESE), a utility in Cali, Columbia (EPSA), and a distribution company (Electropaulo) in Brazil, and led all four acquisition transformation takeovers

#### **DESIGNATIONS**

USA Smart Grid Consumer Collaborative KEMA Utility of the Future Advisory Committee AT&T Field Services Advisory Board Professional Engineer (Alberta) Project Management Professional (PMI)

### **EDUCATION**

Bachelor of Science, Electrical Engineering, Texas A&M University

## **TODD MCLAREN**

### **ROLE**

McLaren will serve on both the transition and management teams as the lead for operations; including transmission and distribution, field engineering, customer service field crews, telecommunications, vegetation management, fleet emergency operations plan and field warehousing.

### **KEY EXPERIENCE**

#### **ATCO**

2018 – Present Alberta, Canada

## Vice President, Engineering & Construction

 Responsible for the overall operations and maintenance of ATCO's transmission, distribution and telecommunication system, as well as project management, supply chain, project construction, commissioning, asset management, land and property functions

#### **ATCO**

2016 – 2018 Alberta, Canada

## **Vice President, Maintenance & Construction**

- Responsible for all construction
   – and maintenance-related activities for transmission and distribution
- Accountable for departmental profit and loss (P&L) and health and safety results
- Responsible for strategic planning and direction, priority planning and labour relations for the company

#### **ATCO**

2013 – 2016 Alberta, Canada

## **Vice President, Transmission Construction & Standards**

 Responsible for developing and directing the group executing and delivering ATCO's critical transmission infrastructure projects (line and substation) with total combined project values exceeding \$500 million annually

## **ATCO**

2011 – 2013 Alberta, Canada

## Vice President, Eastern Alberta Transmission Line, Line Construction

 Responsible for construction planning, tender development and award, contractor management and regulatory matters for ATCO's \$1.8 billion HVDC link

### **ATCO**

2009 – 2013 Alberta, Canada

### **Vice President, Large Distribution Projects**

 Responsible for the overall management, direction and coordination of large distribution and transmission capital maintenance projects, as well as developing, directing and controlling the Strategic Project Management Office (PMO)

#### **ATCO**

2007 – 2009 Alberta, Canada

## Vice President, Special Projects, ATCO Group

 Reporting to the ATCO Group of Companies' chief administration officer, responsible for the program to implement an enterprise solution for Oracle HR & operating subsidiaries to ensure their representation with the project (> \$70 million)

## **TODD MCLAREN**

#### **ATCO**

2003 – 2007 Alberta, Canada

## **Vice President, Customer Care & Billing, ATCO I-Tek**

 Responsible for delivering a full suite of customer call and billing services on behalf of 1.3 million customers in a centralized function on behalf of Direct Energy, The City of Red Deer, ATCO Electric and ATCO Gas; the operation won multiple North America-wide awards for customer care and customer satisfaction during this period

#### **ATCO**

1999 – 2003 Alberta, Canada

## **General Manager, Business Services, ATCO I-Tek**

 Developed a centralized customer care and billing function on behalf of the ATCO Group of Companies for more than 1.3 million customers; responsible for developing contract procedures and performance metrics, and to begin operations on behalf of 2 external customers (Direct Energy and City of Red Deer)

#### **EDUCATION**

**Finance Major**, Agriculture Business Program, Olds College **Law Minor**, General Studies, Southwest Texas State University

Goguen will serve on both the transition and management teams as the lead for capital programs; including federal funds management and overall project management.

#### **KEY EXPERIENCE**

#### **ATCO**

2017 – Present Alberta, Canada

# Project Experience: West Fort McMurray 500 kV Transmission Line — Alberta PowerLine

Serves on the project management team and project executive committee;
 responsible for project development and project management

#### **ATCO**

Completed in 2015 Alberta, Canada

# Project Experience: Eastern Alberta Transmission Line (EATL) — Vice President, Transmission

 Provided support to ATCO executive in the EATL's early development and planning (2004 to 2010)

#### **ATCO**

2010 – 2013 Alberta, Canada

# Project Experience: Hanna Region Transmission Development (HRTD) — Vice President, Project

 Responsible for the \$760 million project's overall development & execution, including project management, engineering, procurement, regulatory, right-ofway acquisition, permitting, construction & commissioning

#### **ATCO**

2017 – Present Alberta, Canada

# Senior Vice President & General Manager, Transmission & Distribution, Electricity

- Overall responsibility for ATCO transmission and distribution business, including system operations, maintenance, asset and work management, quality management, risk management, project & construction management, engineering, procurement, commercial, finance & accounting, regulatory, health & safety, environment, customer care & billing and metering & meter data management functions
- Serves on the Western Energy Institute and Winnifred Stewart Association boards of directors

## **ATCO**

2015 – 2017 Alberta, Canada

## Senior Vice President & General Manager, Transmission, Electricity

Overall responsibility for ATCO's electricity transmission division, including system operations, maintenance, asset and work management, quality management, risk management, project & construction management, engineering, procurement, commercial, finance & accounting, regulatory, health & safety, environment, customer care & billing and metering & meter data management functions

#### **ATCO**

2013 – 2015 Alberta, Canada

#### **Vice President, Competitive Transmission**

- Responsible for developing non-regulated transmission and telecommunication projects
- Responsible for overall project development oversight, from project inception through to RFP submission (including commercial and technical aspects)

## PAUL GOGUEN, P. ENG., MBA

#### **ATCO**

2012 – 2013 Alberta, Canada

## Senior Vice President, Transmission Engineering & HRTD Project

 Responsible for engineering and commissioning functions for ATCO's Transmission & Telecommunication Capital Program (> \$1 billion in 2012 & 2013), and for all regulatory matters related to the HRTD project (\$700 million)

#### **ATCO**

2004 – 2010 Alberta, Canada

## **Vice President, Transmission**

 Responsible for the overall operations and maintenance of ATCO's transmission and telecommunication system, as well as transmission planning and land and property functions

## **ATCO**

2000 – 2004 Alberta, Canada General Manager, Yukon Electrical Company Ltd., Northland Utilities Enterprises Ltd., Northland Utilities (NWT) Ltd., Northland Utilities (Yellowknife) Ltd.

 Responsible for the general management of all functions at ATCO's North of 60 companies, including O&M, capital program, government affairs, Indigenous affairs, corporate communications & regulatory

## **DESIGNATIONS**

Professional Engineer (Alberta)

### **EDUCATION**

Bachelor of Science, Mechanical Engineering, Queen's University Master of Business Administration, University of Alberta Ivey Executive Development, Ivey Business School

Nguyen will serve on both the transition and management teams as the lead for capital projects, construction and project execution.

#### **KEY EXPERIENCE**

#### **ATCO**

2017 – Present Alberta, Canada

# West Fort McMurray 500 kV Transmission Line — Vice President, Alberta PowerLine

 Responsible for the engineering, construction, procurement project control and overall execution of the \$1.6 billion project

#### **ATCO**

2015 – 2016 Alberta, Canada

## Site C Worker Accommodation — Vice President, Project

Responsible for the engineering, construction, procurement, project control
and overall execution of the \$580 million 1,800-person lodge; Quyen's vast
experience and record of delivering projects on schedule and on budget
were key to meeting the projects very compressed schedule

#### **ATCO**

2013 – 2015 Alberta, Canada

## Eastern Alberta Transmission Line (EATL) — Vice President, Project

 Responsible for the engineering, construction, procurement, project control and overall execution of the \$1.8 billion, 500 kV EATL project

#### **ATCO**

2010 – 2013 Alberta, Canada

## Hanna Region Transmission Development — Director (2012 – 2013), Senior Project & Engineering Manager (2010 – 2012)

- Director responsible for project management, engineering management, procurement, project control and execution of the \$800 million HRTD project. Project included detailed site identification and routing, survey, environmental assessment, construction, operating and maintaining all associated transmission facilities. Approved the project controls, communications, environmental, quality and H&S plans developed for the project, and supervised implementation and execution
- Senior project & engineering manager responsible for project and engineering management

#### **ATCO**

2008 – 2010 Alberta, Canada

#### Vice Lead Transmission Design Engineer

 Lead designer for substations, transmission line and the telecom facility design team

## **ATCO**

2003 – 2008 Alberta, Canada

## **Lead Engineer**

 Supervised the Protection & Control group, including planning and designing all substations

#### **ATCO**

1997 – 2003 Alberta, Canada

### **Senior Maintenance Engineer**

 Set maintenance direction for transmission substations, transmission lines and telecom facilities

#### **ATCO**

1994 – 1997 Alberta, Canada

## Project Manager, Projects & Engineering

 Responsible for setting maintenance direction for transmission substations, transmission lines and telecommunication facilities

## QUYEN NGUYEN, P. ENG.

### **ATCO**

1989 – 1994 Alberta, Canada

## **Electrical Design Engineer**

- Responsible for completing design, specification and material procurement for 240/144 kV and 144/25 kV transmission substations
- Engineered analysis and wrote specifications for transmission substation battery banks and battery chargers, and evaluated standard designs for transmission substations

## **DESIGNATIONS**

Professional Engineer (Alberta)

## **EDUCATION**

Bachelor of Science, Electrical Engineering, University of Alberta Executive Leadership Program, Ivey Business School Body of Knowledge, Project Management Institute

Laird will serve on both the transition and management teams as the lead for customer service.

#### **KEY EXPERIENCE**

## ATCO Energy Ltd.

2017 – Present Alberta, Canada

## Senior Manager, Home & Energy Retail Operations

- Influence and motivate teams within the business unit and across the larger ATCO organization to develop and execute the ATCO Retail vision through strategies and operating principles
- Engage staff in developing action plans to enhance communication across divisions, strategically solve problems, and promote collaboration to deliver exceptional customer experiences
- Provide guidance to internal and external teams on policies, processes, and procedures to ensure the optimal use of resources and customer experience delivery
- Review market research and customer research to anticipate business and customer opportunities
- Negotiate mutually beneficial vendor agreements for products and services
- Use problem solving and conflict management skills to govern and manage service agreements with IT, retail product, and service vendors
- Responsible for developing the customer experience strategy by evaluating customer feedback and implementing process changes to improve customer satisfaction as well as customer experience metrics, including CSAT, surveys, insights, and quality assurance programs
- Develop and manage a budget of >\$15M
- Ensure compliance with industry regulatory requirements
- Develop, launch, and operate new ATCO Retail business

### ATCO Energy Ltd.

2015 – 2017 Alberta, Canada

### Manager, Customer Care & Billing

- Played a key role in the development and launch of ATCO Energy Ltd
- Developed and executed the RFP process for hiring a third-party call center and billing provider
- Managed the project to set up the ATCO Energy billing system
- Managed the project to develop and document all customer care policies, processes, procedures, and training modules
- Developed the quality program for both agent onboarding and agent service delivery
- Responsible for managing call center service levels, service quality, and reporting
- Responsible for gathering call center intelligence and working with marketing and sales to develop and improve sales strategies based on voice of the customer data
- Worked effectively with the commercial & industrial sales team on lead development
- Participated in the development of marketing and sales strategies.
- Responsible for ensuring compliance with industry regulatory requirements, representing ATCO Energy at industry meetings, and liaising with regulatory bodies

## **ATCO Electric**

2010 – 2015 Alberta, Canada

## Manager, Customer Care & Billing Governance

- Responsible for managing a \$10M+ contract with third party service provider
- Worked with service provider to implement customer experience improvements:
  - Decreased number of customer calls >10 minutes in length by 7%
  - Decreased customer dissatisfaction by 5% through implementing customer concierge service
- Worked with service provider to determine best cost business solutions to meet organizational requirements and maintain compliance with regulatory requirements
- Developed bi-weekly dashboard reporting as a value-added service to monitor service quality
- Reviewed and analyzed customer satisfaction survey results and implemented process improvements based on results
- Developed customer experience team to include customer service employees from across the organization
- Initiated and led several LEAN process improvement projects
- Represented ATCO Electric at industry meetings with the Alberta Utilities Commission
- Represented ATCO Electric on the Canadian Electricity Associations Customer Committee
- Responded to intervenor requests on regulatory proceedings
- Developed and implemented policies, processes, and procedures

### ATCO I-Tek

2008 – 2010 Alberta, Canada

## Manager, Process Quality, ATCO I-Tek

- Responsible for managing a department consisting of four workgroups and 45 staff members (User Acceptance Testing, Customer Care Solutions, Charge & Statement Check, Rate Administration)
- Identified, supported and grew internal resources to meet current and future business needs:
  - Implemented industry standard training and developed scenario database to increase efficiency of User Acceptance Testing team.
  - Implemented cross training and inter-departmental communication to support company succession plan and decrease work duplication.
  - Introduced ITIL processes to department and division as an industry standard model of process and quality assurance.
- Provided superior leadership, mentorship and direction to a variety of workgroups, enabling the implementation of strategies, tools, processes, solutions, and training to support the delivery of high quality service
- Responsible for the managements of testing of all system changes and production issues for in house billing system and its interfaces
- Responsible for the management of the end to end issue resolution for operations:
  - Developed process for issue ownership and follow up decreasing the number of unresolved issues.
- Developed strategy for issue prioritization and resource management

## **JESSICA LAIRD**

## **EDUCATION**

**Bachelor of Commerce**, Organizational Analysis & Marketing, University of Alberta

Strategic Leadership Development, Ivey Business School Developing Customer Experience Metrics – Forrester Research

Bashualdo will serve the transition team as the lead for the IRP coordination

#### **KEY EXPERIENCE**

## Quanta Technology, LLC 2017 – Present Rexford, NY

## **Principal Advisor, Distribution & Asset Operations**

- Oversees planning, design, construction, asset management, distribution operation & maintenance, and loss control
- Develops distribution master planning, reliability improvement, loss reduction, and power utility process re-engineering
- Heavy focus on integration of DER, distribution system hosting capacity evaluation, microgrid power system studies, asset management and operations, losses control and reliability improvement

Senior Manager, Distribution Planning and Microgrids, Smart Grid

Vehicle recharging station evaluation for US, Canada and Mexico

Managed a team dedicated to study Smart Grid implementation, DG and

IPP modeling and interconnection studies, Protection Automation, Electric

# Siemens Industry US

2012 – 2017 Schenectady, NY

2006 – 2012 British Collumbia, Canada

BC Hydro

## Senior Engineer, Distribution Engineering

- Performed Distribution Planning Studies. \$30 Million in Capital Plan over the last 5 years
- Project Managed large projects implementation
- Power Producers (IPP) rated up to 15 MW interconection studies to BC Hydro systems (12kV, 25 kV and 35 kV)

### Edelnor

1994 – 2004 Lima, Peru

# Planning Engineer, Technical Leader Planning, Designing, Construction, Maintenance, Studies

- Under the direct supervision of a professional engineer, the successful candidate will be responsible for the design of overhead transmission and distribution lines
- Performed preliminary engineering and budgetary cost estimates; completed PLS-CADD based transmission designs; directed drafters and designers in the development of construction documents; preparated and reviewed of design specifications and drawings in addition to the preparation of detailed design calculations

#### **DESIGNATIONS**

Professional Engineer, APEGBC, Canada

Project Management, Project Management, Humber College Institute of Technology and Advance Learning

#### **EDUCATION**

**Bachelor of Science,** Electrical Engineering, National University of Engineering, Peru

Master of Business, School of Peruvian University of Applied Science, Peru

## **ALBERT BEATTIE**

### **ROLE**

Beattie will serve on the transition team as the lead for data security within information technology and operations technology planning.

#### **KEY EXPERIENCE**

## Optiv (formerly Accuvant Inc.) 2017 – 2019 Alberta, Canada

#### **Client Solutions Director**

- Develops and leads a high performing team of 11 Solutions Architects across Canada and the US involving multiple product solutions, executing technical aspects of prospect discovery and existing customers, improving processes, and acting as the Subject Matter Expert (SME) on the capabilities of the solutions, on boarding and success experiences
- Provides leadership to the Solution Architects by directing decision making on career planning, personal development and sales strategy; recruits new talent, including Solutions Architects and Client Managers, and reviews and adjusts compensation plans to increase productivity and retention rates
- Offers thought leadership to clients by developing a core understanding of the client's unique business needs; builds and develops durable executive relationships resulting in a win-win situation for the client and Optiv
- Leverages effective communication and conflict-management skills to resolve disputes between Client Managers and Solutions Architects; schedules and maintains vendor and industry certifications for the Solutions Architect Team

## Optiv (formerly Accuvant Inc.) 2016 – 2017 Alberta, Canada

### **Senior Solutions Architect**

- Provided thought leadership to clients in keeping them up to date on the changing threat landscape, recommending solutions and configurations they had not thought of; played a pivotal role in driving engagement in the account between the client and the Sales Manager.
- Collaborated with the Account Manager for Western Canada to build brand awareness of Accuvant/Optiv and developed business opportunities.
- Assessed client needs and performed discovery in order to design, recommend, and sell solutions tailored to the client's unique requirements; engaged with other regional sales teams to provide pre-sales assistance to clients scattered across Canada and the US.
- Worked closely with the partner community in order to understand each partner's range of products, where they fit and how to position the products; coordinated discovery sessions with Optiv Senior Solution Architects to generate accurate and timely quotes.

## **ALBERT BEATTIE**

Optiv (formerly Accuvant Inc.) 2014 – 2016 Alberta, Canada

#### **Solutions Architect**

- Develops and leads a high performing team of 11 Solutions Architects across Canada and the US involving multiple product solutions, executing technical aspects of prospect discovery and existing customers, improving processes, and acting as the Subject Matter Expert (SME) on the capabilities of the solutions, on boarding and success experiences
- Provides leadership to the Solution Architects by directing decision making on career planning, personal development and sales strategy; recruits new talent, including Solutions Architects and Client Managers, and reviews and adjusts compensation plans to increase productivity and retention rates
- Offers thought leadership to clients by developing a core understanding of the client's unique business needs; builds and develops durable executive relationships resulting in a win-win situation for the client and Optiv
- Leverages effective communication and conflict-management skills to resolve disputes between Client Managers and Solutions Architects; schedules and maintains vendor and industry certifications for the Solutions Architect Team

The Herjavec Group 2013 – 2014 Alberta, Canada

## **Technical Manager, Western Canada**

- Provided leadership and mentorship to 8 technical personnel in Calgary and Vancouver by building a stronger Storage and Security team in Western Canada
- Managed the process of generating Statement of Work (SoWs) written for client engagements by the engineers for accuracy and completeness; maintained the Western Vendor relationships and spearhead training initiatives for the engineering staff
- Attended sales meetings with clients and account manager to introduce
  The Herjavec Group to potential clients and explain the services and
  capabilities to create value, discovery of client needs and identify potential
  opportunities
- Provided Pre-sales consulting and design technical solutions for the account manager and clients through consulting, designing and implementing various security and network solutions

The Herjavec Group 2011 – 2013 Alberta, Canada

## Security Engineer

- Provided IT Security Services to a diverse array of clients ranging from Health Care, Legal, Oil and Gas, Aerospace, Education and Retail with emphasis on CheckPoint, Palo Alto Networks, Riverbed, Sonicwall, Aventail. NetOP and Blue Coat
- Deployed Palo Alto Networks Firewall as an internal Firewall, providing segmentation across multiple zones increasing the security of the Brock University and TransAlta Energy
- Upgraded Checkpoint R65 to R75.x across all Husky Energy sites globally and deployed Checkpoint SSL VPN for Pacific Blue Cross
- Performed Risk Assessment Audit for Nexen and performed onboarding for managed service, SonicWall, Aventail and NetOp for Boston Pizza

## **ALBERT BEATTIE**

## WestJet Airlines 2010 – 2011 Alberta, Canada

#### **Technical Architect**

- Contributed towards various projects ranging from a post-PCI Compliancy impact investigation and review, while offering expertise and enterprise holistic views to the Governance and Architectural staff
- Collaborated with the Security group to analyze and provide guidance on security practices on PCI, Anti-Spam, NAC, and system testing
- Explored policy for a Bring Your Own Device initiative, involving mobile device management and access by incorporating personal devices onto the WestJet infrastructure in a secure method
- Performed detailed review and analysis of the state of Virtualization in the enterprise; analyzed Unified Communications and remote access

## IPS Networks 2007 – 2010 Alberta, Canada

## Senior Technical Architect/Sales Engineer

- Played a key role in various projects ranging from Network auditing to AD design and implementation, AD security audits, Exchange migrations, to Network WAN acceleration, NAC, firewall deployments, proxy deployments, monitoring and vulnerability assessments
- Implemented various hardware appliances and providing the associated professional services including all manner of documentation and network/system drawings for clients, such as Vancouver Olympic Organizing Committee, Petro-Canada, Vancouver Airport Authority, Canadian Northern Shield Insurance, Tourism Vancouver, among many others
- Provided thorough network review, audit and analysis of various sites, including a road map on changes to core infrastructure to modernize it and increase the flexibility of the network
- Conducted network vulnerability assessments using security tools such as Nessus, Qualys and NMAP; installed and configured Ironmail appliances for anti-spam and anti-virus protection of Exchange infrastructure

## GFS Canada 2006 - 2007 Canada

#### Contractor

- Contracted to maintain and enhance the Windows environment for a new implementation of a Business Intelligence system built on Windows 2003 R2 x64, SQL 2005 and Proclarity
- Ensure the uptime of the systems, troubleshoot any issues discovered during the development phase and implement fixes
- Document the build of each server, performance-tune the network, servers, SAN and fiber fabric, develop a disaster recovery procedure, implement a backup solution (TSM), liaise with various vendors for systems enhancements, and implement a system monitoring solution
- Assisted the on-site staff with various technical issues related to Blackberries, and other network or hardware issues

## Electric Mail Company 2005 - 2006 Canada

### **Exchange Administrator and Sales Engineer**

- Managed a clustered Exchange 2003 environment for their hosted Exchange customers
- Managed internal Windows domain, network, desktops and phone systems

# **ALBERT BEATTIE**

Syscom Consulting Inc. (Telus) 2000 - 2005 Canada

Ministry of Finance, Government of British Columbia 1996 - 2000 British Columbia, Canada

#### **Technical Support Specialist**

 Involved in implementing and managing various systems and configurations for multiple clients. Typical clients were law firms, container shipping/bulk materials handling companies, and national chain/franchisees

#### **Senior Systems Support Analyst**

- Provided 2nd level support for desktops and servers
- Conducted diagnostic evaluations and provided recomendations for repairs or implementing solutions
- Conducted classroom training for up to 10 users at a time on new systems or applications
- Assisted network team with cabling, troubleshooting and implementing equipment.

Buell will lead the Information and Operations Technology transition plan

#### **KEY EXPERIENCE**

# Quanta Services, Inc.

2018 – Present Houston, TX

## **Operations Systems Support Program Manager**

- Lead implementation and management of portfolio, program and project governance frameworks
- Develop project portfolio prioritization methodologies
- Coach and mentor project sponsors and managers
- Review programs and projects for deliverability including adequate resourcing, management and governance procedures, and accuracy of financial estimates
- Development of appropriate reporting tools which deliver value
- Lead ongoing program level business continuous improvements initiatives
- Accountable for defining program requirements/enhancements
- Manage relationships with both operations and IT to keep communication channels open

## Deloitte Consulting

2017 – 2018 Houston, TX

## Senior Manager/Specialist Leader

- Responsible for executing all aspects of finance and technology transformation projects
- Responsible for cutover strategy and planning, fit/gap analysis, data migration strategy, day 1 readiness, testing, deployment planning/execution, sprint planning and post go-live support
- Responsible for project budgeting and financial forecast updates
- SOW preparation and execution
- Key participant in sales initiatives
- Oracle Cloud transformation lead

# Quanta Services, Inc.

2010 – 2017 Houston, TX

#### Portfolio Manager

- Provide Project Management services to multiple complex projects
- Responsible for standardization of PMO processes and tools
- Responsible for selecting and implementing a Project Portfolio Management tool (PPM)
- Accountable for managing project assignments to PM's and overall status reporting for the PMO
- Successfully managed multiple contract negotiations for software licensing, hosting and SOW's
- Responsible for project budgeting and financial forecast updates

#### **Meritage Homes**

2005 – 2010 Houston, TX

#### Regional Vice President of Finance Southwest Region

- Responsible for providing accurate quarterly P&L and balance sheet forecasts
- Mange financial underwriting process on potential acquisition targets
- Provide ongoing project level profitability analysis on existing projects
- Responsible for analyzing potential joint venture opportunities
- Management of finance team overseeing three divisions with combined revenue of over \$200M

# NATHAN BUELL, CPA

#### **Jefferson Wells**

2004 – 2005 Houston, TX

#### **Manager Internal Audit**

Managed internal audit teams for multiple clients

## Deloitte Consulting 2000 – 2004 Houston, TX

#### Manager

- Led financial implementation teams (G/L, A/R and A/P) on mulitple engagements
- Led process modeling and redesign efforts
- Facilitated the integrated testing for multiple implementations
- Developed and led client-training programs

#### **DESIGNATIONS**

Project Management Professional (PMP) Certified Public Accountant (CPA) ITIL® Foundation Certified

#### **EDUCATION**

Bachelor of Accountancy, Arizona State University

Clark will serve on the transition team and lead the environmental function.

## **KEY EXPERIENCE**

# ATCO, Natural Gas Division

2017 – Present Alberta, Canada

#### Manager, Environment & Technical Compliance

- Develop strategic, consolidated policies and approaches for multiple ATCO companies in conformance with internal management systems and ISO 9001 and 14001
- Manage a team of supervisors, professionals, and technicians across multiple geographic locations and functional areas in implementation of the management system
- Administer department resourcing to ensure attainment of objectives
- Coordinate centralized reporting and priority-setting for the Health, Safety, Environment & Quality department
- Complete senior-level technical reviews of environmental assessments, controlled processes, and quality audits

#### ATCO, Natural Gas Transmission Division

2015 – 2017 Alberta, Canada

## Manager, Environment, Standards & Quality Assurance

- Provided guidance and facilitated management system reviews for the integrated management systems within an ATCO company
- Supervised a team of engineers, environmental professionals, and administrative staff in implementation of management system programs
- Ensured preventative and corrective actions from incidents and audits were identified, tracked, and implemented
- Spearheded an interdisciplinary, employee-led committee focused on developing alternative methods of reducing ATCO's environmental impact

# ATCO, Natural Gas Transmission Division

2012 – 2015 Alberta, Canada

#### **Project Manager**

- Managed multiple environmental projects, including reclamation and remediation projects, distributed energy projects, energy efficiency projects, and building renovation projects
- Supported development of environental and quality objectives within an integrated management system
- Completed technical incident investigation, review, and cause analysis
- Supervised engineering students and junior engineers in completion of department deliverables

#### ATCO, Natural Gas Transmission Division

2012 – 2015 Alberta, Canada

## **Engineer-in-Training**

- Acted as an environmental advisor to develop appropriate protection plans and regulatory applications to support pipeline and energy facility construction
- Supported construction and operations work as a field inspector focused resolving environmental and quality concerns
- Completed calculations and submitted required reports relating to greenhouse gas and criteria air contaminant emissions

### **DESIGNATIONS**

Professional Engineer (Alberta)
Project Management Professional (PMI)

# **CURTIS CLARK**

## **EDUCATION**

Bachelor of Science, Civil Engineering, University of Alberta Master of Science, Environmental Practice, Royal University Project Management Certificate, Mount Royal Universit Foundations of Leadership Certificate, Mount Royal University

Ellis will serve on the transition team in customer service leading the billing services

#### **KEY EXPERIENCE**

#### **ATCO**

2018 – Present Alberta, Canada

#### **Manager Operations Northwest Region**

- Lead the teams responsible to execute on Customer Connections for the delivery of electricity services in the Northwest region.
- Responsible for the Customer Connection Expediters that design and propose electricity service solutions to our customers.
- Responsible for the Construction Leads that manage the requirements to construct the electricity service solutions including the contract management process for exernal powerline contractors.
- Responsible for the Schedulers that deliver on scheduling and dispatching work packages for both electricity construction and service customer requests.

#### **ATCO**

2017 – 2018 Alberta, Canada

#### **Customer Care & Billing Manger**

- Responsible for the daily management of the Electricity Contact Centre and Billing teams
- Manage user acceptance testing and incident management team for the utility billing system
- Accountable for overseeing and leading distinct teams to execute a variety of business process improvement projects.

#### **ATCO**

2014 – 2017 Alberta, Canada

#### Manager - Billing and Process Improvement

- Accountable for overseeing and leading distinct teams to execute a variety of business process improvement projects.
- Manage user acceptance testing and incident management teams for the utility billing system
- Responsible for the daily management of the Electricity utility billing team
- Champion of the division's operational excellence and innovation initiatives (War on Waste) by leading the Steering Committee, execution of the program and engaging employees to find and eliminate wasted effort and free up capacity.

#### **ATCO**

2013 – 2014 Alberta, Canada

#### **ATCO CIS Testing & Support Manager**

- Responsible for the daily operations of the ATCO-CIS Support Center, User Acceptance Testing, and Charge and Statement Check teams.
- Provide strong leadership and expert knowledge to ensure system integrity and proper operation of key business support systems through effective quality assurance and control measures.

#### TINA ELLIS

#### **ATCO**

2012 – 2013 Alberta, Canada

#### **Process Improvement Manager**

- Accountable for the development of business cases on Business Process Outsourcing (BPO) strategic projects.
- Responsible to develop and deliver presentations to internal review boards for acceptance or rejection of business cases. Responsible to understand the application of technology, business applications and business processes to deliver the expected business benefits defined by BPO.
- Responsible for coordinating the implementation of business cases to deliver on the expected business benefits outcome with in acceptable and agreed to tolerances.
- Responsible to transition process improvements through system automation and LEAN initiatives to operations post-implementation and facilitate re-deployment of resources gained through the process improvements

#### **ATCO**

2009 – 2012 Alberta, Canada

#### **ATCO Gas and Direct Energy Business Process Manager**

- Accountable for end to end business processes for Gas Distribution, Regulated and Competitive Retail Energy Customer Care and Billing Services including on-shore and off-shore delivery centers
- Responsible to understand the application of technology, business applications and business processes to deliver the business process outsourcing to utility and energy clients
- Accountable for performance of the business process while maintaining strong business knowledge and expertise. Applying strategic focus to ensure contractual obligations are fulfilled. Responsible for implementation of process improvement initiatives and quality assurance activities

#### **DESIGNATIONS**

Six Sigma Green Belt Certification, ASQ

#### **EDUCATION**

Strategic Leadership Development, Ivey Business School ITIL Change Management Training, Northern Alberta Institute of Technology

**Project Leadership Certificate Program**, Northern Alberta Institute of Technology

Information Technology Management Program, University of Alberta Management Development Program, University of Alberta Records & Electronic Information Management, Grant MacEwan College

Fite will serve on the transition team and lead the financial management and budgeting processes

#### **KEY EXPERIENCE**

Quanta Utility Engineering Services, Inc. 2017 – Present Houston, Tx

#### **Chief Financial Officer**

- Business Development and growth oriented CFO partnering with business unit president to carve out and combine three existing electric distribution engineering operations into one nationwide platform company
- Executing on this multi-year strategic priority, my efforts have been initially focused on developing a fully functioning administrative team (Acctng, HR, IT, Admin, Ops Support) that is rightsized to support operations, limit cost and sufficiently mitigate risk
- Key efforts included implementing a new accounting system, setting and communicating new company policy, developing employee incentive compensation and benefit plans, engaging outside service providers, setting up regional offices to support geographic expansion through organic growth and pursuing acquisitions in order to grow from \$85M to estimated \$250M+ platform company

# Quanta Services, Inc.

2008 – 2017 Houston, Tx

#### **Vice President Accounting and Controller**

- Department head reporting to Corporate CFO and working directly with Legal, Treasury, Tax, M&A, Operations, Risk Management, Internal audit, IT and external advisors to management risk, ensure compliance, serve the Senior Executive Leadership and BOD, and support the business unit operations as the company grew from consolidated revenues of approximately \$3 billion (50 U.S. subsidiaries) in 2008 to \$10billion in revenues in 2016 (domestic and international)
- Final two years of service in this role included specific oversight of Quanta's latin american business units in Peru, Colombia, Ecuador, Chile, Mexico and Guatemala. Partnered with regional operations leaderhship to develop compliance, reporting and large project management programs
- General controllership duties included leading of team accounting and finance professionals that grew from 17 employees in 2008 to 45+ in 2016 through all aspect of corporate and consolidated accounting close, business unit analysis, project reviews, ownership of all key accounting policies, key judgements and estimates (including AR reserves, change order/claim management, project incentives and loss accruals, revenue recognition, goodwill assessments/impairments, insurance accounting, litigation matters/SFAS 5 loss accruals), equity compensation calculations, incentive compensation calculations/accruals, wtd avg shares and EPS, 10-Q/10-K reporting, MD&A, earnings releases and other public company reporting, accounting due diligence for acquisitions, post-acquisition integration, annual SOX control assessments, annual audits, SEC comment letters, internal investigations, BOD and Audit Committee reporting, new accounting pronouncements and systems implementations.

# **MARTIN FITE**

# Pricewaterhouse Coopers, LLC

2001 – 2008 Houston, Tx

#### **Senior Manager - Assurance**

- Highly rated performance, committed to client service, well rounded professional development across multiple industries, strong technical accountant and auditor
- Plan, lead and execute public and private company financial statement and internal control audits and professional services engagements
- Industries served include regulated/commercial utilities (generation, pipeline transportation), construction, driling/extraction, and manufacturing

# Arthur Andersen LLC

1997 – 2001 Houston, Tx

#### Manager - Assurance

- Highly rated performance, committed to client service, well rounded professional development across multiple industries, strong technical accountant and auditor
- Plan, lead and execute public and private company financial statement audits and professional services engagements.

#### **DESIGNATIONS**

Certified Public Accountant (CPA)

#### **EDUCATION**

**Bachelor's of Business Administration,** Accounting, Angelo State University

Gignac will serve on the transition team and lead the systems operations and metering

#### **KEY EXPERIENCE**

#### **ATCO**

2019 – Present Alberta, Canada

### **Manager Transmission Capital Maintenance Projects**

- Tasked with implementing the yearly Capital maintenance portfolio for the electric transmission system
- Ensure program and project performance objectives are met
- Managing a project team of 6 Project Managers

#### **ATCO**

2017 – 2019 Alberta, Canada

#### **Project Manager Unifier implementation**

- Project lead for the implementation of a IT solution (Oracle Primavera Unifier and P6) that supports project delivery (project controls)
- Responsible for all aspects of the project: Business case, business requirements, process design, technologies selection, technical specifications, recruiting, project controls, contracts, build, tests, start-up, support, turn over to operation
- Responsible to ensure user adoption and utilization of the system
- Successfully deliver solution on time and on budget
- Managed a project team of 6 resources

#### **ATCO**

2013 – 2016 Alberta, Canada

#### **Manager Project Management Office**

- Tasked with developing and implementing a single central Project Management Office for the ATCO group of companies
- Established a standard project life cycle with control gates to increase success of projects
- Standardize, streamline and roll out project management processes across
   6 business units
- Established a governance model for the PMO (supportive model)
- Managed a team of 5 engineers and project managers

#### Company

2015 – Present Alberta, Canada

#### **Superintendent Commissioning and Project Manager**

- Superintendent Commissioning for the construction of a 500km HVDC power line with two Converter Stations (Siemens technology), a \$2B project
- Managed a team of 15 engineers and technicians
- Prepared and documented test plans for Factory testing, Sub-System testing and on Site (System) testing
- Coordinated all series of tests
- Ensure quality control during testing and ensure deficiencies are resolves.
- Project manager for project close-out; Contracts closing, Claims
   Settlement, Deficiencies clean up, documentation clean up, Right of Way reclamation work
- Supporting the regulatory team

# RAPHAEL GIGNAC, PHD, PMP, P. ENG.

#### Hydro-Quebec

2011 – 2013 Quebec, Canada

#### **Operations Manager, Grid Operations**

- Real time operations for the high-voltage grid in southern Quebec
- Managed two control centers with 24/7 shifts
- Negotiate agreements with local union representatives
- Managed a team of 165 operators

#### Hydro-Quebec

2008 – 2011 Quebec, Canada

#### **Maintenance Manager, Grid Operations**

- Responsible for the maintenance of transmission substations in the regions of Abitibi and Outaouais in the province of Quebec
- Reestablishing electric service to customer during outages
- Representing the company with Major customers in assign regions
- Negotiate agreements with local union representatives
- Commissioning and project support of new facilities added to the grid
- Managed a team of 115 power technicians and electricians

#### **DESIGNATIONS**

Professional Engineer (Alberta)

Project Management Professional (PMI)

#### **EDUCATION**

**Bachelor of Science**, Power Engineering, Laval University, Quebec, Canada

**Strategic Leadership Development**, CIREM – HEC Montreal Residential Executive Program

# **BEATRIZ GONZALEZ**

#### **ROLE**

Gonzalez will serve on the transition team leading the governmental approvals process in the legal department.

#### **KEY EXPERIENCE**

#### **ATCO**

2018 – Present Canada, Brazil, Chile, Argentina, Uruguay, Mexico

# Manager, Government Relations (Projects)

- Specilializes in economic and project analysis of government relationships at any government level, with a main interest in energy sector in Latin America
- Focused on governmental relationships, numerical analysis, and interdisciplinary research

# ATCO Pipelines

2017 Mexico City & Hidalgo, Mexico

## Manager, Government Relations (Projects)

- Project Elbe for ATCO Ltd: Acquisition of 40% interest in Neltume Ports by ATCO LTD in Latin America
- Member of Operations Due Diligence team with responsibility to assess permit compliance, environmental compliance, and labor/union relations
- Site review of port operations completed in Chile, Argentina, and Uruguay
- Held responsibility as ATCO lead for management call with Brazilian port operations
- Completed relevant sections for Operations Due Diligence Report on assessment for 16 different port operations in four countries
- Project Ramal Tula. Responsible for Land, Permits, and project compliance. Responsible for government relations
- Arbitration for ATCO Pipelines: Participated in an arbitration process under the London Court of International Rules of Arbitration
- ATCO witness for area of responsibility
- Worked directly with Canadian legal team in preparation of Memorial of Claim, Memorial of Reply, Memorial of Rejoinder, and all witness statements as fact expert on the project
- Directly responsible to Arbitration Lead Lawyer for quality control of all Spanish documents for official communications with Arbitration Tribunal and submission of all legal filings within the arbitration
- Assisted legal counsel in examination strategy for witnesses of opposing party

# **BEATRIZ GONZALEZ**

# ATCO Pipelines 2015 – 2016 Mexico City & Hidalgo, Mexico

#### Senior Analyst, Projects

- Responsible for compliance with the CRE permit for operations of Ramal Tula
- Completed a rate filing that resulted in CRE recognition of additional capital costs to achieve an increase in the allowable maximum tariff of 240%
- Completed update of General Terms and Conditions of transportation service in accordance with new CRE requirements
- Developed an agreement for third party interconnection to pipeline system
- Responsible for maintenance of land files, judicial validation of land contracts, and acquisition of new right of way through legal easement process
- Managed third party vendors for legal and land acquisition processes
- Responsible for the compliance and renewal for all permits on Ramal Tula
- Completed a detailed project plan for Land and Permits for new pipeline project associated with Ramal Tula
- Developed detailed project schedule and cost estimate for the required scope for leadership team

#### Causa Natura

2014 Yucatan & Quintana Roo, Mexico

#### **Document Control**

- Joined the project as executive assistant of the ATCO Executive responsible for the project
- Became directly involved in the execution of the project with responsibilities that included all document control for the project and management of quality system
- Worked directly with the counterpart in CFE to ensure response to any non-compliance notice was completed in the correct format
- Responsible for obtaining necessary information from project team and developing response in correct format
- Participated directly in weekly construction meetings on site
- Direct responsibility for reporting on the quality section
- Provided translation to Project Manager in real time
- Responsible for ensuring the records for all work complies with the quality management system, all records are maintained in accordance with the document control system, and that the approvals and records for the procurement of materials and services on the project comply with the procurement policy

# Access to Public Information in Mexico City (InfoDF)

2010 – 2012 Mexico City, Mexico

#### **Expert associated**

- Transparency and Accountability in the Fishing Industry
- Interdisciplinary research, based on inquiries made to CONAPESCA to assess the national fisheries policy in three areas: permits, subsidies, and inspection and surveillance

# **BEATRIZ GONZALEZ**

#### **Project Leader**

- Annual Strategic Planning, preparation of quarterly and annual reports
- Selection and monitoring of projects financed by InfoDF
- Responsible for budget oversight goals (POA)
- Document Control and responses to information requests directed to the area.

#### **EDUCATION**

**Master of Government and Public Affairs,** Latin American Faculty of Social Sciences, Mexico

**Bachelor of Science**, Biology, National Autonomous University of Mexico **Energy Production, Distribution & Safety,** State University of New York and Buffalo University

Leadership Development Program, Mount Royal University
Law and Environmental Management, Centre for Environmental Legal
Studies AC

**Project Cycle Management**, Mexico Development Consultants

Goodfellow will serve on the transition team as the lead for the development of a vegetation management plan

#### **KEY EXPERIENCE**

## BioCompliance Consulting, Inc. 2005 – Present St Croix, MN

#### **Principal Consultant**

 Expert consulting practice focusing on utility operations, maintenance and construction with emphasis on reliability and process efficiency, with emphasis on VM practices and risks trees pose to T&D systems

## Quanta Services, d.b.a. Potelco 1991 – 2006 Sumner, WA

#### **Managing Director**

- Support of Quanta's proposals for Business Process Outsourcing (BPO) of utility engineering, construction, operations, maintenance, materials management, and outage restoration services
- Over-arching responsibility for organizational design, workforce transition, implementation and managing an innovative Service Provider (BPO) contract for electric and gas T&D services included design engineering, supply chain, construction, operations and maintenance of energy delivery infrastructure

# Puget Sound Energy

1987 – 1998 Bellevue, WA

# Manager, Projects, Manager of Operations, Manager Standards & Practices

- Responsible for portfolio of major electric and gas distribution system construction projects
- Responsible for development of design, construction, maintenace and operation stabdards
- Creation, implementation, and management of a state-of-the-art UVM program for the T&D system

# Wisconsin Public Service

1982 – 1986 Green Bay, WI

#### **System Forester**

- Overall responsibility for creation, implementation and management of a distribution system vegetation management program for the utility
- Managed the wood pole inspection and maintenance program

# New York Electric & Gas

1978 – 1981 Binghamton, NY

#### **Division Forester**

- Responsible for a regional vegetation mainteance operations
- Responsible for clearing and site restoration efforts associated with major transmission construction projects.

#### **DESIGNATIONS**

Member, ISA, UAA, IEEE and SAF

#### **EDUCATION**

**Bachelor of Science,** Environmental Resources Management, SUNY **Bachelor of Science,** Forestry, Syracuse University

# **DIANNE GUNDERSON**, CBAP

#### **ROLE**

Gunderson will serve on the transition team as the lead for administration and logistics

#### **KEY EXPERIENCE**

# ATCO Electric Ltd.

2018 – Present Alberta, Canada

#### **Project Manager**

- Project management of the Consortium Proposal Submission for the operation and maintenance of Puerto Rico's Transmission & Distribution sytems
- Project management of the ATCO Innovations Showcases (includes: solar panels, LED/solar streetlights, electric vehicle charging stations and mCHP (micro combined heat and power) installations to market company initiatives to new customers

# ATCO Electric Ltd.

2014 – 2017 Alberta, Canada

#### **Construction Planner**

- Developed execution plans, estimates and schedules for the construction/commissioning of regulated and non-regulated transmission/distribution infrastructure
- Coordinated with project management, engineering, construction and procurement to identify issues and implement innovative solutions for the benefit of the rate payer

# ATCO Electric Ltd.

2012 – 2013 Alberta, Canada

## **Project Analyst**

 Provided analysis, metric development and reporting for the Eastern Alberta Transmission Line (EATL) project, a 485 km, 500 kV transmission line construction, one of the first of its kind executed in Canada

# Capital Power Corporation

2004 – 2011 Alberta, Canada

#### **Supervisor, Contract Administrator**

 Negotiated and administered contracts for all operational routine maintenance of the 1200 MW coal-fired Genesee Generating Station and supervised contracted resources as required

#### Acrodex Inc.

2001 – 2003 Alberta, Canada

#### **Rebates Administrator**

 Coordinated rebate collection on IT Services hardware/software purchases (>\$1 million)

#### **DESIGNATIONS**

Certified Business Analyst Professional (CBAP)

#### **EDUCATION**

**Business Analysis Citation**, University of Alberta **Accounting**, Norquest College

# MARK HALDANE, M.SC., P. ENG.

#### **ROLE**

Haldane will serve on the transition team as the lead for the achievement of performance metrics

#### **KEY EXPERIENCE**

#### **ATCO**

#### 2014 – Present Alberta, Canada

#### **Quality Engineer**

- Ownership of nonconformity tracking and corrective action process
- Developed procedures for cross-functional process improvement projects
- Lead development of a quality management system (QMS) based on ISO 9001:2015
- Provide QMS training to staff at all levels
- Lead internal QMS audits

## Quantiam Technologies

2011 – 2014 Alberta, Canada

#### Supervisor QA/QC

- Led manufacturing quality inspection team
- Developed quality tests for products at all stages of manufacturing
- Developed project quality plans
- Approved products for shipping to customers around the world
- Led corrective action projects and worked with process owners to improve process performance

#### National Research Council

2009 – 2011 British Columbia, Canada

#### **Technical Officer**

- Operated and maintained world class fuel cell test lab
- Worked with customers to develop and analyze tests to deliver maximum customer value

#### **Tekion Canada**

2006 – 2009 British Columbia, Canada

#### **Research Associate**

Developed manufacturing process for fuel cell sub-assemblies

#### **DESIGNATIONS**

Professional Engineer (Alberta)

#### **EDUCATION**

Master of Science, Materials Engineering, University of Alberta Bachelor of Science, Materials Engineering, University of Alberta Strategic Leadership Development, Ivey Business School

Harbord will serve on the transition team and lead physical security for the organization

#### **KEY EXPERIENCE**

#### **ATCO**

2016 – Present Alberta, Canada

### **Advisor, Corporate Security**

- Provide expert advice and consultation on a wide range of security related matters for all global business Units at ATCO, including:
  - threat and risk assessments for personnel and property;
     investigations; physical security of sites; special events; security management; executive protection, etc.

# Shaw Communications

2013 – 2016 Alberta, Canada

## **Director, Enterprise Risk Management / Corporate Security**

- Directed several teams dedicated to developing and executing strategies to mitigate physical and logical security risks
- Implemented physical and information security planning and standards
- Oversaw operational compliance of security programs including SOX, PCI, and CASL
- Oversaw protection of physical assets, including 14,000 employees at over 500 sites across North America

# Alberta Justice & Attorney General

2011 – 2013 Alberta, Canada

#### **Manager, Corporate Security**

- Resolved security issues related to the Ministry, including: policy development, threat risk and impact assessments, planning, training, and administration
- Directed, led, and advised stakeholders, including the Executive Leadership Team and Senior Managers
- Improved partnerships with external stakeholders regarding the coordination of activities, security issues, and exchange of intelligence, including provincial and federal law enforcement agencies

# Office of the Alberta Ombudsman

2009 – 2011 Alberta, Canada

#### Investigator

- Investigated complaints of adminstrative unfairness against the government of Alberta, including government departments, agencies, boards, and designated health professions
- Coordinated with government officials at all levels during politically sensitive situations

## Bell West Bell Canada 2000 – 2008

Alberta, Canada

Associate Director, Corporate Security

- Overall management and facilitation of investigations, access control, asset protection, security awareness, risk assessments, and physical security
- Administered and maintained policies to ensure physical safety of all property and assets owned by Bell West
- Supervised administration and operation of organization's security equipment and staff

# DAVID HARBORD, BA, CPP

# Telus Communications

1993 – 2000 Alberta, Canada

### Security Investigator, Corporate Security / Manager, Credit Services

- Investigator (4 yrs): Internal and external investigations related to the protection of company assests (people, property, information, reputation)
- Manager (3 yrs): Development and supervision of Credit Representatives responsible for collection of overdue accounts. Call Centre Management

# Royal Canadian Mounted Police

1980 – 1993 Alberta/Ontario, Canada

#### **Constable and Corporal**

- Corporal (4 yrs): Sniper and Assaulter on the Special Emergency Response Team (SERT), the elite national antiterrorist team
- Constable (9 yrs): General Duty, Highway Patrol, and the Emergency Response Team (ERT)

#### **DESIGNATIONS**

Certified Protection Professional (CPP)

#### **EDUCATION**

Bachelor of Arts, Criminology, Simon Fraser University, Burnaby, BC Security Management Certificate, University of Calgary Criminal Justice Diploma, Vancouver Community College

Hari will serve on the transition team as the lead for engineering and asset management

#### **KEY EXPERIENCE**

#### **ATCO**

2016 – Present Alberta, Canada

#### Manager, Distribution Engineering

- Leading Distribution Design, Planning, Standards and Safety Codes teams for the province of Alberta. Team varying in size from 40-80 over 3 years
- Leading and executing initiatives which delivered operational efficiency and improved the customer experience

#### **ATCO**

2014 – Oct Alberta, Canada

#### **Supervising Engineer, NE Region**

- Led the Fort McMurray, Slave Lake & Planned Programs teams executing the estimating and design of customer and internally driven projects
- Executed the implementation of key initiatives such as LED Street Light replacement & Distribution SCADA implementation

#### **ATCO**

2011 – Oct Alberta, Canada

#### **Engineer**

- Estimated and designed small and large Distribution projects for the Fort McMurray area
- Developed and Planned the expansion of the Fort McMurray grid including provisions for future growth and reliability improvements

#### Magna IV Engineering

2010 – 2011 Alberta, Canada

## **Project Engineer**

- Developed leads then estimated, designed, project managed, and construction managed underground Distribution projects in Alberta
- Managed sub-contractors and associated budgets for client projects to ensure cost and quality was achieved for Distribution projects

#### **ATCO**

2006 – 2010 Alberta, Canada

#### **Engineer-in-Training (EIT)**

- Built electrical models, wrote business cases and ran similations for Distribution projects
- Estimated & designed Distribution projects
- Modeled and designed Transmission lines
- Troubleshooted unplanned Transmission outages including doing root cause investigations

#### **DESIGNATIONS**

Professional Engineer (Alberta)

Project Management Professional (PMP)

#### **EDUCATION**

Bachelor of Science, Electrical Engineering, University of Alberta

Holman will serve on the transition team leading the procurement and non-federal funding groups

#### **KEY EXPERIENCE**

#### CU Inc.

2018 – Present Alberta, Canada

#### Manager, Enterprise Sourcing & Legal

- Accountable for Sourcing Specialists performing corporate procurement, enterprise-wide contracting, and supply chain centre of excellence support
- Accountable for Legal Advisors performing commercial drafting, negotiation, interpretation, and dispute resolution

# ATCO Shared Services

2017 – 2018 Alberta, Canada

## **Manager, Strategic Sourcing (Services)**

 Accountable for Sourcing Specialists / Category Managers responsible for implementing cross-functional Busines Unit strategic procurement initiatives using comprehensive analysis of ATCO spend, industry, stakeholder requirement, risk, and global markets

# ATCO Electric Ltd.

2014 – 2017 Alberta, Canada

## Manager, Sourcing & Contracts

 Accountable for Contract Specialists / Category Mangers performing strategic sourcing and contracting activities in addition to Supplier Management

# ATCO Electric, Distribution Div.

2012 – 2014 Alberta, Canada

# Contracts & Governance Advisor (formerly Commercial Contracts Specialist)

 Monitored corporate procurement and contracting practices in order to ensure their adherence to legal, regulatory and corporate policy requirements. Supported management purchasing on interpretation, drafting, negotiation, and articulation of a variety of agreements and legal documentation

## Gyeongju University

2001 – 2012 Gyeongju, S. Korea

#### **Professor**

 Ex-pat lecturer on international comparative law and politics in the Culture and Tourism department for the University's Global Initiative

#### **Dixon Law Office**

2000 – 2001 Alberta, Canada

#### **Barrister & Solicitor**

Lawyer practicing corporate law, commerical transactions and litigation

# Neufeld Law Office

1997 –2000 Alberta, Canada

#### **Barrister & Solicitor**

- Lawyer practicing corporate law, commerical transactions and litigation
- Legal Assistant Program Instructor at local business college

# **DAVID R. HOLMAN**

#### **DESIGNATIONS**

Practising Lawyer, Corporate / Government, Law Society of Alberta

Member, Alberta Bar Association

Member, Supply Chain Managmeent Association of Alberta

#### **EDUCATION**

**Bachelor of Arts,** Political Science, Dalhousie University **Bachelor of Laws,** University of New Brunswick

Lemler will serve on the transition team as the lead for transmission and substation operations

#### **KEY EXPERIENCE**

## Quanta Technology 2019 – Present Raleigh, NC

## **Executive Advisor, Distribution & Asset Operations**

- Distribution and transmission planning, asset management, system maintenance
- System operations, emergency response, and project engineering/ construction

# Pacific Gas & Electric 2012 – 2019

2012 – 2019 San Francisco, CA

#### **Vice-President, Electric Transmission Operations**

- Responsible for PG&E's electric transmission business and operations of a system consisting of over 18,600 miles of electric transmission line (60kV to 500kV) and 960 transmission and distribution substations throughout Northern and Central California
- Providing leadership and strategic direction at the company for transmission strategy, grid operations, engineering, maintenance, and construction activities
- Oversaw the company's emergency response organization, developed a new electric vehicle charging program, developed a new energy storage program, and competitive transmission business

# Pacific Gas & Electric 2011 – 2012

San Francisco, CA

#### Senior Director, Transmission, Substation & Project Services

- Responsible for the maintenance and construction of PG&E's electric distribution system. The system consists of over 140,000 miles of electric distribution line (4kV to 21kV) throughout Northern and Central California
- Successfully implemented several new efficiency initiatives that provided immediate business benefits and over 15% productivity improvement.
   Those initiatives included crew size optimization, planned outage reduction, safety knowledge & skills assessment, pole unit cost reduction, and M&C work coordination process
- Key team member within Electric Operations to address several regulatory issues including Map Gap, Private Lines and CPUC Circuits

# Pacific Gas & Electric 2013 – 2019

San Francisco, CA

#### Senior Director, Transmission, Substation & Project Services

- Responsible for the maintenance, construction and project management of the electric transmission and T&D substatio
- Project services responsibilities include gas and electric T&D capital projects totaling over \$1.3 billion
- Implemented a new project portfolio management system to improve overall efficiency in cost, scope and schedule performance

## **GREGG LEMLER**

# Pacific Gas & Electric

2004 – 2009 San Francisco, CA

#### **Director, Transmission/Substation Maintenance & Construction**

- Responsible for the maintenance and construction of the electric transmission and T&D substations throughout Northern and Central California
- Improved safety performance 70% by improving leadership, accountability and implementing a safety grass roots program
- Developed and implemented several new work methods that improve productivity, customer satisfaction and reduce costs
- Developed a new electric transmission emergency plan, including an organizational structure that improved the overall response to emergencies

# Pacific Gas & Electric

1998 – 2004 San Francisco, CA

#### **Director, T&D Engineering & Planning**

- Led the electric transmission and distribution engineering and technical support functions including asset management, capacity planning, financial plans, design, system protection, standards, equipment procurement and generation interconnections
- Established new T&D infrastructure asset management programs that improved reliability and reduce costs. Evaluation of the asset class, analysis of condition, best in class maintenance practices, optimal design, and a replacement strategy that included priority variables
- Developed a state-of-the-art substation control building design utilizing advanced technology that is becoming the industry standard
- Improved overall quality and reduced life-cycle cost of substation equipment by:
  - Creating strategic alliances with substation equipment suppliers including power transformers, breakers and switches
  - Establishing equipment teams made up of representatives from engineering, maintenance, procurement, quality control and the suppliers

#### **DESIGNATIONS**

Professional Engineer, State of California Lean Six Sigma Green Belt Certification

#### **EDUCATION**

**Bachelor of Science,** Mechanical Engineering, University of Wiscon **Master of Business Administration**, California State University, Fresno **Executive Program**, Dartmouth College Tuck School of Business

Lentz will serve on the transition team leading fleet operations

#### **KEY EXPERIENCE**

#### Quanta Services, Inc.

2016 – Present Houston, TX

#### **Fleet Operations**

- Provide insight and direction for fleet operations across all operating units inclusive of 60,000 plus assets
- Identify methods of cost reduction and improved profitablitly through CapEx forecasting, asset dispostiion, vendor management, utilizaton, and proper tracking of spend
- Management of the internal rental company, and maintaining high utilization of assets

#### **Quanta Services, Inc**

2011 – 2016 Houston, TX

#### **Equipment Business Process Lead**

- Create, develop, and manage equipment business processes to improve current systems through process improvement initiatives
- Restructured equipment programs and processes focusing on bottom line savings through fleet right sizing, modernization of fleet, and optimizing utilization
- Directed implemention efforts for fleet related systems including ERP, telematics, and asset management

#### InfraSource, LLC

2009 – 2011 Houston, TX

#### **Director of Equipment**

- Managed a fleet of 6,000 plus assets across multiple legal entities
- Create, develop, and manage annual CapEx And Lease budget by focussin on proper balance of Capital and Leased assets for maizimizing bottom line savings
- Developed focused intiatives to maximize vendor relationships and standardizing fleet make-up for increased utilization of assets

#### InfraSource, LLC

2008 – 2009 New Berlin, WI

#### **General Manager – Operations & Integration**

- Led integration of four acquisition and mergers into the corporation
- Develop and implement business processes to drive standardization across the company creating efficiencies resulting in bottom line savings

# **Arby Construction,**

Inc.

2004 –2008 New Berlin, WI

#### **Director of Support Services**

- Directed all functions of Operational Support Services for a \$70 MM company inlcuding directing Fleet, Safety, Risk, Human Resouces, and Training Departments
- Managed Fleet of 2,000 assets inlcude acquisition, disposition, capital planning, and maintenance

# Arby Construction, Inc.

1997 – 2000 New Berlin, WI

## **Directional Drill Manager**

 Led over 20 directional drilling crews ranging in size from small service drill crews to 16" pipeline drill installations within a national geography

# **JASON S. LENTZ**

# Arby Construction, Inc.

1997 – 2000 New Berlin, WI

# **Trostel SEG**

1995 – 1997 Lake Geneva, WI

#### **Safety Director**

 Led the implementation of safety management processes for all safety programs and training, managing Workers' Compensation, and developed internal auditing and tracking to ensure top rated safety performance through operational metrics

#### **Safety Director**

- Analyze, develop, and implement plan of action regarding the overall management direction Safety Management
- Focused on injury prevention through education and training as well as direct oversight of all Workers' Compensation Claims
- Redesigned manufacturing workflow layout to improve employee safety while increasing productivity through floor design
- Imporved pachaging concepts to improve ergonomics, minimize outgoing shipping costs, and improve productivity

#### **EDUCATION**

**Bachelor of Science**, Safety Management, University of Wisconsin – Platteville

Love will serve the transition team in customer service by leading the call center

#### **KEY EXPERIENCE**

#### **ATCO Electric**

2017 – Present Alberta, Canada

#### Manager, Customer Relations

- Responsible for multiple customer facing groups including Emergency and Outage Response, WorkForce Dispatch, Customer Contact Centre, Billing Operations, High Load Move Coordination, Underground Locate Dispatch/Review and Customer Information System User Support.
- Solid knowledge of Human Resources policies, Collective Agreements and experience in delivering performance managmenet contracts
- Financial management of all budgets and monthly forecasts
- Involved team in setting goals, ways to achieve them and maintaining company business plan objectives
- Ability to foster a team approach and demonstrate leadership abilities to negotiate or facilitate when necessary

#### **ATCO Electric**

2015 – 2017 Alberta, Canada

#### **District Manager, Fort McMurray Distribution Operations**

- Responsible for day to day operations in the Operations, Maintenance and Construction of Electrical Distribution Facilities in Northeastern Alberta
- Lead teams of up to 300 employees in response to the May 2016 Wildfire as the Incident Command Centre District Lead in Wood Buffalo
- Superior safety record and compliance with ATCO Electric's HS&E Best Practices
- Exceptional organizational and time management skills with a proven ability to manage changing priorities during emergencies
- Demonstrated leadership and relationship building skills while managing both internal and external customer demands and priorities

#### **ATCO Electric**

2014 – 2015 Alberta, Canada

#### **Operations Supervisor**

- Ensured all teams complied with HSE Best Practices, policies, accountabilities and assisted with multiple Distribution incident investigations
- Develop annual financial and resource work plans for all Operational,
   Maintenance and small project construction activities
- Assisted with needs assessment, development and delivery of focused training initiatives to Fort McMurray's ATCO Electric Distribution
   Operations teams. Experience and working knowledge of both ATCO Electric's and the Regional Municipality of Wood Buffalo Emergency Response plans
- Accurately processed, documented and updated multiple projects, monthly reports, and tasks related to the New Distribution Extension projects
- Established aptitude in leading, engaging and motivating Power Line
   Technicians through encouragement, trust and constructive feedback

# **SANDY LOVE**

#### **ATCO Electric**

2011 – 2014 Alberta, Canada

## **Customer Service Supervisor**

- Strive for the highest customer satisfaction standards by committing to excellence, the community and extraordinary customer relations
- Monitor new project construction metrics at the team and individual level to ensure targets are met, otherwise investigate root cause and implement corrective measures when they are not met
- Completed needs assessment, development and delivery of customer focused training initiatives directly related to service area retention to ATCO Electric

#### **ATCO Electric**

2008 – 2011 Alberta, Canada

#### **Customer Service Rep, New Distribution Services**

- Managed Fort McMurray District community investment strategies including district presentations, employee participation, donations and sponsorships in accordance with corporate policies
- Managed project delivery to customers for new Distribution Extentions from application to energization completion
- Developed excellent working knowledge of ATCO Electric Terms and Conditions, rates and policies and often provide support and training to Operations staff
- Idigenous Consultation Lead in completing, gathering and documenting consultation with Indigenous groups around High Level for Transmission and Distribution projects

#### **ATCO Electric**

2003 – 2008 Alberta, Canada

### **Quality Assurance, Customer Care & Billing**

- Performed a wide scope of billing services in the utilities industry using ATCO specific software with experience in multi-service utility billing including electricity, gas and water
- Prepared specialized responses for customer and Utility Commission complaints resulting in effective resolution
- Assisted in development and maintenance of policies, practices and procedures related the Master Service Agreement with third-party billing vendors
- Monitored and audited Distribution Operations processes to ensure compliance with both ATCO and the Alberta Utilities Commission's requirements
- Accurately processed, documented and updated multiple projects, monthly reports, and load settlement discrepancies

**EDUCATION** 

Bachelor of Education, University of Alberta

#### **ROLE**

Madder will serve on the transition team as a leader on the communications team

#### **KEY EXPERIENCE**

#### **ATCO**

2017 – Present Alberta, Canada

#### **Senior Communications Advisor, Corporate Communications**

- Develop strategic communications plans to support business priorities
- Work with CEO and senior leadership to provide counsel and support with speeches, opinion editorials, presentations, media interviews and messaging
- Manage day-to-day media activities including news releases, coverage tracking and reporting, key messages, press events and approvals in adherence with ATCO's Disclosure policy
- Delivered a three-tier centralized media training program that prepared more than 40 leaders across all business units
- Identify and analyze issues impacting ATCO's reputation, brand and the energy industry at large
- Develop and maintain the media relations component of the crisis communications plan and coordinate crisis training scenarios
- Collaborate with internal clients across ATCO to deliver consistent and timely communications for enterprise-wide initiatives
- Co-led the development of the Annual Report and Sustainability Report
- Work closely with Investor Relations team to coordinate and publish quarterly results new releases

Canadian Energy Pipeline Association (CEPA) 2016 –2017 Alberta, Canada

#### Senior Advisor, Media & Issues

- Was acting Communications Director for seven months, delivering on all initiatives and responsibilities including digital communications, member outreach, internal communications, media relations, speeches, presentations and collateral creation. Co-managed budgets, hiring and the overseeing of consultants.
- Delivered a media strategy that increased media requests by 72 per cent and media coverage by 47 per cent from the previous year
- Built and fostered relationships with various stakeholders including journalists, member company contacts, and key government personnel
- Managed media requests and coached senior leaders for media interviews
- Created and implemented an issues management program to identify and prioritize existing and emerging issues within Canada's pipeline industry
- Worked closely with CEO to offer council and provide support with speeches, presentations, thought leadership pieces, podcasts and media interviews
- Created communications content including press releases, backgrounders, key messages, digital media kits, issue sheets, opinion editorials, magazine articles and social media content

- Developed and maintained crisis communication plan
- Co-led in the development of the annual industry performance report and major industry advertising campaign
- Provided leadership, mentoring and coaching to Communications Coordinator

Bantrel Co. 2015 – 2016 Alberta, Canada

#### **Senior Communications Advisor**

- Communications Lead for Alberta; developing internal and external communications strategies for the Calgary and Edmonton office
- Developed news releases, Q&As, feature stories, newsletters, website/intranet content, key messages, social media content and marketing material
- Provided strategic advice to internal clients on audience needs, message development and effective communication tools
- Worked closely with CEO and senior leadership to provide support with speeches, reports, presentations and change management solutions
- Led the planning of community investment projects, townhalls, staff conferences and events

# **TAQA North**

2013 – 2015 Alberta, Canada

#### **Communications Advisor**

- Worked closely with President to provide executive communications on all messaging including staff memos, quarterly business updates, reports, speeches, presentations and key messages
- Delivered communications strategies that supported TAQA's image and reputation, ensuring all communications were consistent with the global brand
- Wrote and produced a quarterly 20-page internal magazine that featured articles on employees, community investment initiatives, and local and global operations
- Coordinated corporate sponsorships including a gold-level partnership with the Calgary Stampede
- Spearheaded a record-breaking United Way Campaign that increased employee engagement at TAQA North by 80 per cent
- Played a significant role in all aspects of the Crisis Communications
   Team
- Assisted with change management communications planning for an organizational restructure
- Managed content and overall direction of TAQA North intranet site
- Delivered a number of corporate videos
- Committee member with the TAQA Women's Network and TAQA Social Club

#### **CBC** Television

2010 – 2013 Alberta, Canada

#### Online Producer/Writer for CBC.ca

- Managed CBC News Calgary website
- Wrote daily online news stories (CP style)
- Led, planned and executed special event coverage for online
- Developed and managed content for social media channels within CBC.ca. (Twitter, Facebook & CBC live feed)

#### Producer of CBC News Calgary at 5:00 and 5:30

- Leveraged communication planning skills to make all editorial decisions on newscast content
- Produced programming through a range of technical and project management skills including scriptwriting, video editing and creating graphics
- Directed and mentored five television news reporters, overseeing their daily assignments while working as a television producer at
- Researched, planned and executed various projects and series within the television department
- Edited and approved reporter scripts and live reporting hits
- Oversaw control room operations for six staff members.

#### Reuters News Agency 2008 – 2010 London, U.K.

#### **Producer**

- Produced and directed daily financial news programs, specializing in energy and commodity markets
- Co-produced a three-day news program at the World Economic Forum in Davos, Switzerland that featured interviews with world leaders and top CEO's
- Field producer at Oil & Money conference in London and Copenhagen Climate Summit
- Managed Reuters Insider website
- Wrote scripts, created graphics and financial charts & edited video
- Researched future shows/pitched story ideas
- Interviewed & produced news stories

# **NBC News.** 2006 – 2008 London, U.K.

#### **International Desk Editor**

- Monitored prime news sources, agency feeds and other broadcast media
- Assigned crews, implemented coverage plans, organized tv shoots
- Booked, researched and pre-interviewed all NBC guests
- Researched/pitched future news stories
- Worked closely with producers and correspondents to provide logistical and editorial support
- Negotiated the licensing of still photos and video

#### CNN International 2007 London, U.K.

#### **Guest Booker / Researcher**

- Booked, researched and pre-interviewed all CNN guests
- Worked with producers and correspondents to provide logistical and editorial support
- Researched/pitched future new stories
- Field produced as needed

#### **EDUCATION**

Public Relations Certificate, Mount Royal University
University of Montana, Bachelor of Arts in Journalism
Lethbridge College, Diploma in Broadcast Journalism
Mastering Executive Communications, private program facilitated by the Humphrey Group

# MILLER, ASHLEY, SPHR, SHRBP, SWP

#### **ROLE**

Miller will serve on the transition team and lead the workforce management and training functions within human resources

#### **KEY EXPERIENCE**

# Quanta Services, Inc.

2016 – Present Houston, TX

#### **Director, Human Resources**

- Responsible for performing HR related duties in a consultative nature for workforce issues that impact the overall core business functions of the organization
- Supports the organization and acts as a subject matter expert for the company policies and procedures, employment law, and fundamentals of all core areas of Human Resources
- Leads the organization in the following: talent acquisition, development and management, employee relations, compliance, global mobility, HR communications and programs, HR data analytics and mergers and acquisitions

#### **Martin Marietta**

2014 – 2015 Dallas, TX

#### Senior Human Resources & Safety Division Manager

- Demonstrated ability to excel in challenging situations such as company reorganizations and restructuring programs (Martin Marietta acquisition of Texas Industries, Inc. in 2014)
- Oversaw the updated design and implementation of key Safety program for the Region, "Guardian Angel", for all responsible employees
- Planned, developed, organized, implemented, directed and evaluated the organization's human resources/safety function and performance for Southwest Division Ready Mix Business Line (approx. 1500 employees)
- Participated in the development and implementation of the corporation's plans, programs, policies and procedures as a strategic partner, particularly from the perspective of the impact on human capital and the company's ability to maintain a competitive advantage in the industry
- Hired, supervised, and managed performance of HR and Safety Staff (15 direct and indirect reports), managed departmental budget; established, implemented, and monitored departmental goals, objectives, and standard operating procedures and achievements
- Directed the administration of recruitment, on-boarding, benefits, employee and career pathing, succession planning and talent management

#### **Texas Industries**

2012 – 2014 Dallas, TX

### Senior Human Resources Manager

- Responsible for overall human resources and support of management team for multiple business unit locations/lines
- Developed and maintained competitive wage matrices
- Built a comprehensive employee recruiting strategy
- Developed and facilitated all new-hire orientations. Conducted employment verficiations and investigations. Facilitated criminal background check process for new hires
- Educated and advised employees on group health plans, voluntary benefits, and retirement plans

# MILLER, ASHLEY, SPHR, SHRBP, SWP

- Developed and enforced company policy and procedures relating to all phases of human resources activity
- Offered fair and equitable compensation by comparing current salaries with market pay
- Shadowed employees to determine an accurate description of the duties and skills required for roles
- Processed unemployment claims and acted as the company representative at unemployment hearings
- Developed new blended (online & classroom) learning curriculum for managers and front line supervisors. Rolled out to over 50 supervisors and managers. Developed and implemented a new hire onboarding program that accelerated time to productivity by 15 days.

#### CEMEX

2006 – 2012 California & Texas

# Human Resources Manager, Human Resources Coordinator, Professional in Development, Benefits Analyst

- Held responsibility for employee and labor relations, labor negotiations, leadership coaching, talent acquisition, talent management, policy creation, design and implementation and HR business partner to business units
- Provided HR generalist support to 50+ field locations, provided support to field HR managers and directors, managed non-commercial company fleet program for West Region, assisted with recruitment and onboarding of talent, tracked regional spending on contract labor and savings on headcount reductions, managed region organizational charts for all business lines and departments, held responsibility for administering company's Educational Tuition reimbursement program, managed health and welfare, pension and dues payments to union trusts
- Participated in a company-wide high talent "Professional in Development Program", worked within various departments (Logistics, Strategic Planning, Technical Services, Operations, Sales, HR, Credit, Finance, etc.) during one year to gain a better understanding of how the company operates
- Worked with third party administrators/vendors and local HR managers/coordinators on a daily basis to resolve participant issues regarding benefits, coordinated health fairs to promote employee wellness, developed and reviewed benefit communication resources such as newsletters, brochures and open enrollment materials, processed all premium payments for insurance carriers on a monthly basis, as well as reconcile the VEBA account, asssisted employees and retirees from all US locations with questions or problems concerning benefits, communicated any benefit changes and/or initiatives to local HR managers/coordinators regularly

# MILLER, ASHLEY, SPHR, SHRBP, SWP

#### **DESIGNATIONS**

Senior Professional in Human Resources (SPHR) Strategic Human Resources Business Partner (sHRBP) Strategic Workforce Planning (SWP)

# **EDUCATION**

Bachelor of Arts, Government, University of Texas at Austin

Montz will lead serve the transition team as the lead for federal funds and federal procurement manual

#### **KEY EXPERIENCE**

#### IEM

2017 – Present Morrisville, NC

#### **Director of State and Local Response and Recovery**

- Leads teams engaged in recovery using federal programs such as PA and HMGP
- Provides leadership and oversight of an IEM recovery team supporting Jacksonville State University following an EF-4 tornado. The team has provided and continues to provide the following services: PA Grants Portal Management, Damage Assessment, Damage Description and Dimensions, Project Worksheet (PW) formulation, Cost estimating and invoice review, Section 406 Mitigation Cost eligibility and reasonableness review, HMGP application preparation for the State's review and potential award
- Leads a hazard mitigation and PA team assisting the Louisiana Governor's Office of Homeland Security to continue recovery from hurricanes Katrina, Rita, Gustav, and Ike and 2016 flooding

#### Deloitte

2016 – 2017 Alberta, Canada

#### **Senior Manager, Advisory**

- Assisted state and local government clients with emergency management disaster response and recovery and guided them through challenges such as: damage assessments; project prioritization; accessing federal assistance; project integration; audit findings; grant and subrecipient monitoring; procuring with federal financial assistance; establishing Joint Field Offices; enhanced reporting; 2 CFR 200 conformance, and FEMA funding management strategies.
- Served the City of Joplin, Missouri and the City of San Marcos, Texas in the use of their Community Development Block Grant – Disaster Recovery (CDBG-DR) grant funding to recover from disasters. Some recovery projects included flood mitigation efforts and school safe rooms to guard against loss of life during tornadoes.

# U.S. Department of Homeland Security

2013 – 2016 Denton, TX

#### **Director, Grants**

 Oversight of federal financial assistance awarded by DHS-FEMA for the purpose of national preparedness and the recovery and mitigation from disasters

## U.S. Government Accountability Office 2010 – 2013

Alberta, Canada

#### Senior Analyst

- Conducted quality assurance and control of audits and reviews of disaster response and recovery programs at FEMA and HUD
- Reviewed annual DHS budget for House and Senate Appropriations Committee relative to federal grant programs and made program recommendations

## **CHRISTIAN MONTZ**

- Made recommendations to DHS and DOJ regarding duplication, fragmentation, and overlap in grant programs
- Made recommendations regarding program efficiency and adequacy of internals controls within GAO's Yellow Book framework
- Returned in 2018 for a short time to assist with disaster recovery analysis

## Office of Justice Programs 2007 – 2010

## **Management Analyst**

 Provided internal oversight through program assessments and reviews for the wide range of justice grant programs at OJP

#### **DESIGNATIONS**

Certified Fraud Examiner
Presidential Management Fellowship
U.S. Housing and Urban Development Fellowship

#### **EDUCATION**

**Master of Public Administration**, University of Tennessee at Chattanooga **Bachelor of Science**, Thomas Edison State University

Orlando will serve on the transition team and lead the real estate functions for the organization

#### **KEY EXPERIENCE**

## Quanta Services, Inc. 2008 – Present Houston, TX

#### **Director, Real Estate & Environmental Services**

- Responsible for leadership and oversight of the organization's real estate portfolio and associated transactions which includes acquisitions, dispositions, long-term leases and ground leases
- Oversees the management of Quanta's real estate portfolio including 3rd party brokerage team; department functions include, but not limited to, preparation and negotiation of contracts, leases, deeds, mortgages and other real property legal documents on behalf of the organization
- Establishes and implements short- and long-range organizational goals, objectives, strategic plans, policies and operating procedures; monitors and evaluates programmatic and operational effectiveness and effects changes required for improvement
- Responsible for the creation of building processes, methodologies, best practices as well as other programs for the organization as needed
- Develops and manages annual budgets for the organization and performs periodic cost and productivity analyses
- Develops and implements cost savings strategies for the organization
- Recommends and participates in the development of organizational policies and procedures; serves on planning and policy-making committees
- Plans, develops and implements strategies for identifying areas of liability and develops and implements risk mitigation strategies for the organization
- Leadership and oversight of the organization's environmental department and environmental management system, ensuring development of CMS and implementation of CMS to operating units is managed efficiently and effectively
- Responsible for Corporate Headquarters facilities management functions
- Manages and oversees all HQ space modifications, space allocations and relocations of employees and workspace assignments

#### **DESIGNATIONS**

Certified Commercial Investment Member CoreNet Global, Corporate Real Estate Leadership & Management CCIM Institute, Commercial and Investment Real Estate Management

#### **EDUCATION**

**Bachelor of Science**, Business Management, University of Phoenix

## **VIC ROMERO**

#### **ROLE**

Romero will serve on the transition team leading System Remediation Plan

#### **KEY EXPERIENCE**

## Quanta Technology

2017 – Present Raleigh, NC

## **Executive Advisor, Distribution & Asset Operations**

- Responsible for all aspects of Advanced Metering Infrastructure proposal development
- Development and deployment of technology and smart grid strategies for a large electric transmission and distribution utility
- Worked with State and Federal regulators, legislators, and community and union leaders to develop and implement regulatory policies

## San Diego Gas & Electric

1977 – 2016 Raleigh, NC

#### **Director of Technology Solutions & Reliability**

- Distribution system reliability including implementing operational and technology enhancements
- Implementing new hardware and software technologies for field personnel and planners,
- Oversight of the Corrective Maintenance Program

## **Director of Asset Management & Smart Grid Projects**

 Implementation of Smart Grid Projects including OMS/DMS, Borrego Springs Microgrid, Substation Condition Based Maintenance, battery storage, and capacity planning of the distribution system

## **Director of Kearny (Substation & Transmission)**

Substation and transmission construction and maintenance

#### Manager of Beach Cities Construction & Operations

 Construction, maintenance, and reliability of the distribution system in the Beach Cities District

#### **Electric Distribution Standards Manager**

 Identify and implement new equipment and standards and oversight of SDG&E's Corrective Maintenance Program

#### **DESIGNATIONS**

Registered Professional Electrical Engineer, California General Engineering Contractors License, SDG&E Electrical and Electronics Engineers (IEEE) Member Power & Energy Society (PES) Member

#### **EDUCATION**

**Bachelor of Science,** Electrical Engineering, California Polytechnic State University

## **ANDREW SCHWAITZBERG**

#### **ROLE**

Schwaitzberg will serve on the transition team on matters related to commercial topics, including Title III, and the overall utility transformation

#### **KEY EXPERIENCE**

## Quanta Services, Inc.

2018 – Present Houston, Texas

## Senior Vice President, First Infrastructure Capital Advisors

- Lead overall deal screening and assessment processes
- Oversee associate / analyst resource allocation across active and prospective deals
- Actively engaged in multiple transactions in the power and telecom infrastructure segments

# McKinsey & Company 2014 – 2018 2007-2010

Houston, Texas Washington, DC

#### **Associate Partner**

- Leader in Global Energy & Materials Practice, focus in Electric Power / Natural Gas
- Co-founder of of the Utility of the Future Service line, focused on utility transformations, investment planning, and technology disruption
   Examples of project leadership:
- 3-year operations diagnostic and cost transformation for a large, integrated municipal utility
- "Utility of the Future" strategy for top 3 US utility
- Development of investment prioritization approach for a distribution utility
- Emissions reduction strategy for a major investor-owned utility

## Quanta Services 2013

Houston, Texas

## **Capital Solutions Group**

Investments and partnerships in electric infrastructure

## Climate Bridge 2010-2012 London, UK

#### **Investment Manager / Strategy Manager**

Clean energy project developer/financier with a portfolio of 150+ projects (3+GW) in China

- Led strategic review of growth opportunities following Series B financing
- Managed global team to assess over 500 MW of investment opportunities in coalmine methane, waste energy, solar, and wind power projects

#### **DESIGNATIONS**

CFA® charterholder

#### **EDUCATION**

**Bachelor of Arts**, Government, University of Texas at Austin **Bachelor of Business Administration**, Finance, University of Texas at Austin

Master of Business Administration, Harvard Business School

Seibert will serve on the transition team as the lead for shared services

#### **KEY EXPERIENCE**

Chicago Energy Associates LLC 2007– Present Chicago, IL

#### **Managing Partner**

- Conducted extensive financial and operational analyses of the publiclytraded electric and gas T&D infrastructure construction industry for a private equity investor
- Led a series of engagements with an international T&D electric power and pipeline construction firm, including:
  - Planning and building of a new unionized electric T&D construction business to serve the Western U.S.
  - Planning and implementing a 9-month restructuring / turnaround of a troubled electric T&D construction business unit
  - Conducting detailed fleet assessments for 3 construction divisions with a combined fleet of over 3000 construction equipment units
  - Integrating the project management functions of a multi-business unit regional electric T&D construction firm that is undergoing a growth-through-acquisition strategy
- Conducted a comprehensive Power Production, Transmission, Distribution, Customer Service, and Corporate/Shared Services investment, cost and performance assessment for a Midwestern U.S. Investor-Owned Electric utility in preparation for an upcoming general rate case application
- Led several strategic initiatives for a rapidly growing large-diameter pipeline construction firm in the Western U.S. and Canada
- Prepared extensive T&D expert testimony as part of a general rate case for a 1M+ customer Mid-Atlantic electric utility
- Was engaged by several private equity (PE) firms in New York and Dubai to support their electricity sector investment initiatives
- Developed a T&D modernization plan (technical, financial, and regulatory strategy) for four operating companies of a multi-state U.S. electric utility holding company
- Led an investment group's initiative to develop a 3200 MW combined cycle gas turbine power plant and desalinization facility in the Kingdom of Saudi Arabia (KSA)
- Conducted an independent review of a Midwestern electric utility's Smart Meter and energy efficiency and conservation (EE&C) plans
- Led the development of long range plan (through 2030) for the electric and steam utility business units of a 3+million customer East Coast combination utility
- Developed a long-range (15+year) T&D Modernization Plan for a mid-Atlantic electric utility that evaluated and sequenced the Company's complete network reconstruction, automation, and Smart Grid investments
- Conducted three comprehensive electric T&D reliability assessments for separate operating companies of a U.S.-based utility holding company
- Supported merger integration efforts to combine two Midwestern electric utilities

## **JAMES SEIBERT**

## UMS Group, Inc. 2001 - 2007

Middle East & Europe

#### **Managing Director**

- Led an Asset Management Transformation initiative in the Power Production business unit for a 4000+MW U.S. fossil fleet
- Led a Strategic Asset Management business transformation for a large Middle Eastern power and water transmission utility

## **Navigant** Consulting 1992 - 2000

## Vice President, Energy Delivery

• Focused on asset management, T&D modernization planning, electric reliability, and merger initiatives

#### **DESIGNATIONS**

Certified Professional Accountant (CPA)

#### **EDUCATION**

Bachelor of Science, Industrial & Systems Engineering, Ohio State University

Master of Business Administration, University of Chicago

Shutt will serve on the transition team as Transition Program Coordinator and will ensure the orderly execution of the technical elements of the project and provide a lead role for the administration of all key project agreements and the P3 arrangements

#### **KEY EXPERIENCE**

## Alberta PowerLine (an ATCO Company)

2013 – Present Alberta, Canada

## Role – DBJV Project Manager West Fort McMurray 500 kV Transmission Project

Location – Northeast Alberta/Fort McMurray to west of Edmonton, Alberta, Canada

- Responsible for leading and directing the Design Build Joint Venture (DBJV) and the direction of the primary EPC and Routing/Regulatory contractors. Engaged from the RFQ through to the energization of the project and transition to operations including equity sale
- Responsible for the DBJV project management and project controls for the \$1.6B project
- Managed the requirements of this P3 project including the project agreement requirements with the Alberta Electric System Operator (AESO), the financing requirements of the senior lenders and the ongoing requirements of the Collateral Trustee
- Managing the Management Services Agreement for the operating phase of the project
- The project was energized 90 days in advance of the Target Energization Date

## ATCO Electric 2011 – 2013 Alberta, Canada

Manager, Transmission Projects, North East Transmission

Development, Location – Northeast Alberta/Fort McMurray and Wabasca

Areas in Canada

The North East Transmission Development Project was a \$600 million project group to increase the transmission system capability around Fort McMurray, Alberta.

- Provided leadership and direction to project teams for the NETD project Responsible to manage, coach and mentor the Project Management, Engineering and Procurement disciplines for the project
- Developed and implemented project processes and management tools as required for the project which included a master contract management system, an inter-project material appropriation system, progress reporting requirements and integration with the Project Management Office
- Developed and managed the resource plan for the project management group to ensure proper resourcing. Ensured that required systems and processes were in place. Managed and lead Safety Accountabilities for the project management group
- Responsible to resolve contractor claims and to ensure effective change management practices were implemented during contract administration

ATCO Electric 1990 – 2011 Alberta, Canada

## **Manager, Transmission Projects**

- Provided leadership and direction as well as managed, coached and mentored the Project Management group
- Coordinated with the Project Management Office to develop and implement project processes and management tools as required. Responsible to ensure effective change management
- Developed and managed the resource plan for the project management group to ensure proper resourcing through recruitment and allocation along with required systems and processes were in place
- Managed and lead Safety Accountabilities for the project management group

#### Fort Chip Remediation, Location- Fort Chipewyan, Alberta

The project remediated contaminated soil at a decommissioned diesel power plant as per the Alberta Environment requirements. The remediation utilized a Thermal Desorption Process at the site.

- Managed community and stakeholder concerns and requirements regarding the Thermal Desorption Process and the project
- Engaged community residents for employment and ensured that the community received regular progress updates
- Managed the primary contractor

#### **Project Manager**

- Project manager on multiple major Transmission (240 kV, 144 kV) facility projects
- Principal for multi-discipline engineering and construction team
- Lead role in planning, monitoring, and controlling projects
- Management of scope, schedule and budget for design, procurement and construction phases
- Technical liaison with transmission administrator and industry stakeholders
- Management of external stakeholders including clients, communities and regulatory agencies

## **TransCanada Keystone Projects**, Location- Hardisty, Alberta to Southern Border, Alberta

The project included three substations and 58 km of 144 kV transmission line to support the TransCanada Keystone pipeline. The project was fast tracked to reduce the schedule by 3 months.

- Responsible for overall project execution through to close-out
- Responsibilities include: safety, quality assurance, quality control, schedule, financial management and document control, close-out, and client liaison

#### **DESIGNATIONS**

Professional Engineer – The Association of Professional Engineers and Geoscientists of Alberta

PMP - Project Management Institute

## CRAIG SHUTT, B.SC., PMP, P. ENG.

#### **EDUCATION**

B.SC., Mechanical Engineering, University of Alberta
Graduate Certificate in Project Management, Alberta School of Business,
University of Alberta
Ivey (ATCO) Strategic Leadership Program, Ivey School of Business
Certificate in Program Management, International Institute of Learning

## JOHN G. STONE, IV CRM, ARM, RF, ERIC, CRIS

#### **ROLE**

Stone will serve on the transition team leading the risk management and insurance procurement

#### **KEY EXPERIENCE**

## Quanta Services, Inc.

2014 – Present Houston, Texas

## International Risk Manager

- Responsible for insurance and risk management in the U.S. and over 20 foreign countries overseeing insurance programs ranging from Latin America to Australia
- Daily interaction with Quanta's foreign operations involved in work with utilities across the globe
- Responsible for liaising with insurance carriers around the world to drive the best results for Quanta and our clients

#### **AirSure Limited**

2011 – 2014 Houston, Texas

#### **Director**

- Insurance brokerage for aviation clients and related companies involved in worldwide commerce
- Led a service team of dedicated professionals focused on delivering top results in a personalized, one-on-one setting

## Apex Global Partners

2009 - 2011 Houston, Texas

## **Vice President & Managing Director**

- Casualty and property placement for clients involved in a myriad of operations
- Client-facing position which required daily interaction with dozens of clients

## Frank Crystal & Co.

2003 – 2009 Houston, Texas

#### **Director**

- Client consultancy and insurance placement in the global marketplace supporting energy and infrastructure companies in the U.S.
- Responsible for two manufacturer insurance programs

#### **Aon Corporation**

1999 - 2003 Houston, Texas

#### **Vice President**

- Assisted large international energy clients with property and casualty placements and internal risk management
- Successfully managed dozens of clients, providing immediate response and alternatives to a dynamic range of companies

#### **DESIGNATIONS**

Certified Risk Manager (CRM)
Associate in Risk Management (ARM)

RIMS Fellow (RF)

Construction Risk Insurance Specialist (CRIS) Energy Risk Insurance Specialist (ERIS)

#### **EDUCATION**

Finance / Risk Management, University of Texas

Tonsi will serve on the transition team as the lead for emergency operations and distribution operations

#### **KEY EXPERIENCE**

## ATCO Electric

2019 – Present Alberta, Canada

## Transmission, Distribution, Customer Service and Emergency Response Specialist

- Project oversite for bid proposal performing key focus on the T&D Operations
- Core project team member reviewing and providing guidance to all aspects of the project
- Lead various team through our due diligence process
- An integrated team that developed a very complexed and competive bid proposal

## ATCO Electric 2018 – Present Alberta, Canada

## Regional Manager Central East Region, Transmission and Distribution Field Services

- Managed 256 employees across various disciplines with T&D field operations across Alberta
- Key functional leader of the T&D Utility Transformation
- Developed and maintained a high-level of customer service and developed strong relationships with a range of customer classes; Residential, Farm, Commercial, Industrial, and Indigenous
- Managed teams to supply outage responsive outage response
- Managed teams to ensure optimal T&D operations and maitenance these systems
- Health, Safety and Environmental performance of the team and system
- Managed and provided human resources across the team
- Responsible for providing financial oversite of the T&D operations and maintenance, and capital spenditures for the region

### **ATCO Electric**

2017 – 2017 Alberta, Canada

### **Temp Assignment – Director of Distribution Operation**

- Provide leadership and direction to ATCO Electric's District Operations which included the 7 District Managers and their 39 services points, and it's 218,000 customer base.
- Overall leadership to ensure outage responsive outage response across Alberta
- Accountable to ensure optimal Distriution operations and maitenance of the system
- Accountable for the Health, Safety and Environmental performance across the distribution system
- Provide human resources leadship and direction across 850 Distribution employees
- Responsible for providing financial oversite of Distribtion operations and maintenance, and capital spenditures

## **TERRY TONSI**

## ATCO Electric 2007 – 2018 Slave Lake, Alberta, Canada

## **District Manager of Slave Lake District**

- Managed distribution operations across various the Slave Lake geographical area. These areas consisted of primarily distribution operation, new customer extensions and customer service
- Developed and maintained a high-level of customer service and strong relationships with a range of customers; Residential, Farm, Commercial, Industrial, municipal government and Indigenous customers
- Lead operational teams to supply outage response
- Managed teams to ensure optimal distribution operations and maintenance across the area
- Accountable for the Health, Safety and Environmental performance of the team and system
- Managed and provided human resources support across the team
- Responsible for financial targets across operations and maintenance, and capital spenditures

#### **ATCO Electric**

2000 – 2007 Slave Lake, Alberta, Canada

#### **Senior Serviceman**

- Lead the Slave Lake Service Point Team, including safety performance
- Provide "Operator In Charge" for all distribution operation within the service point
- Coach and mentor the operations team
- Provide leadership to ensure safe, reliable and operation of the distribution system
- Maintain and construct various T&D facilities
- Provide customer service across the service point which includes the following, collections, customer complaints, new extentions, meter reads, etc.

## Alberta Power Ltd/ATCO Electric

1988 – 2000 Alberta, Canada

## **Apprentice and Journeyman Lineman**

- Construct and operate, distribution and transmission system.
- Active member of various safety teams

## RS Line Construction

1986 – 1988 Alberta, Canada

#### **Apprentice Line**

Construct distribution transmission system

## Lesser Slave Regional Fire Service

1993 – 2018 Slave Lake, Alberta, Canada

## **Captain and Firefighter**

- 25 year as a volunteer firefighter; structural and wildland
- 15 years as a Captain, Sr. Leader of on the department
- Various fire service training which includes ICS 100, 200 & 300 and all required structual/wildland firefighter and large equipment legislated training

#### **EDUCATION**

**Journeyman Powerline and Red Seal**, Northern Institute of Technology, NAIT, (1990)

## **CHARLES WALKER**

#### **ROLE**

Walker will serve the transition team and lead the PPOA for the generation function

#### **KEY EXPERIENCE**

Energy Operations Group 2010 – Present Chicago, IL

#### **Principal**

- Extensive experience in distressed situations, commercial and financial restructuring and M&A integration, new business development, balance sheet review, budget redesign, risk management, financial control and process reengineering, and infrastructure & manufacturing process implementation
- Leads the overall business which was founded to operate, maintain and provide asset management services to acquired power generation assets
- Originated commercial activities along with the overall profitability of Energy Operations Group, LLC and all acquired companies
- Participated as a member of the board of all the companies acquired and served as lead business executive in all restructuring, divestiture, refinancing and dispute resolution
- Led the acquisition of seven independent power plants that were either over-levered, involved in litigation, shuttered or insolvent

Carson Cogeneration Company 2001 – 2010 Alberta, Canada

#### **Principal**

- Led a consulting firm that provided energy and biofuel related investment strategy, project development, benchmarking, biofuel technology and acquisition assessment, due diligence support and strategic advice on 16 projects in the areas of renewable energy, development and financial models, wind development and construction, dairy and ethanol, wind O&M, renewable acquisitions, financial advisement, wind down assistance, and distressed debt purchase assessment
- Responsible for business development and lead the acquisition of two power generation assets
- Responsible for the origination and development of a 3300 MW power purchase agreement with Williams Energy
- Responsible for joint development of multiple power generation assets with an emphasis on selling Shell equity natural gas and completed Shell's first power generation aset acquisition in the United States

#### **EDUCATION**

Master of Business Administration, Loyola University Electrical Engineering Minor, Northern Illinois University

West will serve on the transition team leading materials management

#### **KEY EXPERIENCE**

#### **ATCO**

2017– Present Alberta, Canada

## **Director Supply Chain**

- Leads and Directs Supply Chain with areas of focus from the end to end supply chain, Sourcing, Inventory Management, Procurement and Warehousing Support, Logistics, and Oracle Optimization
- Leading transition in a shared services model, meeting the needs of the organization, delivering value while focusing on process optimization

#### Mckesson

2016 – 2017 Alberta, Canada

## **Senior Director Operations**

- Leads and Directs Distribution Operations, Logistics and Customer Service, with an annual volume of ~\$3.5 B represented by 60 million lines/year across 6 distribution centers (~ 1 Million Sq Ft), 4 Provinces, 2 Territories
- Leading distribution network optimization anchored by Data rationalization driving ROI, Optimization of Transportation costs and Sales Service Offering
- Delivering Solution Readiness, Business Resource, Stakeholder and Change Management, Communications and Training Delivery

## Johnson & Johnson

2013 – 2017 Ontario, Canada

## **Director, National Distribution Operations**

Leads and Directs Distribution Operations with an annual volume of ~
 \$3.2B, facilitating relations for 3rd Party Logistics agreements throughout Canada; directs Distribution, Budget oversight, 3PL relationship management, Stakeholder management, and customer logistics

#### **Arclin/Coveright**

2008 – 2013 Ontario, Canada

## **Vice President Supply Chain & Quality Assurance**

- Leads and Directs Total Supply Chain for Manufacturing: inventory management, sourcing, purchasing, planning, plant scheduling, customer service, quality assurance & warehouse/logistics activities
- Creates synergy between departments, enhancing company communication, improving overall customer experience and employee engagement

#### **Derma Sciences**

2005 – 2008 Ontario, Canada

#### **Director Materials & Logistics**

 Leads and Directs global material management, purchasing, planning, scheduling, customer service & logistics activities for manufacturing and distribution

#### **Anixter**

1998 – 2005 Ontario, Canada *HK*, *China* 

#### **Inventory Manager**

- Leads and Directs inventory management and control across Canada
   Operations Manager, HK
- Leads and Directs regional operations, leads negotiation and implementation of 3rd Party Logistics warehousing solution (Non-Union)

## **Karen West**

## **EDUCATION**

Bachelor of Commerce, Major Economics, Concordia University
Ivey Executive Program, Ivey Business School
Finance for Non-Financial Professionals Program, Ivey Business School

#### **KEY EXPERIENCE**

## ATCO Natural Gas Division

Aug 2019 – Present Alberta, Canada

## Manager Key Accounts (Industrial and Builders & Developers)

- Accountable for the staff responsible to enable the delivery of premier energy solutions and premium earnings by improving the customer experience at ATCO Natural Gas Transmission and Distribution through:
  - Providing strategic direction of and monitoring customer interfaces
  - Customer Education and supporting the delivery of new products and services
  - Implementation of process optimization & Support of Technology to improve the Customer experience
  - Support the development of our workforce into a more Customer Centric perspective
  - o Promoting growth of gas products and services
  - Engage, measure and listen to our customers to understand their needs, tastes & expectations to improve the customer experience.

## ATCO Pipelines & Liquids GBU

Aug 2018 – Aug 2019 Alberta, Canada

#### **Manager Key Accounts-Industrial**

 Same as above just for the Transmission high pressure Industrial market customers

## **ATCO Distribution**

Feb 2017 – Aug 2018 Alberta, Canada

#### Senior Manager Customer Care & Billing and Emergency Dispatch

 Accountable for the staff responsible for the Call Centre, Back office billing and both North & South Dispatch services for ATCO distribution.

## THEO BANICK

## **ATCO Pipelines**

April 2001 – Feb 2017 Alberta, Canada

## Senior Manager Pipeline System Control & various other progression roles

- Accountable for the staff responsible to ensure the safe, efficient, timely, and cost effective operation of ATCO Pipelines' pipeline network and related facilities. Manage and direct the operation of ATCO Pipelines gas transmission network so as to meet all contractual commitments with ATCO Pipelines' transportation customers, interconnecting pipeline operators or other agreement holders are met. The Senior Manager is accountable for the staff responsible for the Monitor & Control, maintenance, development and support of ATCO Pipelines SCADA control systems (SCADA Support & Engineering), System Optimization Engineering and Customer & Pipeline System Support teams.
- Other roles within Pipeline System Control during the time period
  - Manager Pipeline System Control, Group Leader Pipeline System Control, Pipeline System Representative, Team Leader Pipeline System Control, Pipeline System Control Operator.

## ATCO Gas / Northwestern Utilities LTD

July 1995 – April 2001 (Seasonal) Alberta, Canada

#### **Rural & Main Construction Laborer**

 Employed as a Rural & Main Construction seasonal laborer. Repaired and constructed underground gas lines.

#### **EDUCATION**

## **THEO BANICK**

**Bachelor of Science**, Major in Cognitive Science & Minor in Chemistry, University of Alberta, Edmonton (2000)

Strategic Leadership Development, Ivey Business School (2015)

#### Other ATCO Internal training / external Certificates attained:

- -Aboriginal Relations Leadership Certificate, University of Calgary
- -Aboriginal Awareness Training Certificate, University of Calgary
- -ATCO Pipelines Leadership for Results Certificate
- -Foundations of Leadership Certificate (Communication Styles, Emotional Intelligence, Art of Listening, Motivation Change Management, Performance management, Conflict Resolution, Respectful workplace
- -Disability Management for Leaders (OSI STD/LTD informational session Certificates
- -ATCO Customer service training; Bridging Service to Sales / Navigating Challenging situations / Building Customer Loyalty
- -Anti-Bribery & Anti-Corruption training
- -Media Relations and interviewing training
- -Labour Realations training
- -Incident Command Training
- -Project Management overview training
- -Senior Official on Call training
- -Pipeline System Control Operator Exam Certificate
- -In-house Compressor training
- -OASys DNA 7.5 Operational & Control (Telvent) training
- -Fire & Fire ExtinguisherSafety
- -Fire Extinguisher Safety
- -Emergency First Aid Certification
- -Emergency Response training
- -Emergency Response Pipeline System Control training
- -Vehicle Safe Operating Practices
- -Vehicle Full Driver Training 2 and Evaluation (CAE)

Director of Engineering - MidWest

#### **KEY EXPERIENCE**

## Quanta Utility Engineering Services

2007 – Present Missouri, USA

## Blaylock Engineering

L.L.C.

2005 – 2007 Missouri, USA

## Wideman and Associates, Inc. 1998 - 2005 Missouri, USA

## St. Louis Bridge Construction Co.

1995 - 1998 Missouri, USA

## **Director of Engineering, Midwest**

- Oversee the Distribution Engineering, Make Ready Estimating and Pole Load Analysis programs.
- Manage up to 40+ employees, building and working with each team to ensure project success
- Set budgets and schedules, meet with clients, pursue and secure additional work.

## **Owner and Principal Engineer**

- Provided complete structural design solutions for industrial, commercial, and residential projects.
- Representative projects include design of structural repairs at the Solutia plant, design of residential shear walls, crane runways, monorail systems for manufacturing plants, renovation of commercial buildings, and consulting for Alberici Constructors at the Chrysler plant.

## **Senior Design Engineer**

 Served as a project and design engineer for industrial and commercial projects including building frame design, elevated platforms and walkways, storm water detention, retaining walls, foundations, and site surveying.

## **Project Engineer**

Served as a construction project engineer for various bridge projects and lock and dam projects ranging from \$250K to \$20M in construction value. Projects included the rehabilitation of the Cole Street/Carr Street overpass in downtown St. Louis, and the re-decking and repair of the bridge over the Missouri river at Washington, MO.

#### **DESIGNATIONS**

#### **Professional Engineer**

Missouri, Illinois, Kansas, Georgia, North Carolina, Iowa, Kentucky (all current)

#### **EDUCATION**

**Bachelor of Science, Civil Engineering**, Missouri University of Science and Technology (1995)

## **JEFF BREGMAN**

#### ROLE

Planning Coordinator/Associate Engineer

#### **KEY EXPERIENCE**

## Quanta Utility Engineering Services

2012 – Present Missouri, USA

## Planning Coordinator / Associate Engineer

- Coordinated projects for several design technicians and AutoCAD technicians.
- Tracked billing and project status using both Excel and Google Sheets
- Lead designer for projects requiring a variety of skill sets
- AutoCAD Drafting
- PLS-CADD Transmission Line Design
- Microsoft Office expertise
- SolidWORKS Drafting

## PAR Electrical Contractors, Inc.

2007 – 2012 Missouri, USA

## **Senior Designer**

- Heavy Underground (Duct Bank) design
- URD Subdivision electric and gas design
- Distribution design

#### **DESIGNATIONS**

#### **EDUCATION**

**BS**, Electrical & Computer Engineering, University of Missouri-Kansas City (2016)

BS, Architectural Engineering, Illinois Institute of Technology

AS, General Studies, Kansas City Kansas Community College (2008)

## **CHRISTIAN CANON**

#### ROLE

Engineer

#### **KEY EXPERIENCE**

## Quanta Utility Engineering Services

2014 – Present Missouri, USA

#### **Engineer**

- Field Inspection and condition assessment
- Coordinate projects for design technicians and AutoCAD technicians.
- Developed standards for clients and for designers.
- Created construction documents for electrical crews, gas crews and utilities.
- Substation Design and Studies
- QA/QC on designs for PE to review
- Pole Load Analysis

#### **General Motors**

2013 – 2014 Missouri, USA

#### Intern

- Performed quality control testing on new vehicles
- Evaluated results of quality control and provided information to superiors

#### **DESIGNATIONS**

#### **Engineer in Training (EIT)**

Missouri Board for Architects, Professional Engineers, Professional Land Surveyors, and Professional Land Architects El-2015022895

#### **EDUCATION**

BS, Structural Engineering, Missouri University of Science & Technology (2015)

## **BRYAN CAREY**

#### ROLE

Director of Utility Inspection Services

#### **KEY EXPERIENCE**

## **Quanta Utility** Engineering Services, Inc. 2018 – Present

## Missouri, USA **Alamon Utility**

## 2014 - 2018 Montana, USA

Services

## Osmose 2009 - 2014Georgia, USA

## **Director of Utility Inspection Services**

- Business Development
- Project Management
- Regulatory Compliance
- Develop and Implement New Inspection Programs

## **Operations Superintendent**

- Development of Safety and Training Program
- Business Development
- Expand into Traditional Inspection Methods

#### Forman/ Foreman Trainer

- Management and Training Traditional Inspection Methods
- QA/QC Control Program
- DOT Compliance
- Foreman Trainer

#### **DESIGNATIONS**

Gunnery Sergeant, United States Marine Corps, 1995-2008

#### **EDUCATION**

Vice President

#### **KEY EXPERIENCE**

## Quanta Utility Engineering Services, Inc. 2016 – Present Missouri, USA Quanta Technology 2014 – 2016 North Carolina, USA Duke Energy 1999 – 2014 North Carolina,

USA

#### **Vice President**

- Executive oversight of engineering projects
- Business Development in Pacific NW and Southeast US markets
- Engineering consulting for construction and operations projects

#### **Senior Advisor – Distribution Operations and Asset Management**

- Transmission, Distribution, and Substation Operations consulting
- Asset Management Planning and System Valuation Assessments
- Training development and mentoring for junior engineering staff

#### Lead Engineer / Senior Project Manager

- Construction Resource Management and work plan development
- Reliability Program Development and metric development
- Project Management responsibilities for major infrastructure projects
- Distribution Asset Management
- Distribution Control Center Engineer
- Grid and Outage Management

#### **DESIGNATIONS**

#### **Professional Engineer**

North Carolina (30875), South Carolina (26274), Virginia (47455), Washington (54533), Arkansas (18210), Alabama (37268), Texas (127948). **Project Management Professional (PMP)** 

#### **EDUCATION**

Master of Science, Electrical Engineering, NC State University (2012)

Bachelor of Science, Electrical Engineering, NC State University (2000)

## **SCOTT DIEFENBACH**, PMP

#### ROLE

**Project Manager** 

#### **KEY EXPERIENCE**

Quanta Utility Engineering Services, Inc. 2006 – Present Missouri, USA

#### **Project Manager**

- In depth knowledge of NESC.
- Pole Insepction / Loading Analysis
- Initial fielding, OCALC and SPIDA loading software, reporting
- Joint Use Application and Permitting Pole Loading, identification of existing NESC and Utility spec violations, remedies of identified violations, coordination between existing attaché' and the new attaché to execute the remedies and the new attachments.
- New employee hiring.
- Creation of training material for new projects and executing said training.
- Project Start Up
- Storm Restoration Lead Assessment

**DESIGNATIONS** 

Project Management Professional - PMP

**EDUCATION** 

## TIMOTHY DOUGAN, PMP

#### ROLE

Vice-President

#### **KEY EXPERIENCE**

## Quanta Utility Engineering Services

2011 – Present Missouri, USA

#### **Vice-President**

- Spearhead and direct Program operations across US
- Develop and implement Project Controls
- Participate & Execute Strategic Planning for Program expansion
- Formerly Director of Program Management (QUES & Utilimap Corporation Major Projects)

## Black & McDonald Limited

1997 – 2011 Missouri, USA

## Various Positions (Progressive, merit-based promotions)

- Project Lead (US Operations) for ERP Migration (JDE) Define deliverables, communication plan, change-management strategy, team cohesion protocol and rigorous testing of replacement of legacy workmanagement, HR, and accounting systems for US Region (Served at the personal request of the President of Black & McDonald)
- Midwest Division Manager of Utility Services Provide leadership and senior management-level ownership of business unit with staff consisting of 75+ trade, Professional Services and administrative staff team members.
- Street Lighting Maintenance Manager Develop and charter the maintenance product line and establish SOP & operational manual (Street Lighting System Improvement Project featured as a Best Practices presentation to International Street and Area Lighting Conference in San Diego in 2005 as well as IES LD+A Magazine)

#### **DESIGNATIONS**

Project Management Professional (PMP)

#### **EDUCATION**

BS, Economics, Kansas State University
MA, Economics, University of Missouri, Kansas City (in progress)
Certificate in Labor Studies, University of Missouri, Kansas City (in progress)

Director of Planning and Engineering, Midwest

#### **KEY EXPERIENCE**

## Quanta Utility Engineering Services

2006 – Present Missouri, USA Capital Electric 2015 – Present Alberta, Canada

## **Director of Design and Engineering, Midwest**

- Oversee design and engineering group projects and operations
- Staff management
- Project implementation, execution

## Designer

- Sole joint user designer for Everest KC build project
- KC Live District Heavy Underground Design build
- Corbin Park, Zona Rosa, Tulleries Large Shopping district OH to UG Conversions

#### **DESIGNATIONS**

PMP - Project Management Institute, (#1487595) Microstation Certification – CADD Concepts

#### **EDUCATION**

**PMP Certification - Project Management,** Project Management Institute (2012) **Pre-Engineering/CAD - Engineering,** Tad Technical Institute (1997)

#### President

#### **KEY EXPERIENCE**

Quanta Utility
Engineering
Services, Inc.
2016 – Present
Missouri, USA
PAR Electrical
Contractors, Inc.
2013 – 2016
California, USA

#### President

 Integration and continued growth of four (4) highly successful distribution, transmission, substation, generation engineering and professional services business units within the Quanta Services portfolio.

## **Director – Western Region**

- Established new strategic operational direction
- Built strong leadership teams
- Increased market share in major Western accounts
- Overhauled and improved operating processes and systems
- Identified and resolved major issues that could have significant political, technical or controversial impacts on customer departments, the company or outside contract forces or agencies
- Oversaw design, marketing, promotion, delivery and quality of programs, products and services
- Identified and resolved major issues that could have significant political, technical or controversial impacts on customer departments, the company or outside contract forces or agencies
- Maintained open and effective lines of communication between Customers and PAR to ensure that all issues and concerns are addressed and to maintained product/project fluidity and continuity
- Conducted contract proposals and cost analysis

PAR Electrical Contractors, Inc. 2006 – 2013 California, USA

#### **Division Manager**

- Built distinguished, multi-state engineering group of 150+ personnel servicing major utilities within Western United States
- Turned around underperforming operating unit by streamlining business operations, re-establishing and reinforcing customer relationships
- Created new customer alliances
- Increased market share in highly competitive business sector
- Restored operational profitability
- Ensured that all operations are optimized, including material and manpower allocation, personnel productivity and safe work practices
- Estabish Utility Line Management Services, Inc. (Director)

**DESIGNATIONS** 

**EDUCATION** 

B.S. Business Management, California Lutheran University, 1998

#### **Professional Engineer**

#### **KEY EXPERIENCE**

## Quanta Utility Engineering Services

2005 – Present Washington, USA

## Potelco, Inc.

2001 – 2005 Washington, USA

#### Wilson

Construction, Inc. 1999 – 2001 Washington, USA CH2M Hill

1989 – 1999 Washington, USA

## **Senior Electrical Engineer**

- Responsible for the design and construction management of mediumvoltage electrical distribution system projects; both utility and privatelyowned systems.
- Project management and field engineering of construction projects.
- Staff supervision, training, and mentoring.

## **Manager of System Engineering**

 Responsible for the supervision and mentoring of project managers, engineers, and technicians.

#### **Electrical Engineer**

 Electrical engineer for the design and construction coordination of 15-kV electrical distribution projects; both utility and privately-owned systems.

#### **Project Engineer**

- Provided services during construction on six major contracts for secondary treatment expansion of an existing 440 million-gallon-per-day wastewater treatment plant.
- Substation designs and additions including station arrangement, equipment selection and layout, ground mat, control schematics, switchboard arrangement and layout, and point-to-point wiring
- Overhead and underground distribution line design up to 25-kV.

#### **DESIGNATIONS**

#### **Professional Engineer**

Washington (30237), Oregon (46006PE), Hawaii (11636), Alaska (12612), Utah (7859568-2202), Colorado (44796), California (E19578), Nevada (024486)

Lieutenant-Colonel, US Army (Retired), 21 Years.

#### **EDUCATION**

B.S. Electrical Engineering, Oregon State University (1987)

#### **Professional Engineer**

#### **KEY EXPERIENCE**

## Quanta Utility Engineering Services 2007 – Present

Missouri, USA

#### **Professional Engineer**

- Provide project management and engineering expertise for underground cable replacement designs and installations. Provide engineering expertise, review and approval of structural loading analysis performed on wood pole distribution and sub-transmission lines as well as for cell tower wood pole antenna structures. Provide engineering review and approval on construction proposals and on as-built drawings.
- Provided engineering and design expertise for the design and construction of medium voltage residential and commercial underground distribution systems.

## Manpower Professional Inc. 2007 Missouri, USA AmerenUE Corporation 1985 - 1999 Missouri, USA

## **Project Engineer / Coordinator**

Provided engineering and program services for AmerenUE's PowerON
 Program under the direction of the Ameren Manager.

## **Supervising Engineer – Green Hills, Wentzville and Berkeley Districts**

• Managed the engineering departments with responsibility for the supervision, planning, engineering and design, scheduling and budgeting of electric utility medium voltage overhead and underground power line construction and maintenance projects.

## **DESIGNATIONS**

#### **Licensed Professional Engineer**

Missouri #24222, Georgia #PE039626, Kansas #PE24291, Texas #121195, Utah #9700839-2202, Indiana #PE11600141, Alabama #37230-E, South Carolina #35178, Nevada #25357, North Carolina #46173, Nebraska #E-17003, Wisconsin #46198-6.

**NCEES Record** 

#### **EDUCATION**

**Bachelor of Science, Electrical Engineering,** Missouri University of Science and Technology (1985)

#### **Program Manager**

#### **KEY EXPERIENCE**

## Quanta Utility Engineering Services

2015 – Present Missouri, USA

## **Program Manager**

- Lead EPC and Design Build Opportunities
- Electric Power (T&D) and Telecom (Google Fiber)
- Subject Matter Expert NESC Applications
- Lead Proposals, Proposal Reporting

## Black & McDonald Limited

1988 – 2015 Canada, United States

## **Various (Merit Based Promotions)**

- Business Development Western Canada Utilities
- Division Manager Western Canada Utilities
- Canadian Utility Operational Start-Up Vancouver, Edmonton
  - o OH & UG Transmission, Substation(s) to 500kV
  - o OH & UG Distribution, Substation(s), Civil Infrastructure
  - o Light Rail, Roadway & Airfield Infrastructure
  - o Industrial (Refinery, Asphalt Plant) /// Commerical (Hospital)
- Division Manager Utah
- US Utility Operational Start-Up Kansas City, Salt Lake City, Detroit
  - Outdoor Lighting
  - o OH & UG Distribution, Civil Infrastructure
  - Roadway & Airfield Infrastructure
- Project Manager Southern Ontario Region
- Power Lineman Apprenticeship Ontario Hydro C&D, MEA (Ontario)
- Management Internship Utilities (Ontario)

#### **DESIGNATIONS**

**Gold Seal Certification** – Project Manager (Canadian Construction Association) **Power Lineman Journeyman** – Province of Ontario, Ontario Power

Authorities, IBEW.

General Engineeering Contractor (Qualifier) – Utah, Arizona, Nevada

#### **EDUCATION**

**Practical Loss Leadership**, Det Norske Veritas (2014) **Bachelor of Arts Program**, Carleton University (1987-1990) (Not Confirmed)

Transmission Design Manager

#### **KEY EXPERIENCE**

## Quanta Utility Engineering Services, Inc.

2014 – Present California, USA

## **Transmission Design Manager**

- Provide training and direction to Transmission Estimating, Design, Quality Control and Administrative staff
- Oversee the Transmission Deteriorated Pole Program and Design Build Pilot Program, providing design support to Southern California Edison's Transmission Organization
- Works effectively with the internal team to meet program deliverables
- Provide technical support to SCE and PAR design personnel
- Interface with customer design, peer level, and management teams to regularly provide direction, status updates and issue resolution
- Proactively identify and implement process improvements to help realize increased deliverable gains

## Southern California Edison 1989 – 2014 California, USA

## Various (Progressive responsibility and leadership)

- Management of multi-million dollar Transmission construction/relocation/underground conversion projects from start to finish, providing ongoing support/direction/updates to all levels of internal and external corporate management.
- Work closely with project leaders and stakeholders
- Provide guidance and technical support to foremen and field crews.
- Provide lay engineering services/interconnection study input and other technical assistance to E&TS engineering for load growth/system planning
- Enforce strict standards in the development of project specific designs.
   Adhere to SCE, CPUC (G.O.95, 128 and 131D) regulatory requirements.
- Represent Transmission in the ongoing enhancement of AUD/DM design tools as the main Subject Matter Expert.

#### **DESIGNATIONS**

#### **EDUCATION**

Bachelor of Science, Accounting (Emphasis in Quantitative Financial Analysis), University of La Verne (1989)
MBA, University of La Verne (Ongoing)

#### **Professional Engineer**

#### **KEY EXPERIENCE**

## Quanta Utility Engineering Services

2017 – Present Missouri, USA

#### **Professional Engineer**

- Electric Distribution engineering and design.
- Gas Distribution engineering and design.
- Telecommunication engineering and design.
- Coordination of projects for several designers and drafters.
- Manage and track project status's to coordinate with monthly billing.
- Quality Control for electrical and gas designs.
- AutoCAD Design.
- Trainer for CPS GIS/Work Manager systems.

## Quanta Utility Engineering Services

2013 - 2017 Missouri, USA

## **Associate Engineer**

- Electric Distribution engineering and design.
- Gas Distribution engineering and design.
- Telecommunication engineering and design.
- Coordination of projects for several designers and drafters.
- Manage and track project status's to coordinate with monthly billing.
- Quality Control for electrical and gas designs.
- AutoCAD Design.
- Trainer for CPS GIS/Work Manager systems.

#### **DESIGNATIONS**

#### **Professional Engineer**

Kansas (PE25987), Texas (130113), Colorado (PE.0055008), Florida (84994), Iowa (P24632), Nebraska (E-17010), North Dakota (PE.27846), South Dakota (14150), Ohio (PE. 84167), Oklahoma (30225), Wyoming (PE17003)

#### **EDUCATION**

**BS**, Mechanical Engineering, University of Kansas (2013)

Minor, Physics, University of Kansas (2013)

CPS Energy Trainer, CPS GIS Design and Work Manager systems (2015)

## SHASHIDHAR REDDY PILLI

#### ROLE

**Electrical Engineer** 

#### **KEY EXPERIENCE**

## Quanta Utility Engineering Services, Inc. 2016 – Present

Missouri, USA

#### **Electrical Engineer**

- Engineering, construction services for comprehensive infrastructure needs in the electric and power industries.
- Inspect the utility poles in all stages -Engineering Review, Communication Review, Notice to proceed and Post Fiber Inspection and using structural analysis software for utility poles.
- Quality Control for Make Ready work of Google Fiber.
- Training other employees on basic topics of electrical and computer fields.

#### **Various**

2012 – 2016 Hyderabad, India

#### **Electrical Engineering Intern**

- Provided support for automation of distribution, switching, converter, and receiving stations.
- Visited substations to verify equipment layout & wiring and updated drawings with as-found conditions.
- Created drawing overlays using Micro station for drafting department.
- Performed preventive maintenance on HV, MV, and LV switchgear and protection systems.
- Diagnosed and resolved MV and HV circuit problems. Installed and wired commercial and industrial electrical equipment.
- Commissioned and tested protective relays.
- Inspected LV/HV substations including ground resistance testing and battery load bank testing.

#### **DESIGNATIONS**

#### **EDUCATION**

**Master of Science, Electrical Engineering,** Northwestern Polytechnic University (2016)

Bachelor of Technology, Electrical and Electronics Engineering, Jawaharlal Nehru Technological University (2014)

**Project Manager** 

#### **KEY EXPERIENCE**

Quanta Utility Engineering Services, Inc. 2013 – Present Missouri, USA

#### **Project Manager**

- Google Fiber
- Lead weekly meetings to discuss project development, complications and solutions
- Forecast quarterly budget and schedule goals
- Develop and institute innovative processes within project teams
- Permit approved utility poles to KCPL, ATT & Westar
- Serve as main point of contact for Google and KCPL project managers
- Interfaced resources to find resolutions for developmental obstacles
- Project schedule

**DESIGNATIONS** 

Project Management Professional - PMP

**EDUCATION** 

B.S. Business Administration, Marketing, University of Missouri (2012)

## **KEN PUENTEZ**

#### ROLE

Survey Manager

#### **KEY EXPERIENCE**

## Quanta Utility Engineering Services, Inc. 2015 – Present California, USA

#### **Survey Manager**

- Provide training and direction to Survey Cad technicians and Survey Field operations, Design, Quality Control and Project timeline structures to meet project time schedules.
- New market strategy Lead for client development.
- Works effectively with the internal team to meet project deliverables
- Provide technical instruction to department leads for implementation of new practices and standards.
- Interface with customer design, peer level, and management teams to regularly provide direction, status updates and issue resolution
- Proactively identify and implement process improvements to help realize increased deliverable gains Key responsibilities

## West-Land Group Inc.

2009 – 2015 California, USA

## **Project Surveyor**

 Coordinate with key staff to ensure deliverable quality and scope completion for many utility and public works projects. Responsible for creating best practices manual and standards for field and office integration of project data and procedures for field to finish work standards.

#### **DESIGNATIONS**

Land Surveyor In Training Certificate
California State Board for Professional Engineers, Land Surveyors and
Geologist.

#### **EDUCATION**

#### Santiago Canyon College

Associates Degree Surveying and Mapping Sciences (2011)

#### Quality and Process Engineer

#### **KEY EXPERIENCE**

## Quanta Utility Engineering Services

2016 – Present Georgia, USA

## **Quality and Process Engineer**

- Developed the corporate Quality Management System (for Construction and for Engineering)
- Determines and evaluates process defects with existing work systems
- Analyzes construction operations to generate the corporate quality program manuals
- Modifies quality control and assurance programs in implementing regulatory processes

#### **Various**

2002 – 2016 Georgia, USA

## **Operations and Logistics Engineering**

- Coordinated and scheduled daily production activities
- Operated computer and electronics in systems setups and repairs
- Managed and executed standard operating procedures for manufacturing processes
- Conducted quality control objectives to resolve production problems and maximize product quality

## Northrop Grumman

2001 - 2002 California, USA

## **Systems Coordination Engineer**

- Coordinated engineering developments in electrical and mechanical updates of launcher designs
- Supported data integration and systems coordination of manufacturing operations
- Coordinated and hosted design reviews and production in new project launches

## Finepitch Technology 2000 -2001

California. USA

#### **Project and Process Engineer**

- Designed and coordinated manufacturing process and established operation procedures
- Coordinated with team leader, IT department, and production to assure quality and timely operations
- Supported quality control and quality assurance to maintain a wellcoordinated productions cycle

#### **DESIGNATIONS**

#### **EDUCATION**

Bachelor Industrial Engineering, Georgia Institute of Technology (1999)

#### **Division Manager**

#### **KEY EXPERIENCE**

# Quanta Utility Engineering Services

2019 – Present Florida, USA

## **Division Manager**

- Market engineering services to existing clients or solid prospects within the assigned geographic division.
- Drive operational excellence across the organization that will result in improved business operations, increased technical competence, and superior client satisfaction.
- Lead continuous improvement efforts for project teams and clients.

## **Pike Engineering**

2014 – 2018 Florida, USA

# **Director of Engineering & Surveying**

 Responsible to develop, mentor, and lead a team of 70 Electric Utility Designers, GIS Technicians Project Administrators and Survey Personnel over multiple Utility Clients.

#### **Lockheed Martin**

2012 - 2014 Florida, USA

# Lead Staff Electrical Engineer

 Designed and managed electrical facilities in an industrial setting. Projects included arc flash remediation, protective device coordination, and longrange planning for plant expansion.

#### **Progress Energy**

2008 - 2012 Florida, USA

#### **Transmission Line Engineer**

Designed and managed all aspects of new or existing transmission line projects, (69kV, 115kV, and 230k) including permitting, coordinating with governmental entities, right-of-way acquisition, coordinating with financial and project managers, etc.

#### **Progress Energy**

2003 - 2008 Florida, USA

# **Project Engineer**

 Designed and orchestrated construction of distribution system necessary for service of projects. Sourced permits, ordering materials, and engineered projects.

#### **DESIGNATIONS**

State of Florida Engineering Intern

#### **EDUCATION**

**Bachelor of Science, Electrical Engineering**, University of Central Florida **Master of Science, Business Administration,** Florida Metropolitan University

#### Senior Project Manager

#### **KEY EXPERIENCE**

# Quanta Utility Engineering Services

2015 – Present Missouri, USA **Google** 

2014 – 2015 Missouri, USA

## **Senior Project Manager**

- Engagement for Major Project and Operational Office start up
- Project Controls
- Google Fiber Program Job Planning for Electric Utilities

## **Technical Project Manager (Google Fiber)**

- Field deployment of fiber to the subscriber network including communication hut site acquisition, permitting, make ready, construction, and quality
- Coordinate extensively with municipal officials, local utilities, and contractors.

# Black & Veatch

1998 - 2012 Missouri, USA

# **Progressive Management that includes the following Roles:**

- Director, Public Safety Networks and Network Engineering Construction
- Director, Execution Integration
- Project Manager
- Assistant Project Manager
- Business Manager
- Construction Specialist
- Field Control Specialist

#### **DESIGNATIONS**

Project Management Professional (PMP)

#### **EDUCATION**

Promoted to PhD Candidacy, Northwestern University (1998)

Master of Arts, University of Missouri (1995)

Infantry Officer Basic Course Name, Ft. Benning, GA (1991)

Bachelor of Arts, University of Missouri (1991)

# **PHILIP ZIEGLER**

#### ROLE

Engineer

#### **KEY EXPERIENCE**

# Quanta Utility Engineering Services

2013 – Present Missouri, USA

#### Engineer

- Transmission design and studies
- Distribution design and studies
- Substation design and studies
- Joint Utility Project Management
- Structural load analysis using O-Calc Pro, NESC clearance evaluation, make ready recommendations and pole replacement design for joint utility projects

# Black & McDonald Limited

2009 – 2013 Missouri, USA

#### Intern

- Structural load analysis using O-Calc Pro, NESC clearance evaluation, make ready recommendations, and pole replacement design for joint utility projects
- Surveyed distribution infrastructure
- Pole design using PLS-POLE
- Damaged cable investigations

#### **DESIGNATIONS**

Passed Fundamentals of Engineering Exam in 2014

#### **EDUCATION**

**Bachelor of Science, Civil Engineering**, University of Missouri – Kansas City (2014)

**Design of Transmission Lines, Structures and Foundations,** University of Wisconsin – Madison (2015)

# Electric Utility Management

Over 47 years of electric utility industry experience, including management of substation and Transmission and Distribution systems construction and maintenance.

#### **KEY EXPERIENCE**

# QUES – Utility Line Management Services

2013 – Present United States, CA

## **Field Operations Manager**

- Provide direct oversight of Site Representatives in the field ensuring compliance to client and ULM requirements for safety, conduct on the job, and documentation.
- Perform scheduling and job assignments of all Site Representatives.
- Performs direct oversight of Contract Electrical Checkers in the field ensuring compliance to client and ULM requirements for contractor safety are met.
- Perform Electrical Checker Program employee assessment and hiring oversight.
- Provide oversight of administrative requirements for Site Representatives.
- Developed process and standards for field observation methods used during the oversight Site Representatives and Contract Electrical Checkers.

# Southern California Edison

1972 – 2012 United States, CA

## Manager of Electrical Construction (SONGS Nuclear Plant) Supervisor – Substation Construction and Maintenance

- Supervised an electrician crew in the maintenance and repair of 53 different substations, ensuring worker safety, schedule adherence, and compliance
- Expertise installation, maintenance, and repair of 220KV, 115KV, and 66KV related to ABB, Mitsubishi, and Siemens circuit breakers.
- Managed scheduling of routine and corrective maintenance activities
- Monitored projects for quality of workmanship, timeliness, and cost controls
- Developed work group performance planning and initiatives

#### **DESIGNATIONS**

Lineman Apprentice Program – Southern California Efdison

#### **EDUCATION**

Associates Degree, Administration of Justice, Citrus College

# Electric Utility Management

More than 36 years of experience gained in Engineering, Construction, Utility Operations and Project Management activities towards successfully executing projects to meet customer needs.

#### **KEY EXPERIENCE**

# QUES – Utility Line Management Services 2015 – Present United States, CA

# **Division Manager**

 Responsible for all business and operational elements for this Utility Services Company. ULMS provides Project and Construction Management services to support the Utility industry. Projects/Operational Business lines supported include Transmission, Distribution, Substation, Power Generation, Telecommunication and Nuclear.

# Southern California Edison

1983 – 2015 United States, CA

# **Principle Manager**

- Responsible for Southern California Edison's (SCE's) wood pole program.
- Program management included the Pole Loading Project, Intrusive Pole Inspection Program (GO-165 commitment), pole repair, design of replacement poles, and the execution of pole replacement to comply with GO-165 commitments (approximately 25,000 poles replaced annually).
- The Pole Loading Project is a CPUC commitment to analyze all 1.4 million poles in the SCE system to insure compliance with regulatory and company loading criteria.
- This position was also responsible for budgets associated with the above scope, which included \$400M in capital and \$20M in O&M annually.

#### **Progressive Management Roles**

- Manager of Substation Construction Distribution Business Unit
- District Superintendent Saddleback District
- Project Manager Transmission and Distribution Business Unit
- Resource Planning & Performance Manager Distribution Business Unit
- Refueling Outage Manager Outage Management Division
- Project Engineer Nuclear Engineering and Design Dept
- Construction Manager Civil/Mechanical Dept

#### **EDUCATION**

**B.S. Construction Management**, California State University Long Beach **MBA**, University of Phoenix

# **KEVIN (CASEY) RYAN**

#### **ROLE**

# Electric Utility Management

Electrical power generation industry professional with technical and leadership experience in commercial electrical power generation, transmission, and distribution including, switchyard construction management, power plant maintenance division and electrical maintenance department management, power plant construction project management, and maintenance training development and implementation.

#### **KEY EXPERIENCE**

# QUES – Utility Line Management Services 2011 – Present United States, CA

# **Startup Engineering Manager**

- Manage 15 Startup Engineers and a multi-million dollar contract workforce in the construction, acceptance and functional testing, and customer turnover of newly constructed and modified electrical transmission substations.
- Supervise multiple transmission substation construction projects simultaneously throughout Southern California utilizing excellent project management and organizational skills.
- Ensure compliance to North American Electric Reliability Corporation (NERC) and Federal Energy Regulatory Commission (FERC) regulations and standards by directing the performance of programs and documentation.
- Coordinate field construction and project management activities associated with engineering and construction design and implementation strategies.

# Southern California Edison

1977 – 2010 United States, CA

## **Progressive Positions**

- Maintenance Division Manager
- Electrical Maintenance Group Manager
- Electrical Test General Foreman
- Construction Project Manager
- Maintenance Field Engineer
- Electrical Test Supervisor
- Electrical Training Instructor
- Electrical Test 'A'
- Plant Operator

#### **DESIGNATIONS**

Project Management (PMP) – University of California Irvine Senior Management Training – Institute of Nuclear Power Operations Training Instructor – Institute of Nuclear Power Operations Certified Test 'A' – Southern California Edison

#### **KEY EXPERIENCE**

QUES – Utility Line Management Services 2013 – Present United States, CA Construction Management/Construction Site Representative

#### **Construction Site Representative**

- Interpret and implement engineering drawings for construction, ensuring adherence to SCE design specifications
- Process and document field modifications to engineering drawings
- Perform civil and electrical inspections of in-progress and completed construction activities
- Coordinate with SCE Engineering in resolution of design issues
- Coordinate with SCE Environmental and other local and regulatory agencies involved with jobsite environmental and safety compliance
- Process and track construction material procurement, use, and returns
- Promote safety at the jobsite, including ensuring SCE safety requirements are met prior to and during construction activities (e.g. Job Hazard Analysis, Tailboard)
- Process project documentation during and at completion of the project, including as-built drawings, inspection records, and material returns
- Provide routine and emergent project status to SCE Project Management and ULMS Management

Inland Valley Construction 2002 – 2013 United States, CA

#### **Progressive Positions**

See above

#### **DESIGNATIONS**

Bechtel Environmental, Safety & Health Passport for AT&T Mobility - Certificate No. 1001803.

Tech Safety Lines Tower - Certificate No. 312000614.

OSHA Trained DEI Climber Awareness - Certificate No. 6515.

Communications Train Tower Safety and Rescue - Certificate No. MA 021201EZ.

Radio Frequency Cabling and Connectors - Certificate No. 17199.

Cellular Coax and Microwave Cable Certificate.

Andrews Institute of Connector Training - Certificate No. A00301-CA-11276.

Communication Scope Cell Reach Product Connector Training - Certificate No. 6041.

Trench Shoring National Utility Contractor Association Competent Person Training Program Certified 6/13/2011 and 2/24/2001.

American Heart Association - Heartsaver First Aid

Construction
Management/Construction
Site Representative

Thirty years of technical/managerial experience in power generation including hydro power generation, gas turbine/combined cycle generation and coal fired generation. Experience in maintaining and operating hydro generation assets, maintaining plant reliability, plant performance and execution of multi-million dollar capital projects.

#### **KEY EXPERIENCE**

# QUES – Utility Line Management Services

2018 – Present United States, CA

# Blair Church and Flynn Consulting Engineers

2017 – 2018 United States, CA

# Mega Volt Professional Services

2016 – 2017 United States, CA

# Southern California Edison

2004 – 2013 United States, CA

## **Quality Control/Construction Project Management**

- SCE Generator Repair, Big Creek 4 Hydro-Electric Facility
- Manage project schedule to established customer milestones.
- Provide technical oversight of maintenance repair and modification activities of main generator.
- Coordinate with customer management and vendors in daily repair activities, procurement, and inspection activities.
   Report project progress and participate in routine and emergent oversight meetings.

## **Operation Consultant**

Performed Seismic Assessment on SCE's Big Creek
 Powerhouse 1, 2, 3, and 4, Eastwood pump storage unit, and
 Mammoth Pool power facility.

#### **Quality Control Specialist**

- California Oil Refinery
- Mechanical repair audit and quality control for a large air compressor crank shaft for a California refinery.

# **Engineering Manager**

- SCE's Northern Hydro Division, Big Creek, CA
- Responsible for 1000 megawatts of generation, 23 generators, 10 dams, 18 penstocks and a technical staff of six.
- Supervised a Civil Engineer, Mechanical Engineer, Electrical Engineer, RCM Supervisors and Project Managers.
- Participated in FERC Part 12 Inspections, including potential failure mode analysis of 7 major dams.

#### **DESIGNATIONS**

Training in tap root, root cause analysis, RCM analysis, Hydro generator, maintenance IRIS, super alloys in heavy-duty gas turbine

#### **EDUCATION**

Bachelor of Science in Mechanical Engineering, University of Arizona Bachelor of Science in Rehabilitation, University of Arizona

Construction
Management/Construction
Site Representative

Highly talented and accomplished Foreman with more than 15 years of construction supervision experience. Adept at scheduling, management, job coordination, record keeping, change orders, purchasing and monitor production quality, and inventory control. Certificates held are: High Reach, Forklift and Scaffold Erection.

#### **KEY EXPERIENCE**

QUES – Utility Line Management Services 2013 – Present United States, CA

#### **Quality Control/Construction Project Management**

- Involved in Two Greenfield 500KV Stations (Red Bluff & Colorado River)
- 40+ Core Stations, Electrical and Civil upgrade and improvements Oversee Southern California Edison (SCE) contracted construction activities of new (Green Field) and existing substations for Utility Line Management Services (ULMS).
- Interpret and implement engineering drawings for construction, ensuring adherence to SCE design specifications
- Process and document field modifications to engineering drawings
- Perform civil and electrical inspections of in-progress and completed construction activities
- Coordinate with SCE Engineering in resolution of design issues
- Coordinate with SCE Environmental and other local and regulatory agencies involved with jobsite environmental and safety compliance
- Process and track construction material procurement, use, and returns
- Promote safety at the jobsite, including ensuring SCE safety requirements are met prior to and during construction activities (e.g. Job Hazard Analysis, Tailboard)
- Process project documentation during and at completion of the project, including as-built drawings, inspection records, and material returns
- Provide routine and emergent project status to SCE Project Management and ULMS Management

**DESIGNATIONS** 

Local 1506 Union Carpentry School

**EDUCATION** 

General Sudies, Long Beach City College

Construction
Management/Construction
Site Representative

Lead CSR on Lugo Substation retrofit including NERC/CIP Control Room (MEER) upgrades, seismic mitigation to 500kV and 220kV racks, 500kV bus upgrades, and relay replacement and Eldorado Substation new construction of NERC CIP MEER building, installation of new 500kV and 220kV bank positions and other upgrades

#### **KEY EXPERIENCE**

QUES – Utility Line Management Services 2014 – Present United States, CA

## **Construction Site Representative (CSR)**

- Oversee Southern California Edison (SCE) contracted construction activities of new (Green Field) and existing substations for Utility Line Management Services (ULMS).
- Interpret and implement engineering drawings for construction, ensuring adherence to SCE design specifications
- Process and document field modifications to engineering drawings
- Perform civil and electrical inspections of in-progress and completed construction activities
- Coordinate with SCE Engineering in resolution of design issues
- Coordinate with SCE Environmental and other local and regulatory agencies involved with jobsite environmental and safety compliance
- Process and track construction material procurement, use, and returns
- Promote safety at the jobsite, including ensuring SCE safety requirements are met prior to and during construction activities (e.g. Job Hazard Analysis, Tailboard)
- Process project documentation during and at completion of the project, including as-built drawings, inspection records, and material returns

Hartung Construction 1989 - 2014 United States, CA

#### **General Contractor** (1989-2014)

- Performed as site construction manager for new construction and complete remodels for commercial, industrial, and residential customers, including custom homes
- Oversaw all aspects of contract management and subcontractor oversight, including contractor safety in accordance with client and OSHA safety program requirements

**EDUCATION** 

General Sudies in Architectural and Engineering, Cypress College

Construction Assigned to manage Southern of upgrades. (Electrical and Civil). Site Representative

Assigned to manage Southern California Edison (SCE) Substation upgrades. (Electrical and Civil).

#### **KEY EXPERIENCE**

QUES – Utility Line Management Services 2015 – Present United States, CA

#### **Construction Management/Construction Site**

- Oversee Southern California Edison (SCE) contracted construction activities of new (Green Field) and existing substations for Utility Line Management Services (ULMS)
- Interpret and implement engineering drawings for construction, ensuring adherence to SCE design specifications
- Process and document field modifications to engineering drawings
- Perform civil and electrical inspections of in-progress and completed construction activities
- Coordinate with SCE Engineering in resolution of design issues
- Coordinate with SCE Environmental and other local and regulatory agencies involved with jobsite environmental and safety compliance
- Process and track construction material procurement, use, and returns
- Promote safety at the jobsite, including ensuring SCE safety requirements are met prior to and during construction activities (e.g. Job Hazard Analysis, Tailboard)
- Process project documentation during and at completion of the project, including as-built drawings, inspection records, and material returns
- Provide routine and emergent project status to SCE Project Management and ULMS Management

Freeman Alternative Resources, Inc.

2008 – 2015 United States, CA

#### **Construction Site Representative 2**

- Successfully managed all types of SCE construction projects from simple ground well and asphalt construction to complex projects such as complete substation rebuilds.
- Extensive experience in both the Civil and Electrical areas of SCE substation construction. I am always open to any and all project types and locations.
- Used my computer background and experience to enable me to efficiently complete the required forms and reports that are an essential part of the duties.

Construction Site Representative

Assigned to manage Southern California Edison (SCE) Substation Management/Construction upgrades. (Electrical and Civil).

#### **KEY EXPERIENCE**

**QUES – Utility Line Management Services** 2009 - Present United States, CA

# **Construction Management/Construction Site**

- Oversee Southern California Edison (SCE) contracted construction activities of new (Green Field) and existing substations for Utility Line Management Services (ULMS)
- Interpret and implement engineering drawings for construction, ensuring adherence to SCE design specifications
- Process and document field modifications to engineering drawings
- Perform civil and electrical inspections of in-progress and completed construction activities
- Coordinate with SCE Engineering in resolution of design issues
- Coordinate with SCE Environmental and other local and regulatory agencies involved with jobsite environmental and safety compliance
- Process and track construction material procurement, use, and returns
- Promote safety at the jobsite, including ensuring SCE safety requirements are met prior to and during construction activities (e.g. Job Hazard Analysis, Tailboard)
- Process project documentation during and at completion of the project, including as-built drawings, inspection records. and material returns
- Provide routine and emergent project status to SCE Project Management and ULMS Management

**Larry Jacinto** Construction 1994 - 2009 United States, CA

# **Construction Foreman**

- Performed estimating and planning for construction projects
- Interpreted plans both engineering and architectural departments
- Ensured projects were completed on time and within budget
- Organized job sites and kept daily logs and paperwork
- Communicated and coordinated with job superintendents
- Operated equipment and grade check when needed
- Conducted safety meetings and ensured jobsite safety
- Managed equipment operators and laborers

# ROBERT ROBINSON

#### ROLE

#### **KEY EXPERIENCE**

## QUES – Utility Line Management Services

2009 – Present United States, CA Construction Management/Construction Site Representative

# Construction Project Management /Construction Site Representative (CSR)

- Oversee Southern California Edison (SCE) contracted construction activities of new (Green Field) and existing substations for Utility Line Management Services (ULMS)
- Interpret and implement engineering drawings for construction, ensuring adherence to SCE design specifications
- Process and document field modifications to engineering drawings
- Perform civil and electrical inspections of in-progress and completed construction activities
- Coordinate with SCE Engineering in resolution of design issues
- Coordinate with SCE Environmental and other local and regulatory agencies involved with jobsite environmental and safety compliance
- Process and track construction material procurement, use, and returns
- Promote safety at the jobsite, including ensuring SCE safety requirements are met prior to and during construction activities (e.g. Job Hazard Analysis, Tailboard)
- Process project documentation during and at completion of the project, including as-built drawings, inspection records, and material returns
- Provide routine and emergent project status to SCE Project Management and ULMS Management

# **Director of SCE Sourcing Options and Substation Projects**

Oversaw and developed new customer base for substation work

## **Progressive positions**

- Service Planner/Field Construction
- Project Manager
- Operations/General Supervisor
- District Superintendent
- Manager Program and Construction
- Field Construction Manager

#### **DESIGNATIONS**

Pouk & Steinle

United States, CA

United States, CA

Southern California

2005 - 2009

1980 - 2005

Edison

Project Management Certification, UCI, (2000-2001) Management Certification Course, SCE (UCP) 1999

#### **EDUCATION**

Business Management Studies, UOP, 1996-1998

Construction
Management/Construction
Site Representative

Extensive technical/managerial experience in electric utility construction.

#### **KEY EXPERIENCE**

QUES – Utility Line Management Services 2017 – Present United States, CA

# Construction Project Management /Construction Site Representative (CSR)

- Oversee Southern California Edison (SCE) contracted construction activities of new (Green Field) and existing substations for Utility Line Management Services (ULMS)
- Interpret and implement engineering drawings for construction, ensuring adherence to SCE design specifications
- Process and document field modifications to engineering drawings
- Perform civil and electrical inspections of in-progress and completed construction activities
- Coordinate with SCE Engineering in resolution of design issues
- Coordinate with SCE Environmental and other local and regulatory agencies involved with jobsite environmental and safety compliance
- Process and track construction material procurement, use, and returns
- Promote safety at the jobsite, including ensuring SCE safety requirements are met prior to and during construction activities (e.g. Job Hazard Analysis, Tailboard)
- Process project documentation during and at completion of the project, including as-built drawings, inspection records, and material returns
- Provide routine and emergent project status to SCE Project Management and ULMS Management

Freeman Construction 2011 – 2017 United States, CA

## **Director of SCE Sourcing Options and Substation Projects**

• CSR activities on SCE projects

#### **DESIGNATIONS**

AMP Certification – Design Premise Cabling Systems Global Knowledge/Nortel Netoworks – 21E-81C Installation and Maintenance

## **EDUCATION**

General Business Studies, UCLA & La Verne Uniniversity

Construction
Management/Construction
Site Representative

Extensive technical/managerial experience in electric utility construction.

#### **KEY EXPERIENCE**

# QUES – Utility Line Management Services

2017 – Present United States, CA

# **Construction Project Management / Construction Site Representative (CSR)**

- Oversee Southern California Edison (SCE) contracted construction activities of new (Green Field) and existing substations for Utility Line Management Services (ULMS)
- Interpret and implement engineering drawings for construction, ensuring adherence to SCE design specifications
- Process and document field modifications to engineering drawings
- Perform civil and electrical inspections of in-progress and completed construction activities
- Coordinate with SCE Engineering in resolution of design issues
- Coordinate with SCE Environmental and other local and regulatory agencies involved with jobsite environmental and safety compliance
- Process and track construction material procurement, use, and returns
- Promote safety at the jobsite, including ensuring SCE safety requirements are met prior to and during construction activities (e.g. Job Hazard Analysis, Tailboard)
- Process project documentation during and at completion of the project, including as-built drawings, inspection records, and material returns
- Provide routine and emergent project status to SCE Project Management and ULMS Management

# Southern California Edison 2008 – 2012 United States, CA

## DESIGNATIONS

# **Contract Construction Site Manager**

CSR activities on SCE projects

Coast Guard Electrical and Electronic Engineering School
Coast Guard Generator Operations School
Cummings Onan Factory Generator Technician School
Coast Guard Senior Leadership and Management Academy
US Government Industrial Safety Supervisor Training Course
Coast Guard Aids to Navigation and Lighthouse Maintenance School

Construction
Management/Construction
Site Representative

Over 12 years combined experience in supply chain/project/contract management and managing multiple projects simultaneously and effectively. Experience working within SCE substations supporting construction activities.

#### **KEY EXPERIENCE**

# QUES – Utility Line Management Services

2013 – Present United States, CA

# Construction Project Management /Construction Site Representative (CSR)

- Provide support to Construction Project Managers, Planners, Quality Control Specialists, Analysts and Engineering on substation construction projects.
- Knowledge of technical disciplines and procedures relating to substation design, construction, maintenance and operations.
- Familiar with substation construction documents including: purchase orders/contractor proposals, pre-job walk minutes, job walk minutes, statements of work, construction plans, outage requests, bill of material, engineering design specifications, field change orders, and work completion forms.

# AECOM/National Technologies Associates

2009 - 2013 United States

## **Lead Supply Technician**

- Worked within management teams to plan current/future logistics efforts that effect production, distribution, and inventory staying within or exceeding the scope of objectives for over \$2 billion worth of military assets.
- Monitored the status and effectiveness of material support by identifying, analyzing, and resolving problems, such as the shortages of shipments to units and solving their issues.

#### **DESIGNATIONS**

Project Management Certificate (in progress), Stanford University-Stanford, CA

Marine Corps Aviation Supply School (19 Week Training Course)

## **EDUCATION**

Master's in Business Administration (Concentration in Management & Leadership), University of La Verne

Bachelor of Science Degree in Management with a Minor in Economics, Park University

Associates of Science Degree in Business, Barstow Community College

# **DANIEL ANDERSON**

#### **ROLE**

#### **KEY EXPERIENCE**

QUES – Utility Line Management Services 2014 – Present United States, CA Quality/Safety

#### **Quality Specialist III**

- Construction safety oversite for Southern California Edison working with project managers on special projects, major projects, Transmission and distribution and deteriorated pole program.
- Prepare safety Kick-Off Meeting and PowerPoints for qualify contractors in regards to CAL OSHA and Fed OSHA and Southern California Edison's "APM" Accident Prevent Manual.
- Conduct safety inspection and audits in the field to ensure safe work practices. Perform independent assessments of work performed to assure results obtained by peers are valid. Provide input and recommendations during the Quality Control peer review and checkpoint process.
- Provide program oversight by Identifying program strengths and weaknesses.
- Develop consistent inspection and assessment methodologies and techniques to assure consistent program implementation and compliance to construction, and regulatory standards.
- Identify, recommend and implement process improvement opportunities and enhancements. When non-conformances or discrepancies are identified, provide feedback, recommendations and analysis to the responsible vendor.
- Participate in meetings to guide and support assigned projects to ensure safety and compliance. Participate in job walks and projects start-up.
- Stay current with Quality Control processes by participating in technical, safety, and program development training.

#### **DESIGNATIONS**

Certified Site Safety Health Officer

OSHA #500 - Trainer Course in OSHA Standards for Construction OSHA #501 - Trainer Course in OSHA Standards for General Industry

OSHA #510 Construction Standards

OSHA # 511 General Industry Standards

Occupational Safety and Health Outreach Trainer

CSSHO EM 385 1-1 Federal Government Standards

American Red Cross Authorized provider CPR/First Aid/AED

Instructor

**HAZWOPER Certification 40 Hour** 

Blood borne Pathogen's Certification

**Fall Protection Trainer Certification** 

Certified in water damage restoration

Asbestos and lead certified

#### **EDUCATION**

OSHA Training Institute, Educational Center, College of Southern Nevada Occupational Health Safety Department, OSHA Training Institute & Education Center

# **REED GACHO**

#### **ROLE**

#### **Quality Control**

Licensed professional engineer in the State of California, having worked in the land development and heavy construction industries since 2005. Ability to comprehend, interpret and develop contract documentation, project specifications and project plans. Well versed in all project phases, from design through construction. Take great pride in working together with peers to provide a product that meets the expectations of all parties involved.

#### **KEY EXPERIENCE**

# QUES – Utility Line Management Services

2015 – Present United States, CA

# PAR Electrical Contractors 2012 - 2015 United States, CA

# Antelope Valley Engineering 2012 - 2015

United States, CA

#### **DESIGNATIONS**

#### **EDUCATION**

# **Quality Specialist**

- Provide engineering and design services to support SCE's TLRR Program.
- Develop work plans and work scope for budgeting, environmental clearance, and prepare contract documents. Perform mapping of construction work areas in ArcGIS based on field reconnaissance. Provide Quality Assurance/Quality Control during project execution phase, including pier, tower assembly, and conductor sag inspections as well as civil improvement inspections.

### **Project Engineer – Civil Infrastructure**

- Performed Construction Management, Engineering, and Planning. Managed civil improvement scope and contract projects involving removal of 220 kV transmission lines to replace with 500 kV transmission lines spanning 80 miles.
- Managed all aspects of electric projects related to construction of customer facilities.
- Performed scheduling and coordination of small and large scale construction activities. Documented and reported on current projects to customer management.
- Coordinated with regulatory agencies on construction projects.
   Analyzed project's risk, budgetary, and schedule restraints

#### **Project Manager/Lead Design Engineer**

 Prepared proposals for land development projects, performed topographic surveys, and prepared tentative tract/parcel maps, developed permit drawings, and designed wood frame structures.

Supplemental Workshop in Science Leader, California Polytechnic State University

Bachelor of Science in Civil Engineering, California Polytechnic State University (2005)

# **Quality Control**

Over 15 years in Construction Management. 5 years Substation Construction & Maintenance as Site Representative for major projects. Also trained in, plan reading, engineering specifications, inspections and quality control, methods and standards, safe working practices, close out procedures, for the Southern California Edison SC&M and Division State Architects.

## **KEY EXPERIENCE**

# QUES – Utility Line Management Services 2011 – Present United States, CA

#### **Substation Construction & Maintenance Site Representative**

- Southern California Edison SC&M Substation Construction & Maintenance Site Representative. Assigned to multiple substations throughout the system from 4kv – 500kv managing contractors and crews while maintaining budgets and schedules for each work order.
- Facilitate and provide reports to management (MPO) on progress for overall impacts and execution of projects. Experience being a leader while cross – functioning with upper management and groups. Experience working under pressure while keeping relationships with contractors, outside agencies and all levels of management during the duration of the projects. Manage and communication in decision making showing planning skills and execution of delivery.

# **Del Terra Group** 2004 – 2011 United States, CA

# **Construction Management and Construction Superintendent**/Assistant CM

- Maintain a current set of all documents that pertain to the project, plans, and specifications.
- Maintain logs for request for information and change order requests.
- Monitor work in progress and conduct detailed analysis of contractors' schedules for accuracy and conformance to master schedule and report percentage complete.

#### **DESIGNATIONS**

Southern California Edison (Security Access Approved) Certificate -North American Electric Reliability Corporation Critical Infrastructure Protection. 2014-2016

Electrical Certificate – Division of State Architect. 2009
Fire Life Safety Certificate – Division of State Architect. 2009
Outreach Training Course for Construction Industry Certificate –
Occupational Safety & Health Administration. 2009
Traffic Flagging (Public Works) Certificate – Traffic Control. 2007

#### **EDUCATION**

Architecture, Design, & Construction Building Courses, Citrus College (1998-2002)

Construction Management (Certificate Program) Courses, California State Polytechnic University of Pomona (Ongoing)

# LARRY LUTTRULL

#### **ROLE**

# **Quality Control**

Over 50 years of experience in electric utility construction, maintenance, trouble-shooting, project management, training, and quality control.

#### **KEY EXPERIENCE**

# QUES – Utility Line Management Services 2015 – Present United States, CA

# **Quality Control Specialist**

- Field inspector responsible for ensuring construction standards are met for high voltage transmission power lines.
- Conduct inspections for wire sagging, lattice steel towers, foundations and site grading/restoration.
- Conduct erosion control measure inspections an installation/maintenance.
- Coordinate activities of work crews in the field and report to the Construction Manager for Southern California Edison.

#### **Burns & McDonald**

2010 – 2015 United States, CA

# **Project Coordinator**

- Managed the outages involved with the construction of the T.R.T.P. transmission line for SCE.
- Liaison between all contractors involved in the project and SCE.

#### **Xcel Energy**

2010 – 2015 United States, CO

## Field Construction Manager

• Established new guidelines in setting up the bid process and ensured that all project goals were completed in an orderly and timely sequence and the budget was maintained.

# Southern California Edison

1965 – 1999 United States, CA

#### **Operation Consultant**

- Coordinated construction activities for various High Voltage Construction Contractors.
- Managed crews of up to 30 men and directed budgets as high as \$30 million annually. These contracts included installing about 30 new major distribution circuits and underground systems for large housing tracts and business centers that required extensive cable replacement at substations.
- Managed the distribution relocation for the 12KV T.R.T.P. (Tehachapi Renewable Transmission Project) for SCE. Project involved the major transmission tying-in of electricity generated at the Wind Farms in Tehachapi, CA and connected into major transmission centers in the L.A. Basin, Orange County, and ending in the Inland Empire.

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# **TODD RAMEY**

#### **ROLE**

## **Quality Control**

Field Inspector with experience in both civil and electrical construction quality and compliance auditing.

#### **KEY EXPERIENCE**

# QUES – Utility Line Management Services 2010 – Present United States, CA

## **Transmission Inspector II**

 Inspection of 66Kv,110Kv,220Kv and 500Kv Transmission Lines from Road and Right of Way Grading, Inspecting and Installing Foundations, Inspection and Erecting Lattice Towers and TSP Poles, Wire Sagging and Inspection

# Burns & McDonnell 2010 United States, CA

## **Lead Civil Engineering Inspector (2010)**

 Inspection of 500Kv and 220Kv Transmission Lines from Road and Right of Way Grading, Installing Foundations, Erecting Lattice Towers, and TSP Poles

#### **DESIGNATIONS**

Nuclear Gauge Operator Training, Radiation Safety Officer Training, Pacific Nuclear Technology Company
Civil Inspection & Testing, Survey, and Heavy Equipment Operation,
Operating Engineers
ACI Concrete Field Testing Grade I
ICC Reinforced Concrete Special Inspector
ICC Post Tension Slab Special Inspector

# **EDUCATION**

Fire Science & General Studies, Antelope Valley College

# **ANTHONY BEAVERS**

#### **ROLE**

Substation Commissioning & Startup Engineer Provide oversight for Southern California Edison Contract Test groups in the Substation Construction & Maintenance Division. Approving inservice readings, primary/secondary testing and protection settings management for new substation construction as well as guidance on utility policies and procedures regarding electrical testing and commissioning.

#### **KEY EXPERIENCE**

QUES – Utility Line Management Services 2012 – Present United States. CA

Hampton-Tedder Technical Serv. 2011 – 2012 United States, CA

Stone & Webster Construction 2010 – 2011 United States, CA

Canus Corp. 2009 – 2010 United States. CA

# Startup Engineer

 Provide oversight for Southern California Edison Contract Test groups testing and commissioning, including protection systems.

## **Test Specialist**

 Commissioned SCE substations, performed Protection System upgrades, and directed Test Technicians.

#### **Electrical Estimator/Test Specialist**

 Performed estimating, Test Technician work, and electrical troubleshooting at San Onofre Nuclear Generating Station (SONGS).

#### Sr. Test Technician

 Maintained and updated Protective Relaying Circuits in substations in Central and Northern California as well as maintaining and testing LTCs, relays, and circuit switchgear.

#### **EDUCATION**

**Bachelor of Science in Energy Management**, Bismarck State College (2014)

**Associate Degree in Electrical Technology & Business**, University of Phoenix

**Entergy Basic and Advanced SCADA Training** (GE/Harris/Westronics RTU)

**AVO Institute** Print Reading & Troubleshooting, Basic, Advanced, and Generation Relay Certifications

**USAF Apprentice Electrical Power Production Technical School** 

Substation Commissioning & Startup Engineer Twenty six years of technical/managerial experience in power generation including hydro power generation, gas turbine/combined cycle generation and coal fired generation. Experience in maintaining and operating hydro generation assets, maintaining plant reliability, plant performance and execution of multi-million dollar capital projects.

#### **KEY EXPERIENCE**

QUES – Utility Line Management Services 2012 – Present United States, CA

# Startup Engineer

- Perform commissioning and pre in-service testing of all relays/breakers/transformers and all In-service testing required during Southern California Edison's 12KV, 66KV, 220KV, and 500KV station.
- Oversee Contract Test Technicians in the performance of substation testing and commissioning and perform all client required documentation of completed activities, including non-conformances and resolution.
- Managed electrical crews in the installation of Main Turbine Mark VII Ovations controls/protection system upgrade.
- Responsible for planning and scheduling of electrical modifications required for San Onofre Nuclear Generating Stations Cold and Dark Decommissioning Project.

Sun Technical Serv. 2003 – 2012 United States, Various

#### **Relay Technician**

- Perform electrical test planning utilizing SAP, control circuit testing, calibration of protective relays, meters, multiple control relays, and switchgear breakers.
- Commissioned and implemented relay/controls design changes for Duquesne Light Company station upgrade project, and performed routine maintenance and testing on emergency battery and protective relay testing at South Texas Nuclear Operating Company.

Various companies & Project Assignments 1986 – 2011 United States, Various

#### **Electrical Estimator/Test Specialist**

- Testing, calibration, maintenace and operatioojns of various plant protections systems
- Journeyman Lineman Classification

#### **EDUCATION**

**Electronics**, Jones County Junior College (1985) **Electronics**, Warren Central High Vo-Tech School (1981)

# **EARL CUTSHALL**

#### **ROLE**

Substation Commissioning & Startup Engineer Widely expericed at all aspcts of substations including Project Management, Test Technician Supervision, Test Technician & Substation Operation requirements.

#### **KEY EXPERIENCE**

QUES – Utility Line Management Services 2018 – Present United States, CA

# Startup Engineer

- Responsible for technical oversight and support of electrical design modifications of new and retrofit 500/220/115kV Substations.
- Provide oversight of resources required to test substation electrical components and systems, development and review of testing schedules.
- Single point of contact between Grid Control Center, Substation Operations, Maintenance, Contracted Electrical Test, Vendors, Protection, Design, and Automation Engineering. Initiate and maintain Non-Conformance Report (NCR) documents.
- Review test data and in-service readings prior to release of equipment.

Southern California Edison 1980 – 2018 United States, CA

#### **Various Positions**

 38 years of progressive work for electric utiluity in the positions of Startup Engineer, Substation Operator, Substation Test Supervising Technician, Substation Test Technician, Journeyman Electrician\, Utilityman and Groundman

# **EDWARD GIBSON**

#### **ROLE**

Substation Commissioning & Startup Engineer Twenty six years of technical/managerial experience in power generation including hydro power generation, gas turbine/combined cycle generation and coal fired generation. Experience in maintaining and operating hydro generation assets, maintaining plant reliability, plant performance and execution of multi-million dollar capital projects.

#### **KEY EXPERIENCE**

QUES – Utility Line Management Services 2011 – Present United States, CA

#### Startup Engineer

- Responsible for planning and scheduling of electrical modifications required for San Onofre Nuclear Generating Stations Cold and Dark Decommissioning Project. Provide oversight to substation testing and commissioning
- Manage all aspects of building new and old substations, start-up commissioning, demolition, interconnecting projects and upgrading infrastructures with consistency in adhering to timelines, quality, and cost.
- Ensure that construction projects are executed in compliance with building codes, regulations including FERC/NERC, safety standards, structural soundness, and specifications.
- Perform Quality Assurance reviews of electrical and civil design documents and drawings.
- Prepare and process all required documentation, such as Engineering Design Change requests, Change Request Notices, Plant Change Modifications, Temporary Modifications, RFI & all applicable commissioning documentation.

Various companies & Project Assignments 2000 – 2011 United States. Various

#### **Electrical Estimator/Test Specialist**

- Worked in progressive roles in generation plant ;projects including nuclear and fossil fuel
- Held roles ranging from Construction Manager, Project Manager, Field Engineer, Coordinator, etc.

#### **EDUCATION**

**Industrial Electricity, Oberlin Vocational Technical School** 

Substation Commissioning & Startup Engineer Nearly 40 years of Project Management, Engineering, Management and Supervisory experience in Power Generation and Transmission and Distribution, including Chemistry and Mechanical Engineering and T&D Substation Commissioning and Project Management. Developed Startup Processes that were adapted for both ULMS and SCE Startup Engineering personnel.

#### **KEY EXPERIENCE**

QUES – Utility Line Management Services 2009 – Present United States, CA

#### Startup Engineer

- Created & implemented the turnover process used by ULMS and SCE Startup Engineers. Commission 12kV, 66kV, 220kV and 500kV substations, including reviewing test data, testing relays, HMI / RTU / PLC / DFR breakers, arrestors, CCVTs, wave traps, power protective relays transformers & protection relays.
- Have commissioned multiple substations, including Windhub [500kv, 220kv and 66kv], Whirlwind [500kv 220kv], El Casco, Delano, Purify, Mascot, Antelope [500kv, 220kv, 66kv], Gorman, Sparkle as of September 2015. Whirwind Roy Solar, and Desert Star.
- Manage all aspects of substation projects related to commissioning and documentation. Perform scheduling and coordination of testing and commissioning activities.
- Document and report on current projects to customer management.
   Coordinate with regulatory agencies on construction projects.
   Analyze project's risk, budgetary, and schedule restraints

# Southern California Edison

1979 – 2008 United States, CA Manager, Maintenance & Construction Services (2007-2008)
Manager, Nuclear Construction & Engineering Support (2006-2007)
Manager, Chemistry Division (1998-2006)
Manager, NSSS Systems Engineering (1997-1998)
Manager, Power Generation System Engineering (1993-1997)
Supervising Engineer, Power Generation (1985-1993)
Supervisor, Retrofit and Startup (1982-1985)
Supervisor, Balance of Plant Test Operations (1981-1982)

#### **DESIGNATIONS**

Registered Professional Chemical Engineer (California Certificate No. 3559)

Registered Professional Mechanical Engineer (California Certificate No. 19966)

Certification in Project Management, University of California at Irvine (2001)

#### **EDUCATION**

Masters in Chemistry, University of Southern California (1975)

Bachelors of Science in Chemistry, University of Southern California (1974)

Substation Commissioning & Startup Engineer

Graduate Engineer with production engineering and management experience that has encompassed startup, design, operations, and decommissioning activities.

#### **KEY EXPERIENCE**

QUES – Utility Line Management Services 2010 – Present United States, CA

#### Startup Engineer

- Commissioning Startup Engineer for new and modified SCE substations.
- Provide coordination of testing and commissioning activities in support of electrical substations of varying voltage ratings from transmission to sub-transmission to distribution.
- Responsible for the coordination and resolution of issues related to completion of the substation and its facilities.
- Manage all aspects of the projects related to commissioning and testing. Perform scheduling and coordination of commissioning and testing activities.
- Document and report on current projects to customer management.
   Analyze project's risk, budgetary, and schedule restraints

# Southern California Edison

1985 – 2009 United States, CA

# Electrical/Controls Design Engineering Manager (1985-2009)

- Oversaw 45 engineers with various project responsibilities.
- Managed planning, performance, and corrective action programs.
- Provided oversight of SONGS Unit 1 decommissioning process and activities, including electrical, civil, and mechanical engineers.

#### **DESIGNATIONS**

ASME- General Member, and subgroup for MOV Performance Testing EPRI- NP-6660-D, Application Guide for MOVs, TAG member reviewer

#### **EDUCATION**

Graduate School, Carnegie-Mellon UniversityB.S. Nuclear Engineering, Pennsylvania State UniversityEE Major, University of Kentucky

Substation Commissioning & Startup Engineer Project Management, Engineering, and Supervisory experience in Power Generation and Transmission and Distribution. Extensive experience in Substation Testing and Commissioning of substation systems, including control circuits, relays, and system protection.

#### **KEY EXPERIENCE**

QUES – Utility Line Management Services 2013 – Present United States, CA

#### Startup Engineer

- Perform Startup Engineering technical oversight at new and retrofit T&D substations throughout Southern California Edison's service territories.
- Perform QA review of Engineering electrical and civil design drawings/packages for SCE. Implement commissioning turnovers of 12kv, 66kv, 220kv and 500kv substations.
- Provide oversight and documenting commissioning testing components (e.g. relays, HMI/RTU/PLC/DFR breakers, arrestors, CCVTs, wave traps, and protective relays).
- Development and review testing schedules (Microsoft Project), move programs, and switching orders. Provide Single point of contact between Grid Control Center, Substation Operations, Maintenance,
- Contracted Electrical Test, Vendors, Protection, Design, and Automation Engineering. Initiate and maintain Non-Conformance Report (NCR) documents, review test data and in-service readings prior to release of equipment.

# Southern California Edison

2006 – 2013 United States, CA

# **Project Management Organization/ Maintenance & Construction Services**

- Responsible for personnel and projects within the Construction/Project Management Organization. Managed Project Manager and Project Coordinators. Experienced with plant decommissioning.
- Served as the Safety Conscious Work Environment Advocate for PMO.
   Knowledgeable with SONGS procedures and processes. Managed 12 Non-Manual and 22+ Manual employees.
- Managed resources responsible for PMO 3-Finger Report, Project Scorecard, SPI, CPI, and KPI. Managed cost and schedule resources for 7DLA schedules and EAC cost reports.
- Established and maintained a consolidated project status and financial system. Established Level 1-3 schedule

## **DESIGNATIONS**

Project Management Professional (PMP) Engineer-In-Training (EIT)

#### **EDUCATION**

Bachelor of Science: Electrical and Computer Engineering emphasis in Power System, Instrumentation and Controls, California Polytechnic State University (2005)

Substation Commissioning & Startup Engineer

Graduate Engineer with production engineering and management experience that has encompassed startup, design, operations, and decommissioning activities

#### **KEY EXPERIENCE**

QUES – Utility Line Management Services 2010 – Present United States, CA

#### Startup Engineer

- Commissioning Startup Engineer for new and modified SCE substations.
- Provide coordination of testing and commissioning activities in support of electrical substations of varying voltage ratings from transmission to sub-transmission to distribution.
- Responsible for the coordination and resolution of issues related to completion of the substation and its facilities.
- Manage all aspects of the projects related to commissioning and testing. Perform scheduling and coordination of commissioning and testing activities.
- Document and report on current projects to customer management.
   Analyze project's risk, budgetary, and schedule restraints

# Southern California Edison

1995 – 2010 United States, CA

# **Manager of Electrical Construction (SONGS Nuclear Plant)**

 Provided direction of two supervisors in Nuclear Construction Engineering (NCE) and Test Technicians responsible for schedule development for outages, planning of Work Orders, and oversight of testing major design modifications to systems in the nuclear power plant. Supervisor of 220kV switchyard.

#### **Supervisor of Electrical Construction Engineering**

 Supervised eleven (11) Nuclear Construction Engineers (NCE) responsible for review of work orders and development of preoperational test procedures required for testing of electrical design modifications in the plant and switchyard. Certified EPRI Nuclear Work Order Planner and Procedure Author. Supervisor of SONGS 220kVswitchyard.

#### **DESIGNATIONS**

EPRI Nuclear Work Order Planner and Procedure Writer Nuclear Training Instructor USAF – Technical Sergeant (E-6)

#### **EDUCATION**

Bachelor of Science in Business Administration, concentration in Human Resources Management, California State University Long Beach

**Associate of Arts in Business Administration**, Golden West Community College Huntington Beach

# **AUTUMN BRAASE**

#### ROLE

#### **Technical Training**

#### **KEY EXPERIENCE**

# Northwest Lineman College 2019 – Present Boise, Idaho

# **Director of Workforce Programs**

- Lead segments of strategic projects and programs instrumental to the creation and expansion of NLC's business development partnerships
- Bridge innovation to reality, formalize plans into programs, and provide tactical, operational, and strategic insight

# Idaho Department of Commerce 2016 – 2019 Boise, Idaho

# **Senior Business Attraction Specialist**

- Worked with hundreds of companies in varying industries leading to 65 companies relocating or expanding to Idaho, bringing over \$800 million dollars in capital expenditure and over 4,500 new jobs
- Organized, managed and served as team lead for hundreds of site selection projects
- Scheduled and facilitated meetings and site visits between state officials, local governments, regional economic development organizations, educational institutions and corporate decision makers
- Completed in-depth industry research and data analysis, in partnership with research staff, to evaluate potential business attraction projects, anticipate market trends and substantiate the allocation of state tax incentive dollars

# Tampa Hillsborough Economic Development Corporation 2014 - 2016 Tampa, Florida

# **Business Development Manager**

- Fostered the creation of over 500 high-wage jobs with over \$15 million in capital investment while successfully negotiating over \$1.5 million in financial incentives and over \$300,000 in training grants
- Developed and lead 50+ industry association meetings and roundtable discussions to encouraging industry collaboration and discover innovative workforce solutions
- Served as the organizations' subject matter expert and relationship manager for industries such as information technology, life science and headquarters

# United War Veterans Council 2013 – 2014 New York, New York

## **Marketing Specialist**

- Planned/executed a marketing campaign increasing website hits by 510%, NYC household broadcast viewership of 88% and external market viewership of 74%
- Composed, edited and contributed to event website content using Wordpress
- Implemented a comprehensive social media campaign in collaboration with strategic partners

# **AUTUMN BRAASE**

# Idaho Department of Commerce

2008 – 2013 Boise, Idaho

# **Business Attraction Specialist**

- Completed in-depth industry research and data analysis, in partnership with research staff, to evaluate potential business attraction projects, anticipate market trends and substantiate the allocation of state tax incentive dollars
- Generated thousands of new leads for the state through industry partnerships, panel presentations, customer relationships, trade shows and conferences
- Contributed to the design and application of a comprehensive state -wide marketing strategy Participated in the customization and implementation of a department -wide Salesforce CRM rollout

#### **DESIGNATIONS**

Workforce Curriculum Tier 1 Certified

#### **EDUCATION**

Bachelor's of Business Administration, Boise State University

**Customer Service** 

#### **KEY EXPERIENCE**

#### ATCO ELECTRIC

2010 - 2019 Yellowknife, NT

## Supervisor, Office & Customer Service

- Supervisor of two teams (NUY and NWT), ensuring level of customer service provided by all staff met service excellence objectives
- Ensured all revenue was accurately billed and collected through CIS, AR and AP. Revenue payments included cash in-office, electronic, telephone, and payment agency
- Ensured all transactions through CIS were monitored and any issues were tracked and resolved
- Developed and updated internal policies and procedures as required
- Main point of contact for inventory ordering of office equipment and computer systems
- Personally addressed and managed all customer escalations and concerns regarding consumption and safety issues
- Conducted yearly performance plans and completed semi-annual assessments. Provided training opportunities and development plans for all staff
- Provided coaching and feedback to all staff regularly to ensure they operated as a cohesive team
- Assisted with the recruitment and hiring of staff for both customer service and operations
- Appointed as a member of the NUY negotiating team
- Assisted in conflict resolution involving staff
- Developed an excellent working relationship with key community members, including the City of Yellowknife and the GNWT
- Responsible for media and community relations. This included planning, organizing and attending events, representing Northland Utilities
- Extensive multi-tasking required. Assisted with both Manager and Operation roles during both short term and long term vacancies
- Co-Chair of the Joint Health & Safety Committee

Environmental

#### **KEY EXPERIENCE**

# **Quanta Services,** Inc.

2017 – Present Houston, TX

## **Environmental Manager**

- Working under Environmental management System to develop Quanta Environmental Program for projects
- Established environmental workgroup that developed Environmental Guidelines, Assessment tools and trainings
- Working with Risk and Legal Departments in Quanta and Operating Units
- Assisting with environmental incident responses in operating units

Key Energy Services 2012 – 2017 Houston, TX

#### **Environmental Director**

- Managed team of internal environmental specialists responsible for environmental remediation, permitting, compliance, Agency interactions
- Managed all environmental subcontractors, consultants and waste management company MSAs and projects
- Managed company asset and property environmental liability
- Oversaw due diligence process for acquisitions and divestitures

#### **Environmental Specialist**

- Conducted field work for environmental remediation and provided on site remediation project management
- Conducted environmental compliance audits, reported spills and noncompliances to regulatory agencies, prepared and executed field sampling plans

Texas General Land Office 2002 – 2012 Corpus Christi, TX & Houston, TX

# Oil Spill Response Officer

- Managed, planned for, and prepared and participated in drills for oil spills in Texas coastal water in coordination with state and federal agencies and regulated community
- Audited coastal facilities for compliance with Texas State laws.
- Conducted joint exercises and field inspections with USCG, EPA, TCEQ and TXRRC
- Represented State on Regional Planning committee. Drafted the first plan to utilize volunteers on spills that was USCG approved
- Media Coordinator for Adopt-A-Beach program, Served as Incident Commander on M/V Chemical Supplier spill in Houston Ship Channel in 2009
- Worked in Unified Command center Environmental Unit on M/V Eagle Otome and MODU Deepwater Horizon spills in 2010
- Drafted spill response plans that were utilized following my departure on the Texas City Y spill in 2014

# MAREN COLIGAN, M.S., REM, CSEM

#### **Natural Resource Specialist**

- Drafted permits for a multitude of project types in Texas coastal water.
- Conducted field assessments in coordination with permit applications for residential, commercial and industrial projects
- Worked with sister agencies, USACE, USFWS, TXPWS, TCEQ, on permitting for large coastal projects
- Conducted shoreline determinations and field audits of permitted and unpermitted structures for the state of Texas

#### **DESIGNATIONS**

Registered Environmental Manager Certified Safety and Emergency Response Manager

# **EDUCATION**

Bachelor of Marine Biology, Southwestern College of Kansas Master of Science, Coastal Ecology, Texas A&M University - Corpus Christi

Safety & Health

#### **KEY EXPERIENCE**

# Quanta Services, Inc.

2017 – Present Houston, TX

## **Vice President, Safety Health and Environmental**

- Oversee Safety, Health and Environmental Programs for Quanta Services Operating Units
- Oversee the integration and continual support of Northwest Lineman College
- Oversee training programs that support technical training for Operating Unit employees
- Oversee the development of a Corporate Environmental Program
- Coordinate staff to provide Safety, Health & Environmental support to the business units
- Ensure that progressive ideas are continually being developed and implemented by all levels of management to drive the safety process

PLH Group, Inc. 2014 – 2016 Irving, TX

#### SVP, Safety, Health and Environmental

- Oversee Safety, Health and Environmental Programs for pipeline and electric safety, working with each PLH subsidiaries to ensure compliance with all federal, state and local regulations
- Develop and oversee Corporate Environmental Program
- Oversee Department of Transportation (DOT) Programs
- Develop, oversee and manage Department of Labor Apprenticeship Programs
- Develop key policies and procedures to create an environment of accountability and execution of those items
- Develop programs specific to pipeline safety
- Coordinate staff to provide Safety, Health & Environmental support to the business units
- Ensure that progressive ideas are continually being developed and implemented by all levels of management to drive the safety process
- Due Diligence team member for mergers and acquisitions
- Insurance Program management

PLH Group, Inc. 2011 – 2014 Irving, TX

#### Vice President, Safety and Training

- Developed and oversaw all Safety and Health programs for PLH subsidiaries to ensure compliance with all federal, state and local regulations
- Developed key policies and procedures to create an environment of accountability and execution of those items
- Developed, oversaw and managed Department of Labor Apprenticeship Programs
- Coordinated staff to provide adequate training and auditing to project personnel
- Ensured that best practices are continually being developed and shared by the individual business units

# **MATT COMPHER**

Power Line Services, Inc. 2009 – 2011 The Woodlands, TX

#### Vice President, Safety and Training

- Developed and oversaw Safety and Health programs for all Electric Construction Subsidiaries to ensure compliance with all federal, state and local regulations
- Developed key policies and procedures to create an environment of accountability and execution of those items
- Coordinated staff to provide adequate training and auditing to safety personnel on key projects
- Ensured that progressive ideas were continually being developed and implemented by all levels of management to drive the safety process;
   Mediated insurance renewal with key stakeholders and outside consultants
- Served as Executive sponsor of Insurance program including auto, construction equipment, liability, and workers compensation
- Lead initiatives on key expansions of real estate facilities including substation operations, maintenance facility and operational headquarters of our utility construction division
- Developed and managed Department of Labor Apprenticeship Program

American Electric Power 2004 – 2009 Columbus, OH

#### **Contractor Safety Administrator**

- Directed and managed AEP Transmission construction contractor safety program including program development, assessment and execution
- Mediated interface with contractors on matters regarding safety performance
- Developed, implemented and managed all aspects of the AEP Transmission Safety Terms and Conditions for all contracted capital construction, accommodating requirements of annual capital program ranging from \$400-\$700M annually across 11 states and 75 contract companies
- Managed and maintained statistical contractor employee and safety performance databases
- Prepared and disseminate reports to management
- Provided necessary training, guidance and contractor safety oversight for 75-125 Transmission Construction Representatives, Project Managers and Project Lead Engineers
- Managed and administered outsource activity as it pertains to professional safety consultation and OSHA training as well as outsourced AEP construction safety managers for major projects
- Served as AEP Transmissions primary interface with contractor senior executive management regarding matters concerning safety

# **MATT COMPHER**

# MPW Industrial Services 2003 – 2004 Hebron, OH

# **Central District Health and Safety Manager**

- Managed Health and Safety for over 300 employees working at several different accounts
- Worked with owner safety representatives on matters regarding safety at their plants and facilities
- Developed site specific and job specific safety plans for new accounts or projects
- Multi-state responsibilities included, Ohio, Michigan, Kentucky, Indiana, West Virginia & Virginia
- Directed Safety Supervisors who work for and report to the Central District Health and Safety Manager

# MPW Industrial Services 2002 –2003 Hebron. OH

# **Cincinnati District Health and Safety Manager**

 Oversaw Cincinnati District and safety for MPW's largest account (AK Steel Middletown Works)

# MPW Industrial Services 2001 – 2002 Hebron, OH

# **On Site Safety Supervisor**

- Managed Health and Safety for all employees working at AK Steel Middletown Works
- Successfully improved the safety culture and obtained an injury free workplace for a record period of time
- Recognized by AK Steel as most improved safety performance of the year
- Recognized by AK Steel for one year zero recordables and lost time incidents

## **DESIGNATIONS**

Construction Health and Safety Technician (CHST)
Occupational Health and Safety Technologist (OHST)

**Certified Utility Safety Professional (CUSP)** 

## **Asset Management**

#### **KEY EXPERIENCE**

# Quanta Technology 2019 – Present Raleigh, NC

## **Executive Advisor, Distribution & Asset Operations**

- His responsibilities include all aspects of asset management, system planning, risk and compliance management, reliability performance, and technology deployment for electric transmission and distribution systems.
- Development and deployment of technology and smart grid strategies for a large electric transmission and distribution utility
- Worked with State and Federal regulators, legislators, and community and union leaders to develop and implement regulatory policies..

# Pacific Gas& Electric

1981 – 2019 San Francisco, CA

# Vice President of Electric Asset Management

- Transmission and Distribution planning and reliability for 70,000 square mile service area with approximately 18,000 miles of transmission lines and 100.000 miles of distribution lines
- Transmission, Substation, and Distribution asset management including investment strategies, standards, and performance management
- Electric Operations technology research, demonstration and program management for operations, and information systems technology (OT and IT)
- Advanced Technologies Laboratory and Applied Technology Services providing internal technical consulting services to the utility including meteorology, electrical testing, equipment repair, non-destructive evaluation, corrosion management, and technology integration testing
- Electric Operations risk and compliance management including leading Electric Operations' PAS 55/ ISO 55000 certification initiative

# **DESIGNATIONS**

- Past Chairman NERC
- Past Board Member and Vice Chairperson Gridwise Alliance
- Past Chair WECC Board of Trustees
- Past member University of California Merced Board of Trustees
- Member, Institute of Electrical and Electronics Engineers (IEEE)

#### **EDUCATION**

MS, Electrical Engineering, Santa Clara University (1991)

**BS**, Electrical Engineering, Iowa State University (1981)

Operations Business Support

#### **KEY EXPERIENCE**

#### **ATCO**

2015 – Present Alberta, Canada

# Systems Analyst

- Act as the front line for all Oracle financial incidents and special requests
- Manage quarterly Oracle upgrade
- Provide training for Financial Oracle Applications
- Support Finance transformation projects
- Provide support to the Derivative team

# ATCO POWER

2014 – 2015 Alberta, Canada

# **Accounting Services Analyst**

- Prepared Hedge & MTM accounting calculations
- Reconciled the Hedge & MTM contract deals against Deal System Capture (DRR data)
- Prepared gas deals reconciliation against the wholesale team data
- Developed and implemented documentation for Derivatives team
- Managed and monitored the accounting treatment for hedge and MTM deals
- Prepared the hedge effectiveness report (Power & Gas) monthly to ensure that the hedge relationship is still highly effective.
- Prepared the hedge effectiveness calculations and analysis (Prospective & retro).

#### ATCO POWER

2012 – 2014 Alberta, Canada

# **Accountant, IPP Energy Invoicing**

- Prepared the GT Hydro revenue models that currently depict pool revenues, Ancillary Service Market(ASM) revenues, Transmission Must Run Service(TMR) revenues, fuel cost and LSTA cost
- Prepared invoices for TMR dispatches and LSTA cost hours
- Prepared detailed analysis of the plants fuel consumption and monthly fuel reconciliations
- Prepared fuel payments
- Prepared ASM Reconciliation and settlements
- Provided insight to the commercial group and Joint venture partner on commercial statistics (Fuel volumes, generation, gas consumption, fire hours and outages report)
- Monitored daily Trades for the Ancillary services
- Reconciled Wattex Vs Ancillary Services Model
- Prepared Estimate Revenue Month End and Prepare Watt-Ex Settlement

# HUGO DELGADO, BCS.

# **ATCO POWER**

2008 – 2012 Alberta, Canada

# **Corporate Accountant**

- Supported Oracle Financials, Special project, Oracle implementation and training for users
- Worked directly with Accounting, Finance and Operations leadership and staff to support their financial/analytical system needs
- Provided support in technical developments via Excel spreadsheets (VB) and other reporting tools
- Performed Control accounts reconciliations and analysis
- G&A analysis and reconciliation
- Payroll reconciliation and interface process
- Month End closing process

# **EDUCATION**

**Bachelor of Economics**, Universidad Autonoma de Occidente, Colombia **Diploma Business Information Systems**, Fanshawe College, London, ON

# **MICHAEL DELISIO**

#### **ROLE**

Transition Support, infrastructure improments

#### **KEY EXPERIENCE**

ION Consulting, 2000 – Present Houston, TX

#### Director

- Manage facilities infrastructure improvement projects to accommodate the installation of a new reverse-osmosis boiler water system at Illinois Power's Havana Station
- Evaluate PI Software implementation for DTE Energy
- Develop control system specification and control room upgrade for AES plant Ampliacion
- Develop EPC specification for a green field, mine mouth coal-fired plant at Elkhart Illinois by coordinating the preliminary engineering activities, preparing bid documents and serving as a member of the bid evaluation team
- Serve as Lead Engineer for plant condition assessment of AES Arrecifes Plant in Caracas Venezuela
- Served as Lead Engineer for plant condition assessment of AES Tacoa Plant in Caracas Venezuela
- Performed a root cause analysis of a furnace explosion on AES Tacoa Unit
   5, and developed recommendations to prevent a recurrence
- Performed condition assessment of two oil-fired PSEG generating units in Connecticut
- Performed condition assessment of Nova Scotia Power generating assets,
   Fossil and Hydro, for the Nova Scotia Electric Power Commission
- Served in an advisory capacity for industrial safety related issues at San Onofre Nuclear Generating Station during the Unit 2 steam generator replacement
- Performed Plant administrative reviews of CPS Energy's Spruce, SommersDeeley and Braunig Generating Stations
- Served in an advisory capacity for industrial safety related issues during a scheduled outage at the Mystic 8 Generating Station, Medford, MA

# **MICHAEL DELISIO**

1993 - 2000

## Director (cont.)

- Led the design, development and implementation of decision support tools for the Fossil Generating Portfolio to support the transition from a regulated cost-plus business to a deregulated competitive business
- Managed a 1700 MW generating facility, Powerton Station, the largest coal-fired plant in the ComEd system
- Served as the local ComEd representative to the communities within Tazewell and Peoria counties
- Managed a team of ten Project Managers responsible for scope, schedule and budget for all major engineered capital projects within the Fossil Division
- Managed day-to-day plant operations and the plant safety program at Joliet Generating Station 29
- Served as a member of the Fossil Division Safety Task Force
- Served as the lead investigator of a fatal dust collector explosion at Joliet Station, and on the team investigating furnace explosions at State Line and Fisk Generating Stations
- Responsible for all maintenance activities at Collins Generating Station, a 2750 MW oil fired facility
- Managed a staff of engineers and engineering assistants responsible for monitoring plant processes and plant performance at Collins Generating Station
- Developed and implemented pre-operational procedures and performed interlock testing, systems start up, and operational troubleshooting of five new 550 MW oil-fired steam generating units
- Performed various engineering assignments as a member of the station's technical staff

**EDUCATION** 

**Engineering Administration Masters**, Bradley University **Chemical Engineering Bachelors**, University of Illinois

Manager - Planning & Reporting

#### **KEY EXPERIENCE**

# ATCO Gas and Pipelines Ltd.

2018 – Present Alberta, Canada

# Manager - Planning & Reporting

- Managing the annual business plan process and ensuring timely delivery of presentation materials to Senior Leadership
- Working closely with internal customers to understand business needs and aligning reporting standards across business units to increase efficiency and improve quality of information used to make business decisions
- Establishing accurate earnings forecasts, understanding variances to actual results, and presenting financial summary to various internal customers monthly
- Forecasting business cashflow needs and determining debt financing annually to ensure year end targets are achieved while maintaining proper debt structure
- Reviewing accounting transactions monthly posted by the General Accounting team and ensuring accuracy of financial statements
- Leading preparation of various reporting packages used by Senior Leadership. Reporting deliverables include monthly financial and operational results, quarterly review packages to explain year over year variances, and Designated Audit Director (DAD) packages to explain operational and financial matters to the Board of Directors
- Preparing financial information related to the business which is used in publicly disclosed documents such as the Management Discussion & Analysis (MD&A)
- Working closely with the Regulatory teams to determine the accounting treatment of regulatory decisions and calculating the financial impact to the business
- Overseeing preparation of key components used in annual regulatory filings such as Rule 005 and annual deferral applications
- Coaching staff and providing necessary support to ensure development of technical knowledge and soft skills. Providing both formal and informal feedback to direct reports on a frequent basis, and recognizing accomplishments

ATCO Electric Ltd. 2015 – 2018 Alberta, Canada

## Manager, Accounting

- Managed a team of 8 direct reports and lead month end close activities to ensure accurate recording of business transactions, and timely reporting of results in accordance with IFRS and Canadian GAAP
- Lead preparation of non-consolidated and consolidated monthly, quarterly, and annual financial statements in a timely and efficient manner. Provided ATCO Corporate with external reporting information used in the Management Discussion & Analysis

- Reviewed intercompany transactions with affiliate companies to ensure they are recorded in accordance with Compliance Rules mandated by the Alberta Utilities Commission (AUC)
- Researched and analyzed new accounting standards applicable to rate regulated utilities and determine impact to financial statements under IFRS
- Worked closely with various stakeholders to prepare annual regulatory filings which are submitted to the Alberta Utilities Commission (AUC). Prepared written responses to interveners during regulatory hearing process
- Lead the preparation of annual tax provision and filing of the corporate tax return for ATCO Electric Ltd. Presented corporate tax matters and impact to earnings to Management
- Managed communication with internal and external auditors, assisted with internal controls testing and process walk-throughs, and coordinated audit of quarterly and annual financial statements
- Worked closed with Project leads to ensure smooth transition of historical financial data in old accounting system to new Oracle Fusion (Cloud)
- Developed performance goals with subordinates and monitored frequently to ensure goals were being met, and provided timely feedback

#### **ATCO Electric Ltd.**

2014 – 2015 Alberta, Canada

# Supervisor – Business Planning & Forecasting

- Established earnings targets based on approved return on equity (ROE), maintained forecasting of capital expenditures in the Capital Budgeting System (CBS), determined financing requirements, monitored credit metrics, and forecasted cash flow
- Lead the annual Business Plan process and ensured all deliverables were provided to Senior Leadership in a timely and efficient manner under tight deadlines
- Analyzed financial statements and prepared explanations for actual variances to business plan monthly
- Projected debt financing requirements by utilizing financial models to forecast future capital expenditures and changes in working capital to ensure year end cash targets were achieved
- Developed Capital Tracker model used under Performance Based Regulation (PBR), which was filed with the Alberta Utilities Commission, to provide a mechanism for the Distribution utility to recover necessary capital funding over the plan term while earning premium returns

## ATCO Electric Ltd.

2011 – 2014 Alberta, Canada

# Senior Corporate Accountant – Business Planning & Forecasting

- Worked on preparation of annual business plan and other corporate deliverables in a timely manner
- Utilized financial models in order to forecast earnings on a monthly basis and track variances to business plan targets. Worked closely with various groups to understand deviations from the forecast and provided explanations to Management

- Planned and lead Hyperion system implementation project, Capital Budgeting System (CBS), used to budget Capital Expenditures by utilizing Oracle Hyperion. Worked closely with consultants and various operating groups over several months to ensure the new system captures business needs
- Lead various Oracle Hyperion training sessions to Operational Accountants as well as members of the Business Planning team
- Calculated financial metrics on a monthly basis to ensure ATCO Electric maintains an A Credit Rating and presented to Management

# PricewaterhouseCoopers (PwC) LLP 2008 – 2011 Alberta, Canada

#### Senior Associate – Audit & Assurance

- Planned, performed and executed audit engagements for large public and private companies in various industries
- Performed GAAP vs. IFRS analysis and research to assist clients transitioning to new international accounting standards
- Performed GAAP vs. ASPE analysis and research to assist clients transitioning to new accounting standards for private entities
- Performed internal controls testing for large public and private companies to ensure that transaction processes are operating efficiently and effectively, and provided recommendations where weaknesses were noted
- Performed testing over control procedures for large public U.S. clients to ensure compliance with Sarbanes-Oxley Act (SOX)
- Planned, performed and executed review engagements for large private companies in several industries
- Drafted financial statements for clients which includes preparation of the balance sheet, profit and loss, cash flow statement, and related note disclosures
- Performed notice to readers for small private clients and prepared corporate tax returns
- Ensured engagements were sufficiently staffed and provided guidance to junior staff to assist completion of relevant sections assigned to them

#### **DESIGNATIONS**

Chartered Acountant, CA Legacy Designation Chartered Professional Accountant, CPA Designation

#### **EDUCATION**

**Bachelor of Commerce**, Accounting/Finance, University of Alberta **Chartered Accountant Designation**, Chartered Accountant School of Business

Foundations of Leadership, Mount Royal College

**Executive Support** 

#### **KEY EXPERIENCE**

# Quanta Services, Inc.

2012 – Present Houston, TX

# **Vice President, Operation**

- Responsible for corporate wide Engineering, Procure and Construct Projects, Various International Regions and Operational Lead for cross functional and multi business unit projects
- Championed Quanta's operations in opportunities that involve investments by Quanta Services.
- Renegotiated contract for large electric transmission customer back to profitability.
- Awarded competitively bid West Coast utility gas transmission outsourced construction contract (\$300M+). Led all aspects of deal including; deal shape and contract pricing, organizational structure, strategy, and contract negotiations.

# Dashiell / Quanta Services Company

2006 – 2012 Houston, TX

# **Vice President Operations and Business Development**

Executive with responsibility for regional and market operational and business development functions of Dashiell, an electrical engineering and construction services business unit of Quanta. Specific responsibilities include operational performance, project success, revenue growth, strategic business planning, customer relationship management, project development and customer diversificationLorem ipsum dolor sit amet, consectetuer adipiscing elit. Maecenas porttitor congue massa.

#### ABB Inc.

1998 – 2006 Raleigh, NC

# **Manager Strategic Development**

• Manager responsible for the Technical Sales and Marketing Development Program, development of new web based marketing and customer analytical tools for the Front End Sales Organization and leadership of ABB's technical and commercial messages across business units across industry.

#### **Account Executive**

 Utility Account Sales Manager responsible for the sales and strategic marketing activities at investor owned electric utilities in Kansas and Missouri.

## **DESIGNATIONS**

Professional Engineer (Alberta)
Project Management Professional (PMI)

#### **EDUCATION**

**Bachelor of Science, Mechanical Engineering**, University of Kansas **Masters of Business Administration**, Rice University

# **ROBERT DUMAS**

## **ROLE**

## **Engineering Support**

#### **KEY EXPERIENCE**

# Quanta Technology

2018 – Present Raleigh, NC

# **Principal Advisor, Advisory Services**

- Responsible for all aspects of Advanced Metering Infrastructure proposal development.
- Development and deployment of technology and smart grid strategies for a large electric transmission and distribution utility
- Worked with State and Federal regulators, legislators, and community and union leaders to develop and implement regulatory policies..

#### Itron Inc.

2017 – 2018 Raleigh, NC

# **Director, Solution Delivery**

- Utilizing SQL database to migrate asset data for software upgrade
- Validating that asset records/fields align with business needs
- Mapping data migration efforts for all future internal/external users

Elster Solutions 1999 – 2014 Raleigh, NC

## Vice President, AMI Program Delivery

- Directed a 90+ person staff including department directors, engineers, Java developers, GIS analysts and system analysts. Responsible for project deployment, professional services, field services, and ongoing support for Smart Grid and AMI programs.
- Created and delivered AMI project services executive level presentations in support of sales efforts with winning results.
- Pioneered GIS processes for metering service location estimation and deployment planning for RF based AMI systems to greatly accelerate product market acceptance, accelerate program implementation and catalyze company growth.
- Led the development and implementation of project management processes and procedures to ensure efficient and consistent project implementation, tracking and reporting. Obtained department ISO certification
- Implemented customer support processes and web portal services to allow rapid customer issue resolution increasing customer satisfaction

## **DESIGNATIONS**

- Registered Professional Engineer NC # 021763, VA # 019875
- Leadership Development in ABB Duke University
- Conceptual Selling, Strategic Selling, Miller Heiman
- Contract Law University of Richmond

#### **EDUCATION**

**BS** - Nuclear Engineering, N.C. State University (1977)

MS - Environmental Engineering, N.C. State University (1996)

**PhD** - Environmental Engineering, N.C. State University (1999)

# JESUS (EDUARDO) FERNANDEZ, MBA.

## ROLE

Internal Controls

#### **KEY EXPERIENCE**

#### **ATCO**

2016 – Present Alberta, Canada

## **Manager, Internal Controls**

- Lead the Internal Controls Team (4 Senior Internal Controls Advisors + 2 Internal Controls Analyst)
- Plan and coordinate annual activities to fulfill C-SOX Certification Program (NI 52-109) and financial reporting requirements
- Provide internal controls expertise, oversight and support the CFO, Controllers and Business Process stewards
- Coordinate and lead Internal Controls Certification Program (ICC) and Steering Committee (with PWC, VP of Internal Audit and the CFO)
- Support management by implementing and maintaining the Company's Internal Controls Framework
- Support the senior management team in the development, maintenance and oversight of the Internal Controls Over Financial Reporting (ICFR)
- Determine annual materiality and significant account scoping (top down risk assessment) for ICC planning
- Oversee planning and execution of internal controls testing, evaluating design and operating effectiveness

# Coca-Cola Refreshments 2009 – 2016 Alberta, Canada

# Manager, Finance Western Canada

- Ensured accuracy of financial reports, planning, forecasting and KPIs for the Distribution, Warehouse, Sales and Marketing, Fleet and Cold Drinks business units
- Lead the Western Canada Finance and Administrative team (6 Business Managers direct reports + 26 indirect reports)
- Focal point and partner with Internal Controls team supporting SOX, COSO, internal/external audits, compliance and standard business processes
- Key advisor and financial business partner to Sales Vice President and PSS/Field Operations Vice President
- Performed monthly P&L (including revenue/EBITDA analysis) and Balance Sheet reviews for regional and corporate Vice Presidents & MD&A inputs
- Coordinated and developed company's annual budget for Western Canada
- Validated process improvement and financials associated with DMAIC and 5S methodology (Six Sigma)
- Prepared financial cases for new projects, business developments and opportunities to increase revenue
- Prepared and reviewed monthly forecasts for sales volume and OPEX results
- Coached and developed my team members and other Business Unit Leads in order to achieve best performance
- Analysis and calculation of revenue (EBITDA) per case metric for business performance KPIs

# JESUS (EDUARDO) FERNANDEZ, MBA.

#### **BASF Chemicals**

2008 – 2009 Caracas, Venezuela

#### Controller

- Coordinated and lead the finance team (3 direct reports / team of 13 employees)
- Financial and controls advisor to the Regional Directors
- Coordinated the annual budgeting process
- Performed monthly reviews of financial statements
- Prepared KPIs and presentations for Regional Directors
- Monitored performance and analysis of company revenue and working capital ratios
- Partnered with Internal Controls in order to implemented controls catalogs and risk assessments
- Analyzed Forex and currency exchange control impact
- Monitored business performance and budget deviations
- Developed business cases and strategies for new businesses and opportunities to increase revenue
- Represented the company on different business and commerce chambers
- Evaluated all the risks associated with local economy
- Coordinated external audits with E&Y
- Key contact for local entities for financial requirements including MD&A

#### ExxonMobil

2001 – 2007 Caracas, Venezuela

## **Controls Coordinator**

- Internal Controls advisor dedicated to advice the Finance and Accounting, HR, Procurement and IT department
- Member of the Management of Change (MOC) transition team responsible for handing over the operations to PDVSA after closing the EM subsidiary in Venezuela
- Coordinated monthly Accounts reconciliations process, KPIs and Financial Statements review with senior management
- Coordinated metrics company's performance for MD&A
- Analyzed independent revenue verification (financial reporting), royalties & tax calculations
- Ensured the accuracy and quality of the account reconciliations performed by the accounting team (9 accountants)
- Implemented SOX and COSO framework in the company
- Expert advisor on company's Controls Integrity Management System (CIMS) corporate compliance and Sarbanes Oxley (SOX 302 and 404) testing
- Ensured Procurement processes compliance with
- Company's Sourcing Handbook
- Coordinated Joint Venture audits (JV partners = PDVSA / BP and PetroCanada) following COPAS audit protocol
- Coordinated independent project reviews and unit internal assessments
- Expert advisor in Management of Change (MOC), Delegation of Authority (DOA), risk assessments and controls catalog
- Participated as team lead for implementing a Payroll System as well as for Citibank Mass Payment application

# JESUS (EDUARDO) FERNANDEZ, MBA.

#### ExxonMobil

2000 – 2001 Caracas, Venezuela

# **Project Execution Team - Intern**

- Analyzed project capital spending on a monthly basis (Total Project = \$4.7MM)
- Analyzed actual cost vs. budget and generate KPIs
- Prepared national content reports for local energy ministry
- Analyzed lump sum contracts and escalation payments
- Analyzed claims to contractors on scope and time execution
- Forecasted payment based on contractual commitmentsAnalyzed impact of currency inflation on the project cost

# **DESIGNATIONS**

- Colegion de Adminitradores y Contadores Venezuela
- Prosci ADKAR Change Management Certification
- ARBUTUS Data Analytics Certification
- Capability Maturity Model Integration (CMMI) CMMI V2.0 Certification (CMMI) – CMMI V2.0

#### **EDUCATION**

Master in Business Administration, Cornell University
Bachelor of Business Administration, Finance and Accounting,
Universidad Catolica Andres Bello, Caracas Venezuela
CMMI

# STEPHANIE FISHER, RIMS-CRMP, RF, CRM, ARM, CRIS

#### **ROLE**

Risk Management and Insurance

#### **KEY EXPERIENCE**

#### **Quanta Services, Inc.**

2003 – Present Houston, Texas

# **Director of Risk Management and Insurance**

- Overall responsibilities for Risk Management and Insurance for Fortune 300 global construction company to include insurance procurement, claims management, and risk financing.
- Oversight of Surety relationships, capacity, and claims.
- Management of Captive Insurance Company.
- Oversight of Crisis Management Team.

## **AIG Claim Services**

1996-2003 Houston, Texas

# **Unit Manager, National Accounts**

- Managed National Account team with responsibilities for service calls, presentations, and files reviews.
- Management responsibilities from interviewing to training and counseling.
- Served on several nationwide Strategive Initiatitves and served as Houston BPI Facilitator.

# Aetna Casualty & Surety

1989 - 1996 Texas, California

# **Senior Claim Representative**

- Handled both personal and commercial claims for auto, general liability, workers' compensation, and excess policies specializing in National Accounts. This includes outside investigations, coverage analysis, Mediations, service calls, and basic claim handling.
- Served on Employee Leadership Council appointed by Management.

## **DESIGNATIONS**

Energy Risk Insurance Specialist (ERIS), International Risk Management Institute (2019)

RIMS-Certified Risk Management Professional, inaugural class, RIMS (2016)

Risk Fellow, RIMS (2015)

Construction Risk Insurance Specialist (CRIS), International Risk Management Institute (2014)

Certified Risk Manager, National Alliance (2010)

Associate in Risk Management, The Institutes (2010)

## **EDUCATION**

**Master of Legal Studies (MLS)**, Dispute Resolution concentration, Pepperdine Law School, Malibu, California (2020)

**The Institutes' Management Education Program**, Wisconsin School of Business Center for Professional and Executive Development, Wisconsin (2015)

**Bachelor of Business Administration**, Finance, Baylor University, Waco, Texas (1989)

Performance Metrics

#### **KEY EXPERIENCE**

# Quanta Technology 2016 – Present Raleigh, NC

# **Principal Advisor, Distribution & Asset Operations**

- Provide engineering and project management support in the areas of DER impact, reliability, distribution engineering assessment, spatial load forecasting, and distribution voltage conversion studies.
- Investigated and identified measures to improve distribution system reliability. Identify potential enhancements to the distribution reliability improvement strategy for the next several years with particular emphasis on identifying ways to reduce SAIDI and SAIFI.
- Conduct DER impact studies looking at the max / min load scenarios which evaluates the adequacy of the feeders to accept the generation by the DER, with respect to equipment thermal capacity and voltage performance. Primary line and equipment loadings are be compared with their ratings. Voltage violations are reviewed and if found, mitigating solutions are identified.

#### **DNV-GL**

2008 – 2016 Raleigh, NC

# **Principal Consultant, Power System Planning**

- Performing consulting studies related to distribution system modeling, asset management, reliability, analytics, and automation
- Modeling the impact of distributed generation on electric distribution grids, providing expertise on smart grid applications, evaluating voltage conservation projects
- Performing reliability studies for distribution automation upgrades, and reviewing utility policy and utilization of distribution assets

# American Electric Power (AEP) 1999 – 2008 Columbus, Ohio

# **Principal System Analyst**

- Maintained and supported distribution engineers in the use of line design software. This included both electrical and structural analysis. Also supported field engineers in the use of GPS technologies.
- Responsible for the installation of PQ equipment (including communications), data collection and analysis of PQ indices.
- Coordinated the design, development, and support of an application to administer and track various outside contractors. This included the processing of contracts, work-orders, timesheets, invoices, and bank transfers..

## **DESIGNATIONS**

Professional Engineer, Pennsylvania

#### **EDUCATION**

Master of Electric Power Engineering, Ohio State University (1978) Bachelor Science Electrical Engineering, Ohio University (1977)

# FRANCIA GALARRAGA

#### ROLE

Compliance Analyst

#### **KEY EXPERIENCE**

# **ATCO Natural Gas**

2015 – Present Alberta, Canada

# **Compliance Analyst**

- Risk management analyst supporting the implementation of the Enterprise Risk Management (ERM) framework in the Natural Gas and Electricity divisions. The ERM framework allows the Companies to effectively manage business risk, adhere to required global regulatory requirements and maximize shareholder return.
- Collaborate with Senior Management level on identifying, assessing and reporting extreme/high risks across the Utilities looking at external and internal influences that exist.
- Prepare and coordinate risk materials for the Semi Annual Risk Meetings.
- Responsible for implementation of the anti-bribery and anti-corruption compliance program, ensuring compliance with the *Corruption of Foreign Public Officials Act* and other anti-corruption regulations, conducting anticorruption risk assessment and developing risk-mitigation strategies.
- Conducted and lead anti-corruption in person training in ATCO Mexico, and developed online training program.
- Support the Performance Measurement and Benchmarking process maintaining high quality KPIs reporting on a timely basis.
- Key contact for credit reviews, business intelligence information and anticorruption due diligences on Business Development initiatives.
- Responsible for performing internal control compliance documentation over financial requirements.

# ATCO Structures & Logistics

2011 – 2015 Alberta, Canada

#### **Senior Internal Auditor**

- Responsible for implementation of the anti-bribery and anti-corruption compliance program, ensuring compliance with the *Corruption of Foreign Public Officials Act* and other anti-corruption regulations, conducting anticorruption risk assessment and developing risk-mitigation strategies.
- Senior Internal Auditor responsible for performing internal control compliance evaluations over financial, operational, IT, and regulatory requirements.
- Tasks included developing audit plans and audit procedures, performing audits, preparing recommendations, and reporting the results to Management.

# ConocoPhillips

2006 – 2008 Puerto La Cruz, Venezuela

# **SOX Coordinator**

- SOX Coordinator for the Joint-Venture between ConocoPhillips and Petroleos de Venezuela (PDVSA) with 110,000 bbl/day production.
- Maintained and validated SOX documentation and internal control processes on an ongoing basis.
- Ensured financial reporting control compliance by coordinating with internal auditing, operating groups, and external auditors.
- Developed test procedures and tested operational efficiency of internal controls over financial reporting for SOX compliance.

# FRANCIA GALARRAGA

# Pfizer Pharmaceutical 2002 – 2006

2002 – 200 Caracas, Venezuela

# **Risk Assurance Manager**

- Conducted internal audits and created communications and status reports for senior management and the Audit Committee.
- Conducted fraud investigations and compliance reviews for accounts payable and employee expenses.
- Improved internal control system pertinent to AP receiving
- Coordinated monthly accounts payable and accruals accounts reconciliation process.

## **Ernst & Young**

1990 – 2001 Caracas, Venezuela

## **Audit Manager**

- Assessed the internal controls of corporate clients and strategized improvements while planning and leading audit engagements.
- Reviewed individual and consolidated financial statements and prepared audit reports for domestic and international corporations.

## **DESIGNATIONS**

Chartered Professional Accountants (CPA)

#### **EDUCATION**

**Bachelors in Accounting,** Andres Bello Catholic University, Caracas, Venezuela

**Master in Business Administration**, Metropolitana University, Caracas, Venezuela

# ROGER GARRETT

#### ROLE

**Business Strategy Support** 

#### **KEY EXPERIENCE**

# ION Consulting 2019 – Present

#### **Director**

- Energy Executive with a successful track record creating, developing and implementing business strategies; building and managing large, diverse teams; and initiating and implementing complex projects. Over 20 years of diversified experience in the energy industry including acquisitions, project development, operations, corporate business initiatives, capital equipment sales, after-market parts and service sales, and marketing
- Extensive knowledge of U.S. energy markets and organizations
- Recognized for ability to structure and close deals and implement creative solutions. Skilled in fostering collegial working atmosphere among team members even during periods of high stress. Effective presenter to key decision makers, investors, and lenders
- Highly skilled in acquisitions and project development, corporate financial planning, business strategies, regulatory reviews and approvals, project management, environmental permitting and siting, contract negotiations, due diligence analysis, business development and commercial transactions

# **GE** 2003 – 2019

# **Head, Resource Planning and Acquisitions**

- Established, staffed, and directed a 20-member organizational team with responsibility for corporate financial planning, new business initiatives, and capital project review
- Acquired and developed all new electric generation resources, including deal structuring, contract negotiations, siting, permitting, property rights, regulatory approvals, legal strategies, and public involvement.
- Successfully acquired and developed over \$2.5 billion and 2 GW of new generation assets
- Dircted a team responsible for exploring emerging energy technologies, trading environmental credits, and developing corporate growth initiatives
- Managed a team responsible for the development and construction of new infrastructure projects, including the Tacoma LNG project and the acquisition of electric generation resources for the company's portfolio – whether acquisition of physical operating assets, development of new assets or longer-term power purchase agreements
- Responsible for exploring and implementing generation projects utilizing emerging technologies

# **PG&E** 1991 – 2002

- Managed multi-disciplinary project team with responsibility for all aspects of project management and development, including siting, permitting, property rights, contract negotiation, engineering, fuel procurement, regulatory approvals, legal strategies, public involvement, financing, partner relations, and marketing
- Established market presence in Northwest Region

# **ROGER GARRETT**

Puget Sound Energy 1977 – 1991

- Held a variety of sales and marketing positions, including international sales, in the GE Energy sector
- Involved with power generation equipment and after-market sales and services for both utility and industrial market segments

# **EDUCATION**

International Marketing Masters, Union College
Electrical Engineering Bachelors, University of Nebraska – Lincoln

# JAMES WALTER GLOTFELTY

## **ROLE**

Senior Advisor

#### **KEY EXPERIENCE**

# Quanta Services, Inc.

2017 – Present Houston, TX

#### **Senior Advisor**

 Working with government agencies at the state and federal level and has led the start-up of numerous successful government and regulatory affairs organizations

# Clean Line Energy Partners

2009 – 2017 Houston, TX

# Founder, Executive Vice President

- Oversight of government relations functions with Congress, and state legislatures
- Participate in r State regulatory efforts, including testimony before state legislatures and agencies
- Work with State regulatory agencies and other industry efforts to develop rules and opportunities for independent transmission companies across the US
- Led numerous stakeholder meetings and discussions with landowners and state and local officials

## **IFC Consulting**

2004 – 2009 Houston, TX

## **Managing Director**

- Managed regional business development and expansion strategy for Electric Reliability Compliance, Electric Power, Transmission, Renewables and Fuels
- Created and managed NERC Compliance consulting practice
- Managed numerous projects for RTOs, electric utilities, independent power producers, renewable energy developers, local, state and federal agencies, emerging energy technology companies in MISO, PJM, NYISO, CAISO and ERCOT
- Worked with CEOs and senior management of major energy providers on energy development strategies, strategic planning activities, legislative and regulatory strategies

# U.S. Department of Energy 2005 – 2004 Washington, DC

# Director, Office of Electric Transmission and Distribution (Assistant Secretary) and Senior Policy Advisor, Office of the Secretary

- Led Bush Administration's negotiations with Congress on Energy Bill and other presidential priorities
- Political appointee and DOE Management Council Member. Worked extensively with DOE Labs and industry on legislative, policy and management issues
- Participated in DOE and regional critical infrastructure exercises

# JAMES WALTER GLOTFELTY

# Calpine Corporation 1998 – 2001

1998 – 2001 Houston, TX

# **Director, Government and Regulatory Affairs**

- Managed government, regulatory and public affairs office for 14 states
   Oversaw internal and external staff of 20 employees and consultants
- Worked with national trade organizations to promote competitive power markets across the US
- Helped negotiate interconnection agreements for new power plants
- Developed and participated extensively in state regulatory proceedings and legislative strategies
- Lead efforts to develop new electric interconnections with Mexico

# Office of Governor George W. Bush

1995 – 1998 Austin, TX

# **Policy Director**

- Advised Governor on all energy issues including the development of new wholesale and retail electric markets in Texas, as well as telecommunications and technology issues before the state
- Developed with State Legislature, legislation that created wholesale/retail electric competition in Texas
- Worked on cross border energy issues with TX Secretary of State and officials from Mexico

#### **EDUCATION**

**Bachelor of Science,** Marketing and Political Science, Texas Christian University

**T&D Performance Metrics** 

#### **KEY EXPERIENCE**

# Quanta Technology 2019 – Present Raleigh, NC

## **Executive Advisor, Distribution & Asset Operations**

- Engineering, Operations, and Regulatory areas of the Distribution & Transmission segments of the electric utility industry.
- Recent focus includes business and technical integration of Distributed Energy Resources/Non Wires Alternatives (DER/NWAs),
- Distribution System Load Forecasting methods incorporating DER, addition of stakeholder involvement and transparency in the Distribution System Planning process
- Initial development of performance indicators to be used in performancebased rate-making proposals.
- Extensive background in state and federal regulatory proceedings including serving as an expert witness.

# Pepco Holdings Inc.

1994 - 2019 Washington, DC

# Manager, Capacity Planning

- Oversight and management of Capacity Planning, including Distribution Planning, and Distributed Energy Resources Planning & Analytics for the PHI utilities including Atlantic City Electric (NJ), Delmarva Power (DE/MD), and Pepco (DC/MD).
- Includes development of Short and Long Range Recommendations for Distribution System Modifications and Additions to mitigate identified issues and/or improve system performance; development of Capacity Planning's input into the Annual 5-Year Capital Plan and 10-Year Forecast of Electric Plant Additions; technical evaluation and approval of applications to interconnect Distributed Energy Resources to the distribution system (under state tariff and wholesale regulations & process); participation in related internal and external working groups and stakeholder meetings; and support of strategy and policy development.
- Provide Regulatory support ensuring timely responses to internal and external data and testimony requests as well as any related analysis and reporting. Serve as Expert Witness as required.
- Testify in rate case hearings and Public Service Commission Technical Conferences. Participate in Public Service Commission Grid Modernization working groups on Non-Wire Alternatives, Microgrids, Pilot Projects, and Distribution System Planning.
- Assure processes are followed, adequate staffing is maintained, and appropriate tools are available while not exceeding cost center budgets. (Note that Distributed Energy Resources Planning & Analytics was moved to the Smart Grid group in a mid-2017 reorganization.)
- Serve as the Exelon Utility Functional Area Manager (UFAM) Capacity Expansion - Electric Distribution for Pepco Holdings.

# CES Int'I/SPL WorldGroup 2000 – 2005

# **Product Manager, ADMS Applications**

- Defined market requirements to drive product development plans and related budgets through market research, customer focus groups, and prospect visits for an advanced, real-time, electric power distribution network management system that included real-time power flow and OPF as well as a new product suite for measuring, monitoring, and reporting of electric distribution system performance.
- Analyzed and forecasted product line profit & loss; supported potential customers in development of quantified value propositions and ROI analysis; developed and maintained thought leadership within market space; restored customer confidence and satisfaction in the flagship Outage Management System product offering by initiating and leading a cross-functional, multi-level problem resolution effort; provided technical training and interpretation of power engineering concepts, theory, standards, etc.; and authored/co-authored several white papers, conference proceedings, and/or technical articles.

# Northern States Power 1998 – 2000

## **Director of Operations**

- Directed operations providing Non-Destructive Diagnostic Testing of Underground Cable Systems throughout the US & Canada.
- Researched and developed business tools, policies, procedures, and services; developed, documented, and implemented improved business processes and field safety practices in compliance with OSHA, NESC, etc.;
- Improved the quality and credibility of test reports and recommendations for preventive action; contributed to development of an asset management software product tailored to diagnostic testing
- Co-authored a storm restoration report to PSCs on behalf of a major east coast electric distribution utility
- Advised on the development of an APPA guide to the optimization of primary distribution systems; provided technical training and interpretation of power engineering concepts, theories, standards, etc.

# Pepco Holdings Inc.

1981 – 1998 Washington, DC

# **Senior Systems Engineer, System Planning**

- Supervised and performed Distribution Planning for various regions of the Pepco utility.
- Represented corporate interests with customers, consultants, research groups, and other utilities.
- Drafted rate case testimony, land use zoning special exception testimony, and replies to various regulatory inquiries.

#### **DESIGNATIONS**

**Professional Engineer,** District of Columbia, Maryland, and Delaware Senior Member IEEE

Member IEEE PES Distribution Reliability and Smart Distribution Working Groups

# **DONALD HALL**

# **EDUCATION**

MS, Electrical Engineering, Kansas State University, 2010
BS, Electronics Engineering Technology, Capitol College (Laurel, MD), 1986
AAS in Electronics Engineering Technology, Capitol College, 1981

# **CHRISTOPHER HUGHES**

#### **ROLE**

**Business Support** 

## **KEY EXPERIENCE**

#### **ATCO**

2015 – Present Alberta, Canada

# Manager, Enterprise Risk & Benchmarking

- Lead and coordinate the Utilities annual Enterprise Risk assessment process
- Oversee development, implementation and ongoing improvement of ATCO's risk management process across the organization
- Lead the development of Operational Excellence metrics and targets to drive performance improvements in key areas of focus for ATCO Electric
- Lead Benchmarking studies with external vendors
- Ensure compliance with all Corporate policies, including anti-bribery and anti-corruption requirements, signing authorities and Trademarks
- Identify and develop mid to longer-term strategies and business plan objectives and actions associated with each of the key goal areas for the company
- Support the regulatory process, including written evidence, responses to information requests, etc.

## **ATCO Electric**

2013 – 2015 Alberta, Canada

# Manager, Financial Services & Risk

- Lead and coordinate ATCO Electric's annual risk assessment process
- Ensure compliance with all Corporate policies, including anti-bribery and anti-corruption requirements, signing authorities and Trademarks
- Oversee and participate in the Internal Controls Certification process ensuring deadlines set by Internal Audit are met, operational staff is supported and there are no control deficiencies
- Monitor status and oversee resolution of all Internal Audit recommendations
- Monitor exposure to Industrial and Retailer Credit and ensure compliance with ATCO Electric Distribution's credit policies

#### **ATCO Electric**

2008 – 2013 Alberta, Canada

## Supervisor, Corporate Planning

- Lead and coordinate ATCO Electric's annual risk assessment process
- Lead the development of Operational Excellence metrics and targets and design point allocation methodology for the Variable Pay Program to influence and drive performance improvements in key areas of focus for ATCO Electric
- Identify and develop mid to longer-term strategies and business plan objectives and actions associated with each of the key goal areas for the company
- Support the regulatory process, including written evidence, responses to information requests, etc.
- Produce the orientation package for new Directors as required
- Provide support to the General Manager, North of 60, particularly in the development of the North of 60 Strategy
- Member of the Asset Management Working Group
- Member of the ATCO Utility Conference Committee

# **CHRISTOPHER HUGHES**

# **ATCO Electric**

2004 – 2008 Alberta, Canada

# Regulatory Analyst, Economics & Forecasting

- Responsible for creating and maintaining econometric models used in the load forecasting process
- Responsible for preparation of electric load forecasts for both the industrial and non-industrial sectors which are utilized for internal business plans and General Tariff applications
- Responsible for conducting in-depth variance analysis in regards to our load and revenue forecasts
- Familiar with the Alberta energy industry, in particular the regulatory environment
- Responsible for updating and maintaining large databases
- Respond to ad hoc economic queries and requests

Canadian Building Energy End-Use Data Analysis Center (CBEEDAC) 2003 – 2004

#### **Graduate Research Assistant**

- Responsible for extensive economic research
- Responsible for in depth econometric analysis
- Areas of research include energy economics, and energy efficiency
- Determine target areas for improvements in energy efficiency in commercial and institutional buildings

#### **DESIGNATIONS**

Alberta, Canada

Project Management Professional (PMI)

#### **EDUCATION**

Bachelor of Arts, Economics, University of British Columbia
Master of Arts, Economics, University of Alberta
Extension Certificate Program, Project Management, Mount Royal
University

Strategic Leadership Program, Ivey Business School

IT/OT - OT Infrastructure Sub-Team Leader

## **KEY EXPERIENCE**

Technology Leader with over ten years of experience in IT, OT, and Cybersecurity. Demonstrated ability in strategy and project leadership of critical infrastructure technology systems

ATCO Group 2018 – Present Alberta, Canada

## Manager, Solution Architecture | IT

- Lead team of IT professionals implementing enterprise IT systems in matrix organization
- Oversee IT project delivery resources, incl. Oracle HCM, Office 365, Work & Asset Management, Meter Data Management, Customer Information Systems, GIS, IAM, etc.
- Support ITIL Service Lifecycle
- Lead organizational introspective project on the value and state of Data in ATCO

ATCO Group 2016 – 2018 Alberta, Canada

# Manager, Cybersecurity | Operational Technology

- Developed OT Operations and Security Engagement
- maturity assessment based on NIST and CMMI including cyber-awareness training for end-users
- SCADA, Network Architecture Design & ICS Security
- Alberta & international project bids (M&A)
- Cybersecurity committees and representation for OT security
- Cybersecurity Governance in Operational Technology and Critical Infrastructure (Electric & Gas)

#### **ATCO Pipelines**

2013 – 2016 Alberta, Canada

## Sr. SCADA Engineer, Supervisory

- Project Manager SCADA, Instrumentation & Controls portion of multi-year, company-wide project trading \$85M of pipeline assets with 3<sup>rd</sup> party company
- Contribute to SCADA & Control Room Plan to operate remote pipelines (Mexico & BC, Canada)
- Develop and supervise SCADA capital budget & improvement projects
- Oversee SCADA Audits and contribute to SCADA regulatory requests
- Lead and implement Cybersecurity & ICS initiatives including: Asset classification, patch management, change management, disaster recovery, alarm management, access management, etc.

# **ATCO Pipelines**

2011 – 2013 Alberta, Canada

## **SCADA Engineer**

- Execute SCADA capital improvement projects
- Document and implement Standards, Processes, and Guidelines
- Administer vendor service contracts and licensing
- Develop ATCO Pipelines' capital budget application for annual business plan

# MARK HUMPHREYS, P.ENG, CISSP

# The Forestry Corp. / Encaps IT Inc.

2018 – 2011 Alberta, Canada

# Computer Software Engineer, E.I.T. | Programmer Analyst

- Development of geospatial software interfacing with ESRI ArcGIS
- Application development and software support .NET, VB, Java, and PL-SQL
- desktop applications, web applications, and hand-held device apps
- Relational database design and maintenance
- Client application support including requirements specification (Business Analysis)
- Systems administration including web applications and active directory domain management (DNS, DHCP)

# **DESIGNATIONS**

Professional Engineer (PM)

Certified Information Systems Security Professional (CISSP)

## **EDUCATION**

Bachelor of Science, Computer Engineering, University of Alberta

**Business Support** 

#### **KEY EXPERIENCE**

#### **ATCO**

2012 – Present Perth, Australia

# **General Manager, Electricity Division**

- As General Manager holding key accountability for the Electricity Division of ATCO Australia. With a direct team of 32 and an indirect team of over 40 professionals in areas such as operations, Maintenance, Engineering, Project Development and Delivery, Asset Management, Health and Safety, Finance and Business Development.
- Previous positions held;

Senior Engineer (2012 – 2017)

Station Manager (2016 - 2017

Senior Manager – Operations and Engineering (2017 – 2018)

• Projects included:

Osborne Power Station Expansion (Pre - FID)

- o Project Sponsor and Development Manager
- Sponsor and Project Manager for 60MW expansion to existing asset

Western Victoria Transmission Network Expansion (early work and EPC only)

- Australia Energy Market Operator
- o Technical Lead and Co-Sponsor for 500kV Transmission line

#### Centrica PLC LTD

2004 – 2012 Plymouth, United Kingdom

## Senior Engineer & Project Engineer

- Holding various roles within the business including Operations, Maintenance, Major & Minor project work, Construction and Commissioning. Based out of Plymouth, UK with several overseas projects and deployments
- Key achievements:
  - Designed and Implemented Asset and Integrated Management System
  - Developed and implement intelligent analytics for plant automation and optimization

#### **MAERSK LINE**

1996 – 2004 Worldwide

## **Senior Marine Engineering Officer**

- Various Vessels and locations around the world as both Operations and Maintenance Engineer
- Through the journey of working my way up to Senior Engineering Officer, held several positions including new build, construction and commissioning
- Led teams in excess of 40 multi discipline engineers and coordinated/planned major outages/dry-docks with CAPEX's in excess of £1M

#### **EDUCATION**

Bachelor of Engineering, Hons

# **BRYCE JOHANNECK**

## **ROLE**

**Engineering Support** 

#### **KEY EXPERIENCE**

# Quanta Technology 2019 – Present Raleigh, NC

## **Principal Engineer**

- Distribution engineering concepts using grid-edge data and granular AMI data
- Meter data management system (MDMS) system and has similarly connected hourly AMI data to real-time distribution topology via leading distribution connectivity models.
- AMI to support all facets of bill calculation and rate analysis to include incremental price/residential demand component billing using 15/60-minute AMI data – while accounting for subtractive metering at thousands of accounts.
- Work with continuous, highly-granular, real-state analysis of distribution grids, graph trace analysis/non-intrusive load monitoring, models supporting real-time distribution topology/connectivity awareness, and power line signal modulation/processing.
- Experienced with all aspects of distribution including some transmission and recent asset management experience.

# Bridge Energy Group

2019 - 2019 Newton, MA

# Cass County Electric Cooperative 2014 – 2019 Fargo, ND

#### Consultant II

- Utilizing SQL database to migrate asset data for software upgrade
- Validating that asset records/fields align with business needs
- Mapping data migration efforts for all future internal/external users

#### **Data Scientist**

- Collaborated to develop solution resulting in full AMI performance through distribution switching events
- Wrote PL/SQL which converts TWACS AMI pulse data into watt hour data

   using for many purposes
- Build advanced SQL reports that convey near real time information in clear/concise views
- Tied 15/60 minute AMI data to connectivity model database resulting in ability to trend AMI feeder load
- Use creativity to develop insights from large combinations of data
- Partner with inside personnel to accomplish goals and provide broad access to electric meter data
- Work with outside vendors to improve quality of AMI data/streamline data collection
- Chair of Technology Committee tasked with creating solutions that will solve tomorrow's business needs
- Assist with wiring of commercial poly phase metering installations as needed

# **BRYCE JOHANNECK**

# Kandiyohi Power Cooperative

2007 – 2014 Spicer, MN

# **Journey Lineman**

- Collaborated with line crew to rebuild two substations from high side switches to feeder terminations
- Installed and replaced high voltage electric equipment from substation to consumer
- Partnered with other employees across divisions to apply electronic job orders from office to field through implementation of NISC software, devices, and processes

## **DESIGNATIONS**

- NDSCS Electric Meter School (2017)
- NISC Meter Data Management Training (2015)
- Central Lakes College Leadership Training (2014)
- Journeyman Lineman License (2010)

# **EDUCATION**

**BA** Business Adminstration, University of Mary, Fargo, ND (2018) **AAS** Electrical Line Work, Dakota County Technical College, (2007)

IT/OT - Enterprise Architecture Sub-Team Leader

#### **KEY EXPERIENCE**

#### **ATCO**

2015 – Present Alberta, Canada

## **Business Architect**

- Develop architectural principles and building codes for key areas of architecture including application, data and business architecture
  - o Develop and maintain key architectural artifacts including
  - Component Business Models
  - Application Component Models
  - o Data Book of Record
  - Business Information Models
- Develop and maintain enterprise architecture vitality process
- Work with the Business Relationship Managers to ensure direction and approach are consistent with the overall company objectives
- Provide architecture support and guidance to project teams
  - o Determine integration requirements
  - Establish criteria for selecting and reusing common service components
  - Manage implications of architectural exceptions
  - Contribute to the Enterprise Enablement Forum to resolve architectural exceptions
- Identify opportunities for sharing capabilities between divisions

#### **ATCO**

2014 Alberta, Canada

#### **Test Lead**

- Lead a team in the development of test scripts, execution and validation of test and parallel batch runs
- Established balance and controls for customer, financial, metering and measurement data
- Responsible for overall re-design and streamlining of the complex batch schedules

#### **ATCO**

2009 – 2014 Alberta, Canada

#### **Application Architect**

- Gathering and documenting business requirements for client-initiated service requests for changes relating to ATCO-CIS.
- Responsible for ensuring solutions are compliant with Retail MSA, client policy, Tariff Bill Code and System Settlement Code
- Responsible for the overall data and application architecture of system enhancements and integration with external systems (e.g. Work Force Management, Work Management, ERP, external market participants)
- Responsible for ensuring that all proposed solutions meet architectural compliance guidelines.
- Apply quality assurance measures to all proposed ATCO-CIS solutions to ensure alignment with application architecture and integration standards in a service-oriented architecture environment.
- Validate design, database changes to ensure integrity of the data model is not compromised.

# **COLETTE JUBINVILLE**

- Analyze strengths and weaknesses associated with alternative business and technical solutions.
- Provide ongoing mentoring to business analysts, application design team and operational workgroups.

#### **ATCO**

1993 – 2009 Alberta, Canada

# **Application Designer**

- Worked with clients to gather and document business requirements.
- Created design specifications and estimated costs to meet new business requirements.
- Analyzed and identified best solution for complex system enhancements.
- Provided mentorship and guidance to system analysts on conducting business requirement workshops.
- Ensured the lines of communication remained open between project participants.
- Integral member of key projects including:
  - Initial development of ATCO-CIS
  - o Direct Energy Transition project
  - Customer Self-Serve Prototype/Framework

#### **EDUCATION**

**Computing Science,** Northern Alberta Institute of Technology Project Management, Mount Royal University Spanish, University of Alberta, Extension (Level I & II)

**Project Management** 

#### **KEY EXPERIENCE**

Eurus Energy America / Avenal Solar Farm Avenal, CA

# Sr. Project Manager (EPC)

- Prime EPC contract for a 45 MW fixed PV Solar Farm. The project site was 420 acres and included approximately 450,900 solar panels and three (3) individual 73/34.5KV 25MVA electrical substations with 34.5KV switchyards with control building and SCADA communications
- Interconnection coordination and execution with PG&E. The scope of work included complete site grading, 13.5 miles of site roadways, 75,150 steel piers, 15,030 EA 50' panel racking tables for a total of 751,500 LF (142 miles), 257,874 LF (49 miles) of 35KV direct buried medium voltage cable, 113,975 LF of excavation trenching, 45-1.068MW Emerson pad mounted inverters, 45 1000 KVA pad mounted transformers and 23,000 LF (4.3 miles) of perimeter site fencing.

Samsung Solar Construction / Atwell Island Solar Farm

## Sr. Project Manager (EPC)

- Prime EPC contract for a 20 MW fixed PV Solar Farm on 160 Acres utilizing Sharp frameless solar panels.
- Installation of new 21-115 KV Substation to tie into existing Pacific Gas & Electric 115 KV Transmission Line, installation of (16) 1.2 MW inverters.
- General Management of all subcontrators, managing site meetigs and provided schedule/progress updates to the client on a weekly and monhtly basis.

NAVFAC Southern Division / Electrical Distribution Upgrade, Keesler AFB Biloxi, MS

#### Sr. Project Manager

- Prime design/build RFP for NAVFAC. Replaced all existing overhead electrical distribution, telephone and cable TV with new underground infrastructure for approx. (3,000) commercial and residential bldgs.
- Constructed new 112/23KV, 35MVA electrical substation and 112KV Switchyard, installed approx. (1,000) new street lights, (40) miles of concrete underground ductbank with (60) precast manholes, (186,000) LF of #500 MCM 25kv cable, (426,000) LF of #1/0 25kv cable, (141) three phase pad mounted transformers, (265) single phase pad mounted transformers, (70) pad mounted SF6 switches, (85) pad mounted 25kv terminal cabinets, (2800) 25kv #1/0 load break elbows, (330) 25kv #500 load break elbows and (81) 25kv #500 splices.
- This project received very high praise after Hurricane Katrina when Keesler was one of the first facilities on the Gulf Coast to have power restored as a result of the design concept, quality and resilience of the system.

#### **DESIGNATIONS**

PMI Project Management Professional (PMP) Certification
OSHA 20 Hour Certification for Construction Supervisor Leadership Skills
OSHA 30 Hour Certification for Construction
USACE EM 385-1-1 Certification PMI 6 Sigma Green Belt

Supervisor, Measurement Management

#### **KEY EXPERIENCE**

#### **ATCO**

2018 – Present Alberta, Canada

# **Supervisor, Measurement Management**

- Managed meter compliance and sampling programs under Measurement Canada regulation
- Analyzed equipment failure results using various analytical and statistical techniques
- Adjusted job assignments and schedules to keep pace with dynamic business needs, factoring in processes, employee knowledge and customer demands
- Managed completion of capital and maintenance programs for radio telemetry sites
- Oversaw work of 18 Technologists/Technician's performing high-quality measurement and radio communications work
- Key driver of the remote station monitoring project

#### **ATCO**

2017 – 2018 Alberta, Canada

# Supervisor, Electronics & Instrumentation

- Ensured completion of Maintenance and Capital Improvement programs on all measurement and telemetry equipment
- Implemented improved analytics to make data driven decision-making possible, allowing for timelier decisions and improved confidence
- Oversaw talented team of 11 Electronics & Instrumentation Technologists by actively communicating project information, remedying issues and delivering positive feedback
- Boosted group efficiency 30% by devising and deploying improved route planning and triage style approach

#### **ATCO**

2015 –2017 Alberta, Canada

# **Operations Engineer**

- Used SyngerGi Gas to simulate field operations, proactively identify problems and mitigate risks
- Assisted with Emergency Response to Hit Line and Customer Outage situations, including design of emergency isolation procedures
- Determined level of financial and technical feasibility of proposed initiatives
- Managed full life cycle of efficiency driven projects

#### **ATCO**

2014 – 2015 Alberta, Canada

#### Project Engineer, UPR

- Responsible for overall project management of large diameter distribution pipeline projects, including: design, construction, forecasting
- Assisted with contract administration
- Determined and scheduled priorities as required to progress project under tight deadlines
- Effectively Managed internal and external stakeholders

## ANTHONY KEELAN P. ENG.

#### **ATCO**

2013 – 2014 Alberta, Canada

## **Planning Engineer**

- Created Long Term Planning Studies for to facilitate project selection decisions
- Prepared and submitted business cases for both internal use as well as AUC filings
- Responsible fo the overall planning design of ATCO Gas' Urban Pipeline Relocation project in Edmonton
- Mentored fellow engineers as well as EITs and Co-op students in planning design and hydraulic modelling

## **ATCO**

2011 – 2013 Alberta, Canada

## **Distribution Design Engineer**

- Responsible for project management, design, and construction of over 60 distribution pipeline design projects totalling over \$3MM annually
- Mentored Co-op engineers and new hires in pipeline design principles and processes
- Coordinated with construction and operations group to ensure smooth execution of construction and maintenance projects
- Completed monthly forecasting

## **DESIGNATIONS**

Professional Engineer (Alberta)

## **EDUCATION**

Bachelor of Science, Materials Engineering, University of Alberta

## IT/OT - IT Applications Sub-Team Leader

### **KEY EXPERIENCE**

Extensive experience in application development including systems integration, business and data architecture, and program management. I work well on teams using a subtle leadership approach that I find to be successful in gaining trust and loyalty.

## ATCO Gas/ Electric

2017 – Present Alberta, Canada

## Solution Architect - Customer Billing, Service Initiation Billing, and Distribution Configuration System Replacement

• Enterprise initiative to implement new technology that supports the Gas and Electricity utilities critical business processes for managing customers, customer service, and customer billing.

## **ATCO Electric**

2017 - Present Alberta, Canada

## **Enterprise / Application Architect - Application Roadmap**

 Contribute to the development of business, application, and data architectures for the ATCO companies.

## **ATCO Electric**

2016 – Present Alberta, Canada

# Solution Architect - Meter Data Management Upgrade / AMR Upgrade / AMI Implementation

 Implementation of new technology to manage the collection, validation, and publication of electricity measurement data.

#### **ATCO Gas**

2012 Alberta, Canada

## **Solution Architect / Business Consultant - Contract Management**

 Develop solution for ATCO Gas to manage their gas transportation contracts after the integration of commercial operations in Alberta under one set of rates and services.

## **ATCO Gas**

2012 Alberta, Canada

## Solution Architect / Business Consultant - Customer Outage Notification

 Implement solution that enabled ATCO Electric to use automated tools to notify customers of planned outages.

## **ATCO Electric**

2011 – 2015 Alberta, Canada

## Solution Architect / Business Consultant - Meter Equipment Asset Management

 Project to implement business processes that ensure regulatory compliance for metering accuracy and asset lifecycle tracking.

#### **ATCO I-Tek**

2011 Alberta, Canada

## **Business Consultant – Australian Acquisition**

Services to assess IT assets that were part of the Australia acquisition.

#### **ATCO Gas**

2011 Alberta, Canada

## **Solution Architect - Instrument Recording System Replacement**

 Solution design phase of a project to replace a legacy application used to manage inspection of instrument type meters.

## JIM KINDRACHUK

#### **ATCO Electric**

2010 - 2012 Alberta, Canada

## **Business Consultant - Direct Energy Drop Chute Replacement Project**

 Responsible for managing Direct Energy requirements and implementation of new software mandated by the AUC for exchanging information in the Alberta marketplace that supports the deregulated industry.

#### **ATCO Gas**

2008 - 2009 Alberta, Canada

## **Solution Architect - Retailer Service**

 Solution Design phase of a project to implement a gas imbalance reporting system that would support the gas distribution company to manage the Retailer Service process as specified by the AUC.

## **ATCO Electric**

2007-2010 Alberta, Canada

## **Solution Architect - Implement Meter Data Management**

 A project to replace ATCO Electric's legacy application for the management of interval metering data including collection, validation, and publication with commercial software.

#### **ATCO Gas**

2003 - 2006 Alberta, Canada

## **Solution Architect - Distribution Forecasting and Settlement**

 Project to implement a system to forecast the daily gas delivery requirement for the ATCO Gas distribution system in support of the industry Retailer Services requirements.

#### **ATCO Electric**

2002 - 2007 Alberta, Canada

## **Program Manager - Customer Choice Distributed Systems**

 A project to manage the operation, enhancement, and development of all applications required to support the emerging Alberta deregulated utility industry.

## **ATCO Electric**

2000 - 2003 Alberta, Canada

## **Solution Architect - Load Profiling and Settlement**

 Deliver project to configure and implement commercial software product that supports the new business requirement for electricity load settlement.

## **Canadian Utilities**

1992 - 1999 Alberta, Canada

## Team Lead, Application Architect, Data Architect - CIS Project

 Project to replace the legacy application supporting the customer care and billing business process for the electricity and gas distribution companies.

## Canadian Utilities

1986 - 1991 Alberta, Canada

## Project Manager, System Analyst - CIS Project

 Project to maintain and operate the legacy CIS/COS IMS utility billing software application.

## Alberta Government Treasury

1985 - 1986 Alberta, Canada

## **Programmer Analyst - Pension and Payroll Project**

 Project to implement a system to forecast the daily gas delivery requirement for the ATCO Gas distribution system in support of the industry Retailer Services requirements.

## JIM KINDRACHUK

## **EDUCATION**

**Strategic Leadership**, Ivey Business School, Western University **IT Portfolio Management**, Intervista Institute **Diploma**, Computer Systems Technology, Northern Alberta Institute of Technology

**Business Support** 

## **KEY EXPERIENCE**

ION Consulting 2017 – Present

## **Management Consultant**

- Responsible for change management requirements as the OCM Lead for the Customer Workstream including Business/Technical Role Maps, Change Impact Logs, Change Agent Network, Business Readiness Assessments, Communication Plan, and Cutover and Go-Live Support
- Developed content and supported the creation of proposals, RFP responses, documentation required for orals, engagement letters, contractual documents, and presentation decks

2015 - 2016

- Responsible for documenting and supporting business changes that drive industry specific operating transformation focusing on tasks relating to people and process
- Responsible for change management project planning and implementation activities, document creation, communications, and status reporting

2014 - 2015

- Developed content and supported the creation of proposals, RFP responses, documentation required for orals, engagement letters, contractual documents, and presentation decks
- Responsible for assessing the operational requirements of the call center agent and support staff, analyzing the operational and business viability of several facility options, coordinating the development of financial and operational staffing evaluation models, and developing high level transition plans for the two optimal solutions
- Responsibile for project startup activities, managing weekly status and other project meetings, conducting interviews, coordinating system assessment discussions with client users and CIS system experts, and creating documentation on findings from the current state diagnose efforts
- Provided operational and project support for a SAP ISU Upgrade Initiative including the coordination of project logistics, development of a business transition plan and a technical project plan along with the creation of a closeout deliverable containing documentation from all phases of the project from kickoff through testing and cutover to signoff

## **MARCIA KOSKO**

2009 - 2014

- Established a TXUE IT Performance Management Team.
- Created a resource management strategy to support TXUE IT Management, Finance, PMO, and Vendor Management including the establishment of HP PPM as the core resource, project and financial database, automation of resource and financial reporting from PPM, standardization of organization charts, creation of contractor onboarding templates and processes, implementation of timesheet controls, and creation of IT contractor rate cards and a vendor guide.
- Created a new view of the System Reliability Dashboard to more accurately reflect the applications that impact Sev 1 Tickets then automated the dashboard to ensure data accuracy and also eliminate extensive administrative time and costs
- Partnered with Customer Quality and IT Quality Assurance Teams to create a Project/Release and Defect Lessons Learned Strategy to assess the root cause of IT project challenges and initiate corrective actions.
- Managed the IT Financial

2009 - 2011

- Established one new near-shore call center and two new domestic call centers along with the ramp down of one offshore call center during this eighteen-month initiative
- Worked customer operations and supply chain to finalize the requirements, create and issue a RFP, evaluate responses, select the future call center partners, complete contract negotiations, and formalize SLAs
- Created the ramp plans and successfully managed all of the call center implementation activitie
- Scheduled and managed travel logistics for all of the project support resources
- Responsible for the completion of a Call Center Compliance Review
- Responsible for the monthly and quarterly customer care control audits to ensure adherence to company policies and procedures
- Served as the coordinator for all internal audits within Customer Operations

## **EDUCATION**

**Business Masters**, Business Policy and Industrial Relations, The University of Chicago, Booth School of Business

**Engineering Bachelors**, Structural Engineering and Materials Management, University of Illinois

#### **Asset Management**

#### **KEY EXPERIENCE**

## Quanta Technology

2019 – Present Raleigh, NC

## **Principal Advisor, Distribution & Asset Operations**

- Evaluation of reliability of service to critical customers for a major Midwest utility.
- Evaluated the Distribution Automation program for a major Midwest utility.
- Evaluated the use of steel poles for distribution circuits for a major East coast utility.

## Pepco Holdings Inc.

2009 – 2018 Washington, DC

## Manager, T&D Automation

- Developed the T&D Automation program form the ground up, including technical designs and guidelines, process and change management strategies.
- Led development of expanded FLISR and recloser implementation strategy that helped PHI achieve first quartile reliability performance.
- Led completion and implementation of a underground network transformer/protector monitoring system.
- Led completion and implementation of a transmission PMU/Synchrophasor and transformer DGA strategy.

## Pepco Holdings Inc.

2004 – 2009 Washington, DC

## Manager, Asset Reliability Planning

- Led development of risk/benefit assessment models for all types of capital projects. Coordinated efforts of internal teams and consultants to develop one of the first investment prioritization models in the industry.
- Managed evaluation and implementation of \$400M/year capital budget.
- Managed evaluation/planning of the Transmission and Substation assets.

# Pepco Holdings Inc.

1981 – 1997 Washington, DC

## **Engineer Supervisor, T&D Planning**

- Co-led development of the Atlantic City Electric Distribution System Master Plan. The centerpiece of the plan being addition of 65 feeders and reduction of the peak feeder load and allow transfers to adjacent feeders. This was a key measure taken to improve service reliability for ACE.
- Completed evaluation/planning of the T&D system, including load forecasting, short circuit studies, area improvement plans and construction authorizations.
- Provided expert testimony on need for improvement projects at local planning boards, and at the State level as part of a locally contested substation project approval.

## JOE LOPORTO, PE

# Pepco Holdings Inc.

2000 – 2018 Washington, DC

## **Incident Management Team Leader**

- Co-led post storm electric service restoration efforts in the Delmarva Peninsula as Incident Management Team leader. Co-led these efforts through major storms, heat waves, and union strikes.
- Work included coordination of internal and mutual assistance crews, and establishment of off-site staging areas when needed for large restoration efforts.
- Co-led completion of post restoration performance evaluation, including development and implementation of lessons learned.
- Involved in the formulation of incident management team process documents and second role descriptions.

## **DESIGNATIONS**

- Institute of Electrical and Electronics Engineers (IEEE)
- Professional Engineer, New Jersey

## **EDUCATION**

■ BS, Electrical Engineering, Rutgers College of Engineering (1981)

## Workforce Development

## **KEY EXPERIENCE**

## Northwest Lineman College 2018 – Present Boise. ID

## **President, Strategic Solutions**

- Northwest Lineman College's industry leader for business development, relationships, and high value solutions for our customers
- Developed the organizational structure, systems and processes to support a new segment of Northwest Lineman College's business
- Hired and trained a staff capable of executing the operational and administrative functions necessary to succeed in a new and rapid growth environment
- Increased revenue over 300% in less than two years, delivered training to over 12,000 individuals over the same time period while maintaining the highest level of operational excellence and value to our customers

## Northwest Lineman College 2013 – 2018 Boise, ID

## **Chief Operating Officer**

- Responsible for guiding and executing the strategic vision of Northwest Lineman College
- Maintained the highest level of operational and educational excellence across four campuses dispersed throughout the United States
- Developed a sustainable and scalable organizational structure that allowed Northwest Lineman College to thrive during a time of the rapid growth

## United States Special Operations Command

2011 – 2013 Tampa, FL United States Marine Corps

2009 – 2011 Cherry Point, NC

# **United States Marine Corps**

1993 — 2009 USA

## **Division Chief, Force Generation**

- Expert advisor to the Commanding General on force management
- Developed executable plans and systems that balanced and optimized training requirements to accomplish core skills with the ability to fulfill deployment requirements in support strategic national interests

## **Commanding Officer**

Executive leader of a multi-mission aviation organization valued at \$450 million in equipment, an annual operating budget of \$50 million and 250 diverse and worldwide dispersed personnel

#### Billets Included; Executive Officer, Maintenance Officer, Attack Pilot

- Executive Officer; Chief of Staff to the Commanding Officer. Responsible for all administrative and staff functions for a operational unit comprised of 250 plus Marines and their families. Duties included logistics, safety, training, family readiness, legal and intelligence
- Maintenance Officer; Responsble for the well being of 200 plus Marines as well as all the maintenance and readiness of 29 aircraft and all associated support equipment
- Attack Pilot; Trained and executed aviation missions that included carrierbased combat missions in support of Operation Enduring Freedom and Operation Anaconda

## **JOSH LUCK**

## **EDUCATION**

**Master of Science**, Military Operational Arts and Science, Air Command and Staff, Montgomery, AL

**Bachelor of Science**, Political Science, Boise State University, Boise, ID **Advanced Strategy Program**, University of Chicago, Booth

## **ERIC MARKELL**

## ROLE

Business support

## **KEY EXPERIENCE**

## ION Consulting 2018 – Present

Markell specializes in business strategy, special situation investing and turnaround services. He has over 30 years of experience in the utility and power industry.

Markell has recently retired from Puget Sound Energy, an integrated electric and gas utility, where he held positions as Chief Resource Officer, Chief Financial Officer and, Chief Strategy Officer. In those executive capacities he was responsible for the development, construction and financing of ~800 MW of new wind generation capacity. In addition, as a ten-year veteran and principal of United American Energy Corp., an independent power company, he has extensive experience in the acquisition of a numerous power projects across multiple technologies.

Markell joined the Board of Directors of The Hudson Renewable Energy Institute in 2013.

Markell has been a frequent speaker and panelist on energy matters and has been a guest lecturer at various colleges and universities.

## **EDUCATION**

**Public Administration Masters**, The Maxwell School, Syracuse University **Bachelor of Economics**, Union College

## Workforce Development

## **KEY EXPERIENCE**

## Northwest Lineman College

2018 – Present Meridian, Idaho

#### **Director of Education**

- Manage the learning & development team
- Lead efforts to ensure students' needs are met through engaging curriculum and high-quality instructional delivery
- Provide strategic and tactical planning for teaching assessment for internal teams and external clients.

## Boise State University

2003 – Present Boise, Idaho

## Lecturer (2014-2018)

## Adjunct Faculty, Technical Communication (2003-2014, 2018-present)

- Teach and develop curriculum, assessments, and student engagement practices for both undergraduate and graduate courses in Technical Communication within the English Department.
- Deliver courses in a classroom and online using evidence-based instructional practices (EBIPs) and Blackboard LMS. Focus on helping students move toward professionalism in their communication.

## **Aquent Studios**

2007 – 2018 Boise, Idaho

## Engagement Lead and Management Consultant (2014-2018) Managing Director (2007-2014)

- Provided periodic, consulting for operational initiatives including project management, account set-up and management, contract vendor negotiation, and hiring.
- Served as executive manager for a group of over 90 information developers, graphic designers, web developers, and managers throughout North America and India.
- Established service teams for major accounts including ExxonMobil and HP.
   Managed a \$7 million budget with accountability for profit and loss and staff utilization, as well as key metrics established with each client.
- Served as global account director for the \$17 million account with Hewlett-Packard Company, including contract negotiation and compliance.

## Sakson & Taylor

2003 – 2007 Boise, Idaho

#### Resource Manager / Sr. Project Manager

- Provided professional services to Fortune 500 companies in the area of documentation and training content.
- Developed technical communication capacity in Aquent's offices in India (Mumbai and Bangalore).
- Ensured that schedules, budgets and quality meet or exceed client expectations.
- Coordinated logistics with localization partners for multilingual content.

## MIKE MARKLEY

## Lionbridge 1998 – 2003 Boise, Idaho

## **Director of Design & Development**

- Directed all technical writing, graphic design, consulting, and projectmanagement activities for a division with three locations and 50 employees.
   Recruited and managed technical resources (managers, project managers, writers, graphic designers).
- Developed and directed managed-service groups for clients throughout the western United States.
- Served as Resource Manager, Presales Manager, and Project Manager prior to 2000.

#### **DESIGNATIONS**

Inducted as Fellow into the Society for Technical Communication (2012) Assistant Governor, Rotary International District 5400 (2018-2021) Committee Chair Rotary Youth (international) Exchange (2019-2022) Past Chair, Leadership Boise Alumni Association (a civic educational program through the Boise Metro Chamber of Commerce) Past Executive Board Member, Semilla Nueva sustainable agriculture nonprofit based in Idaho and Guatemala (2012-2018) Conference Speaker at seven Society for Technical Communication conferences (2004-2008, 2010-2011)

#### **EDUCATION**

Master of Arts, Technical Communication, Boise State University Bachelor of Science, Public Relations, University of Idaho

## **Executive Vice President - Operations**

#### **KEY EXPERIENCE**

## **Quanta Services**

2017 – Present Houston, TX

## **Executive Vice President - Operations**

- Develop and implement overall fleet strategy for the Quanta Services family of companies.
- Oversee fleet operations, fleet procurement and capital planning for 61,000 assets.
- Manage corpoarte level GPS / Telematics program.
- Manage aviation operations fixed wing.

# Pacific Gas & Electric Company

2006 – 2017 San Francisco, CA

## **Senior Director – Transportation & Aviation Services**

- Develop and implement overall fleet strategy for Pacific Gas & Electric.
- Operational responsibility for fleet operations, fleet engineering, fleet procurement and DOT / Regulatory Compliance covering 15,000 vehicles.
- Operational responsibility for fixed wing and helicopter operations.
- Direct responsibility for alternate fuel vehicle and fueling infrastucture programs to include electric, natural gas and hydrogen.

## Consumers Energy

2001-2006 Jackson, MI

## **Director - Fleet Operations**

- Develop and implement overall fleet strategy for the Pacific Gas & Electric companies.
- Operational responsibility for fleet operations, fleet engineering, fleet procurement and DOT / Regulatory Compliance covering 8,000 vehicles.

#### Frito-Lay

1997-2001 Frankfort, IN

## **Division Fleet Maintenance Manager**

- Operational responsibility for fleet operations, fleet procurement and DOT / Regulatory Compliance covering 6,000 in 22 states.
- Oversee facilities management.

#### **Roadway Express**

1986-1997 Toledo, OH

## **District Fleet Maintenance & Safety Manager**

- Operational responsibility for fleet operations, fleet procurement and DOT / Regulatory Compliance covering 2,500 vehicles.
- Direct responsibility for employee safety and workers compensation.
- Direct responsibility for facilities management.

#### **DESIGNATIONS**

Certified Diesel Mechanic (1979)

Alternate Fuel (Electricity & Natural Gas) Technology Expert

#### **EDUCATION**

**Master of Business Adminstration** – Marketing and Finance Concentration, Indiana Wesleyan University (1997)

**Bachelor of Science Business Administration** – Production Management and Operations Managementaster of Science, Central Michigan University (1985)

## JORGE O. MELENDEZ, CHST, CUSP

#### ROLE

Safety

#### **KEY EXPERIENCE**

Quanta Services 2016 – Present Houston, TX

## Sr. Corporate Safety Manager, Team Lead

- Assist and consult all Quanta services operating units' management with accident control problems and analysis of serious accidents throughout USA
- Provide safety consultation and support to over 40,000 employees of all operating units of Quanta Services primarily for the power generation and renewables, oil and gas field services divisions
- Function as a liaison between corporation and operating units safety, risk, personnel and management
- Advise operating units' management and safety professionals of program effectiveness and needs, coach management and employees in safety and health policies and practices, and mentor safety professionals at the operating unit level
- Assist in the development and coordination of strategy safety programs
- Support and assist with the successful implementations of all corporate initiatives

Power Corporation of America 2013 – 2016 Port Orange, FL

## VP of Risk, Environmental, Health and Safety

- Establish and oversee comprehensive safety programs consistent with local, state and federal governmental regulations and the company safety, health and environmental program manual
- Employ and supervise qualified personnel for field level safety supervisor and safety inspector positions
- Assist and consult all management with accident control problems and analysis of serious accidents
- Conduct periodic inspections on the jobsite to ensure that an aggressive safety program is in operation
- Provide company with guidance on up-to-date federal, state, and local codes and standards
- Enforce all applicable local, state and federal governmental regulations and the company safety, health and environmental program manual
- Review all routine inspection reports from safety managers to analyze trends and common practices
- Review and investigate all incident/accident reports, unusual accidents, or trends and ensure that corrective action has been applied
- Ensure that all jobsites maintain necessary files and records that conform to applicable recordkeeping requirements
- Provide professional guidance, assistance and training to all safety representatives within the company. Act as the primary research person for questions arising from property, automobile, workers compensation, general liability and occupational safety and health related issues. Evaluate performance of safety representatives annually and provide recommendations for improving or enhancing abilities

## JORGE O. MELENDEZ, CHST, CUSP

- Establish safety goals and objectives for the company. Identify program
  and training needs, establishing a timetable for development and
  implementation, and identification of expected performance in terms of
  injury and accident rates/reductions for facilities and overall company
- Point of contact for litigations/mitigations resulting from property, automobile, workers compensation, general liability and occupational safety and health related issues

## Quanta Services (Service Electric Co.) 2002 – 2013 Palmetto, FL

## **Regional Safety Manager**

- Conduct job site audits that include PPE compliance and proper use, proximity of medical facilities, competent person, first aid/cpr, housekeeping, safety, and DOT paperwork
- Administrator of safety program for power transmission, distribution, substation, installation and maintenance services in the south east region.
- Develop safety committees, administer safety trainings, utility damage prevention and awareness meetings
- Act as the primary research person for questions arising from property, automobile, workers compensation, general liability and occupational safety and health related issues
- Point of contact for litigations/mitigations resulting from property, automobile, workers compensation, general liability and occupational safety and health related issues
- Investigate, compile, analyze and report data from property, automobile, workers compensation, general liability and occupational safety and health related issues to the appropriate personnel
- Primary liaison between Service Electric and the insurance companies and medical facilities
- Execute the Department of Transportation Motor Carrier Program pursuant to the Code of Federal Regulations and Florida Statues

## **DESIGNATIONS**

Certified ISMA MOT Intermediate

Fluently speak both English and Spanish. Proficient in Microsoft Excel, Word, Power Point

Certified ISMA Signalization Level II

Completed Excavation and Soil Mechanics Instructor Program

CPR/First Aid Instructor

**Defensive Driving Instructor** 

**TEEX Crane Certified** 

**CUSP** certified

Qualified Storm Water Management Inspector

## **EDUCATION**

## **JORGE O. MELENDEZ, CHST, CUSP**

**Doctor of Philosophy**, Power Engineering, University of Alberta (2004) **Master of Science**, Power Engineering, Harbin Institute of Technology, China (1995)

**Bachelor of Science**, Power Engineering, Harbin Institute of Technology, China (1993)

Strategic Leadership Development, Ivey Business School (2016) CAMPUT Course on Energy Regulation & Tariffs, Queen's University (2005)

Senior Vice President, Latin America Operations and Infrastructure Solutions

#### **KEY EXPERIENCE**

Quanta Services, Inc.

2017 – Present Houston, TX

## Senior Vice President, Latin America Operations and Infrastructure Solutions

- Heads regional operations and infrastructure solutions efforts for Quanta in the Caribbean and Latin America. Operational footprint includes offices in Puerto Rico, Colombia, Peru, Chile, Mexico, Ecuador and Guatemala.
- Overseeing investment opportunities in electric transmission in Puerto Rico and Chile, Colombia, Peru and Mexico.

Quanta Services Inc. / First Infrastructure Capital LLC, 2017 – 2017 Houston, TX

#### **Senior Vice President**

 Led and managed equity investment opportunities in infrastructure with emphasis in telecommunications in Mexico and Peru, and electric transmission in Mexico and Peru.

Gonzaga Investments & Advisory LLC 2016 – 2017 Houston, TX

## **Managing Director**

- Led execution of transaction mandates, including sourcing, preparing and negotiating complex transactions.
- In 2016, executed mandates with Partners Group as Senior Advisor for an acquisition in South America, and with Quanta Services to provide advisory on Latin American infrastructure project opportunities.

Ashmore Energy International / AEI Services LLC 2009 – 2016 Houston, TX

## **Executive Vice President, Corporate Development & Head of Special Projects**

- Responsible for corporate development activities in the company, leading strategic initiatives, driving M&A transactions, and directing the execution of special projects such as asset divestitures.
- Generated revenue to shareholders in excess of \$6 billion by leading 26 highly successful cross-border transactions.

Gazel Mexico 2007 – 2009 Mexico City, Mexico

#### **CEO/Director General**

- Selected to head the development of AEI/Promigas initial energy investment in Mexico focused on compressed natural gas.
- Tasked to turn this underperforming business around.
- Directed management of 110+ employees leading commercial, financial, planning, business development and operations in 6 different locations in Mexico City.

## LUIS G. MENDEZ

Ashmore Energy International / Vengas, S.A 2005 – 2007 Caracas, Venezuela

## Senior Director/Director General (COO)

 Led reorganization, management changes and achieved immediate operational and financial benefits in challenging operating environment.
 Strategically positioned business for liquidity and timely exit with an extremely successful outcome.

## **DESIGNATIONS**

Awarded Honorary Mention for dissertation thesis to decentralize Mexico City while improving infrastructure and public services

President, Vice President and Class Representative of the Civil Engineering Students Association. Founder and Publisher of the Civil Engineering School Magazine

## **EDUCATION**

Master of Business Administration, Finance and International Business, University of Michigan, Ross School of Business, Ann Arbor, MI Bachelor of Science, Universidad Iberoamericana, School of Civil Engineeering, Mexico City, Mexico

**HVDC & FACTS Engineering** 

#### **KEY EXPERIENCE**

#### **ATCO**

2017 – Present Alberta, Canada

## Senior Manager HVDC & FACTS Engineering

- Overall accountability for the technical team executing HVDC & FACTS projects in ATCO and externally including contracted services to Nalcor.
- Leader responsible for supporting HVDC & FACTS engineering and operations and maintenance services in ATCO and externally including contracted services to Nalcor.
- Technical oversight of operations and maintenance engineering to ATCO's operational HVDC & FACTS facilities including EATL, McNeill, and all SVCs.

#### **ATCO**

2012 – 2017 Alberta, Canada

## Specialist Engineer HVDC & FACTS Engineering

- Key member and technical lead responsible and accountable for project scoping and preparing the technical specification and FACTS discipline project execution for the Thickwood Hills +200/-100 MVAR SVC project. Innovated the split scope implementation for a \$43M contract.
- Part of the team responsible and accountable for project execution and the overall technical integrity of the EATL 500 kV 1000 MW monopole point-topoint LCC HVDC link, a \$1.8B project including design reviews, factory testing, installation, commissioning, system testing, operational readiness, trial operation through to operation and maintenance.
- Key member responsible and accountable for project execution and overall technical integrity of the 150 MW back-to-back monopole LCC HVDC station (1989) controls replacement including contract negotiation, project kickoff, specification and design reviews, factory testing, installation, commissioning, system testing, operational readiness and trial operation through to operation and maintenance
- Part of the team responsible and accountable for project execution and the overall technical integrity of the Lanfine +200/-100 MVAR TCR/TSC SVC including design reviews, factory testing and operation and maintenance.

#### **ATCO**

2011 – 2012 Alberta, Canada

## **ATCO**

2007 – 2011 Alberta, Canada

## Senior Engineer HVDC & FACTS Engineering

 Technical team member and/or team leader executing the role of owner's engineer for the projects listed under Specialist Engineer above.

## Sr./Lead Commissioning Engineer, Engineering & Construction

- Lead engineering role with shared responsibility for growing and leading the team of commissioning engineers and technologists for all transmission projects.
- Performed field commissioning, as well as group planning and administration and served as commissioning representative on project teams, contributing to successful commissioning and completing 30 major transmission capital and capital maintenance projects.

## MARK J. MIELKE

#### **ATCO**

2005 – 2007 Alberta, Canada

#### **ATCO**

2003 – 2005 Alberta, Canada

#### **ATCO**

2002 – 2003 Alberta, Canada

#### **ATCO**

2001 – 2002 Alberta, Canada

## **Commissioning Engineer, Engineering & Construction**

 Entry-level field engineer responsible/accountable for all aspects of AC transmission substation (240 kV, 144 kV, 72 kV, 25 kV) commissioning including apparatus, protection and control and SCADA.

## **Telecontrol Engineer in Training, Transmission Engineering**

 Design, implemented, pre-commissioned and commissioned AC transmission substation SCADA projects.

## **Woodlands Planning Engineer in Training, Distribution Engineering**

Performed 25 kV distribution system load and system planning, protection studies, customer studies and motor start reports.

## Maintenance Engineer in Training, Transmission Facility Management

 Performed AC transmission substation maintenance planning, capital maintenance project initiation and facility performance measuring.

#### **EDUCATION**

**Bachelor of Science**, Electical Engineering Cooperative Program, University of Alberta, Edmonton

## **SHELLY MOGENSEN**

## **ROLE**

Workforce Development

## **KEY EXPERIENCE**

## Northwest Lineman College 2019 – Present Meridian, Idaho

## **Director of Operations, Utility Training Services**

- Continuously evaluate the efficiency of business procedures according to organizational objectives for all Business to Business educational programs.
- Manage procurement processes and coordinate resource allocation
- Oversee customer support processes and organize them to enhance customer satisfaction to maintain operational excellence.
- Review financial information and adjust operational budgets to promote profitability.

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## Northwest Lineman College 2018 – 2019 Meridian, Idaho

## **Senior Operations Manager, Advanced Training**

- Managed Operations for the organization's Business to Business programs; including Advanced Training, Lineman Apprenticeship Programs and Power Delivery Programs. Lead multiple team members to consistently focus on providing timely and quality delivery of all educational programs.
- Maintained operational excellence of an audit-ready program at all times.

## Northwest Lineman College 2017 – 2018 Meridian, Idaho

## **Operations Manager, Mobile Training**

- Managed all aspects of the Mobile Training Team; personnel, mobile training units, and support equipment. Complex prioritization of limited resources, scheduling proficiency in a dynamic environment, and detailed planning and coordination with high visibility customers.
- Responsible for the management of tracking and delivery of all administrative products to include but not limited to; certificates, post training reports and NLC reporting requirements.
- Ensured all Training Specialists had necessary qualifications, certifications, training, and preparation to deliver the highest value to our customers.

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## Northwest Lineman College 2016 –2017 Meridian, Idaho

#### **Executive Coordinator**

 Provided front line complex, high level administrative coordination for the COO. Required high level executive interaction with internal and external customers, showing exceptional interpersonal skill and competence in managing a high volume of varied, detail-oriented duties.

## H & H Utility Contractors, Inc. 2008-2016 Meridian, Idaho

## **Operations Manager/Apprenticeship Facilitator**

- Oversaw daily operations of the Utility Contracting business to ensure company goals were achieved. Participated in personnel matters, general administration, business planning, finance support and project managment.
- Management of the Department of Labor registered apprenticeship program including OJT hours, academic testing through Northwest Lineman College and all veteran requirements to ensure educational and vocational objectives were met.

## **SHELLY MOGENSEN**

Director, Strategic Accounts

## **KEY EXPERIENCE**

## Quanta Services, Inc.

2013 – Present Houston, TX

## **Director, Strategic Accounts**

- Responsible for business development strategies and tactics associated with major projects and alliances with Quanta's global client base.
- Oversees development and delivery of large EPC projects where multiple Quanta companies are involved.
- Leads procurement and material management functions including developing and implementing the approach for issuing procurement packages, negotiating and awarding supplier purchase orders, managing supplier relations including manufacturing quality, managing logistics and inventory control, procurement related documentation, periodically reporting on material management performance, and project closeout.
- Supports development of standardized processes and procedures for Quanta's EPC business practice

# G.W. Murphy & Associates

2010 – 2013 BC, Canada Accenture 2009 – 2010 North America The Structure Consulting Group

2007 – 2009 King of Prussia, PA Infrasource, Inc. 1997 – 2003 Philadelphia, PA Chief Project Officer, BC Hydro, Smart Metering & Infrastructure

## **Level A Capture Lead**

## Senior Vice President

# **Co-Founder, Vice President, Business Development and President Utility Services Division**

#### **DESIGNATIONS**

Professional Engineer

#### **EDUCATION**

**Master of Science, Radiological Physics**, Department of Environmental Sciences and Engineering, University of North Carolina, Chapel Hill, NC **Bachelor of Arts, Biology**, Merrimack College, North Andover, MA

**Business Support** 

#### **KEY EXPERIENCE**

#### **ATCO**

2017 – Present Alberta, Canada

## Manager, Employee Resource Centre

- Carries out supervisory responsibilities in accordance with ATCO's practices and procedures; additional responsibilities include interviewing, training and motivating employees; planning, assigning and directing work; rewarding and disciplining employees; and effective conflict resolution.
- Identifies customer service need and works with team to implement solutions and/or process improvements to increase customer satisfaction.
- Drives quality consistency and productivity of team to ensure consistent employee experience.
- Drives process improvements to enhance the operational efficiency of team
- Fosters relationships between business units and functions to ensure high levels of service.
- Manages relationships with key internal and external stakeholders, partnering closely with them for process enhancement.
- Understands and effectively utilizes resources provided by internal systems, departments, practices, and procedures.
- Creates simple business cases to propose investment in process improvement.
- Identifies need, creates and distributes standard communications.
- Researches Employee Resource Centre best practices with industry contacts.
- Oversees day-to-day operations of the Employee Resource Centre including response monitoring and trend analysis.
- Actively participates in and drives continuous improvement, identifies and eliminates barriers to accuracy, productivity, and quality.
- Monitors Employee Resource Centre performance and ensures appropriate coverage to meet critical service levels.
- Ensures potential risk of response errors are identified and that corrective actions are taken.
- Effectively implements change management driven by process improvement or industry changes.
- Ensures the Employee Resource Centre meets established service goals/standards.

#### **ATCO**

2016 – 2017 Alberta, Canada

## Senior Supervisor, HR Services

- Managed a team of 14 employees.
- Oversaw pension & benefits administration.
- Oversaw payroll processing.
- Oversaw HRIS testing & maintenance.

## KIRSTIN NORMAND, B.A., CPHR

#### **ATCO**

2013 – 2016 Alberta, Canada

## **Supervisor, Talent Acquisition**

- Managed and developed HR Advisors.
- Ensured the Disability Management programs were providing quality, proactive services focused on the advisory services and return to work support for the employees through the company sponsored Sick, STD/LTD plans, Wellness programs and Alcohol and Drug policies and WCB.
- Supported the education of managers and other key stakeholders in all aspects of Disability, WCB, A&D processes.
- Oversaw and reported on the administration of the annual driver's abstract verification process.
- Oversaw and supported the administration of the Engineer in Training (EIT) Program.
- Oversaw process and provided required approvals within the Relocation Program; supporting the HR Advisor on varying situations that arise within the program application.
- Oversaw and supported the Temporary Foreign Worker process.
- Oversaw and supported the administration of the On-boarding Program, Supervisor Orientation Program (HR Sections), Co-op Student Program & Sons & Daughters Program.
- Administered the Anti-bribery and Anti-corruption Policy and Program.
- Lead recruitment function and executed recruitment strategy to hire top talent for ATCO as fast as possible at the lowest cost possible.
- Coordinated recruitment workload across HR team to optimize ability to meet the business needs.
- Maintained seamless process in selection, including candidate screening, interview and offer.
- Developed and set objectives of targeted sourcing plans for difficult to fill roles, including advertising and external recruitment.
- Oversaw and provided subject matter expertise on recruitment functions by ensuring the process adheres with policy, program standards and alignment with labour relations (CBA) requirements.
- Monitored and reported on recruitment efforts to ensure successful delivery of talent to ATCO.

## KIRSTIN NORMAND, B.A., CPHR

#### **ATCO**

2012 – 2013 Alberta, Canada

## **Recruitment Specialist**

- Provided exceptional client service and full cycle recruiting.
- Developed and maintained strong working relationships with leaders, hiring managers and other team members creating partnerships that yielded success, predictable results and credibility.
- Built strong relationships with potential high-quality candidates to ensure a viable talent pipeline.
- Developed the job posting with the hiring manager and determined the best venue to post the role.
- Pre-screened candidates and presented shortlist to hiring managers.
- Interviewed candidates using behavioral-based interviewing methodologies.
- Performed reference checks on selected candidates and reviewed results with hiring managers.
- Managed the presentation, selection, offer, negotiation, closing, and administrative components involved in full lifecycle recruiting.
- Stayed informed of trends and innovative recruiting techniques to be competitive in state-of-the-art recruiting practices.
- Developed and facilitated the on-boarding session for new hires.

#### **Senior Search Consultant**

- Responsible for business development of \$300,000.00 in yearly revenue for the firm.
- Achieved annual revenue targets and performed in the top 3, 5 years in a row.
- Trained and managed Search Consultants.
- Established and maintained solid working relationships with Human Resources management and hiring managers.
- Performed needs analysis to determine position specifications, interpersonal requirements, competitors, industry knowledge and market trends.
- Developed and implemented sourcing strategies, including referral generation, position postings, direct headhunting, sourcing from resume databases, internet recruiting and creative candidate generation.
- Maintained applicant tracking system (Maxhire): tracked requisitions and positions, created, updated and revised job descriptions, managed candidate profiles, managed company profiles, collected recruitment data and provided analysis and reports to support recruitment strategies.
- Developed advertising strategies and identified new associations, publications and conferences that might be relevant for each search.
- Networked with industry contacts, association memberships, trade groups for business development.
- Strong focus on identifying passive candidates through networking, complex Internet searches and internal or external research.

# Summit Search Group

2007 – 2012 Alberta, Canada

# Peel Board of Education

2000 – 2006 Ontario, Canada

## **Training & Development Specialist**

- Provided Job Search Workshops for groups of 10 to 40 individuals; ensuring participants were provided with current information on resume/cover letter development and interview skills.
- Delivered True Colors© workshops to management and employees of Magna International, Bell Mobility and many Ontario Government Ministries as well as athletes, coaches and volunteers.
- Trained over 300 people on assertiveness skills, team building and change management.

## **DESIGNATIONS**

CPHR Designation (Alberta)

## **EDUCATION**

**Bachelor of Arts**, Psychology, University of Alberta Certified administrator of True Colors© and Myers Briggs personality indicators Graduate of Dale Carnegie Program

## **KRISTIN OOSTRA**

## **ROLE**

**Program Content Manager** 

## **KEY EXPERIENCE**

## Northwest Lineman College

2019 – Present Boise, Idaho

## Northwest Lineman College

2018 – 2019 Meridian, Idaho

# Boise State University

2015 – Present Boise, Idaho

## Pyramid Analaytics

2015 – Present Boise, Idaho

## Idaho Digital Learning

2008 – 2015 Meridian, Idaho

## **Program Content Manager**

- Plans and executes content strategies for advanced training programs.
- Manages content creation and revision for internal programs and external custom requests.

#### **Technical Communicator**

- Provided instructional design expertise to develop learning and performance outcomes, implement backward design for curriculum development, and ensure reliability and validity for educational materials.
- Reviewed all curriculum for appropriate background knowledge and scaffolding.

## **Adjunct Teaching Faculty, Literacy**

- Teach both undergraduate and graduate courses in Literacy education for the Department of Language, Literacy and Cultures.
- Develop and deliver courses and content in both face-to-face and online modalities.

## **Director of Global Training**

- Establised online and face-to-face software training programs for both customers and partners.
- Built in-product training materials for users.

## **Content Developer**

- Created student-facing courses and professional development courses for online audiences.
- Provided instructional coaching and mentoring in topics such as instructional design, online learning, blended learning, online course development, and change management.

#### **EDUCATION**

**Doctor of Education**, Educational Technology, Boise State University **Master of Arts**, Literacy, Boise State University **Bachelor of Arts**, English Education, Boise State University

## **GEORGE OPOCENSKY**

## ROLE BACKROUND

George Opocensky has 40 years of experience in the electricity industry, including the design, construction, commissioning, maintenance, operations, engineering, HR, commercial and financial areas of the business in addition to development and implementation of various Health, Safety and Environmental programs. Georges experience also extends to non-Canadian countries, mainly the UK and his existing posting in Mexico City, Mexico. George's experience spans many locations including the UK, Canada and his current location, Mexico City.

## **KEY EXPERIENCE**

#### **ATCO**

2016 – Present Mexico City, Mexico

## **Managing Director, Mexico**

Responsible for all Electricity growth and operations in Mexico, including OME, HR, Environment, Health and Safety, Commerce and Finance. Interfacing with Government Energy Regulatory bodies with regards to the recent Energy Reform. Responding to government and non-government RFP's. Obtaining ATCO Board approvals for investments. Managing the day-to-day operations of ATCO Mexico. Development of ATCO Mexico Business Plans and Strategies. Development and approval of Power Purchase Agreements, Fuel Supply Agreements, etc.

#### **ATCO Power**

2014 – 2016 Alberta, Canada

#### President

Reporting to the CEO, overall management and responsibility of the ATCO Power Generation fleet business of over 2,500MW consisting of 14 gas, coal and hydro generating stations and over 500 staff. Development and approval of operational, financial and commercial strategies. Interfacing with Government Energy Regulatory bodies representing ATCO's views regarding energy reforms.

#### **ATCO Power**

2012 – 2014 Alberta, Canada

## **SVP Operations**

 Responsible for the overall operations of the coal, gas and hydro fleet, including all HSE and O&M activities. Developing and approving long term O&M business plans and strategies

## **ATCO Power**

2006 – 2012 London, UK

## General Manager, Barking Power

Reporting to the CEO, overall responsibility for a 1,000MW natural gas Combined Cycle Generation Facility, including 70 staff. Lead responsibility for the Operations Committee consisting of ATCO, SSE and EdF reporting to the Board. Management of the GT Long Term Service Agreement (LTSA) and the Gas Supply Contract. Management of Clean Energy Ceritficates contracts.

## **GEORGE OPOCENSKY**

#### **ATCO Power**

2001 – 2006 Ontario, Canada

## Station Manager, Brighton Beach

Overall responsibility for a 580MW Combined Cycle Generation Facility

## **ATCO Power**

1989 – 2001 Alberta, Canada

## **Production Manager, Station Manager**

 Moved through various positions through to Station Manager with overall responsibility for an 800MW Coal Fired facility

#### Suncor

1980 – 1989 Alberta, Canada

## **Operator, Operations Supervisor**

 General responsibility for shift supervision of a 100MW coke fired facility and refinery pressure vessels

## **DESIGNATIONS**

Power Engineering Technologist, 1st Class

## **EDUCATION**

Power Engineering, Southern Alberta Institute of Technology (SAIT)

**Business Support** 

## **KEY EXPERIENCE**

Over 40 years' experience and increasing responsibility within the power industry. Comprehensive and extensive knowledge of the transmission system, NERC, generation and load characteristics, energy trading, marketing, and negotiations. Maintains current knowledge of industry trends and developments, as well as an extensive network of industry contacts.

## **ION Consulting** 2010 – 2017

- Oversaw and coordinated ISO/RTO orders and rules and present opinion to MISO and PJM to bring real world working knowledge from a utility standpoint into an engineering environment where new rules were being written.
- Played a lead role in the update of NAEMA by-law rewrite.

#### 2004 - 2010

- Oversaw and managed all Eastern Interconnect TLR's and Energy Emergency Alerts.
- Responsible for issuance of same for ComEd, IP, and Ameren.
- Responsible for Reserve Margins and management of Transmission Line limitations.
- Coordination of all Generation and Transmission within NERC Region, Mid-American Interconnected Network (MAIN).
- Work closely with MISO and all internal control areas, in both real time and planning stages.

#### 1999 - 2002

#### Vice President, Eastern Alberta Transmission Line, Line Construction

- Established customer base and originated long-term business in MAIN, MAPP and ECAR.
- Determined transaction values by utilizing knowledge of line flows, load characteristics and generation site location and develop marketing strategy up to fifteen years.
- Worked with industrial steel mills in developing hedging strategies for their on-site generation.
- Worked closely with Coral Canada to plan development of new generation, and evaluate potential sales into U.S.

## 1998 – 1999

## **Vice President, Large Distribution Projects**

- Established new contracts and customer base (MAIN, ECAR).
- Competitively priced and arranged energy sales and purchase transactions.
- Developed marketing and pricing strategies for daily and forward positions up to 18 months.
- Developed hedging strategies including options trading.
- Major role in setup of trade floor.

## JIM ORLANDO

1996 - 1998

- Played major role in establishing MidCon's power marketing and trading business.
- Acquired new contracts and customers.
- Competitively priced and arranged energy sales and purchase transactions.
- Developed marketing and pricing strategies for daily and forward positions up to one year.
- Developed hedging strategies, including options trading.
- Traded power daily, weekly, monthly, and quarterly in MAIN, ECAR and MAPP.

1995 - 1996

- Competitively priced and arranged energy sale and purchase transactions.
- Developed marketing and pricing strategies and interchange transactions based on market conditions.
- Minimized cost of resources to serve native load customers while maximizing the profit in the interchange market.
- Responsible for direction of station personnel at 21 generating facilities and the commitment of generators located at these facilities.
- Forecasted daily and weekly electrical loads.

1985 - 1995

- Involved in all operating aspects of a major power producer.
- Oversaw and coordinated all high voltage switching and loading, keeping time error in acceptable levels.
- Communicated transmission and unit outages to MAIN.
- Forecasted hourly, daily and weekly electrical loads.
- Responsible for operation and loading of all generation in economic order while keeping within all NERC and FERC guidelines.
- Traded power with other entities on an hourly basis, daily or extended basis.
- Committed and de-committed units.

1972 - 1985

Kept the units online by operating electrical switchboards, synchronizing units, performing high-voltage switching, operating phase shifters, reading blueprints, troubleshooting electrical problems, and placement of workman's protection.

#### **EDUCATION**

NERC-certified **Reliability Coordinator** NERC-certified **System Operator** 

Power industry courses on PJM Operators, Risk Management, Trading of Options and Futures in the Energy Market, Power Systems Operators, Nuclear Power Plant Fundamentals, Steam and Power Plant Fundamentals, Electrical Fundamentals, ABC's of Electricity, Trading and Hedging Strategies, Advanced Account Strategies, Applied Energy Derivatives, and System Operators

## JIM ORLANDO

**Business Support** 

## **KEY EXPERIENCE**

## Northwest Lineman College

2018 – Present Boise, Idaho

## **Vice President**

- Lead and manage the department's strategic projects and programs instrumental in the creation and expansion of NLC's business development partnerships.
- Through interactions with senior leaders, I engage with stakeholders, bring innovation to reality, harmonize efforts, formalize plans into programs, and communicate with enthusiasm and clarity at the operational and strategic levels.
- Through our efforts, NLC is poised to be the dominant supplier of quality education and training, customized products and services, workforce development and labor to the industries we support. We change potential to reality and transform the energy sectors.

#### **Protein Unlimited**

2017 – 2018 Boise, Idaho

## Sales Manager

- Led the trade, broker, buy, and sell of \$35M+ annually in poultry, pork, and beef products.
- My experiences in stakeholder relations enhance my partnerships with major producers in retail, food service, pet, industrial, and government sectors.
- Upon building client relationships, I serve as a trusted advisor on investments, revenue projections, and manage accounts. My research and analysis of markets and competitors offer decision-making reporting and insight.
- I guide supply chain management through wholesale investment inventories, distribution, and logistics and coordinate import/export product instructions.

## City of Meridian

2014 – 2017 Meridian, Idaho

#### **Deputy Director**

- Provided broad, high-level oversight of a full-service public works organization.
- My leadership responsibilities included direct oversight of 5 divisions/45 team members with \$50M in annual budgets.
- My teams planned and directed the execution of public works projects, including financing, design, construction, maintenance, and repair.
- We developed and implemented long-range public works program plans, projects, and services, and created and implemented standards, practices, policies, and procedures.
- I led preparation and administration of departmental strategic plan and was actively engaged in the recruiting, hiring, training, and coaching of personnel.

## MIKE PEPIN, MBA, PMP

## **United States Air Force**

2011 – 2014 Mountain Home, Idaho

#### **Executive Director**

- Served as the Dean and Director of Community College of the Air Force's professional military education school.
- I was responsible for controlling \$3.5M in budgets, a \$1.6M facility, and \$110K in technology assets.
- Professionaly led and developed a cadre of 11 instructors and support personnel and identified and implemented learning/development programs for staff and 1.2K students.

## United States Air Force

2009 – 2011 Mountain Home, Idaho

## Superintendent

- Led a 58 member workforce charged with timely fuel delivery to aircraft requests.
- In my role I had responsibility for 30 vehicles, 35 facilities, and 80 equipment items valued at \$27.3M.
- Additionally, I was the Project Manager for 10 DoD and multi-national training exercises.
- I had the privelege to professionally train and develop the workforce, administer the performance appraisal program, and recognize employee performance.

## **DESIGNATIONS**

Project Management Professional (PMI)

## **EDUCATION**

**Master of Business Administration**, Human Resource Management, Trident University, Calfornia

**Bachelor of Science**, Occupational Education & Management, Wayland Baptist University, Texas

**Associate of Science**, Instruction, Community College of the Air Force, Alabama

**Associate of Science,** Logistics, Community College of the Air Force, Alabama

Leadership Development Program, Boise State University

Vice President, Utility Training Services, Northwest Lineman College (NLC)

### **KEY EXPERIENCE**

## Northwest Lineman College 2003 – Present Meridian, ID

### **Various Roles**

- Designed, developed, and delivered training throughout the United States and internationally.
- Designed training facilities and campuses that encompasses Northwest Lineman College's Three-Phase Educational Model.
- Designed and developed NLC's Lineman Apprenticeship Program, which currently trains over 700 apprentices throughout the US.
- Designed/developed curriculum for the Symbion/Pike Power Center in Morogoro, Tanzania, and led the construction of the campus and launch of training in Morogoro.
- Designed, developed, and registered NLC's Training Specialist Career Progression Program with the US Department of Labor.
- Consult with utilities to assess powerline workforce, safety programs, and apprentice curriculum, training facilities, and various other initiatives.
- Designed and developed the first versions of NLC's Telecommunications and Gas Distribution Pre-Apprentice Programs.
- Four time Crystal Award Winner including the Benchmark Award for my work in Tanzania.
- Served on the US-DOL committee for Apprenticeship Excellence in the Energy Sector (SEA).

## Pacific Gas and Electric Company

1995 – 2003 Northern California

## Journey-Level Lineworker

- Operated, maintained, and constructed transmission, distribution, and underground systems throughout Northern California, including an overhead to underground conversion project in San Francisco, CA.
- Worked as a crew leader on regular maintenance projects and storm work.
- Certified to perform energized work using rubber glove or hot stick methods.

## L.E. Meyers Construction

1995 (summer) Huntington, UT

#### Groundman/Laborer

- Performed ground-level duties to ensure aerial workers received tools and materials in a safe and timely manner.
- Excavations and job site preparation for setting poles and stringing conductors.

### **DESIGNATIONS**

Authorized OSHA Outreach Trainer for Construction Industry Academic Certification for Technical Workforce Training (Curriculum Development)

### **EDUCATION**

**Apprenticeship (Lineman)**, Pacific Gas and Electric Company **Technical Workforce Training Certification**, University of Idaho

OT Applications Sub - Team Leader

### **KEY EXPERIENCE**

#### **ATCO**

2018 – Present Alberta, Canada

### Senior Innovation Adviser ATCO IT

- Work with the ATCO lines of business, Innovations groups, to enable IT solutions related to Innovations projects.
- Manage Azure Cloud infrastructure to enable Innovation.
- Develop Innovation charter.
- Develop Information Technology innovation framework to evaluate innovation proposals.

#### **ATCO**

2017 – 2018 Alberta, Canada

## Manager – IT/OT Integration ATCO IT

- Lead Industrial Internet Of Things (IIOT) initiatives at ATCO.
- Produced IT/OT Integration Report for ATCO Group of Utilities, Focusing on current Integrations and future IT/OT roadmap.
- Research and implement Operational/Information technology integrations within ATCO with the desired outcome to drive operational efficiency.
- Connecting operational systems to business systems to provide real time business analytical data for business decision making.

### **ATCO**

2015 – 2017 Alberta, Canada

### **Manager - Technology Management**

- Management of all Information Technology, including budgeting, regulatory, reporting and strategic direction for applications and users at ATCO Pipelines.
- Leading the Information Technology group in planning and implementing technology solutions to support both distributed and centralized operations to achieve ATCO Pipelines business goals.
- Work directly with the Office of the CIO, ATCO to encourage corporate approaches to ATCO Pipelines technology management.

#### **ATCO**

2006 – 2015 Alberta, Canada

## **Group Leader Graphics**

- Management of Engineering Technologists Designing Natural Gas Pipelines and Facilities.
- Development of GIS Program.
- Development and Implementation of Asset Management Strategy.
- Development of CSA standard S250 Mapping of Underground Utility Infrastructure Technical Committee.

#### **ATCO**

2005 – 2006 Alberta, Canada

### Technical Coordinator – Mapping Systems

- Support and Enhancement of GIS system.
- Management of Engineering Drafting Designers.

### **ATCO**

1999 – 2005 Alberta, Canada

### **Team Lead – Applications**

- Managed the Development and Maintenance of Pipeline billing systems.
- Managed the Development of Internet Sites for ATCO.

## **ROSS PHILLIPS**

### **ATCO**

1986 – 1999 Alberta, Canada

### **Senior Systems Analyst**

 Developed IT systems for pipeline Cathodic Protection, GIS, Budgeting, Maintenance and Resource Management.

### **EDUCATION**

**Diploma**, Computers and Data Processing, University of Alberta **Diploma**, Modern Management, Applied Learning International **Diploma**, Electronics, Specializing in Microprocessors, Northern Alberta Institute of Technology

**Diploma**, Microcomputer Management, Grant MacEwan

Senior Physical Security Specialist

### **KEY EXPERIENCE**

#### **ATCO**

2012 – Present Alberta, Canada

### **Senior Physical Security Specialist**

- Subject Matter Expert for the Critical Infrastructure Program (CIP)
- Provide technical guidance in the implementation of the (CIP) Physical Security Program
- Map and adapt regulatory requirements into deliverables including ATCO daily business operations and stakeholder requirements
- Provide gap assessment analysis between existing ATCO infrastructure and Regulatory (CIP) requirements
- Identify and mitigate potential project and operational risks that will compromise the deliverance or compliance of the Physical Security Program
- Assess, design, develop scope of work, procure, coordinate, test and commission of physical security controls for ATCO sites based on the different regulatory agencies (ASSIST, NERC, WECC, AESO)
- Document incident and loss response plan, including contingency plans
- Set up planned maintenance routines and test forms
- Document and implement equipment sparing strategy
- Develop maintenance and troubleshooting guide for field staff
- Deliver on-site equipment orientation training to field staff
- Develop AE Transmission CIP Physical Security Plan procedures as per regulatory (CIP) requirements
- Support the development of security awareness training sessions for stakeholders impacted by the CIP program
- Prepare functional specification for engineering
- Participate in product selection with engineering

### **Johnson Controls**

2004 – 2012 Alberta, Canada

### **Lead Systems Specialist**

- Deliver projects on time and with in budget while minimizing risk to Johnson Controls and the Client
- Coordinate between the Client's internal departments, operations and third party suppliers
- Establish the scope of project, addressing Client's special requirements, performance specifications, procurement strategies and commissioning
- Prepare quotations, datasheets, catalogs and bid documents
- Schedule monthly projects: labor, material and subcontractor costs
- Analyze financial reporting systems and project schedules to proactively address potential problems
- Communicate project progress, issues and financial status to management as required
- Prepare construction work packages including conduit and wire calculations, load calculations, installation details, data sheets, operation manuals, sequences of operation and specifications
- Manage costs, billings and collections
- Complete project billings in a timely and accurate format to the client
- Maintain profitability goals and positive cash flow
- Evaluate the contractual scope of work and the impact of client issued bulletins, field directives and / or scheduling changes. Actively pursues additional work through change orders.
- Perform associated cost estimates, prepare proposals and negotiate final settlement price and customer acceptance
- Ensures project document controls are in compliance with contract requirements and JCI standards
- Oversees project construction for compliance with specifications, local codes and installation techniques
- Manages the selection, ordering, and delivery schedule of materials to be procured for the projects assigned

### Honeywell

2003 – 2004 Alberta, Canada

### **Application Designer**

- Apply customer's specifications Alberta Building Code and Alberta Fire Code for fire alarm and detection systems
- Prepare bill of materials and provides procurement support for projects
- Obtain approvals and final acceptance from the Authority Having Jurisdiction

### **DESIGNATIONS**

Professional Engineer (Alberta)
Physical Security Professinal (PSP - ASIS)

### **EDUCATION**

**Bachelor of Science**, Electrical and Electronic Engineering, Universidad La Salle, Mexico

**Quality Assurance Support** 

### **KEY EXPERIENCE**

### Quanta Services, Inc. 2018 – Present Houston. TX

### **Corporate Quality Systems Manager**

- Quality Manager on PG&E's Wildfire Safety Inspection Project and responsible for Quality's compliance of all Transmission Tower and Pole structures' inspection audits residing along high and medium-risk designated areas
- Responsible for overall development, implementation and maintenance of the organization's Quality Management System (QMS)
- Ensure that the organization's Quality Management System conforms to customer, internal, regulatory/legal requirements and compliance to ISO 9001
- Develop Quality Manual, project specific Quality Plans, and Inspection & Test Plans for individual operating units
- Manage the monitoring, measurement and review of internal processes that affect the quality of our operating units' services and products
- Report to top management on the performance of the QMS (e.g., results of quality audits, corrective actions), including the need for improvement
- Enforce responsibility for accuracy and timely inspection/calibration of monitoring and measuring devices across all operating units

## Technip FMC GREMP CAMPUS 2017 –2018

Houston, TX

## Quality Assurance/Quality Control (QA/QC) Manager I

- Responsible for Quality Inspection activities performed at Gremp Campus, including in process for Completions, Drilling, Welding/NDE, Receiving and Final Order' Reviews
- Responsible for the coordination of calibration on all measuring devices.
   Roll out of this effort reduced wait time from 30 days to 7 days
- Responsible for the Quality Assembly Technician program that provides Quality specific training for Assembly technicians to perform non-critical measurements and work order reviews
  - Program successfully increased work order reviews FPY from 24% to 90% in less than 3 months
  - Program successfully reduced the wait time for Quality Inspections by allowing Quality Assembly Technicians the ability to perform non-critical measurements
  - Program successfully improved relationships with TPIs and helped reduce offshore downtime by increasing accountability within the shop technicians on all work performed
- Increased team's competencies with NDE, thread inspection, visual inspection and CQI training opportunities; while increasing absorption rate from 70% to 85%
- Performed monthly forecast to predict quality inspectors per expected workload; ran monthly metrics reporting to all shops on their FPY and common issues
- Successfully transformed and restructured the QAQC department to execute and perform with little to no supervision

## FMC TECHNOLOGIES

2014 – 2017 Houston, TX

### Subsea Drilling Services (SDS) Quality Engineering Lead

- Within the first three months successfully reduced Corrective Action Requests and Service Notifications' backlog
  - 61% reduction of Corrective Actions
  - 94% reduction of Field Non-Conformance Reports
- Identified gap and updated QMS processes, driving the need to reflect on our current practices and ability to map these processes
- Created and tracked trend analysis for Uptime/Downtime, non-productive time, and shop floor Blue Tag inspections
- Highly focused on "price of conformance" (POC) and challenging inaccurate "price of non-conformance" (PONC) metrics in an effort to drive collaboration and communication among business units.
  - Worked with engineering to ensure that engineering change notifications were properly tagged as POC, rather than PONC
  - Changed rental tool rework financials to reflect accurately in PONC and shop rework charges
- Reduced rework backlog and trained shop planners on how to utilize the rework notifications for Service Order initiation and closure
- Enforced and trained on the "no shipping with open work" instruction, reducing potential offshore downtime

## FMC TECHNOLOGIES

2012 – 2014 Houston, TX

## Subsea Services (SS) Installation Engineer – Drawing and Design Procedures' Reviewer/ BSI Lead Auditor

- Critical contributor for Exxon/Anadarko and Chevron in creation of Testing and Installation Documentation
- Led and participated in Hadrian South onshore activities (SIT, Dock, Inspection of equipment) while providing active support on offshore needs
- Natural ability to consult and establish strong working relationship with EPC, Customers and Technical Service Personnel
- Identified document improvement opportunities, raised FNCRs, and actively audited for START observations

## FMC TECHNOLOGIES 2011 – 2012 Houston, TX

### Subsea Services (SS) Quality Analyst/ Lead Auditor

- Led effort in the achievement of API Q1 Certification and Monogram License
- Successfully initiated and led SS QLT Meetings for CAR resolution and closure with all
- levels of management. Performed full SS system audits, as well as leading several shared services audit with Quality Systems (Gears) in preparation for API recertification audit
- Defined QMS processes across all areas and collaborated with process owners to establish documented procedures and work instructions

### U.S. NAVY RESERVE

December 2010 – Present

## Officer in Charge (OIC) and Civil Engineering Corps (CEC) Officer, Construction Battalion Mobility Unit (CBMU) DET 303 – 200+ Seabees

- Led the most active duty days as a unit receiving acknowledgement from NOSC Houston Commanding Officer and a Navy and Marine Commendation Medal
- Seabee Combat Warfare expert with tours across Seabee units ACB, NMCB and CBMU
- Responsible for the increase of mission readiness of all sailors; thus, allowing the detachment to improve on qualification attainment and drill participation
- Responsible for the planning, development and management of large public affairs, budgets and ambitious public works plans

Commanding Officer for Expeditionary Medical Facility (EMF) exercises and all battalion training readiness

National Aeronautics and Space Administraiton 2001 – 2009 Houston, TX

### ISS System Integrator & Project Lead

- Supported technical and management control of vehicle requirements, design, development, verification, and sustaining planning and implementation
- Maintained open communication with all levels of management and provided feedback for expedient progress in accordance with program plans

Responsible for the analysis of contractors' compliance to project budget, allocation of resources and projected costs for each required program milestone

### **DESIGNATIONS**

## ASQ Certified Manager of Quality and Organizational Excellence American Society for Quality (ASQ)

API Q1 and API Q2 Professional, Wollam Petroleum Advisory Group API 1169 Pipeline Inspector, NWIS Training Inc. National Welding Inspection School

**Business Improvement & Master Auditor** 

BSI & ISO 9001:2015

Lean Six Sigma Green Belt (Training Completed)

**INCOSE Certified Systems Engineering Professional (CSEP)** 

### **EDUCATION**

Master of Business Administration, University of Houston Clear Lake Master of Industrial Engineering, University of Houston Central Master of Science, Human Factors and Systems Engineering, Embry-Riddle Aeronautical University

Master in Human Resources Management, University of Houston Clear Lake

### **Contracts Administration**

### **KEY EXPERIENCE**

#### **ATCO**

2017 – Present Alberta, Canada

### **Senior Contract Administrator**

- Contract administrator for Alberta PowerLine (APL).and the Design Build Joint Venture (DBJV) that built the \$1.6 billion Fort McMurray West 500-kV Transmission Project. Administered the requirements of this P3 project including the requirements of the senior lenders and the ongoing requirements of the Collateral Trustee. This included implementing the processes requied for milestone payments.
- Part of the support team working on the sale of APL equity.

### **ATCO**

2013 – 2017 Alberta, Canada

### **Supervisor Contract Administration**

- Supervised a team of 6 people providing guidance and mentorship with contract formation and administration, while at the same time performing contract administration.
- Participated in all stages of management of the employee life cycle: recruitment and hiring, performance review, mentoring and training, and reward/termination.

## Suncor Energy Services Inc.

2010 – 2013 Alberta, Canada

### **Field Contract Manager**

- Part of the team that implemented "Supplier Performance Management" (SPM).
- Subject Matter Expert (SME) providing leadership and training on Suncor's SPM.
- Managed performance of high-spend (over \$40MM/yr) and high-risk suppliers (Scaffolding, Industrial Cleaning, Non-Destructive Testing).

## Canadian Natural Resources Limited – Horizon Project

2006 – 2010 Alberta, Canada

### **Contract Specialist**

Formed and administered contracts for HR (Master Service Agreements with Employment Agencies for recruitment assistance services), Operations (Supply of overlay pipe spools for the tailings plant, Rental agreement for scaffolding supplies), and Projects (EPCM for the construction of a pilot plant to treat Mature Fine Tailings).

### **EDUCATION**

**Bachelor of Science**, Electrical Engineering, West Virginia University **Foundation of Leadership Training**, Mount Royal University

## **JULIO ROMERO AGÜERO**

### ROLE

System Remediation Plan

### **KEY EXPERIENCE**

## Quanta Technology

2007 – Present Raleigh, NC

## Vice-President, Strategy and Business Innovation

- Provides leadership to Quanta Technology in the areas of technology and business strategy, grid modernization, utility of the future, distribution systems analysis, planning and engineering, distributed energy resources, and emerging technologies.
- Responsible for Quanta Technology's business strategy, innovation, and partnership activities, and execution of special projects.

## National Energy Commission

2005 – 2007 Honduras

### **National Energy Commission**

- Responsible of the regulation of the power generation, transmission and distribution utilities of Honduras, and their interaction in the Central American electricity market
- Revising and approving national power sector regulations and draft laws, national electricity rates studies and power generation contracts.

## National Electric Utility of Honduras

1997 – 2000 Honduras

### **Distribution Operations Manager**

- Responsible for the operation of the distribution system of Tegucigalpa, capital and most important city of Honduras
- Protection coordination, power quality monitoring, and reliability assessment for the Tegucigalpa metropolitan area.

### Advisor — Regional Systems Department

- Responsible for distribution planning and distribution project management for the eastern, southern and central areas of Honduras.
- Managed several voltage conversion, protection coordination and voltage regulation projects.

### Regional Manager — Southern Area

- Responsible for the commercialization of electricity, operation, maintenance, and planning of the distribution system of the southern region of Honduras.
- Managed resources and professional and technical staffs up to 100 persons.
- Supervised state and investor-owned urban and rural electrification projects
- Restoration of the southern area's distribution system after Hurricane Mitch.

## **JULIO ROMERO AGÜERO**

### Regional Manager — Eastern Area

- Responsible for the commercialization of electricity, and operation, maintenance, and planning of the distribution system of the eastern region of Honduras
- Managed resources and professional and technical staffs up to 100 persons. Supervised state and investor-owned urban and rural electrification projects.

### **DESIGNATIONS**

- Institute of Electrical and Electronics Engineers (IEEE)
- Chair of IEEE PES Distribution Subcommittee, Senior Member of IEEE, and member of Advisory Committee of DistribuTECH. Past Chair of IEEE PES Working Group on Distributed Resources Integration, former Editor of IEEE Transactions on Smart Grid, and IEEE Transactions on Power Delivery

### **EDUCATION**

- PhD, Power Engineering, National University of San Juan, Argentina (2005)
- MBA, North Carolina State University, Raleigh, NC (2013)
- BSc, Electrical Engineering, National University of Honduras (1996)

## **ANDRIJA SADIKOVIC**

### ROLE

Integrated Resource Planning and Transmission Studies

### **KEY EXPERIENCE**

## Quanta Technology

2017 – Present Raleigh, NC

### Dorbs

2014 – 2017 San Ramon, CA

### **Principal Advisor, Distribution & Asset Operations**

- Development of renewable energy integration solutions for electric utilities and financial institutions on both transmission and distribution systems.
- Business-technical leadership and consulting in the areas of Volt-VAR and DERMS technology, emerging technologies, reliability, operations, Smart Grid, and integration of renewable energy resources.

### **Principal Consultant, Smart Grid Technologies**

- Consulting services related to renewable generation/storage integration/operation, and next generation grid technology.
- Technology architecture and business development.
- Consulting Contracted as engineering lead for various PG&E pilots (Smart Inverters, Advanced Volt-VAR Optimization, Line Sensors and Fault Detection & Location) to help evaluate potential benefits of hardware/software technologies that could improve PG&E reliability, safety and renewable energy penetration
- Choose, test and deploy technology solutions with the objective to provide financial and technological benefits to PG&E.
- Interviewed vendors and evaluate technology applicability/readiness

### **Smart Wires**

2012 – 2013 Oakland, CA

## Senior Engineer

- Managed a cross-functional team to scope Smart Wire Grid power flow control solution
- Led technology demonstration and adoption process with utility industry to enhance reliability, defer capital expense, increase system capacity/penetration of renewables, save cost of energy, participate in RAS/SPS, and manage congestion
- Provided vision on technical and business strategy on how to technologically plan, utilize, and grow the organization's competitive position and profitability.

## **ANDRIJA SADIKOVIC**

## TRC Engineering, LLC

2008 – 2012 San Francisco, CA

### **Senior Power Systems Engineer**

- Led numerous large and small-scale renewable energy interconnection studies projects for various utilities and generation/transmission developers across the country.
- Recommended interconnection siting and network upgrades to meet regulatory, technical and financial requirements. Provided preliminary cost estimates. Reviewed interconnection requests.
- Led numerous large and small-scale renewable energy and energy storage interconnection projects. Performed and/or managed power flow, voltage, short circuit, interface, reactive/power factor and transient stability work as part of interconnection and system performance studies, in accordance with Applicable Reliability Standards, Regulations, Guidelines, Interconnection Tariffs, FERC orders, and study practices, for transmission systems
- Participated on a team that evaluated and developed a system restoration plan for the New

### National Grid USA

2006 – 2008 Westborough MA

### **Distribution Standards & Transmission Planning Engineer**

- Conducted analytical studies for transmission system expansion, reliability, including interconnection of new generation and commercial load to the National Grid transmission systems.
- Performed power system thermal, voltage, short circuit and transient performance analysis as they relate to system reliability, economics, and operating flexibility.
- Frequent asset management analysis and review. Represented National Grid USA interest on the New England ISO Power Supply Planning Committee. Drove standardization and merger of overhead and underground practices that improve safety and reliability of the distribution and sub-transmission power grid in accordance with NESC. Performed National Grid BES compliance studies. Performed thermal capability analysis for transmission lines, power transformers, circuit breakers, switches, and surge arresters.

### **DESIGNATIONS**

### **EDUCATION**

**Master of Electric Power Engineering**, School of Electronics Engineering, Nis, Serbia (2000)

**Bachelor Science Electrical Engineering**, School of Electronics Engineering, Nis, Serbia (2002)

**Electrical Construction and Commissioning** 

### **KEY EXPERIENCE**

## ATCO Electric 2017 – Present Alberta, Canada

### Manager, Electrical Construction and Commissioning

- Promote a positive health and safety culture of all employees with yearly development of group Health and Safety Leadership Plan
- Ensure all employees in safety sensitive positions complete training and health and safety orientations
- Ensure all employees have the necessary personal protective equipment to safely complete assigned tasks
- Ensure all employees' training requirements and needs are addressed and employees are competent to complete assigned tasks
- Promote employee lead safety initiatives and assist in content of employee lead health, safety and environment meetings
- Recognize employees for positive safety behaviours
- Report to Director on the progress of health and safety status on a frequency basis
- Ensure all employees have the necessary tools to complete assigned tasks safely. Maintain a program to identify new tools and technology to create efficiencies in the workforce
- Lead substation self-perform construction activities by identifying capital maintneance projects fit for internal self-perform crews
- Lead substation Commissioning supervisors with creation and maintenance of substation commissioning technical manuals and identifying new technologies to create efficiencies in substation commissioning
- Lead electrical fabrication shop in completing assigned work and identifying new tools and equipment to build efficiencies
- Ensure all work performed is completed with safety at top of mind and quality
- Ensure all quality and constructability issues are indentified in the Quality Management system and corrective actions are being completed.

## LIONEL SANCHE

### **ATCO Electric**

2011 – 2014 Alberta, Canada

### Supervisor, Commissioning

- Supervise commissioning crew activities, employee HSE accountabilities and employees covered under collective bargaining agreement
- Commissioning of high voltage equipment and digital protection systems
- Analysis and compilation of test reports
- Review design documentation in various stages of the project
- Validation of commissioning procedures and standards
- Develop schedules and coordinate activities with project managers and team
- Develop estimates for project proposals and tendering
- Analyze, validate and approve the creation and updating of commissioning procedures and standards
- Analyze commissioning documentation, including issuance of As-Built drawings, commissioning reports and hand-over certificates
- Set up and performance of protective relaying and metering calibration utilizing computer test equipment
- Direct contractors and commissioning of major substation apparatus
- Ensure all opportunites for improvement in substation design are identified in Quality Management System and assist with improvements.

### **ATCO Electric**

2008 – 2011 Alberta, Canada

### **Telecommunication Technologist, Telecom Engineering**

- Development of standards package for new platform technologies in ATCO Electric telecommunication facilities
- Develop detailed design of telecommunication data circuits for the protection and control of ATCO Electric transmission system
- Provide design progress and schedule updates to supervisor to meet project in service dates
- Coordinate work with other functional groups to ensure project requirements are achieved
- Provide design, support and analysis of capital maintenance programs
- Develop estimates and material procurement for capital projects
- Update project progress by attending and facilitating project review meetings
- Supervise the installation and commissioning of telecommunication system
- Analysis of commissioning reports and final acceptance

### **ATCO Electric**

2001– 2007 Alberta, Canada

### **Telecommunications Technologist, Team Lead**

- Daily supervision of telecommunication technologists
- Analysis of data collected from maintenance programs and identify capital maintenance projects and prepare business case and cost analysis
- Field verify design and make recommendations on design changes
- Manage contracts and coordinate the work of contractors
- Gather data by performing tests using various types of test equipment and documenting equipment reliability by analysis of the results
- Installation and commissioning of telecommunication networks; fiber optics, microwave radio, uhf and vhf links
- Troubleshooting problems (faults, failures, design verification), analyzing, correcting and preparing reports

## **LIONEL SANCHE**

## **DESIGNATIONS**

Professional Engineer (Alberta)

## **EDUCATION**

Electronics Engineering Technology, NAIT
Bachelor of Science, Electrical Engineering, University of Saskatchewan
Strategic Leadership Development, Ivey Business School
Foundations of Leadership, Mount Royal University

## **GERARDO SÁNCHEZ-AYALA**

### **ROLE**

**Performance Metrics** 

### **KEY EXPERIENCE**

### Quanta Technology

2012 – Present Raleigh, NC

## National Utility of Electric Power (ENEE)

1995 – 2010 Tegucigalpa, Honduras

### **Advisor, Distribution & Asset Operations**

- Support electric power utilities, system regulators, and operators in North and South America, by providing analysis and engineering judgment
- Advanced modeling and analysis, impact of distributed generation, spatial load forecasting, distribution system planning, and protection systems.

### **Operation Engineer**

- Operation security of the Central American interconnected power system.
   Power transfer limits for transmission systems.
- Studies on distributed and base generation. Transmission and distribution reinforcements, Short term transmission planning. Steady state, short circuit, and power system stability analysis. Volt/VAR control. DigSILENT Power Factory, PSS/E.
- Technical training seminars for engineering staff: DigSILENT Power Factory, PSS/E, Power Systems Stability.
- Terms of reference and offer evaluation.
- Design of distribution feeders and power substations.

### **CIMELSA**

1996 – 1997 Comayagüela, Honduras

### **Project Manager**

 Management and design of electric installations projects for residential and industrial facilities

### **DESIGNATIONS**

**IEEE** - Institute of Electrical and Electronics Engineers. Power and Energy Society **CIMEQH** - Honduran Association of Mechanical, Electrical and Chemical Engineers

### **EDUCATION**

Ph.D. Electrical Engineering, Virginia Tech (2014)

MS Control Systems, Universidad Nacional del Sur. Argentina (2005)

BS Electrical Engineering, Universidad Nacional Autónoma de Honduras (1995)

## **EDUARDO SANVIDO**

#### **KEY EXPERIENCE**

### ATCO Electric 2017 – Present Alberta, Canada

## **Senior Manager Operational Accounting**

- Responsible for the development and support the execution of the Operational and Capital budgets and forecasts, as well as ensuring the appropriate mechanisms are in place to evaluate and monitor business results.
- Translate strategic plans and forecasts into financial plans and projections to ensure the Electric Global Business achieves its financial targets.
- Develop and lead the Operational and Capital Assets teams of 30 direct and indirect reports in the development, operation and continuous improvement of operational costs and capital investments, procedures and systems (Oracle) to delivery timely, accurate and complete monthly financial results.

### ATCO Electric 2016 – 2017 Alberta, Canada

### Senior Manager, Financial Reporting

- Provided effective financial leadership enabling strategic foresight into the business and providing knowledgeable and accurate information to the Electric Global Business.
- Oversaw the Electric Global Business financial reporting and analysis processes including month/quarter-end internal reporting, technical research and financial statement and MD&A review.
- Led the Management Reporting transformation in the Finance function to improve operational excellence and the customer experience.
- Developed and led the Financial Reporting Accounting team of 15 direct and indirect reports in the development, operation and continuous improvement of procedures and systems (Oracle) that resulted in timely, accurate and complete monthly financial results.

## Enbridge Pipelines Inc., 2014 – 2015 Alberta, Canada

### **Director, Accounting Services**

- Provided strategic leadership and oversight of the governance and consistent application of financial procedures, controls, budgets, forecasts and accuracy of financial statements for Enbridge Liquids Pipelines in Canada.
- Developed and led the Accounting Services team of 70 direct and indirect reports in the development, operation and continuous improvement of capital assets, operating costs and accounts payable processes, procedures and systems (Oracle) that resulted in timely, accurate and complete monthly financial results.
- Managed an operating budget of \$6M/year.
- Set the Accounting Services governance structure, policies, procedures and guidelines that affected all Enbridge Liquids Pipelines in Canada, impacting the reporting of over \$16 billion of capital assets, and potential future revenue stream of over \$2 billion.

## **EDUARDO SANVIDO**

- Led the preparation and continuous improvement of reporting and analysis of monthly results to key stakeholders, which ensured operating objectives were translated into development of Finance strategy.
- Led key stakeholder monthly results review meetings, which identified improvements to budgets resulting in a savings of \$100M in an operating budget of \$800M/year.
- Successfully developed, integrated and aligned the capital assets and operating costs groups with the business areas which streamlined processes and led to increased efficiencies.
- Led and represented Finance as the subject matter expert on topics of current and future commercial and accounting and finance solutions on a number of Enbridge wide operating committees.
- Ensured that appropriate internal controls over financial reporting are in place and operating effectively.
- Led and oversaw all human resources, health, safety and environmental compliance activities for the Accounting Services team. Developed, maintained and reviewed the team succession plans to ensure a pool of ready now candidates to replace planned and unplanned transitions.

Enbridge Pipelines Inc., 2013 – 2014 Alberta, Canada

### Senior Manager, Enterprise Accounting Policy

- Led the Enterprise Accounting Policy team of 5 direct and indirect reports in the development and maintenance of accounting policies and controls, improving consistency and mitigating risks across Enbridge's Finance teams.
- Developed and implemented the first three Enbridge wide accounting policies, improving consistency and mitigating risks across the Finance teams.
- Achieved internal and external stakeholders buy-in for the design and adaptation of Enbridge wide accounting policies and controls.
- Disseminated accounting knowledge across Enbridge Corporate and Enbridge business units, providing access to information and supporting Finance teams through the implementation of technical interpretations and changes in accounting standards.

Enbridge Pipelines Inc., 2010 – 2013 Alberta, Canada

### Manager, Financial Reporting Standards

- Provided meaningful, credible and timely accounting research to senior management in support of all highly technical matters.
- Led and developed a team of 2 direct reports in a highly complex and rapidly changing business/industry.
- Coordinated and led the successful transition from Canadian GAAP to US GAAP for Enbridge Liquids Pipelines Canada – worked closely with the Corporate team on potential GAAP differences and providing the guidance to address those.

## **EDUARDO SANVIDO**

- Guided the development of a 3 days US GAAP training specific to Enbridge to support the Finance teams through the transition.
- Managed and oversaw the implementation and ongoing operation of the contract review process to ensure key accounting issues were captured.
- Coordinated and led the development of technical training material for the Controllers group on complex accounting issues and changes in accounting standards.
- Established and maintained strong relationship with external service providers including the external auditors and consultants.

### PricewaterhouseCoopers LLP, 2003 – 2010 Sao Paulo. Brazil

## Senior Manager, Audit and Assurance Group, Canada

- Oversaw the planning, management and completion of large audit engagements for both public and non-public companies, government and not-for-profit organizations.
- Member of the 2010 Global Team responsible for sharing the PwC Audit Methodology and best practices across the PwC offices in India.
- Member of the Audit Champion Team, which included quality review assignments, updating technical resources and developing internal training programs.
- Facilitated internal courses dealing with accounting, assurance, and regulatory matters.
- Member of the IFRS Champion Team, responsible for the interpretation of complex accounting issues and IFRS implementation.

### **DESIGNATIONS**

CRC Regional Accounting Council (CPA equivalent in Brazil)

### **EDUCATION**

**Bachelor of Accounting Science**, assessed by the International Qualifications Assessment Service ("IQAS") to the completion of a four-year Bachelor of Commerce degree with a focus in accounting. Pontifical Catholic University of Campinas – Brazil **Bachelor of Economics Science**, assessed by the International

Qualifications Assessment Service ("IQAS") to the completion of a four-year Bachelor of Commerce degree with a focus in economics. Pontifical Catholic University of Campinas – Brazil

Strategic Leadership Development, Ivey Business School

T&D Operations and Engineering

### **KEY EXPERIENCE**

## Quanta Technology 2019 – Present Raleigh, NC

## **Principal Advisor, Distribution & Asset Operations**

- Engineering, Operations, and Regulatory areas of the Distribution & Transmission segments of the electric utility industry.
- Recent focus includes business and technical integration of Distributed Energy Resources/Non Wires Alternatives (DER/NWAs),
- Distribution System Load Forecasting methods incorporating DER, addition of stakeholder involvement and transparency in the Distribution System Planning process
- Initial development of performance indicators to be used in performancebased rate-making proposals.
- Extensive background in state and federal regulatory proceedings including serving as an expert witness.

## Commonwealth Edison (ComEd)

2016 - 2019 Chicago, IL

## Manager, Voltage Optimization Project

- Responsible for developing and implementing voltage optimization on the ComEd Distribution system
- Owner of the voltage optimization application controlling Volt/VAR regulating equipment at the substation and feeder levels
- Voltage optimization will be implemented at over 470 Substations with over 2,900 distribution feeders from 2018 through 2025

## Commonwealth Edison (ComEd)

2012 - 2016 Chicago, IL

## Manager, Distribution Project Management

- Responsible for developing five year budget plan concerning resources, material and contracting requirements ranging from \$60M to \$140M
- Responsible for developing plans to address load additions (system growth & new business connections), and reliability improvements (distribution automation) at least cost

## Commonwealth Edison (ComEd) 2006 - 2012 Chicago, IL

### Manager, Distribution Capacity Planning

- Responsible for developing five year budget plan concerning resources, material and contracting requirements ranging from \$60M to \$140M
- Responsible for developing plans to address load additions (system growth & new business connections), and reliability improvements (distribution automation) at least cost

### **DESIGNATIONS**

Member IEEE

### **EDUCATION**

BS Electrical Engineering, Illinois Institute of Technology (1982)

Kelly has been active in the energy industry for over 30 years and has broad experience in project planning and implementation, commercial analysis, regulatory analysis, and operations. Kelly enjoys working with people and customers, either individually or as part of a team.

Experience spans regulated business, non-regulated competitive business and non-for-profit organizations. He has held positions in volunteer and professional Boards and committees serving the areas of health, community, regulatory development.

Throughout his career, Kelly has been involved in project management activities and has provided strategic leadership for work groups of various sizes. Developed skills include facilitation, change management, commercial and technical review and regulatory and policy analysis.

#### **KEY EXPERIENCE**

## ATCO Power Canada Ltd.

2013 – present Alberta, Canada

## ATCO Power Canada Ltd.

2010 – 2013 Alberta, Canada

## ATCO Power Canada Ltd.

2009 –2010 Alberta, Canada

## ATCO Power Canada Ltd.

2006 – 2008 Alberta & Northern Canada

### Senior Manager, Environmental Planning

 Responsible for regulatory and permitting activities associated with development projects and end-of-asset-life projects in Canada and internationally; providing leadership in environment, regulatory and strategic initiatives for development, construction and operations.

## Manager, Compliance, Health, Safety, Security, Environment, Compliance

- Responsible for Health, Safety, Security and Environment program for ATCO Power, in coordination with all sites and operating facilities.
- Development, implementation and monitoring of market and regulatory compliance within ATCO Power as well as working with the responsible authorities to develop and implement meaningful standards to ensure the reliability of the bulk electric system.

### Manager, Project Services, Engineering & Construction

- Supporting project implementation with technical and non-technical services including: health, safety, environment, cost management, quality assurance, scheduling, document management.
- Development of department procedures and processes.

## Manager, Business Development

 Responsible for supporting business development activities from concept through implementation, including commercial, environmental, social and technical components.

## KELLY SCOTT, P.ENG MBA

## ATCO Power Canada Ltd.

1999 –2005 Alberta & Ontario

## Alberta Power Limited

1997 – 1999 Alberta, Canada

### Manager, Commercial and Regulatory

 Responsible for commercial, environmental, regulatory and technical matters required for the development, construction and operation of independent power projects in Canada.

### **Acting Manager, Electricity Supply**

 Responsible for business planning, contracting for energy supply and transmission services and market risk mitigation associated with Alberta Power's wholesale electricity requirements.

### **AFFILIATIONS**

Project Management Institute (PMI) – Member

### **DESIGNATIONS**

Professional Engineer (Alberta) Professional Engineer (Ontario)

### **EDUCATION**

Master of Business Administration, University of Alberta Bachelor of Science, Mechanical Engineering, University of Alberta Strategic Leadership Development, Ivey Business School

### **KEY EXPERIENCE**

### **ATCO Electric**

2017 – Present Alberta, Canada

### **Construction Manager, Alberta PowerLine**

- Supervision and coordination of field resources tasked with observing construction activities to ensure compliance with functional requirements and project permit commitments.
- Disciplines include Health & Safety, Environment, transmission line rightof-way, foundations, tower assembly/erection, conductor stringing, telecommunications and substations.
- Team reviews EPC contractor quality documentation and notes deficiencies and non-compliances prior to payment milestone approval.

### **ATCO Electric**

2015 – Present Alberta, Canada

### Principal Engineer, Substation Engineering

- Frames technical alternatives during project definition phase.
- Owner's Engineer for Alberta PowerLine joint venture for the design and construction of the West Ft. McMurray 500 kV Transmission Project with specific focus on substation and telecommunication elements.
- Project Engineer Yukon Energy Stewart to Keno Project substation design; Eagle Gold interconnection.
- Defines the technical strategy for the implementation of new technologies, processes and approaches in facility design (e.g. the implementation of 25 kV Gas Insulated Switchgear in substation designs; introduction of new breaker technology to ATCO).
- Mentorship of other engineers in the high voltage facility design.

### **ATCO Electric**

2011 – 2015 Alberta, Canada

## Senior Manager, Substation Engineering

- Reporting directly to the Vice President of Engineering and Construction, the role was the day-to day management of a large engineering department (120+ staff) in Edmonton and Calgary responsible for the design of high voltage substations and telecommunication systems in the ATCO network.
- Led the technical innovation strategy for the implementation of new technologies, processes and approaches in facility design to reduce project cost and duration.

## **ATCO Electric**

2009 – 2011 Alberta, Canada

## Lead Transmission Design Engineer, Transmission Engineering

- Project engineering single point of contact on project team for engineering portion of transmission projects.
- Responsible for technical scope definition, engineering and material cost estimates, issuance on completed design and material requisitions.
- Initial responder to field requests and notifications during construction and commissioning.

## ARDEN SPACHYNSKI, P. ENG.

#### **ATCO Electric**

1997 – 2001 Alberta, Canada

### Senior Engineer, Transmission Facility Management

- Led the development of system preventative maintenance programs for major apparatus.
- Evaluated equipment performance trends and recommended actions based on safety, economic, and reliability data (benchmarking and RCM).
- Project managed transmission line vibration mitigation and switch-gear arc suppression.
- Developed and managed contingency planning process for major substation apparatus.

## ATCO Electric 1992 – 1997 Alberta, Canada

### **Technical Training Coordinator, Transmission Department**

- Design and delivery of technical training programs for maintenance and operating staff.
- Development of standard practices and procedures including Power System Work Standards.
- Interfaced with other utilities and governing bodies to exchange ideas and meet established regulations.
- Involved in numerous project assignments relating to project management fundamentals, policy implementation, safe work practices, and auditing of business systems

## ATCO Electric 1989 – 1992 Alberta, Canada

### Senior Engineer, Transmission Commissioning

- Supervised and organized the field acceptance testing of substation electrical apparatus
- Activities focused on ATCO facilities in the northern and eastern portions of Alberta
- Technical areas:
  - AC protection and metering
  - o DC control systems
  - o Programmable Logic Controllers (PLCs)
  - o electrical and mechanical testing of apparatus
  - o civil/structural construction

## ATCO Electric 1985 – 1989 Alberta, Canada

### **Electrical Coordination Engineer, Transmission Planning**

- Negotiated agreements with Telus for the joint use of rights-of-way.
- Determined technical solutions to mitigate induction issues in order to Maintain telephone service integrity and safety.
- Analyzed and approved the addition of harmonic producing customer equipment to the power system (AC-DC converters, adjustable speed drives).
- Conducted field testing to ensure harmonic limits were not exceeded by customer equipment.
- Data base administrator for PSS/E load-flow program.

## ARDEN SPACHYNSKI, P. ENG.

## AltaLink Management Ltd 2005 – 2009 Alberta, Canada

### Manager - Substations, North Field Operations

- Directed and supervised field technologists responsible for the maintenance of substation apparatus.
- Accountable for safety performance of the group.
- Created and managed annual operating budgets.
- Identified and specified capital tool and equipment purchases.
- Ensured training plans were in place for staff and that training requirements were met.
- Completed annual performance reviews and provided feedback to employees.
- Manpower planning and recruitment.
- Identified contractor requirements and managed associated service agreements.
- Provided informal technical support on an ad-hoc basis.

## TransAlta Corporation 2004 – 2005 Alberta, Canada

### **Senior Power Systems Engineer, Technical Services**

- Developed specifications and performed vendor selection and management for major apparatus purchases
- Developed and maintained asset management strategies related to high voltage power systems
- Review of all high voltage incidents or failures to identify root cause recommendation of corrective actions.
- Provided real-time technical field support for high voltage apparatus issues
- Technical support for external interfaces with regulatory organizations (AESO, WECC) and other utilities (AltaLink, ATCO Power, SPC).

# TransAlta Corporation 2003 – 2004 Alberta, Canada

### **Outage Manager, Life Cycle Maintenance**

- Led the development of plans and the execution of planned outages at various generation assets in the TransAlta fleet.
- Negotiated the commercial agreements with the EPC contractors that executed the outages.
- Managed project budget and schedule, contractor compliance with commercial agreements and overall project safety performance. Typical budgets ranged from \$20M - \$30M and durations of 30-60 days.
- Provided timely forecasts and communications to corporate management on outage progress.
- Completed project close-out and the production of final outage reports and findings.

## ARDEN SPACHYNSKI, P. ENG.

## TransAlta Corporation 2001 – 2003 Alberta, Canada

### Supervising Engineer, Electrical Projects

- Supervision of engineers and technologists tasked with management of capital maintenance projects. This included the recruitment of new employees and the hiring of consultants.
- Organization of long-term asset management strategies for the electrical portion of thermal generating stations and the completion of corporate funding requests.
- Project management of non-turnaround capital funded projects.
- Technical support of high voltage apparatus at the thermal plants.
- Introduced process additions and enhancements for capital project management.
- Contract and vendor management through competitive bidding, tender negotiation, and professional services contracts.

### **DESIGNATIONS**

Professional Engineer (Alberta) APEGA Member #41464 (1987) Engineers Yukon Member #2544

### **EDUCATION**

**Bachelor of Science**, Electrical Engineering, University of Alberta, Edmonton

**Certificate in Adult Continuing Education (CACE),** University of Alberta Edmonton

### **KEY EXPERIENCE**

### **ATCO Electric**

2009 – Present Alberta, Canada

## **Electrical Technical Services Supervisor, Transmission**

- Supervise 3 and 9 Electrical Technical Services teams in the day to day operation and maintenance of over 100 of ATCO Electric substations on the eastern half of Alberta.
- Budget, plan and execuite the Pole Test and Treat program for all of ATCO Electric Transmission substations in Alberta.
- Resource planing and execution of capital maintenance projects for over 100 substations in my area of responsibility.
- Forecast and execute the GP&E spending for the entire Technical Services team at ATCO Electric.
- Recruit, hire and train staff in my area of responsibility.
- Responsible for the health, safety and environmental performance of my team.

ATCO Electric 2003 – 2009 Alberta, Canada

### Electrical Technologist Team Leader, Transmission, Stettler, [AB]

- Lead a team of Electrical Technologist that took care of all the operation and maintenance, capital maintenance and commissioning for 16 substations and 1 generation station in the Stettler, Alberta area.
- Identify and build business cases for capital maintenance projects in the Stettler area.
- Represent Technical Services teams on the Alarm Standard Committee that review and approve substations alarms.
- Train and develop employees in my area of responsibility.

### **ATCO Electric**

1990 – 2003 Alberta, Canada

## **Electrical Technologist Qualified, Transmission, Drumheller, [AB]**

- Operation and maintenance of 14 substations in the Drumheller area
- Lead construction, maintenance and commissioning projects for substations in the Drumheller area.
- Train and develop new employees in the Drumheller area.

## Oak Environmental 1988 – 1990 Alberta, Canada

### Electrical Technician, Calgary, [AB]

- Design, build and maintain equipment used in the environmental clean-up industry.
- Shipping and receiving of equipment and materials used for environmental clean-up.
- Train Environmental Technicians and Engineers on operation and maintenance of environment cleanup equipment.
- Troubleshoot and repair of environmental cleanup equipment on customer site throughout Alberta.

Various Electrician Companies

1984 – 1988 Alberta, Canada

### Apprentice/Journeyman Electrical, Calgary, [AB]

 Worked with various electrical companies completing my Journeyman Electrical Apprenticeship.

## **NARAD TULAN**

### **DESIGNATIONS**

Alberta Society of Engineering Technologist (CET)

Journeyman Electrician (Alberta)

Journeyman Power System Electrician (Alberta)

### **EDUCATION**

**Electrical Engineering Technology**, Southern Alberta Institute of Technology

**Journeyman Electrician**, Southern Alberta Institute of Technology **Journeyman Power Systems Electrician**, Northern Alberta Institute of Technology

Management Skills For Supervisor, Red Deer Collage Strategic Leadership Development, Ivey Business School

## **JORGE VÉLEZ**

### **ROLE**

### **Engineering Support**

### **KEY EXPERIENCE**

## Quanta Technology

2015 – Present Raleigh, NC

### **Advisor, Protection & Control**

- Analyzing and protecting transmission systems using ASPEN and CAPE by running short-circuit analysis and sensitivity and coordination tests for high voltage levels.
- Active contributor of the International Business Team in the development of projects related to PMU applications, SIPS, WAMS and WAMPACS for Central and South America.

### XM Filial de ISA,

2010 – 2015 Medellín, Antioquia, Colombia)

### **Protection Analyst**

- Analyzed coordination studies performed by different asset owners of the Colombian power system looking for proper relays settings and philosophies, according to regulatory/operational requirements of the bulk power system.
- Worked as leader and team member of different projects related to PMU applications, SIPS, WAMS and WAMPACS for Colombian Power System.
- Worked in large-scale event analysis for identification of improvements in protection schemes.
- Worked in the incorporation of current national/international regulations for increasing reliability of Colombian power system and definition of proposals for new regulatory frames for the implementation of protection schemes.

### HMV Ingenieros Ltda.

2005 – 2010 Medellín, Antioquia, Colombia

## Project Engineer

- Experience in the field of substations of medium and high voltage (from 2.4 kV up to 230 kV) power plants as a designer and erection, maintenance, testing, and commissioning engineer.
- This experience includes participation in activities such as studies of coordination protections, preparation of bidding documents, detailed relay settings, and supervision of factory tests. Coordinator of the department of analysis, testing, and commissioning of protection systems.
- Experienced in on-site jobs associated with commissioning, testing, and start-up of electrical protections systems.

### **DESIGNATIONS**

IEEE, Member

### **EDUCATION**

**MS**, Electrical Engineering, Iowa State University, 2016 **BS**, Electrical Engineering, Universidad Nacional de Colombia, 2005

Senior Automation and SCADA Engineer

### **KEY EXPERIENCE**

#### **ATCO**

2013 – Present Alberta, Canada

## **Senior Engineer**

- Completed the engineering design, execution and commissioning of the Substation Control System based on a RTAC (SEL-3555) redundant configuration associated to a wind turbine plant for a Behind the Fence Project (BTF)
- Responsible for the definition and development of the new ATCO SCADA architecture based on station controller (EATON/Cooper SG-4260) and IEC-61850
- Successfully completed engineering design, execution, and commissioning
  of the SCADA and Automation systems for several Greenfield and
  Brownfield substations using different technologies and communications
  protocols such as DNP3.0, SEL, Modbus, etc.

### CIMA+

2011 – 2013 Alberta, Canada

### **Telecontrol Engineer**

- Performed Pre-commissioning tests of Telecontrol platform including Serial communication interfaces and networking devices used to communicate with protective relays, HMI and SCADA Control Centre
- Completed Substation Telecontrol design for four substations consisting of GE D-200 RTU, Cimplicity HMI, SEL-2032 communication processors and SEL-RTAC (Real Time Automation Controller)

### **EPCOR**

2008 – 2011 Alberta, Canada

### **Automation Engineer**

- Prepared detailed designs involving schematic drawings, detailed circuit diagrams and Bill of Materials for the Poundmaker's Substation Automation project
- Integrated industry standard telecommunication interfaces such as Ethernet, fibre optics and RS-422/485/232 serial communications used to communicate with protective relays, SCADA systems and Substation Automation Gateways

### **GE FANUC**

2007 – 2008 Alberta, Canada

### **Technical Support Professional**

- Answered technical inquiries regarding control systems using Cimplicity SCADA application and provided diagnostic assistance for software problems
- Worked with customers and field services to configure, install and troubleshoot new control system elements (RTUs, PLCs, SCADA Systems, etc.)
- Documented lessons learned, software defects alerts, troubleshooting tips and software patch information in the form of bulletins and knowledge base entries
- Reviewed diagnostic files, trouble reports from service and interfacing with Design Engineering

## JOHN VILLAMIZAR

## Petroleum & Gas Company (PDVSA)

1989 – 2003 Zulia, Venezuela

### **Automation Group Leader**

- Provided technical expertise for the design and negotiation of the Venezuelan Oil Company (PDVSA – West Region) automation platform upgrades
- Implemented a field device maintenance program which resulted in cost savings of over 10% per year
- Worked as a team member in the design and implementation of the Energy, Oil & Gas information and control systems utilizing Alpha-servers and PC base Human-Machine Interfaces (HMI), networked GE RTUs and Allen-Bradley programmable logic controllers (PLC), supervising and controlling more than 400000 field points through the Telvent-OASYS SCADA System for the Oil & Gas Production Division at PDVSA
- Worked as a team leader providing technical support for the XA/21 and OASYS SCADA platform

### **DESIGNATIONS**

Professional Engineer (Alberta)

### **EDUCATION**

**LEADERSHIP TRAINING,** Mount Royal University, 2015, Edmonton, Canada

**IEC 61850 STANDARD AND APPLICATIONS TRAINING,**Kinetrics, 2012, Toronto, Canada

**DNP 3.0 PROTOCOL AND ASE 2000 PROTOCOL SET,** Subnet Solutions Inc., 2011, Edmonton, Canada

**CONSTRUCTION SAFETY TRAINING SYSTEM (CSTS-09),** EPCOR, 2011, Edmonton, Canada

ABB PLC TRAINING, Fanshaw College, 2005, London, Canada PROJECT MANAGEMENT TRAINING, URBE, 1998, Maracaibo, Venezuela BACHELOR OF SCIENCE, Electronic Engineering, IUPFAN. 1989, Maracay, Venezuela

Supervisor, Forestry East Region

### **KEY EXPERIENCE**

#### **ATCO**

2013 – Present Edmonton, Alberta, Canada

### Supervisor, Forestry East

- Assess patrol data, reviewing with Senior Coordinators/Coordinators to prepare scheduled vegetation control programs
- Direct quality assurance inspections on completed projects and programs
- Negotiate contracts with indigious communities and other contractors in compliance with company policy and practice
- Promote and manage personal safety, staff safety, contractor safety, and public safety
- Ensure contractor and crews are working safely and promote a "safety first" culture
- Communicate H&S requirements and performance expectations to vegetation control contractors and crews
- Provide leadership in incident investigations and reviewing all incidents in the Region(s)
- Supervise, direct, and coach Senior Coordinators and Coordinators
- Develop measurable objectives and assess performance of individuals and the group with annual reviews against these objectives
- Conduct field audits to provide constructive criticism and positive feedback
- Prepare O&M program and Capital program maintenance forecasts for the region
- Allocate approved budgets to regional O&M and capital maintenance work plans
- Meet annual budget forecasts for the region that align with both GTA and the Forest Operations group overall targets
- Review and provide regular status and cost variance reports to Manager on all assigned capital and O&M projects.
- Explain any variations in the budget and provide necessary explanations for the deviations
- Ensure all documentation for work being completed is filed and accurate for audit and future forecast purposes
- Work with planning group in Edmonton to develop all necessary forecasts and budget targets for yearly and multi-year target setting
- Manage district relationships through clear communications with the districts on Forest Operations planned programs, policies and practices.

## SARAH WALKER

#### **ATCO**

2008 – 2013 Grande Prairie, Alberta, Canada

### **Senior Coordinator/Coordinator**

- Manage contractor field based operations and HSE requirements are in complaince
- Monitor contractor health, safety and environment programs and work quality through job observations
- Prepare cost estimating for initial clear and hot spot operations
- Resolve field operations customer/landowner concerns and questions
- Demonstrate high level of detail and accuracy in collecting vegetation inventory
- Assessing and identifying danger trees and providing control treatment
- Prepare landowner/customer consents with high level of detail
- Prepare and submit approval documentation to appropriate local agencies (TFA's) and understand ASRD processes practices and legislation
- Collaboration and implementation with other work groups with regards to the Jasper EPP and Parks Canada
- Support region supervisor with environmental practices, budgets, invoice processing and developing new projects
- Reviewing ATCO's annual wildfire prevention plan with surrounding service points

### Alberta Plywood Ltd. – West Fraser Mills Co. Ltd.

2006– 2008 Slave Lake, Alberta, Canada

### Silviculture/Area Supervisor

- Post harvest silviculture activies including reforestation and silviculture surveys
- Silviculture data entry in Plant Wizard and The Forest Manager (TFM)
- Ensure planting operations are conducted safely and cost effective
- Ensure planting quality is maintained as per company/contract specifications
- Ensure land use documentation is complete and accurate
- In consultation with silviculture forester to implement changes to prescriptions
- Ensure all conditions of the contract are followed
- Conduct seedling adjudication, monitor stock handling and documentation review/submission
- Conduct planting quality audits

### **EDUCATION**

Foundations of Leadership Certificate, Mount Royal University
Forestry Technician Diploma, Sir Sandford Fleming College
Bachelor of Arts Undergrated Degree, Communications, University of Windsor

## JOHN WIDDIFIELD, PE

### **ROLE**

**Asset Management** 

### **KEY EXPERIENCE**

## Quanta Technology 2011 – Present Raleigh, NC

### **Principal Advisor, Distribution & Asset Operations**

- Resident expert on substation design standards, specifications, requirements and philosophy.
- Substation studies to enhance our abilities in this space including operational investigations and our ongoing energized services support.
- Developing cost estimates for substations and transmission lines based on extensive practical experience and contacts within the industries, especially electrical manufacturers.

## Dashiell Corp. 2008 – 2010 Cary, NC

### **Engineering Supervisor**

- Responsible for leading, coordinating, and supervising a team of engineers, designers, and drafters performing all technical aspects of substation design
- Substation studies to commissioning plans, including physical design, relaying, and all equipment and material specification and procurement support.
- Complete responsibility for profitability, quality and schedule performance for the multiple project teams towards the completion of several simultaneous projects.

## Utility Engineering 2007 – 2008 Raleigh, NC

### **Senior Project Engineer**

Responsible for substation grounding studies, design of protective relaying schemes, control circuits, and metering for transmission and distribution systems and substations; major station and mobile substation equipment specifications; responsibilities for distribution class substations, relaying, standards, and cause and effect investigations for electrical accidents, equipment failures, electrical fires, downed conductors, etc..

## Southeastern Transformer Company 2005 – 2007 Dunn, NC

### **General Manager**

Responsible for planning, organizing, staffing, directing and controlling plant efforts and manufacturing production and costs; organizing and staffing new field service organization; provided construction management support for a new 35,000 square foot office and plant painting facilities; new business development plans; and electrical testing of repaired and rebuilt equipment; performed special consulting services related to substation grounding studies and relay coordination studies for local engineering firms

## JOHN WIDDIFIELD, PE

# Booth & Associates, Inc. 1995 – 2005 Dunn, NC

### **Senior Project Engineer**

- Responsible for two mobile substation projects from conceptual design commissioning.
- Responsible for substation projects ranging from 34.5 kV to 230 kV for both municipal and cooperative electric utilities from inception to site selection.
- Responsible for performing work tasks and coordinating efforts to produce complete engineering packages for distribution lines, transmission lines, and substations:

## **Duke Energy** 1980 – 1995 Raleigh, NC

## **Manager of Transmission Engineering Units**

- Responsible for design and budgeting of transmission class substations, transmission lines, and standards including site planning and layout, equipment requirements, structure design, grounding, lightning protection, and relay protection
- Developed equipment specifications based on national standards and company functional requirements
- Provided leadership and management at different times for three work groups within the Transmission Department: Substation Engineering, Transmission Standards, and Transmission Line Engineering.
- Directed the work of large numbers of engineers and engineering technicians to engineer and design new and rebuild of existing substation and transmission line facilities.

### **DESIGNATIONS**

- Professional Engineer: California, Mississippi, New Jersey, North Carolina, Texas, Virginia, and NCEES Record Holder
- Member, Institute of Electrical and Electronics Engineers (IEEE)

### **EDUCATION**

**MS**, Business Finance, Virginia Commonwealth (1975) **BS**, Electrical Engineering, Virginia Tech (1969)

### ROLE

T&D Operations and Engineering

### **KEY EXPERIENCE**

# Quanta Technology 2008 – Present Raleigh, NC

# **Vice-President, Distribution & Asset Operations**

- Business area manager providing leadership for technical consultative services to the renewable energy and utility distribution planning sectors.
- Currently leads the Distribution business area by providing services in the areas of grid modernization, distributed generation, grid integration, distribution system reliability, distribution planning, system optimization & efficiency improvement, asset management, and storm hardening.
- Responsible for coordination, development, and delivery of consultative engineering, business, and technical services to utilities, developers, and marketers of renewable energy, EE, and energy storage.

# **Advanced Energy**

2000 – 2008 Raleigh, NC

# **Director, Utility Services**

- Responsible for the coordination, development, and delivery of consultative engineering, marketing, technical products, and services to electric utilities
- Served as Program Manager and State Director for the development of NC GreenPower, a renewable energy program for North Carolina. Coordinated the formation of a statewide NC GreenPower advisory stakeholder committee including regulators, all electric utilities, energy suppliers, and others.
- Worked with utilities to develop a smart utility grid, plug-in hybrid electric vehicles, and policies to address climate change and environmental sustainability.

# Carolina Power & Light

1976 – 1999 Raleigh, NC

# Manager, Large Commercial Accounts

- Directly responsible for \$100 million national commercial accounts segment, which includes national chains, military, federal, and state government accounts.
- Directed the activities of four territory-wide Account Managers who worked principally with retail chains, healthcare, higher education, telecommunications, and banking.
- Responsible for corporate liaison, account maintenance, business development, electrical service coordination, and technical support.

### **DESIGNATIONS**

Professional Engineer (North Carolina and Missouri)

### **EDUCATION**

**Bachelor of Science**, Electrical Engineering, North Carolina State University, Raleigh, NC (1986)

**Executive Education**, Harvard Business School (2005)

# BREANNA RAE WISE, PHD, PMP, P. ENG.

# **ROLE**

Service Area Specialist, Customer Relations, Electricity Division

# **KEY EXPERIENCE**

Breanna is an experienced Customer Relations professional with a demonstrated history of working in the utilities industry. Her skills include public consultation, account management, technical writing, and public speaking. Breanna has an educational background in international business, global trade, and intercultural relations.

### **ATCO**

2018 – Present Alberta, Canada

# Service Area Specialist

Responsibilities include representing ATCO on the Contract Policy Committee (CPC), interpreting pertinent legislation and regulations, developing operational contracts with our key customers, engaging with the Alberta Utilities Commission (AUC) on Service Area related regulatory proceedings, renewing municipal franchise and operational agreements, creating and altering policies and procedures for the CPC, ensuring the company completes contractual obligations, and planning of the annual CPC conference.

### **ATCO**

2015 – 2018 Alberta, Canada

# **Right of Way Planner**

Responsibilities included planning electric transmission facilities in ATCO Electric's service territory, routing and siting electric transmission facilities, generating project cost estimates, managing a team of supporting project disciplines, completing public consultation, engaging with customers, managing environmental contractors, filing facility applications with the AUC, coordinating joint AUC filings with the Alberta Electric System Operator (AESO), and providing support to a team of legal counsel and expert witnesses in AUC Hearings.

# Blackbox Theatre at Bangkok University 2014

Bangkok, Thailand

# **Set and Lighting Designer**

Responsibilities included designing the set and lights for an entire production season of 13 shows; developing designs with each individual production team; and managing a team of over 30 scenic carpenters, scenic painters and lighting technicians to carry out each design.

## **EDUCATION**

**Master of Global Management**, Business Administration, Royal Roads University (2019)

**Graduate Certificate in Corporate Social Innovation**, Business Administration, Royal Roads University (2019)

**Bachelor of Fine Arts**, Theatre, University of Victoria (2015)

**Appendix 2: Detailed Project Schedule** 



						_		$\overline{}$	_
	Task Name ACTIVITIES - FROM AWARD TO EFFECTIVE DATE	O days	Start Wed 20-01-01	Finish Wed 20-01-01	October January	April	July	October	Januar
-		•	Tue 19-12-17		•				
3	•	0 days		Tue 19-12-17	•				
		0 days	Tue 19-12-17	Tue 19-12-17	¥ .				
-	· · ·	0 days	Fri 19-12-20	Fri 19-12-20	•				
5	Operator signs O&M Agreement	7 days	Fri 19-12-20	Mon 19-12-30					
6	Administrator obtains O&M Agreement Signatures from Required Parties	15 days	Tue 19-12-31	Mon 20-01-20					
7	Transition Starts - Effective Date Occurs	0 days	Mon 20-01-20	Mon 20-01-20	•				
	DP Form 1.5 Front-End Transition Plan	263 days	Tue 19-12-03	Thu 20-12-03	-			-	
9		263 days	Tue 19-12-03	Thu 20-12-03					
10	•	-							
11	1.c Mobilization of Transition Team	38 days	Tue 19-12-03	Thu 20-01-23					
12	•	15 days	Fri 19-12-20	Thu 20-01-09	^				
	Notify transition team members of award and instruct them to make preparations for mobilizing to Puerto Rico	0 days	Fri 19-12-20	Fri 19-12-20	•				
3	Transition team members meeting to discuss mobilization to Puerto Rico	1 day	Mon 19-12-23	Mon 19-12-23	I				
.4	Transition team leaders draft team charters and prepare material for joint workshop transition workshop	15 days	Fri 19-12-20	Thu 20-01-09	-				
5	Logistics (Work Space, Housing, Travel, Phones, etc.)	11 days	Thu 20-01-02	Thu 20-01-16	₩				
16		1 day	Thu 20-01-02	Thu 20-01-02	I				
7	Set up short term housing (short term - hotels and mid term - corporate housing)	10 days	Fri 20-01-03	Thu 20-01-16	•				
.8	Temporary Working Space (Prior to having access to PREPA office space)	8 days	Fri 20-01-03	Tue 20-01-14	•				
.9	Secure temporary working office or space	5 days	Fri 20-01-03	Thu 20-01-09	0				
10	Set up temporary working space (Wi-Fi access, office supplies, printers, etc.)	3 days	Fri 20-01-10	Tue 20-01-14	0				
1	Set up transportation	3 days	Fri 20-01-03	Tue 20-01-07	0				
2	Mobilization of Team Members to Puerto Rico	5 days	Tue 20-01-14	Mon 20-01-20	•				
!3	Transition team members mobilize to Puerto Rico	5 days	Tue 20-01-14	Mon 20-01-20	•				
24	Commercial Setup	5 days	Fri 20-01-03	Thu 20-01-09	₩				
25	Set up Operator bank accounts	5 days	Fri 20-01-03	Thu 20-01-09	0				
26	Front End Transition Activities	38 days	Tue 19-12-03	Thu 20-01-23	-				
27	Pre Planning	20 days	Fri 19-12-20	Thu 20-01-16	-				
28	Prepare detailed Preplanning (Forms, Team Charters, etc.)	20 days	Fri 19-12-20	Thu 20-01-16					
29	Joint Front End Transition Activities	38 days	Tue 19-12-03	Thu 20-01-23	-				
30	Joint Initial Meeting	1 day	Fri 19-12-20	Fri 19-12-20	₩				
31	Set up Public Relations coordination	1 day	Fri 19-12-20	Fri 19-12-20	I				
32	Discuss Transition Period Requirements, immediate next steps and workshops required	1 day	Fri 19-12-20	Fri 19-12-20	I				
13	Subcontractor Contracts (IT, etc.)	20 days	Tue 19-12-03	Mon 19-12-30	-				
34	Prepare RFP for subcontractor work	10 days	Tue 19-12-03	Mon 19-12-16					
35	Issue RFP for subcontract work	1 day	Fri 19-12-20	Fri 19-12-20	I				
36	Receive authorization for subcontractors identified in proposal to be used for Front-End services to Administrator (for contract value exceeding \$XX)	1 day	Fri 19-12-27	Fri 19-12-27	I				
37	Issue subcontractor contracts	1 day	Mon 19-12-30	Mon 19-12-30	I				
38	Joint Parties Workshop Preparation	9 days	Mon 20-01-06	Thu 20-01-16	₩				
39	Parties have workshop to discuss transition, meeting with regulators and island leaders and to agree on teams, team structure, team member requirements, working methodology, objectives and	1 day	Mon 20-01-06	Mon 20-01-06	I				
0	Deliverables Establish Joint Planning Teams	7 days	Tue 20-01-07	Wed 20-01-15	-				
11	Operator submits team charters to Administrator for review and comments	7 days 2 days	Tue 20-01-07	Wed 20-01-15 Wed 20-01-08	+ "				
12	•	3 days	Thu 20-01-07	Mon 20-01-08					
13	Parties Select Team Members and Notifies Them of Workshop Date		Tue 20-01-09	Wed 20-01-15					
14	•	2 days 2 days	Tue 20-01-14 Tue 20-01-14	Wed 20-01-15 Wed 20-01-15	1				
15	Federal Funding Procurement Manual (within 60 days per Section 4.1.e.i)	2 days	Tue 20-01-14	Wed 20-01-15	† i				
16		2 days	Tue 20-01-14	Wed 20-01-15	1				
47		1 day	Tue 20-01-14	Tue 20-01-14	I				
48	Performance Metrics (within 60 days per Section 4.2.f)	1 day	Tue 20-01-14	Tue 20-01-14	1				

	sk Name	Duration	Start	Finish	October January April July October Janua
49	Federal Funding and IRP (within 30 days per Section 4.3.j)	1 day	Tue 20-01-14	Tue 20-01-14	I
50	Back end Transition Plan	1 day	Tue 20-01-14	Tue 20-01-14	!
2	Identify Transition Coordinators for all areas not governed by formal team charter  Assignment of Planning Teams and Transition Coordinators complete	1 day 0 days	Tue 20-01-14 Wed 20-01-15	Tue 20-01-14 Wed 20-01-15	I
3	Submit Team Charters with member names to Administrator	1 day	Thu 20-01-16	Thu 20-01-16	
4		2 days	Tue 20-01-07	Wed 20-01-08	
	Joint Parties meet with PREB to discuss the transition (schedule status / update meetings, review PREB input points, timeline, Deliverables and PREB approval process	2 days	Tue 20-01-07	wed 20-01-08	
5	Joint Parties Transition Kickoff & Team Workshop	1 day	Thu 20-01-23	Thu 20-01-23	₩
5	Transition Leaders from Management Co., PREPA and Administrator kick of the Transition	1 day	Thu 20-01-23	Thu 20-01-23	1
7	Teams start transition work. Break off into individual work areas per team assignment to discuss team charters, next steps, logistics, deliverables, etc	0 days	Thu 20-01-23	Thu 20-01-23	<b>*</b>
3	1.i Governmental Approvals	185 days	Fri 19-12-20	Thu 20-09-03	
9	Engage local Puerto Rico consultants and legal advisors in the area of permitting	1 day	Fri 19-12-20	Fri 19-12-20	1
)	ManagementCo., Administrator and Owner coordinate obtaining Governmental Approvals	6 days	Tue 20-02-04	Tue 20-02-11	₩
1	ManagementCo., Administrator and Owner each designate a permit lead to be the contact person in charge of the requirements for Government Approvals	1 day	Tue 20-02-04	Tue 20-02-04	I
2	Have an initial Governmental Approvals team kick-off meeting	3 days	Wed 20-02-05	Fri 20-02-07	1
3	Agree on procedures for the exchange and review of documents and communications so as to proceed	1 day	Mon 20-02-10	Mon 20-02-10	1
	efficiently and expeditiously	•			
1	Agree on procedures to resolve disagreements among the parties	1 day	Tue 20-02-11	Tue 20-02-11	
5	Identify approvals required	59 days	Wed 20-01-01	Mon 20-03-23	•
5	Perform compliance check (evaluate current and recent existing compliance audists and environmental assessments)	45 days	Tue 20-01-21	Mon 20-03-23	
7	Evaluate and determine which permits require Operator to be permitee or co-permitee.	10 days	Wed 20-01-01	Tue 20-01-14	
3	Prepare a Permit Matrix of all identiified Governmental Approvals (identifying permitting agencies, requirements, tasks and responsbilities per parties)	20 days	Tue 20-01-21	Mon 20-02-17	
9	Evaluate and determine Permitting procedures	20 days	Tue 20-02-18	Mon 20-03-16	_
0	Parties Obtain approvals	123 days	Tue 20-03-17	Thu 20-09-03	<b>—</b>
1	Meet with government agencies with jurisdiction over permits and approvals	1 day	Tue 20-03-17	Tue 20-03-17	I
2	Owner files the required applications and / or other documentation	20 days	Wed 20-03-18	Tue 20-04-14	
3	Owner provide copies of applications to ManagementCo and Administrator	1 day	Wed 20-04-15	Wed 20-04-15	1
4	Governmental Agencies review permit and approval submissions	100 days	Thu 20-04-16	Wed 20-09-02	
5	Governmental Approvals Granted	1 day	Thu 20-09-03	Thu 20-09-03	1
5	1.j System and Generation Contracts	117 days	Wed 20-01-01	Thu 20-06-11	
7					
8	Review and prioritize existing contracts	60 days	Fri 20-01-24	Thu 20-04-16	
,	Detailed legal review for high priority contract	40 days	Fri 20-02-21	Thu 20-04-16	
	Develop plan for assumption of contracts as appropriate	40 days	Fri 20-04-17	Thu 20-06-11	
0	Implement the contract assumption plan	20 days	Wed 20-01-01	Tue 20-01-28	
1	1.k Plan to Address Gaps in Assets, Technology, Processes, etc. (plan to include estimates of c		Fri 20-01-03	Thu 20-12-03	
2	Identify and analyze gaps (assets, technology, processes, etc.) that need to be addressed for Operator to meet Scope of Services requirements	240 days	Fri 20-01-03	Thu 20-12-03	•
3	Assess organization design effectiveness	20 days	Fri 20-01-24	Thu 20-02-20	•
4	Span of control	5 days	Fri 20-01-24	Thu 20-01-30	•
5	Layers of supervisory and management oversight	5 days	Fri 20-01-31	Thu 20-02-06	0
6	Ratio of administrative to direct workers	5 days	Fri 20-02-07	Thu 20-02-13	•
7	Prevalence of protected patronage workers	5 days	Fri 20-02-14	Thu 20-02-20	
3	Review budgeting and cost tracking performance history	20 days	Mon 20-01-06	Fri 20-01-31	▼
9	Actual expenditures as percentage of budgeted	4 days	Mon 20-01-06	Thu 20-01-09	0
0	Unit cost or productivity trends	4 days	Fri 20-01-10	Wed 20-01-15	0
1	Frequency of emergent issues that affected the budget and could have been anticipated	4 days	Thu 20-01-16	Tue 20-01-21	•
_	Evidence of flat line budgets, excessive overtime and use of contractors (accountability for variances)	4 days	Wed 20-01-22	Mon 20-01-27	0
2		,-		Fri 20-01-31	

Task 94		Duration	Start	Finish Thu 20 02 05	October January April July October January
5	· · · · · · · · · · · · · · · · · · ·	30 days	Fri 20-01-24	Thu 20-03-05	
-		7 days	Fri 20-01-24	Mon 20-02-03	
	,	7 days	Tue 20-02-04	Wed 20-02-12	
	•	8 days	Thu 20-02-13	Mon 20-02-24	_
9		8 days	Tue 20-02-25	Thu 20-03-05	
00		15 days	Fri 20-02-07	Thu 20-02-27	
01		3 days	Fri 20-02-07	Tue 20-02-11	
02		4 days	Wed 20-02-12	Mon 20-02-17	
03		4 days	Tue 20-02-18	Fri 20-02-21	
04	* * * * * * * * * * * * * * * * * * * *	4 days	Mon 20-02-24	Thu 20-02-27	
)5	•	20 days	Fri 20-02-07	Thu 20-03-05	
16	, , , ,	4 days	Fri 20-02-07	Wed 20-02-12	•
07		4 days	Thu 20-02-13	Tue 20-02-18	
08	Employee morale / excitement about new management, relief from budget constraints and hiring freez		Wed 20-02-19	Mon 20-02-24	
09		4 days	Tue 20-02-25	Fri 20-02-28	
10	· · ·	4 days	Mon 20-03-02	Thu 20-03-05	
		25 days	Fri 20-02-07	Thu 20-03-12	
11		8 days	Fri 20-02-07	Tue 20-02-18	
12		8 days	Wed 20-02-19	Fri 20-02-28	_
13		9 days	Mon 20-03-02	Thu 20-03-12	
L4		5 days	Fri 20-02-14	Thu 20-02-20	_
15	•	2 days	Fri 20-02-14	Mon 20-02-17	_
16		1 day	Tue 20-02-18	Tue 20-02-18	_
17	·	1 day	Wed 20-02-19	Wed 20-02-19	1
18	Instances (or lack thereof) of management actions and their successes	1 day	Thu 20-02-20	Thu 20-02-20	I
19		20 days	Fri 20-02-14	Thu 20-03-12	•
20	Degree of redundant manual processes	5 days	Fri 20-02-14	Thu 20-02-20	
21	,	5 days	Fri 20-02-21	Thu 20-02-27	•
22	Interaction or linkage dependencies with other functional areas' IT plans	5 days	Fri 20-02-28	Thu 20-03-05	
23	Potential for quick wins that do not require full IT systems replacements	5 days	Fri 20-03-06	Thu 20-03-12	
24	•	15 days	Fri 20-02-21	Thu 20-03-12	•
25	Capability to use performance metrics to pinpoint which problems to fix vs. just gathering data with no analytics	10 days	Fri 20-02-21	Thu 20-03-05	
26	Improving or degrading performance trends	5 days	Fri 20-03-06	Thu 20-03-12	•
27	Assess workforce management systems and processes	15 days	Fri 20-02-28	Thu 20-03-19	₩
28	Effectiveness of current workforce management processes	5 days	Fri 20-02-28	Thu 20-03-05	•
29	Accuracy and usefulness of time charging and productivity tracking	5 days	Fri 20-03-06	Thu 20-03-12	0
30	Personnel inputs to budget cycle	5 days	Fri 20-03-13	Thu 20-03-19	0
31	Compile analysis into draft report	10 days	Fri 20-03-13	Thu 20-03-26	
32	Review and complete assessment report	15 days	Fri 20-03-27	Thu 20-04-16	
33		55 days	Fri 20-01-24	Thu 20-04-09	•
34	T&D completes asset-based assessment report	55 days	Fri 20-01-24	Thu 20-04-09	
35	IT completes asset-based assessment report	55 days	Fri 20-01-24	Thu 20-04-09	
16	HR completes asset-based assessment report	55 days	Fri 20-01-24	Thu 20-04-09	
7	·	55 days	Fri 20-01-24	Thu 20-04-09	
18	Financial Management completes asset-based assessment report	55 days	Fri 20-01-24	Thu 20-04-09	
39		55 days	Fri 20-01-24	Thu 20-04-09	
.0	<i>,</i> ,	55 days	Fri 20-01-24	Thu 20-04-09	
1		134 days	Fri 20-01-03	Wed 20-07-08	-
2	·	70 days	Fri 20-01-03	Thu 20-04-09	
3		3 days	Fri 20-04-10	Tue 20-04-14	-
	. camb acting interdependences between areas	- uuys	Wed 20-04-15	Tue 20-04-14	

	sk Name	Duration	Start	Finish	October January April July October January
L45 L46	Teams identify key inputs required for Initial Budgets	3 days	Wed 20-04-22	Fri 20-04-24	
46	Teams develop scope, high level solution, achievement criteria and "ballpark" cost estimate for each initiative	10 days	Mon 20-04-27	Fri 20-05-08	-
17	Separate initiatives / solutions that pertain to the System Remediation Plan and include in that plan	1 day	Mon 20-05-11	Mon 20-05-11	I I
8		1 day	Tue 20-05-12	Tue 20-05-12	I
9	Incorporate comments and recommendations from Administrator and Management Co.	15 days	Wed 20-05-13	Tue 20-06-02	-
0	Teams develop timelines, milestones, cost estimates and resource requirements	15 days	Wed 20-06-03	Tue 20-06-23	-
1	Prepare risk assessments and analysis	5 days	Wed 20-06-24	Tue 20-06-30	0
2	Risk rank all of the initiatives	5 days	Wed 20-07-01	Tue 20-07-07	•
3	Presentation update to Administrator and Management Co.	1 day	Wed 20-07-08	Wed 20-07-08	1
1	Consolidate Plans from All Areas	1 day	Thu 20-07-09	Thu 20-07-09	■
5	Issue one plan that incorporates all of the Utility's multi year needs	1 day	Thu 20-07-09	Thu 20-07-09	I
5	Development of Roadmap(s)	10 days	Fri 20-07-10	Thu 20-07-23	₩₩
1	Develop a roadmap for all initiatives with Milestone Deliverables (Projected Benefits)	5 days	Fri 20-07-10	Thu 20-07-16	•
3	Develop a consolidated projection of resource requirements, costs and schedules / timelines for the	5 days	Fri 20-07-17	Thu 20-07-23	0
	initiatives	,			
,	Issue roadmap with resource requirements, costs and schedules	0 days	Thu 20-07-23	Thu 20-07-23	<b>♦</b>
)	Development of Consolidated Post Commencement Improvement Plan	15 days	Fri 20-07-24	Thu 20-08-13	▼▼
	Draft General Improvement Plan	10 days	Fri 20-07-24	Thu 20-08-06	•
	Develop General Improvement Plan Presentation	5 days	Fri 20-08-07	Thu 20-08-13	•
	Approval of Consolidated Post Commencement Improvement Plan	80 days	Fri 20-08-14	Thu 20-12-03	▼
	Present Plan to Management Co. for approval	1 day	Fri 20-08-14	Fri 20-08-14	1
;	Adjust Plan per Management Co. comments and / or recommendations	5 days	Mon 20-08-17	Fri 20-08-21	•
	Management Co. Approves Plan	2 days	Mon 20-08-24	Tue 20-08-25	1
-	Submit Plan to Administrator	1 day	Wed 20-08-26	Wed 20-08-26	I
	Present Plan to Administrator	1 day	Thu 20-08-27	Thu 20-08-27	1
,	Administrator reviews Plan and provides comments	40 days	Fri 20-08-28	Thu 20-10-22	
5	Management Co. reviews and incorporates or resolves comments	10 days	Fri 20-10-23	Thu 20-11-05	
1	Provide copy General Improvement Plan to PREB	0 days	Thu 20-11-05	Thu 20-11-05	<b>♦</b>
2	Present plan to PREB	10 days	Fri 20-11-06	Thu 20-11-19	
3	Incorporate comments and recommendations	5 days	Fri 20-11-20	Thu 20-11-26	
4	General Improvement Plan Approved	5 days	Fri 20-11-27	Thu 20-12-03	•
5	1.l Handover Checklist	65 days	Fri 20-01-24	Thu 20-04-23	-
6		-			1
7	Use the Handover checklist submitted in the proposal as the starting point Checklist  Update items on the Handover Checklist on a monthly basis as the review of the system is performed by the	1 day	Fri 20-01-24 Fri 20-04-10	Fri 20-01-24 Thu 20-04-23	_ ` <u> </u>
	takeover teams	e 10 days	FII 20-04-10	1110 20-04-23	
8	1.m PREB Rate Order Filing	179 days	Wed 20-01-01	Mon 20-09-07	•
•	Review current rate modeling system	5 days	Fri 20-01-24	Thu 20-01-30	0
)	Review latest rate case (Case: CEPR-AP-2015-0001) with PREPA	20 days	Fri 20-01-31	Thu 20-02-27	
	Assess Cost of Service Modeling capabilities of PREPA	10 days	Fri 20-02-28	Thu 20-03-12	•
2	Meet with PREB to discuss last rate case rate case filing process and potential improvements	1 day	Fri 20-03-13	Fri 20-03-13	T .
3	Adjust rate filing process based on conversation with PREB as needed	10 days	Mon 20-03-16	Fri 20-03-27	
1	Determine need for a rate adjustment based on Initial Budgets and System Remediation Plan	20 days	Mon 20-03-30	Fri 20-04-24	_
5	Present "Findings" to Management Co.	1 day	Mon 20-04-27	Mon 20-04-27	I
5	Develop plan for revenue requirements or other rate filing as needed	20 days	Tue 20-04-28	Mon 20-05-25	
7	Approval of Revenue Requirement Plan (as needed)	42 days	Tue 20-05-26	Wed 20-07-22	-
,	Present Plan to Management Co.	1 day	Tue 20-05-26	Tue 20-05-26	1
<b>'</b>	Adjust Plan as needed based on comments and recommendations from Management Co.	5 days	Wed 20-05-27	Tue 20-06-02	0
	Management Co. reviews adjustments and approves Revenue Requirements Plan	5 days	Wed 20-06-03	Tue 20-06-09	•
)	Management Co. reviews adjustments and approves Revenue Requirements Plan				1
)	• • • • • • • • • • • • • • • • • • • •	1 day	Tue 20-06-23	Tue 20-06-23	· ·
3 ) ) L	Submit Revenue Requirements Plan and timeline to Owner and Administrator shortly after Initial Budgets  Present Plan to Owner and Administrator	1 day 1 day	Tue 20-06-23 Wed 20-06-24	Wed 20-06-24	- i

Tr د	sk Name	Duration	Start	Finish	October	January April	July	October	January
194	Adjust Plan per Owner and Administrator comments and recommendations	5 days	Thu 20-07-09	Wed 20-07-15		, , , , , , , , , , , , , , , , , , , ,	0		
195	Owner and Administrator Approve Revenue Requirements Plan	10 days	Thu 20-07-09	Wed 20-07-22					
196	Rate Order	179 days	Wed 20-01-01	Mon 20-09-07		<b>—</b>	-	J	
.97	Submit Rate Order with initial budgets	1 day	Wed 20-01-01	Wed 20-01-01		I			
98	Meet with PREB to discuss Revenue Requirements Plan and timeline after submission of Initial Budgets and System Remediation Plan	1 day	Thu 20-07-30	Thu 20-07-30			I		
9	Prepare Plan for Rate Case Filing as needed (Rate Case Preparation, Filing, Hearings Preparation,)	20 days	Fri 20-07-31	Thu 20-08-27					
0	Present Rate Case Plan to Management Co.	1 day	Fri 20-08-28	Fri 20-08-28			I		
1	Adjust per comments and recommendations of Management Co.	5 days	Mon 20-08-31	Fri 20-09-04			0		
2	Present Rate Case Plan to Owner and Administrator	1 day	Mon 20-09-07	Mon 20-09-07			- 1		
3	2. T&D Services Milestones	237 days	Wed 20-01-01	Thu 20-11-26		•			
4		-	Fri 20-01-24	Thu 20-10-01		•		-	
	Sub-Transmission Inside and Outside of the Plant								
5	Transmission and Sub-Transmission System Status of on-going Projects	180 days	Fri 20-01-24	Thu 20-10-01		•		-	
6	Identify, follow progress and assess risks of on-going capital expenditure and O&M projects	1 day	Fri 20-01-24	Fri 20-01-24		1			
7	Monitor status of projects through-out the transition period	180 days	Fri 20-01-24	Thu 20-10-01					
3	Transmission and Sub-Transmission Line Operations	120 days	Fri 20-01-24	Thu 20-07-09				•	
9	Develop plan to monitor unplanned and planned outages through-out the transition period	20 days	Fri 20-01-24	Thu 20-02-20			•		
0	Develop plan to monitor weather patterns and future weather predictions	20 days	Fri 20-01-24	Thu 20-02-20					
1	Perform high level reliability and loading predictive analysis for transition and post transition periods	120 days	Fri 20-01-24	Thu 20-02-20		_			
2	Prepare system contingency plans for operation during commencement and post commence periods			Thu 20-07-09			_		
3	Create a work plan to delineate the generator interconnection points	120 days	Fri 20-01-24	Fri 20-01-31			•		
1		6 days	Fri 20-01-24	Fri 20-01-31 Fri 20-01-24		1			
5	Review Sargent & Lundy one line diagrams for interconnection	1 day	Fri 20-01-24						
5	Create high level scope of work	1 day	Mon 20-01-27	Mon 20-01-27 Tue 20-01-28					
7	Develop high level engineering design (10%) plans	1 day	Tue 20-01-28						
8	Present plan to Transition Leaders	1 day	Wed 20-01-29	Wed 20-01-29					
9	Develop Initial Budget Input	1 day	Thu 20-01-30	Thu 20-01-30					
0	Develop plan to input into System Remediation Plan	1 day	Fri 20-01-31	Fri 20-01-31		,			
1	Identify Transmission and Sub-Transmission O&M and Capital Expenditure Needs	35 days	Fri 20-01-24	Thu 20-03-12					
2	Prioritize known Transmission and Sub-Transmission safety concerns	20 days	Fri 20-01-24	Thu 20-02-20					
3	Identify and Prioritize Transmission and Sub-Transmission reliability issues	20 days	Fri 20-01-24	Thu 20-02-20					
	Identify quick win resiliency projects. Focus on non-complex programs where engineering is minimal, materials are readily available, and projects can be executed in Years 1 and 2.	15 days	Fri 20-02-21	Thu 20-03-12		-			
1	Obtain outlines of the transmission circuit and sub-transmission maintenance plan, transmission substation maintenance plan and maintenance completion rate 2019 YTD, including critical assets	3 days	Fri 20-01-24	Tue 20-01-28		_			
5	Validate and assess the 2020 – 2025 Transmission Five-Year CapEx (Sargent & Lundy) Business Plan versus system requirements.		Fri 20-01-24	Thu 20-02-13		_			
6	Access IRP Requirements	15 days	Fri 20-01-24	Thu 20-02-13		_			
7	Assess and evaluate PREPA's telecommunications plan	20 days	Fri 20-01-24	Thu 20-02-20					
8	2.b Development and Implementation of an Operational Takeover Plan for the Electric	55 days	Fri 20-01-24	Thu 20-04-09		•			
_	Distribution System								
)	Prioritize known Distribution safety concerns	20 days	Fri 20-01-24	Thu 20-02-20					
)	Identify and Prioritize Distribution reliability issues	20 days	Fri 20-01-24	Thu 20-02-20					
L	Identify quick win Distribution resiliency projects	15 days	Fri 20-02-21	Thu 20-03-12					
2	Develop a staged plan to automate the distribution system and some areas on the 38 kV sub-transmission system	30 days	Fri 20-01-24	Thu 20-03-05					
3	Obtain 2019 and YTD 2020 customer outage complaints forms. Review this data to develop future CapEx system improvement projects in key areas	15 days	Fri 20-01-24	Thu 20-02-13					
4	Validate and assess the 2020 – 2025 Distribution Five-Year CapEx (Sargent & Lundy) Business Plan versus system requirements	15 days	Fri 20-01-24	Thu 20-02-13					
35	Integrated Resource Plan (IRP) (Section 4.3.j)	20 days	Fri 20-01-24	Thu 20-02-20					

Ta	sk Name	Duration	Start	Finish	October January April July October January
236	Joint Planning Team reviews the current state of the IRP and its impact on the T&D System and the O&M		Fri 20-01-24	Thu 20-02-20	
	Services	,			
237	Review the current maintenance plan for all assets. Determine if the planned programs have been deployed	d30 days	Fri 20-01-24	Thu 20-03-05	
	and develop a strategy using ATCO-Quanta's experience to bring the plan current	,			
238	Determine if there are established life cycle plans for all critical assets and plans for critical spares.	15 days	Fri 20-03-06	Thu 20-03-26	
239	Develop a Technical Energy Loss Reduction Plan	1 day	Fri 20-01-24	Fri 20-01-24	I
240	Evaluate current meter data management system abilities. Develop a plan for new/improved meter data	20 days	Fri 20-01-24	Thu 20-02-20	
	management (MDM) and meter asset management (MAM) systems	20 days	11120 01 24	1110 20 02 20	
241	Obtain an update on the progress of the new meter shop. Develop a plan to support findings to expedite	20 days	Fri 20-02-21	Thu 20-03-19	
	the operations of the new building. Assess meter shop processes versus regulatory requirements	20 0075	11120 02 21	1110 20 05 15	
142	Assess and identify gaps in meter reading processes, field testing and work procedures	20 days	Fri 20-02-21	Thu 20-03-19	
243		15 days	Fri 20-02-21	Thu 20-03-12	
	plan to meet customer needs and lower operating costs	15 days	11120 02 21	1110 20 05 12	
44	Gather data on streetlight operations and use it to develop a priority repair list and labor strategy to ensure	20 days	Fri 20-01-24	Thu 20-03-05	_
		e 30 days	F11 20-01-24	111u 20-03-03	
45	prompt repairs	10 days	F=: 20 02 0C	Th., 20 02 10	
	Obtain an inventory of lights that have been changed to LED compared to existing HPS lights across the	10 days	Fri 20-03-06	Thu 20-03-19	_
46	system	15 de	F.: 20 02 20	Th 20 04 00	_
17	Assess current lighting inventory and develop a three-year plan to audit and inspect PREPA's public lighting		Fri 20-03-20	Thu 20-04-09	
	Prioritize investments by year	5 days	Fri 20-03-20	Thu 20-03-26	
48	Submit entries to System Remediation Plan	1 day	Fri 20-03-27	Fri 20-03-27	
49	Submit entries to Initial Budgets	1 day	Fri 20-03-27	Fri 20-03-27	
50	2.c Development and Implementation of Additional Take-over plans	237 days	Wed 20-01-01	Thu 20-11-26	
51	2.c.i Transition Plan for T&D Control Centers	151 days	Fri 20-01-24	Fri 20-08-21	₩
52	Validate and assess all transmission and distribution control center grid monitoring and control	10 days	Fri 20-01-24	Thu 20-02-06	
	functionality, inventory of automation and SCADA real-time database				
53	Review and assess the vendor support contracts in association with T&D control center applications that	15 days	Fri 20-02-07	Thu 20-02-27	
	could affect system monitoring and control for safe, reliable power delivery.				
54	Evaluate the energy management systems (EMSs): real-time data, model/data integrity, state estimator,	15 days	Fri 20-02-28	Thu 20-03-19	<b>—</b>
	simulator/training and study mode	,			
55	Assess the physical condition of transmission control centers, including backups (Ponce).	10 days	Fri 20-03-20	Thu 20-04-02	•
56	Develop a plan for modernizing facilities, including rebuilding, relocating and hardening existing facilities.		Fri 20-04-03	Thu 20-04-30	
57	Evaluate distribution operations and backup control centers. Understand how the five control centers	20 days	Fri 20-02-28	Thu 20-03-26	
	support and backup to each other	20 00,5	20 02 20		
58	Develop a strategy to improve continuity of service and customer service	20 days	Fri 20-07-17	Thu 20-08-13	
59	Document and assess the Under-Frequency Load Shed Program	20 days	Fri 20-03-27	Thu 20-04-23	
50		-		Thu 20-04-23	
1	Evaluate T&D outage planning procedures	20 days	Fri 20-04-24		
52	Evaluate the system operator training program and competency assessments.	20 days	Fri 20-05-22	Thu 20-06-18	
	Evaluate electrical operating standards: loading, redundancy, interconnectivity, etc.	20 days	Fri 20-06-19	Thu 20-07-16	
53	Evaluate the restoration plan (black start)	15 days	Fri 20-07-17	Thu 20-08-06	
54	Prioritize investments by year	5 days	Fri 20-08-14	Thu 20-08-20	
55	Submit entries to System Remediation Plan	1 day	Fri 20-08-21	Fri 20-08-21	I
56	Submit entries to Initial Budgets	1 day	Fri 20-08-21	Fri 20-08-21	
57	2.c.ii Transition Plan for Operations and Maintenance (O&M) Activities	40 days	Fri 20-01-24	Thu 20-03-19	•
58	Develop a reliability improvement program that focuses on processes to restore customers quicker,	40 days	Fri 20-01-24	Thu 20-03-19	
	prioritization of customers to restore, vegetation management, automation, data cleansing, animal				
	protection etc.				
59	Conduct a review of field and operations communications protocol	15 days	Fri 20-01-24	Thu 20-02-13	-
0	2.c.iii Emergency Response / Disaster Recovery / Business Continuity Plans	69 days	Fri 20-01-24	Wed 20-04-29	•
1	Review and understand PREPA's Emergency Plan, identify gaps and develop corrective actions	10 days	Fri 20-01-24	Thu 20-02-06	
2	Develop an updated "Emergency Plan"	15 days	Fri 20-02-07	Thu 20-02-27	
3	Present Emergency Plan to Transition Executive Leadership	1 day	Fri 20-02-28	Fri 20-02-28	1
74	Incorporate comments and recommendations from Transition Executive Leadership	3 days	Mon 20-03-02	Wed 20-03-04	1
75	Update the operations manual and the business continuity/disaster recovery plan	40 days	Thu 20-03-05	Wed 20-04-29	
	There is a special continuous and the submess something of about the covery plant		20 00 00		I .

276		0 days	Start Wed 20-04-29	Finish Wed 20-04-29	October January April July October January
277		105 days	Fri 20-01-24	Thu 20-06-18	
78	-	103 days	Fri 20-01-24	Thu 20-02-06	
79	Obtain an inventory listing of vehicles by function and work group, including information on vehicle status	-	Fri 20-01-24 Fri 20-02-07	Thu 20-03-19	
	and any abnormalities noted. Assess the current fleet to ensure it is in safe and roadworthy condition.	SSO uays	F11 20-02-07	111u 20-03-19	
80		15 days	Fri 20-03-20	Thu 20-04-09	
281	Assess shop operations effectiveness and ability to coordinate in-house and third-party services. Identify	-	Fri 20-04-10	Thu 20-05-21	
	opportunities to improve efficiency and productivity		11120-04-10	1110 20-03-21	
82	Evaluate current suppliers (parts, vehicles, equipment, etc.). Use these findings to identify opportunities to leverage long-term suppliers to increase buying power.	20 days	Fri 20-05-22	Thu 20-06-18	_
83	Review the current GPS/telematics system from a fleet management, field operations, employee/public safety and crew dispatch perspective	30 days	Fri 20-03-20	Thu 20-04-30	_
84		20 days	Fri 20-03-20	Thu 20-04-16	
85	Investigate/audit the aviation program, pilot accreditation, helicopter fleet health, maintenance program		Fri 20-02-07	Thu 20-03-19	
	and record-keeping against US Department of Transportation requirements	, .			
86		10 days	Fri 20-03-20	Thu 20-04-02	
87		5 days	Fri 20-04-03	Thu 20-04-09	•
88		1 day	Wed 20-01-01	Wed 20-01-01	₩
89		1 day	Wed 20-01-01	Wed 20-01-01	T I
90		237 days	Wed 20-01-01	Thu 20-11-26	<b>•</b>
91	•	80 days	Fri 20-01-24	Thu 20-05-14	<b>▼</b>
92	· ·	40 days	Fri 20-01-24	Thu 20-03-19	
	·				
93	Monitor productivity	40 days	Fri 20-02-07	Thu 20-04-02	_
94	Assess scheduling and resource planning capabilities	20 days	Fri 20-04-03	Thu 20-04-30	
95	Update the training plans as needed for employees to meet the gaps utilizing the Quanta and ATCO's training programs as a basis	5 days	Fri 20-05-01	Thu 20-05-07	•
96		5 days	Fri 20-05-08	Thu 20-05-14	•
97		180 days	Fri 20-03-20	Thu 20-11-26	•
98	Conduct Initial Observation of Employees in the Field – utilize experienced trainers and Operations Team Members to perform job site observations in each region where crews operate	80 days	Fri 20-03-20	Thu 20-07-09	
199		80 days	Fri 20-07-10	Thu 20-10-29	
00	Report and Recommend Measures to Address Gaps in Skill and Knowledge – Based on the results of the knowledge assessment process and the field observations, we will evaluate where gaps exist; review gaps and provide a report that summarizes employee assess	20 days	Fri 20-10-30	Thu 20-11-26	_
01		100 days	Fri 20-01-24	Thu 20-06-11	▼
02	Analyze written curriculum, field competencies, learning outcomes, curriculum maps, syllabi, assessments, and other related curriculum documentation	80 days	Fri 20-01-24	Thu 20-05-14	
03	Conduct interviews with stakeholders at various levels of the company to obtain the necessary context and situational awareness of the history and use of the curriculum	20 days	Fri 20-05-15	Thu 20-06-11	-
04		40 days	Fri 20-01-24	Thu 20-03-19	
05	Assess career progression programs, review any policies or documentation related to these programs,		Fri 20-01-24 Fri 20-01-24		
	and survey a sampling of employees involved with its oversight			Thu 20-03-19	
06		20 days	Fri 20-05-15	Thu 20-06-11	
07	-	65 days	Fri 20-03-06	Thu 20-06-04	•
08	Visit PREPA's training facilities in each service area to assess educational effectiveness, observing trainee-to-instructor ratios, design and setup of facilities and training areas, and identify opportunities to enhance trainee immersion	40 days	Fri 20-03-06	Thu 20-04-30	_
09		20 days	Fri 20-05-01	Thu 20-05-28	
10		5 days	Fri 20-05-29	Thu 20-06-04	

311 Tas		Duration	Start Wed 20-01-01	Finish Tue 20-04-21	October January April July October Jan
12	Observe delivery of various classes, with an emphasis on observing a broad range of instructors, course	80 days	Wed 20-01-01 Wed 20-01-01	Tue 20-03-24	
	topics, and contexts (sample of 5-10 classes)	60 days	wed 20-01-01	Tue 20-03-24	
3	Conduct gap analysis and build go-forward plan	20 days	Wed 20-03-25	Tue 20-04-21	
	Assessment of Recruitment Strategies	100 days	Fri 20-01-24	Thu 20-06-11	•
5	Review recruitment processes from the vantage point of company mission and desired culture vs. recruitment strategy and results	80 days	Fri 20-01-24	Thu 20-05-14	
6	Assess PREPA's recruitment strategies and status of employer brand, scope of sourcing, job postings, applicant experience, pre-employment testing, job interview process, job description, onboarding process, and career path	80 days	Fri 20-01-24	Thu 20-05-14	
7	Review recruitment and retention analytics, quality of hires, and compatibility between HR processes and field/project requirements	80 days	Fri 20-01-24	Thu 20-05-14	
8		20 days	Fri 20-05-15	Thu 20-06-11	
9		120 days	Fri 20-01-24	Thu 20-07-09	▼
0	NLC to design a comprehensive training schedule and deliver the courses and programs determined to address the gaps discovered during the Assessments of Skilled Labor.	120 days	Fri 20-01-24	Thu 20-07-09	
1		125 days	Fri 20-01-24	Thu 20-07-16	▼
2	PREPA Safety and Health Staff Assessment / Interviews	60 days	Fri 20-01-24	Thu 20-04-16	•
3	·	1 day	Fri 20-01-24	Fri 20-01-24	I
4		60 days	Fri 20-01-24	Thu 20-04-16	_
5	PREPA Public Safety Program Assessment	120 days	Fri 20-01-24	Thu 20-07-09	•
5	Establish a baseline of current PREPA public safety program initiatives and internal resources	80 days	Fri 20-01-24	Thu 20-05-14	
7	Based off of the results of the public safety program assessment, a 5 year strategic plan will be developed to include items such as: videos and reference materials to help promote public safety; "call before you dig" campaign; utilization of social media	40 days	Fri 20-05-15	Thu 20-07-09	_
18	PREPA Physical Safety and Health Assessments (Facility and Field Locations)	120 days	Fri 20-01-24	Thu 20-07-09	
29	Conduct a baseline gap analysis of all PREPA physical work locations, as well as conducting field assessments with PREPA crews. Focus will be on basic OSHA compliance as well as the implementation of industry best practices (i.e., OSHA ET&D Partnership).	80 days	Fri 20-01-24	Thu 20-05-14	
0	Based off results of the baseline gap analysis, the objectives listed in years 1-3 of the safety and health work plan will be prioritized to address the most urgent needs.	40 days	Fri 20-05-15	Thu 20-07-09	
1		125 days	Fri 20-01-24	Thu 20-07-16	▼
2	· · · · · · · · · · · · · · · · · · ·	80 days	Fri 20-01-24	Thu 20-05-14	
3		80 days	Fri 20-01-24	Thu 20-05-14	
34	Based off results of the baseline gap analysis of PREPA's written safety and health programs, the objectives listed in years 1-3 of the safety and health work plan will be prioritized to address the most urgent needs.	40 days	Fri 20-05-15	Thu 20-07-09	_
5	Consolidate and Prioritize Employee & Public budgets by year	5 days	Fri 20-07-10	Thu 20-07-16	0
6		137 days	Fri 20-01-24	Mon 20-08-03	•
7	Assess the existing Computerized Maintenance Management System (CMMS) and define a preventative maintenance program	40 days	Fri 20-01-24	Thu 20-03-19	
8		20 days	Fri 20-03-20	Thu 20-04-16	_
9	Develop a screening process for potential locations for micro grids, including measuring customer engagement, evaluating and prioritizing potential locations and developing interconnection processes.	30 days	Fri 20-03-20	Thu 20-04-30	_
.0	Develop a plan to improve resiliency that focuses on hardening of flood-prone substations and developing industry-aligned construction standards for hardening T&D infrastructure.	30 days	Fri 20-03-20	Thu 20-04-30	_
11	Assess power flow processes and tools for initiation, prioritization, sponsorship and stewardship of projects. Identify gaps and develop a prioritized plan for closing them	30 days	Fri 20-03-20	Thu 20-04-30	_

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	Name	Duration	Start	Finish	October January April July October Janu
42	Assess T&D system planning criteria, outlining philosophies for loading of equipment, circuit configuration and circuit attributes, substation configurations and integration of automation and monitoring. Identify	n30 days	Fri 20-03-20	Thu 20-04-30	_
	gaps and develop a prioritized plan for cl				
3	Interconnection of Renewables	40 days	Fri 20-01-24	Thu 20-03-19	•
4	Review and assess interconnection processes	20 days	Fri 20-01-24	Thu 20-02-20	
5	Assess engineering tools to streamline the interconnection process for renewables and identify /	10 days	Fri 20-02-21	Thu 20-03-05	
	analyze gaps	20 00,5	20 02 22	20 00 00	
6	Develop an improved interconnection process with recommendations to correct the gaps	10 days	Fri 20-03-06	Thu 20-03-19	
7	Develop an asset management policy that includes a strategy to plan and execute programs and manage	-	Fri 20-03-20	Thu 20-05-14	
	assets that may be FEMA funded	, .			
8	Evaluate the components necessary for the development of a strategic asset management plan	15 days	Fri 20-05-15	Thu 20-06-04	
9	Reliability Improvement Plan	137 days	Fri 20-01-24	Mon 20-08-03	▼ ▼
0	Review current reliability improvement plan	10 days	Fri 20-01-24	Thu 20-02-06	
1	Review SAIFI/SAIDI/CAIDI/MAIFI/CEMI past performance and validate the data between 2012 and	20 days	Fri 20-02-07	Thu 20-03-05	_
	present for accuracy	, .			
2	Review data cleansing methods and identify the departments and employees responsible for tracking	10 days	Fri 20-03-06	Thu 20-03-19	
	metrics	,			
3	Review outages by cause, identifying the worst-performing circuits	20 days	Fri 20-03-20	Thu 20-04-16	_
4	Review details on how metrics are calculated and benchmark against IEEE	10 days	Fri 20-04-17	Thu 20-04-30	•
5	Predictive Reliability Model	137 days	Fri 20-01-24	Mon 20-08-03	•
6	Develop a predictive reliability model of the study area using distribution analysis software. The	60 days	Fri 20-01-24	Thu 20-04-16	
	model is calibrated to represent the area's existing reliability	,			
7		15 days	Fri 20-04-17	Thu 20-05-07	
3	Identify quick win resiliency projects	15 days	Fri 20-05-08	Thu 20-05-28	-
,	Identify projects that are already included as a part of the Grid Modernization Plan	20 days	Fri 20-01-24	Thu 20-02-20	-
)	Draft Reliability Improvement Plan	20 days	Fri 20-05-29	Thu 20-06-25	_
L	Identify resources required, timeline, costs and projected improvement to target reliability indices	20 days	Fri 20-06-26	Thu 20-07-23	_
2	Submit Reliability Improvement Plan to Management Co. for approval	1 day	Fri 20-07-24	Fri 20-07-24	I
3	Present Plan to Management Co.	1 day	Mon 20-07-27	Mon 20-07-27	1
1	Management Co. approves Reliability Improvement Plan	5 days	Tue 20-07-28	Mon 20-08-03	•
5	Assess engineering tools and identify gaps	20 days	Fri 20-01-24	Thu 20-02-20	_
6	2.c.ix Identification of real estate	40 days	Fri 20-01-24	Thu 20-03-19	
,	2.c.x Materials Management and Warehouse Plan	236 days	Wed 20-01-01	Wed 20-11-25	₩
3	Gap Assessment Warehouse	83 days	Fri 20-01-24	Tue 20-05-19	<b>—</b>
•	Asset Suite System Capabilities and Limitations	40 days	Fri 20-01-24	Thu 20-03-19	
)	Warehouse Level and Location	13 days	Fri 20-03-20	Tue 20-04-07	
	Warehouse Capacities and Limitations	13 days	Wed 20-04-08	Fri 20-04-24	•
2	Warehouse Equipment Capabilities and Limitations	13 days	Mon 20-04-27	Wed 20-05-13	
3	Develop a plan for Warehouse Yard Environmental Condition Consideration	5 days	Fri 20-03-06	Thu 20-03-12	0
4	Catalog (Standardization of materials)	40 days	Wed 20-03-25	Tue 20-05-19	
5	Hazardous Material Review (IE PCB content, explosives, Oil and other lubricants	5 days	Wed 20-03-25	Tue 20-03-31	0
6	Develop Inventory Management Plan	179 days	Fri 20-03-20	Wed 20-11-25	<b>▼</b>
7	Master Item Creation and Maintenance	1 day	Fri 20-03-20	Fri 20-03-20	1
8	ABC Analysis	1 day	Mon 20-03-23	Mon 20-03-23	1
9	Min / Max, MRP and Reorder Point Inventory Replenishment Planning (All Warehouse Levels)	1 day	Tue 20-03-24	Tue 20-03-24	1
	Cycle Count Schedule and Creation	1 day	Wed 20-03-25	Wed 20-03-25	1
)	,	1 day	Mon 20-11-23	Mon 20-11-23	1
	·	1 day	Thu 20-03-26	Thu 20-03-26	I
1 2	Item Forecasting	/		Tue 20-11-24	T I
! !		1 dav	Tue 20-11-24		
! !	Demand Planning and Bill of Materials Management	1 day 1 day	Tue 20-11-24 Fri 20-03-27		I
L		1 day 1 day 1 day	Fri 20-03-27 Wed 20-11-25	Fri 20-03-27 Wed 20-11-25	I I

		Duration	Start	Finish	October January April July October Januar
387 388	·	4 days	Fri 20-03-20	Wed 20-03-25	
		2 days	Thu 20-03-26	Fri 20-03-27	
39		2 days	Mon 20-03-30	Tue 20-03-31	
90		2 days	Wed 20-04-01	Thu 20-04-02	
91		2 days	Fri 20-04-03	Mon 20-04-06	
92		2 days	Mon 20-04-27	Tue 20-04-28	
93	, , , , , , , , , , , , , , , , , , , ,	2 days	Tue 20-04-07	Wed 20-04-08	
94	-	2 days	Thu 20-04-09	Fri 20-04-10	<u> </u>
95		2 days	Mon 20-04-13	Tue 20-04-14	
16		2 days	Wed 20-04-15	Thu 20-04-16	
97	· · · · · · · · · · · · · · · · · · ·	2 days	Fri 20-04-17	Mon 20-04-20	
8		2 days	Tue 20-04-21	Wed 20-04-22	
9	NON-STOCK Project Receipt and Cross-Docking/Consolidation	2 days	Thu 20-04-23	Fri 20-04-24	
00	Assess Cross Functional Processes	56 days	Wed 20-04-29	Wed 20-07-15	-
)1	Evaluation of cross function activity	7 days	Wed 20-04-29	Thu 20-05-07	
)2	Process Refinement	7 days	Fri 20-05-08	Mon 20-05-18	•
3	Training (System and Equipment Operation)	7 days	Tue 20-05-19	Wed 20-05-27	•
)4	Process Adoption	7 days	Thu 20-05-28	Fri 20-06-05	•
5	KPI Data	7 days	Mon 20-06-08	Tue 20-06-16	
06	System Access Restrictions	7 days	Wed 20-06-17	Thu 20-06-25	•
07	Inventory On Hand Confirmation	7 days	Fri 20-06-26	Mon 20-07-06	•
8	Due Diligence Evaluation Recommendations Execution	7 days	Tue 20-07-07	Wed 20-07-15	•
9	Compile Materials Management and Warehouse Plan	5 days	Thu 20-07-16	Wed 20-07-22	•
.0	Submit input to System Remediation Plan for Materials Management and Warehouse	1 day	Wed 20-01-01	Wed 20-01-01	1
.1	· · · · ·	7 days	Thu 20-07-23	Fri 20-07-31	₩
2		1 day	Thu 20-07-23	Thu 20-07-23	1
.3		3 days	Fri 20-07-24	Tue 20-07-28	0
4		1 day	Wed 20-07-29	Wed 20-07-29	1
L5		2 days	Thu 20-07-30	Fri 20-07-31	<b>♦</b>
.6	·	40 days	Fri 20-02-07	Thu 20-04-02	•
.7	, .	10 days	Fri 20-02-07	Thu 20-02-20	
.8		10 days	Fri 20-02-21	Thu 20-03-05	
9	· · · · · · · · · · · · · · · · · · ·	20 days	Fri 20-03-06	Thu 20-04-02	
0.		24 days	Fri 20-02-07	Wed 20-03-11	•
1		5 days	Fri 20-02-07	Thu 20-02-13	
2		10 days	Fri 20-02-14	Thu 20-02-27	
3	Use existing LIDAR on th Transmission system and statistically inspect the Distribution system	5 days	Fri 20-02-28	Thu 20-03-05	
24		2 days	Fri 20-03-06	Mon 20-03-09	
25		2 days	Tue 20-03-10	Wed 20-03-11	
16		45 days	Fri 20-02-07	Thu 20-04-09	
7		10 days	Fri 20-02-07	Thu 20-04-09	
8				Thu 20-02-20	
9	Compare against ATCO's Emergancy Posponso manual	5 days 5 days	Fri 20-02-21 Fri 20-02-28	Thu 20-02-27	
0	Compare against ATCO's Emergency Response manual	-			
1	Meet with interface emergency response agencies to assure coordination	5 days	Fri 20-03-06	Thu 20-03-12	_
2		20 days	Fri 20-03-13	Thu 20-04-09	
3		150 days	Fri 20-01-24	Thu 20-08-20	
	·	150 days	Fri 20-01-24	Thu 20-08-20	
5		30 days	Fri 20-01-24	Thu 20-03-05	
	,	10 days	Fri 20-01-24	Thu 20-02-06	
16	Full 3rd party environmental compliance assessment of all properties that we will be operating under the JV-PREPA contract to establish baseline lines of liability	20 days	Fri 20-02-07	Thu 20-03-05	_
7	Desktop Review Activities	30 days	Fri 20-03-06	Thu 20-04-16	

438		Duration	Start	Finish Thu 20 04 16	October January April July October Januar
439		30 days	Fri 20-03-06	Thu 20-04-16	
40	Risk Ranking Review	20 days	Fri 20-03-20	Thu 20-04-16	
11	Management Co. to review field assessments	20 days	Fri 20-03-20	Thu 20-04-16	
2	Phase 1 Assessment	20 days	Fri 20-02-07	Thu 20-03-05	
	3rd party to conduct assessment on Phase 1 properties	20 days	Fri 20-02-07	Thu 20-03-05	
13	Phase 1 Review Activities	20 days	Fri 20-04-17	Thu 20-05-14	
44	Based on reposits, additional information gathered, and desk top reviews, conduct Phase I ESAs on any locations that will be used under the Management CoPREPA agreement where risk scores are high.	20 days	Fri 20-04-17	Thu 20-05-14	_
15	Phase 2 Assessment	20 days	Fri 20-05-15	Thu 20-06-11	▼ ▼
6	Based on Phase I findings, conduct Phase II on properties based on Environmental exposure assessment plan	20 days	Fri 20-05-15	Thu 20-06-11	
17	Due Care Development Activities	50 days	Fri 20-06-12	Thu 20-08-20	-
8	Draft Due Care plans with consultants on all properties that had Phase Is completed	30 days	Fri 20-06-12	Thu 20-07-23	
.9	Review plans with operations to prepare for necessary changes for operational take over	20 days	Fri 20-07-24	Thu 20-08-20	<b>=</b>
0	Permit Review	100 days	Fri 20-01-24	Thu 20-06-11	▼ →
1		100 days	Fri 20-01-24	Thu 20-06-11	
	environmental documents (including but not limited to contracts, past budget, employee records, etc.)	,			
52	Review all permits for all non-generation facilities to see what would have to transfer to us, the operator, based on regulatory requirements and create compliance schedule (possibly utilize the syster Quanta facilities currently uses)	100 days	Fri 20-01-24	Thu 20-06-11	
53	Assist PREPA with finalizing consent decrees to separate generation from non-generation requirements	100 days	Fri 20-01-24	Thu 20-06-11	
4	Establish contact with regulatory agencies	100 days	Fri 20-01-24	Thu 20-06-11	
5	Staff, Contractors, Policies and Procedure Assessments	80 days	Fri 20-01-24	Thu 20-05-14	-
6	Determine initial expectation of workforce needs	40 days	Fri 20-01-24	Thu 20-03-19	
7	Develop plan to update, review, or create procedures for all environmental aspects, regulations, etc.	40 days	Fri 20-03-20	Thu 20-05-14	
8	Waste Contractor Review	105 days	Fri 20-01-24	Thu 20-06-18	₩ ₩
9	Perform waste contractor review for all T&D operations	100 days	Fri 20-01-24	Thu 20-06-11	
0	Prioritize O&M and CapEx budget by year	5 days	Fri 20-06-12	Thu 20-06-18	•
1	Facilities	130 days	Fri 20-01-24	Thu 20-07-23	▼
2	Delineation of T&D Facilities from Other PREPA Assets with Legal Agreements in Place	130 days	Fri 20-01-24	Thu 20-07-23	▼ ▼
3	Determination of T&D occupied facilities	5 days	Fri 20-01-24	Thu 20-01-30	0
54		15 days	Fri 20-01-31	Thu 20-02-20	
55	Thorough review of real estate agreements, abstract leases and note options, critical dates, etc.	5 days	Fri 20-02-21	Thu 20-02-27	
6		5 days	Fri 20-02-28	Thu 20-03-05	•
57	Phase I ESA's on all leased, owned and occupied properties	40 days	Fri 20-03-06	Thu 20-04-30	
8	Final determination of T&D occupied facilities based on Phase I ESA results and risk review	20 days	Fri 20-05-01	Thu 20-05-28	_
59	Negotiate, Draft and execute leases on properties occupied but not under a contracted agreement or leases expiring during the Transition Period		Fri 20-05-29	Thu 20-07-23	_
70	Determine if lease assignments or subleases are required if lessee entity is to be changed, draft agreements and execute	40 days	Fri 20-05-29	Thu 20-07-23	
71	Develop and implement Due Care Plans (where required for maintaining liability protections)	40 days	Fri 20-05-29	Thu 20-07-23	
2	Determine and enter all environmental requirements for leased and owned facilities into a compliance management system	40 days	Fri 20-05-29	Thu 20-07-23	
73	Physical Security Measures in Place to Delineate T&D Facilities from Other PREPA Assets	130 days	Fri 20-01-24	Thu 20-07-23	-
'4	Identify office space, office facilities and equipment requirements for ServCo Front-End Transition Plan resources	10 days	Fri 20-01-24	Thu 20-02-06	
75	Implementation of physical barriers to delineate T&D from Generation for both security and liability purposes.	10 days	Fri 20-05-29	Thu 20-06-11	
76	Identification of warranties/guarantees with regards to properties and implement an appropriate plat to manage these requirements moving forward.	r 20 days	Fri 20-05-29	Thu 20-06-25	-

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		Duration	Start	Finish	October January April July October Janua
177	Development of "beautification plan", with intentions to improve facility interiors/exteriors based on cost/prioritization model.	20 days	Fri 20-05-29	Thu 20-06-25	
178	Implement new branding guidelines as required on facades and internal/external signage.	40 days	Fri 20-05-29	Thu 20-07-23	
79	Identify office space for the Administrators, PREB and other representatives to allow for them to conduct audits as required (operator obligation in the O&M contract)	10 days	Fri 20-05-29	Thu 20-06-11	
0	Asset-Based Assessment Report	15 days	Fri 20-06-19	Thu 20-07-09	•••
1	Complete asset-based assessment report for all sub areas of T&D	5 days	Fri 20-06-19	Thu 20-06-25	0
2	Complete documentation for improvement initiatives	10 days	Fri 20-06-26	Thu 20-07-09	
3	3. System Remediation Plan Milestones	<b>201 days</b>	Fri 20-01-24	Fri 20-10-30	•
	Remediation Plan Proposal	11 days	Fri 20-01-24	Fri 20-02-07	•••
	Propose Plan outline and methodology on plan development and gain teams consensus	5 days	Fri 20-01-24	Thu 20-01-30	0
	Present Plan outline and methodology to Transition Leadership and Administrator for approval	1 day	Fri 20-01-31	Fri 20-01-31	1
	Present System Remediation Plan outline and methodology on plan development to PREB for input and comments	5 days	Mon 20-02-03	Fri 20-02-07	1
	Transition Teams Review of the Current State of the T&D System Perform Gap Analysis	35 days	Fri 20-01-31	Thu 20-03-19	•
)	Consolidate IRP Plan, Sargent & Lundy Report, Grid Modernization Report & FEMA Project Worksheets into one plan to avoid overlaps and use as a starting point of identified projects		Fri 20-01-31	Thu 20-02-20	
		20 days	Fri 20-02-21	Thu 20-03-19	_
1		25 days	Fri 20-01-31	Thu 20-03-05	_
		34 days	Fri 20-03-20	Wed 20-05-06	•
1	•	20 days	Fri 20-03-20	Thu 20-04-16	
	·	5 days	Fri 20-04-03	Thu 20-04-09	•
T		3 days	Tue 20-04-07	Thu 20-04-09	1
1		3 days	Fri 20-04-10	Tue 20-04-14	0
		10 days	Fri 20-04-03	Thu 20-04-16	
T	Presentation update to Administrator and Management Co.	1 day	Fri 20-04-17	Fri 20-04-17	1
T		3 days	Mon 20-04-20	Wed 20-04-22	•
1		5 days	Mon 20-04-20	Fri 20-04-24	•
T	·	5 days	Mon 20-04-27	Fri 20-05-01	0
	Risk rank all of the initiatives	2 days	Mon 20-05-04	Tue 20-05-05	l l
	Presentation update to Administrator and Management Co.	1 day	Wed 20-05-06	Wed 20-05-06	I
	Consolidate Plans from All Areas	34 days	Fri 20-03-27	Wed 20-05-13	•
1	T&D Services Plan	5 days	Thu 20-05-07	Wed 20-05-13	0
Ť	Customer Service Plan	5 days	Thu 20-05-07	Wed 20-05-13	0
1	IT Plan	5 days	Thu 20-05-07	Wed 20-05-13	0
Ť		5 days	Thu 20-05-07	Wed 20-05-13	0
		5 days	Thu 20-05-07	Wed 20-05-13	0
1	Data Security Plan	5 days	Thu 20-05-07	Wed 20-05-13	•
1	Vegetation Management Plan	5 days	Fri 20-03-27	Thu 20-04-02	•
	Fleet Plan	5 days	Thu 20-05-07	Wed 20-05-13	•
	Grid Operations Plan	5 days	Thu 20-05-07	Wed 20-05-13	0
	Mini Grids Plan	5 days	Thu 20-05-07	Wed 20-05-13	
	Issue one plan that incorporates all of the Utility's Capital Expenditure multi year needs	1 day	Thu 20-05-07	Thu 20-05-07	I
1	Development of Roadmap(s)	18 days	Fri 20-05-08	Tue 20-06-02	•
	Develop a roadmap for all initiatives (O&M and Capital Expenditures) with Milestone Deliverables (Projected Benefits)	10 days	Fri 20-05-08	Thu 20-05-21	
3	Develop a consolidated projection of resource requirements, costs and schedules / timelines for the initiatives	5 days	Fri 20-05-22	Thu 20-05-28	•
9	Issue roadmap with resource requirements, costs and schedules	0 days	Thu 20-05-28	Thu 20-05-28	<b>♦</b>

520		3 days	Start Fri 20-05-29	Finish Tue 20-06-02	October January April July October Januar
21			Fri 20-05-08	Mon 20-06-15	
2	•	27 days			_
	Identify initiatives that do not have FEMA funding and IEM will pursue FEMA funds (if initiative is a candidate)	3 days	Fri 20-05-08	Tue 20-05-12	·
3	Draft System Remediation Plan	10 days	Fri 20-05-29	Thu 20-06-11	•
	Develop System Remediation Plan Presentation	2 days	Fri 20-06-12	Mon 20-06-15	
	Approval of System Remediation Plan	99 days	Tue 20-06-16	Fri 20-10-30	<b>—</b>
	Present Plan to Management Co. Leadership for approval	1 day	Tue 20-06-16	Tue 20-06-16	1
7	Adjust Plan per Management Co. comments and / or recommendations	3 days	Wed 20-06-17	Fri 20-06-19	1
	Management Co. Approves Plan	1 day	Mon 20-06-22	Mon 20-06-22	1
,	Administrator Approval of Proposed System Remediation Plan (Up to 30 days)	24 days	Tue 20-06-23	Fri 20-07-24	-
)	Submit Plan to Administrator for approval	1 day	Tue 20-06-23	Tue 20-06-23	1
-	Present Plan to Administrator	1 day	Wed 20-06-24	Wed 20-06-24	Ī
	Administrator reviews plan, provides comments, modification requests, and recommendations (up to 30 days)	19 days	Wed 20-06-24	Mon 20-07-20	-
3	Management Co. reviews and incorporates or resolves comments (up to 30 days)	2 days	Tue 20-07-21	Wed 20-07-22	T I
		1 day	Thu 20-07-23	Thu 20-07-23	1
	- ''	1 day	Fri 20-07-24	Fri 20-07-24	T I
	PREB Approval of Proposed System Remediation Plan (Up to 90 days)	70 days	Mon 20-07-27	Fri 20-10-30	
	Management Co. submits Proposed System Remediation Plan to PREB	1 day	Mon 20-07-27	Mon 20-07-27	I
	Management Co. presents plan to PREB	1 day	Mon 20-07-27	Mon 20-07-27	1
,	PREB reviews and approves, denies or proposed modifications to Plan (up to 90 days to respond)	59 days	Tue 20-07-28	Fri 20-10-16	
		5 days	Mon 20-10-19	Fri 20-10-23	
	PREB performs seconds review (if necessary)	5 days	Mon 20-10-26	Fri 20-10-30	
		0 days	Fri 20-10-30	Fri 20-10-30	•
			Wed 20-01-01	Mon 20-07-13	•
1	Evaluating Customer Service Facilities and Assets	65 days	Fri 20-01-24	Thu 20-04-23	•
5	•	5 days	Fri 20-01-24	Thu 20-01-30	•
5		40 days	Fri 20-01-31	Thu 20-03-26	
,	Develop a transition plan to operate customer facilities to support ServCo. Needs and identify requirement for additional facilities and/or consolidate existing facilities		Fri 20-03-27	Thu 20-04-23	-
В		120 days	Fri 20-01-24	Thu 20-07-09	•
9		20 days	Fri 20-01-24	Thu 20-02-20	_
)		40 days	Fri 20-02-21	Thu 20-04-16	_
1		60 days	Fri 20-04-17	Thu 20-07-09	_
2		90 days	Fri 20-01-24	Thu 20-05-28	
3	Assess and collect metrics on the current meter read data collection and meter data management processes and identify gaps	40 days	Fri 20-01-24	Thu 20-03-19	
	· · · · · · · · · · · · · · · · · · ·	50 days	Fri 20-03-20	Thu 20-05-28	_
4	Review and assess meter read quality controls. Develop recommended solutions and implement controls by contract start date				
	contract start date	122 davs	Fri 20-01-24	Mon 20-07-13	•
	contract start date  Identification and Analysis of Gaps	<b>122 days</b> 20 days	<b>Fri 20-01-24</b> Fri 20-01-24		-
	contract start date  Identification and Analysis of Gaps  Visit each customer service operating area to gain an understanding of the Meter to Cash process flow	20 days	Fri 20-01-24	Thu 20-02-20	
; ;	contract start date  Identification and Analysis of Gaps  Visit each customer service operating area to gain an understanding of the Meter to Cash process flow	20 days 60 days			
i	contract start date  Identification and Analysis of Gaps  Visit each customer service operating area to gain an understanding of the Meter to Cash process flow  Complete audit of all customer service processes to identify gaps in controls  Integrate Quality Assurance/Quality Control and Continuous Improvement leaders into all Customer Service transition and gap assessment efforts where appropriate	20 days 60 days	Fri 20-01-24 Fri 20-02-07	Thu 20-02-20 Thu 20-04-30	
5 6 7 8 9	contract start date  Identification and Analysis of Gaps  Visit each customer service operating area to gain an understanding of the Meter to Cash process flow  Complete audit of all customer service processes to identify gaps in controls  Integrate Quality Assurance/Quality Control and Continuous Improvement leaders into all Customer Service transition and gap assessment efforts where appropriate  Identify silo'd work processes between departments that impact timeliness of customer service processes	20 days 60 days 60 days	Fri 20-01-24 Fri 20-02-07 Tue 20-04-21	Thu 20-02-20 Thu 20-04-30 Mon 20-07-13	

	sk Name	Duration	Start	Finish	October January April July October January
562	Solicit feedback and ideas from leadership and front-line employees on opportunities to improve corporate and individual performance.	120 days	Fri 20-01-24	Thu 20-07-09	
63	Identify major process and customer satisfaction opportunities and prioritize for biggest impact	20 days	Fri 20-04-03	Thu 20-04-30	_
64	Develop plan to implement priority controls and identified gaps at contract commencement	20 days	Fri 20-05-01	Thu 20-05-28	<b>—</b>
65	Develop a Customer Service Transition Plan	70 days	Fri 20-01-24	Thu 20-04-30	•
56	Assess staffing requirements in call center, back office, and district offices for customer service functions	20 days	Fri 20-03-06	Thu 20-04-02	<b>—</b>
7	Identify customer service field activities and related FTEs. Develop new organizational structure.	20 days	Fri 20-04-03	Thu 20-04-30	_
8	Execute customer satisfaction survey to identify top 3 customer areas of dissatisfaction	60 days	Fri 20-01-24	Thu 20-04-16	
9	Develop Customer Service employee satisfaction survey to identify top 3 employee areas of dissatisfaction	20 days	Fri 20-01-24	Thu 20-02-20	
0	Approach to the Acquisition and Replacement of Customer Service Assets	120 days	Fri 20-01-24	Thu 20-07-09	
1	Develop a plan to operate all functions under ServCo. as of commencement date for staffing, meter reading, facilities and technology requirements (ex. ServCo. employment contracts, transition of meter reads/accounts by billing cycle, etc.).	60 days	Fri 20-01-24	Thu 20-04-16	
2	Negotiate with external vendors for assignment of contracts or services related to staffing, meter reading, facilities and technology	60 days	Fri 20-04-17	Thu 20-07-09	
73	Development and Implementation of a Service Start and Shut-Off Plan	127 days	Wed 20-01-01	Thu 20-06-25	•
74	Visit each office performing both back office and field credit and collection functions and front-line account set up	30 days	Fri 20-03-06	Thu 20-04-16	_
5	Evaluate performance based on benchmarks, regulations, and targets, compare to ServCo. Processes & procedures.	30 days	Fri 20-03-27	Thu 20-05-07	_
76	Evaluate technology, applications, and external vendors involved in processes	40 days	Wed 20-01-01	Tue 20-02-25	
7	Identify opportunities for improvement and make recommendations for operational changes	20 days	Fri 20-05-01	Thu 20-05-28	
8	Develop transition plan for technology, vendor, and facilities transition plan including final performance testing	20 days	Fri 20-05-29	Thu 20-06-25	-
9	Develop a Meter Asset Management (MAM) Plan	95 days	Fri 20-01-24	Thu 20-06-04	•
)	Assess current meter shop facility and determine if current facility meets business requirements.	20 days	Fri 20-03-06	Thu 20-04-02	<b>—</b>
1	Assess and identify gaps in the information systems and work procedures	20 days	Fri 20-01-24	Thu 20-02-20	_
2	Develop an implementation plan of a new MAM systems and processes	35 days	Fri 20-02-21	Thu 20-04-09	
3	Plan a sampling and meter asset tracking procedures to complement the MAM system. Benchmark the processes with a US based utility following the Federal ANSI/NIST regulations	20 days	Fri 20-04-10	Thu 20-05-07	-
34	Identify quality control gaps in MAM processes. Identify and recommend solutions to improve controls.	20 days	Fri 20-05-08	Thu 20-06-04	_
5	Development and Implementation of a Customer Service Technology	120 days	Fri 20-01-24	Thu 20-07-09	•
6	Review existing Technology, life cycle status, ownership and its effectiveness in meeting business needs. Cal Center, Meter Reading, Billing Payment and Processing	l 30 days	Fri 20-01-24	Thu 20-03-05	_
37	Identify ServCo. Technologies, where synergies may exist and could provide value to PREPA. Evaluate existing Customer Information System, its ability to support business objectives, and potential life span. Identify options and make recommendations	20 days	Fri 20-03-06	Thu 20-04-02	_
8	Develop 5 year Technology Roadmap that maximizes existing investments with strategically timed replacement or partnerships with 3rd party suppliers to support the attainment of customer satisfaction targets within 5 years	30 days	Fri 20-04-03	Thu 20-05-14	_
39	Propose capital plan to support the Roadmap	5 days	Fri 20-05-15	Thu 20-05-21	0
00	Develop reporting/company split in Customer Service databases to delineate contract commencement for reporting purposes	120 days	Fri 20-01-24	Thu 20-07-09	
1	Develop and Implement an Non Technical Energy Loss Reduction Plan	60 days	Fri 20-01-24	Thu 20-04-16	▼
2	Determine crews working fraud investigations & needs for fraud investigations. Determine number of crews to maintain NTL and uncollectables at a "sustain level"	20 days	Fri 20-01-24	Thu 20-02-20	
3	Calculate lost revenue	60 days	Fri 20-01-24	Thu 20-04-16	
4	Assess current targets for non-technical losses per year and number of cut-outs for non-payment to determine manpower requirements	60 days	Fri 20-01-24	Thu 20-04-16	
95		60 days	Fri 20-01-24	Thu 20-04-16	
	Systems. Determine software needed				

Т	ask Name	Duration	Start	Finish	October J	lanuary April	July	October	Januar
597		60 days	Fri 20-01-24	Thu 20-04-16					
598	Develop a Quality Culture Integration Plan	120 days	Fri 20-01-24	Thu 20-07-09		-			
99	Develop a Quality Culture through training and organizational changes	40 days	Fri 20-01-24	Thu 20-03-19					
00	Develop a document retention, storage and control process	40 days	Fri 20-01-24	Thu 20-03-19					
01	Build Quality Assurance into the new Customer Service Manual, consistent with Contract Standards, Annex I		Fri 20-01-24	Thu 20-07-09					
	(Scope of Services) and Annex XI (Performance Metrics)								
02	Develop Balanced Scorecard template as a concept	30 days	Fri 20-01-24	Thu 20-03-05					
03	Define a Continuous Improvement program goals and schedule	30 days	Fri 20-03-06	Thu 20-04-16					
04	Establish Integration Between Customer Services & T&D Ops	100 days	Fri 20-02-07	Thu 20-06-25		<b>—</b>			
)5	• • • • • • • • • • • • • • • • • • • •	20 days	Fri 20-02-07	Thu 20-03-05					
16		60 days	Fri 20-03-06	Thu 20-05-28			J		
07		20 days	Fri 20-05-29	Thu 20-06-25					
08	· · · · · · · · · · · · · · · · · · ·		Wed 20-01-01					<del></del>	
09		•							
		20 days	Wed 20-01-01	Tue 20-01-28	_				
10	• • • • • • • • • • • • • • • • • • • •	80 days	Fri 20-01-24	Thu 20-05-14		•			
11		20 days	Fri 20-01-24	Thu 20-02-20					
12	Develop a joint IT / OT Transition Plan	10 days	Fri 20-02-21	Thu 20-03-05					
13	Develop a joint IT / OT Acceptance Criteria	10 days	Fri 20-03-06	Thu 20-03-19					
14	Present Plan to Transition Leadership for approval	5 days	Fri 20-03-20	Thu 20-03-26		•			
15	Revise Plan per Transition Leadership comments / recommendations	5 days	Fri 20-03-27	Thu 20-04-02					
16	Submit IT / OT Communication Plan and Acceptance Criteria to Administrator	10 days	Fri 20-04-03	Thu 20-04-16					
17	Develop an IT/OT Communication Plan	10 days	Fri 20-04-17	Thu 20-04-30					
18	Publish plan accordingly	10 days	Fri 20-05-01	Thu 20-05-14					
19	5.b Identification and analysis of gaps	40 days	Fri 20-01-24	Thu 20-03-19					
20	5.c Evaluating IT/OT Applications and Infrastructure	60 days	Wed 20-01-29	Tue 20-04-21					
21	Develop a Comprehensive List and Assessment of All OT Application	60 days	Wed 20-01-29	Tue 20-04-21					
22		60 days	Wed 20-01-29	Tue 20-04-21					
23		60 days	Wed 20-01-29	Tue 20-04-21					
24		60 days	Wed 20-01-29	Tue 20-04-21					
25		60 days	Wed 20-01-29	Tue 20-04-21					
26	• , , ,	60 days	Wed 20-01-29	Tue 20-04-21					
27		60 days	Wed 20-01-29	Tue 20-04-21					
28		60 days	Wed 20-01-29	Tue 20-04-21					
29		40 days	Wed 20-01-29	Tue 20-03-24					
30	, , , , , , , , , , , , , , , , , , , ,	40 days	Wed 20-01-29	Tue 20-03-24					
31		60 days	Wed 20-01-29	Tue 20-04-21		-			
32		60 days	Wed 20-01-29	Tue 20-04-21		-			
33		60 days	Wed 20-01-29	Tue 20-04-21					
34		60 days	Wed 20-01-29	Tue 20-04-21					
35		60 days	Wed 20-01-29	Tue 20-04-21					
36		60 days	Wed 20-01-29	Tue 20-04-21					
37		60 days	Wed 20-01-29	Tue 20-04-21					
38		60 days	Wed 20-01-29	Tue 20-04-21					
39	End Point Configuration Management System	60 days	Wed 20-01-29	Tue 20-04-21					
40		60 days	Wed 20 01 29 Wed 20-01-29	Tue 20-04-21	-				
41		40 days	Wed 20-01-29	Tue 20-03-24					
42	· · · · · · · · · · · · · · · · · · ·	40 days	Wed 20-01-29	Tue 20-03-24	-				
13		60 days	Wed 20-01-29	Tue 20-04-21	-	•			
	<b>0</b> .	60 days	Wed 20-01-29	Tue 20-04-21	-				
44		oo uays			_				
44 45		60 days	Wed 20-01-29	Tue 20-04-21		_			

Task Na		Duration	Start		October January April	July Octobe
8	· · · · · · · · · · · · · · · · · · ·	90 days	Wed 20-01-29	Tue 20-06-02		
48		60 days	Wed 20-01-29	Tue 20-04-21 Tue 20-04-21		
50		60 days	Wed 20-01-29			
51		80 days	Wed 20-01-29	Tue 20-05-19		
	- · · · - · · - · · · · · · · · · · · ·	60 days	Wed 20-03-11	Tue 20-06-02		
	, , , , ,	60 days	Fri 20-01-24	Thu 20-04-16		-
	•	60 days	Wed 20-03-11	Tue 20-06-02		•
54		60 days	Wed 20-03-11	Tue 20-06-02		
55		60 days	Wed 20-03-11	Tue 20-06-02	_	
	mplement IT Systems (GL & Payroll) - Transition Period	180 days	Fri 20-03-20	Thu 20-11-26	•	
57	· · · · · · · · · · · · · · · · · · ·	40 days	Fri 20-03-20	Thu 20-05-14		
8	Standup HCM System to support hiring process (assuming Oracle cloud)	100 days	Fri 20-03-20	Thu 20-08-06		
i9	Standup/Configure Payroll System (assuming Oracle cloud)	180 days	Fri 20-03-20	Thu 20-11-26		
50	Standup Kronos, Integrate with Payroll System	180 days	Fri 20-03-20	Thu 20-11-26		
51	Establish internal push/pull reporting needs	60 days	Fri 20-09-04	Thu 20-11-26		
<sup>52</sup> C	Commencement Cutover Planning	60 days	Wed 20-01-29	Tue 20-04-21	-	
3	Develop a comprehensive list of all IT activities required during Commencement Cutover Period	60 days	Wed 20-01-29	Tue 20-04-21		
64	· · · · · · · · · · · · · · · · · · ·	60 days	Wed 20-01-29	Tue 20-04-21		
5 <b>T</b>	· · · · · · · · · · · · · · · · · · ·	40 days	Wed 20-01-29	Tue 20-03-24	-	
6		30 days	Wed 20-01-29	Tue 20-03-10		
7		40 days	Wed 20-01-29	Tue 20-03-24		
<sup>8</sup> F		40 days	Wed 20-01-29	Tue 20-03-24	-	
59		40 days	Wed 20-01-29	Tue 20-03-24		
0	, , , , ,	40 days	Wed 20-01-29	Tue 20-03-24		
1 (	· ·	80 days	Wed 20-01-29	Tue 20-05-19	•	
2	•	40 days	Wed 20-01-29	Tue 20-03-24		
3	·	40 days	Wed 20-01-29 Wed 20-03-25	Tue 20-05-24		
_						
5 <b>I</b>	•	120 days	Wed 20-01-29	Tue 20-07-14		•
6	, ,	40 days	Wed 20-01-29	Tue 20-03-24		
	, , , , , , , , , , , , , , , , , , , ,	120 days	Wed 20-01-29	Tue 20-07-14		
78	Implement targeted retention strategies focusing on those IT staff who are high potential and/or high risk		Wed 20-01-29	Tue 20-07-14		
	Convey new training and career opportunities to acquired IT staff, particularly those identified as key talent	· ·	Wed 20-01-29	Tue 20-07-14		
	•	80 days	Wed 20-01-29	Tue 20-05-19		
0	, , ,	20 days	Wed 20-01-29	Tue 20-02-25		
31	· · · · · · · · · · · · · · · · · · ·	60 days	Wed 20-02-26	Tue 20-05-19		
_	•	82 days	Wed 20-01-29	Thu 20-05-21		
33		20 days	Wed 20-01-29	Tue 20-02-25	_	
34		40 days	Wed 20-02-26	Tue 20-04-21		
35		1 day	Wed 20-05-20	Wed 20-05-20	1	
86	•	1 day	Thu 20-05-21	Thu 20-05-21		
37	•	1 day	Thu 20-05-21	Thu 20-05-21		
8 6.	Financial Management	235 days	Fri 19-12-20	Thu 20-11-12		
<sup>19</sup> 6		10 days	Fri 19-12-20	Thu 20-01-02		
		10 days	Fri 19-12-20	Thu 20-01-02		
		-		Thu 20-01-02		
-		10 days	Fri 19-12-20			
		20 days	Fri 20-01-24	Thu 20-02-20		
		10 days	Fri 19-12-20	Thu 20-01-02	_	
	6.f Preparing Initial Budgets and other Financial Forecasts	210 days	Fri 20-01-24	Thu 20-11-12		
95	Initial Budgets	210 days	Fri 20-01-24	Thu 20-11-12	-	-

		Duration	Start	Finish	October January April July October January
596		5 days	Fri 20-01-24	Thu 20-01-30	
97		20 days	Fri 20-01-31	Thu 20-02-27	
8	<u> </u>	1 day	Fri 20-02-28	Fri 20-02-28	
99	Work streams complete budgets for their areas	30 days	Mon 20-04-27	Fri 20-06-05	
00	•	3 days	Mon 20-03-23	Wed 20-03-25	•
01	Solicit Generation Budget	2 days	Mon 20-03-23	Tue 20-03-24	<u> </u>
02	Generation Budget is received from Owner	1 day	Wed 20-03-25	Wed 20-03-25	I
03	•	10 days	Mon 20-06-08	Fri 20-06-19	•
04	Consolidate Initial Budgets from all areas	10 days	Mon 20-06-08	Fri 20-06-19	
05	Initial Budget Reviews	11 days	Mon 20-06-08	Mon 20-06-22	₩
06	Transition Executive Leaders review revisions and approve submission of Initial Budgets to Administrator	1 day	Mon 20-06-22	Mon 20-06-22	
07	Include Liability Waiver in Budget submission	10 days	Mon 20-06-08	Fri 20-06-19	•
08	Submit Initial Budgets to Administrator	0 days	Mon 20-06-22	Mon 20-06-22	<b>*</b>
)9	Initial Budgets to Administrator	27 days	Tue 20-06-23	Wed 20-07-29	•
10	Administrator reviews Initial Budgets (up to 30 days to review & comment)	20 days	Tue 20-06-23	Mon 20-07-20	
11		0 days	Mon 20-07-20	Mon 20-07-20	<b>*</b>
12	Transition Executive Leaders review comments and recommendations from Administrator	1 day	Tue 20-07-21	Tue 20-07-21	I
L3	Resolve comments and recommendations with Administrator	5 days	Wed 20-07-22	Tue 20-07-28	0
L4	Submit Initial Budgets for submission to PREB (within 30 days of comments from Administrator	1 day	Wed 20-07-29	Wed 20-07-29	I
15	Submission of Initial Budgets to PREB for Approval	76 days	Thu 20-07-30	Thu 20-11-12	<b>—</b>
16		5 days	Thu 20-07-30	Wed 20-08-05	•
.7		60 days	Thu 20-07-30	Wed 20-10-21	
8	, , , , , , , , , , , , , , , , , , ,	3 days	Thu 20-10-22	Mon 20-10-26	0
.9	· · · · · · · · · · · · · · · · · · ·	5 days	Tue 20-10-27	Mon 20-11-02	0
20	·	2 days	Tue 20-11-03	Wed 20-11-04	1
1		5 days	Thu 20-11-05	Wed 20-11-11	0
22	· · · · · · · · · · · · · · · · · · ·	1 day	Thu 20-11-12	Thu 20-11-12	I
23		1 day	Thu 20-11-12	Thu 20-11-12	1
24		0 days	Thu 20-11-12	Thu 20-11-12	<b>*</b>
25		20 days	Fri 19-12-20	Thu 20-01-16	
26		10 days	Fri 20-01-24	Thu 20-02-06	
27					
	, ,	10 days	Fri 19-12-20	Thu 20-01-02	
28		168 days	Fri 19-12-20	Tue 20-08-11	
29	process)	2 days	Fri 19-12-20	Mon 19-12-23	
30	Receive all necessary authorizations and approvals from banking institution, regulatory and all other authorities	20 days	Tue 19-12-24	Mon 20-01-20	
31	Review and, if necessary, change and align the Chart of Accounts to policies and procedures to ensure understanding and transparency for OpCo and ServCo	20 days	Wed 20-01-01	Tue 20-01-28	
32	Ensuring required IT Systems and assets necessary to provide Finance and Accounting Services are integrated and working as intended, assuming the use of PREPA's ERP Oracle platform	80 days	Wed 20-01-29	Tue 20-05-19	
33	Identify and interview all stakeholders to identify gaps and to determine the population and frequency of the existing reports as well as compiling a list of report expectations not currently being met. Identify new reports that add value to PREPA	60 days	Fri 20-01-24	Thu 20-04-16	
34	•	20 days	Fri 20-04-17	Thu 20-05-14	=
35	Demonstrated ability by OpCo to prepare, produce and submit per required O&M Service Agreement: a. financial, accounting, and other analytical records and reports b. filings to regulatory agencies c. financial statements in accordance with GAAP	60 days	Wed 20-05-20	Tue 20-08-11	
36	Identification and assessment of and attain practical familiarity with all processes, policies and procedures,	60 days	Wed 20-01-29	Tue 20-04-21	
	key physical resources, and key human resources associated with performing operations associated with the O&M Service Agreement.	·			

) Т	ssk Name	Duration	Start	Finish	October January April July October January
737	Assess the current control framework utilizing the COSO framework as a benchmark and perform a control		Wed 20-01-29	Tue 20-04-21	October Indianal Abril 1901
	risk assessment	,			
738	Identified financial/accounting internal controls resulting in material weakness ("MW") and significant deficiencies ("SD") have been communicated and agreed mitigation plan in place	40 days	Wed 20-03-11	Tue 20-05-05	
739	Identify and evaluate finance and accounting third-party support and determine which contracts should be maintained/reviewed/terminated	40 days	Fri 20-01-24	Thu 20-03-19	
740	Evaluate the existing payroll process and Labor Cost Reporting and ensure necessary changes/communication are in place to ensure a proper transition to ServCo payroll system	60 days	Fri 20-01-24	Thu 20-04-16	
741		60 days	Fri 20-01-24	Thu 20-04-16	<b>—</b>
742	Review and agree on the carve out approach, plan and delivery of restructured PREPA T&D into Gridco	40 days	Fri 20-01-24	Thu 20-03-19	_
743	(verification of opening balances)	,			
743	Identified areas of non-compliance are communicated and agreed plan to address any outstanding Regulatory and Finance issues are agreed upon. Open areas remained to be assessed are also communicated to the PREPA	60 days	Fri 20-01-24	Thu 20-04-16	
744	Have reorganization hierarchy and staffing requirements completed (budget precursor)	40 days	Fri 20-01-24	Thu 20-03-19	
745	Preparation of detailed initial and long term Operating and Capital Budgets	13 days	Fri 20-03-20	Tue 20-04-07	
746	7. FEMA Funds and Federal Funding Procurement Manual	154 days	Wed 20-01-01	Mon 20-08-03	•
747	Federal Funds Management	120 days	Fri 20-01-24	Thu 20-07-09	
748	Set up Governance Framework	30 days	Fri 20-01-24	Thu 20-03-05	<b>—</b>
749	Examine the necessity for specific policies, procedures and desk guides to help staff comply with and properly manage federal grant funding	30 days	Fri 20-01-24	Thu 20-03-05	_
750	Policies and Procedures	45 days	Fri 20-01-24	Thu 20-03-26	•
751	Set up a compendium of policies and procedures	45 days	Fri 20-01-24	Thu 20-03-26	
752	Staffing Plan	40 days	Fri 20-01-24	Thu 20-03-19	•
753	Identify a staffing plan that will address the ebb and flow of work required to manage the complete lifecycle of PA and HMA (sub)grants	40 days	Fri 20-01-24	Thu 20-03-19	_
754	Surge Staffing	60 days	Fri 20-01-24	Thu 20-04-16	•
755	Utilize existing HR staff at San Juan office to fill required positions during transition	60 days	Fri 20-01-24	Thu 20-04-16	
756	Prioritize hiring of PREPA employees	60 days	Fri 20-01-24	Thu 20-04-16	
757	Deploy and demobilize additional staff based upon the recovery milestones	60 days	Fri 20-01-24	Thu 20-04-16	
758	Project Worksheet Assessment (Also covered under Section 4.3.j)	100 days	Fri 20-01-24	Thu 20-06-11	•
759	Conduct an assessment of the status each 428 Project Worksheets and the bundled projects included in each	100 days	Fri 20-01-24	Thu 20-06-11	
760	Collaborate closely with COR3 and PREPA vendors currently assisting PREPA with disaster recovery	100 days	Fri 20-01-24	Thu 20-06-11	
761	Recovery Project Sequencing	30 days	Fri 20-01-24	Thu 20-03-05	
762	Collaborate with the Operator to determine project sequence optimization	10 days	Fri 20-01-24	Thu 20-02-06	
763	Reorder the prioritization of the commencement of projects based upon an analysis conducted by the Operator	10 days	Fri 20-02-07	Thu 20-02-20	
764	Help the Operator reorder priorities with COR3 and FEMA as necessary to achieve the objectives	10 days	Fri 20-02-21	Thu 20-03-05	
765	• •	120 days	Fri 20-01-24	Thu 20-07-09	
766	•	120 days	Fri 20-01-24	Thu 20-07-09	
767	Obtain and maintain all relevant documentation such as information that supports PW 428 estimates, damage descriptions and dimensions, 406 justification, and any applications already submitted for HMA grant programs	120 days	Fri 20-01-24	Thu 20-07-09	
768	Project Procurement Planning	60 days	Fri 20-01-24	Thu 20-04-16	•
769	Ensure procurement policy within the Disaster Recovery compendium meets all Federal, Territorial, and O&M Agreement requirements between the Consortium and P3	60 days	Fri 20-01-24	Thu 20-04-16	
770	7.d Drafting, revising and finalizing Federal Funding Procurement Manual	154 days	Wed 20-01-01	Mon 20-08-03	<b>▼</b>
771	Develop Chapter 3: Procurement of the Disaster Reovery Federal Funds Assistance Guide	20 days	Fri 20-01-24	Thu 20-02-20	_
772	Draft the Federal Funding Procurement Manual	5 days	Fri 20-02-21	Thu 20-02-27	•
773	•	75 days	Fri 20-02-28	Thu 20-06-11	-
			Fri 20-02-28	Fri 20-02-28	-1

	ask Name	Duration	Start	Finish	October January April July October Januar
775	Address comments and / or revise	3 days	Mon 20-03-02	Wed 20-03-04	1
776	Resubmit Final Federal Procurement Manual to Management Co. for Approval	1 day	Thu 20-03-05	Thu 20-03-05	1
77	Submit to Administrator for review, comments and / or recommendations (45 days)	30 days	Fri 20-03-06	Thu 20-04-16	
78	Management Co. meets with Administrator to resolve comments and / or recommendations	5 days	Fri 20-04-17	Thu 20-04-23	•
79	Submit Federal Funding Procurement Manual to COR3 for review and approval	20 days	Fri 20-04-24	Thu 20-05-21	_
30	Resolve comments and recommendations with COR3	5 days	Fri 20-05-22	Thu 20-05-28	•
31	Approvals received from Management Co., Administrator and COR3	10 days	Fri 20-05-29	Thu 20-06-11	
32	Federal Funding Procurement Manual Approval by FEMA and DHS OIG	154 days	Wed 20-01-01	Mon 20-08-03	•
33	Prepare Federal Funding Procurement Manual submission to FEMA and DHS OIG	3 days	Wed 20-01-01	Fri 20-01-03	1
4	Submit Federal Funding Procurement Manual to FEMA and DHS OIG for review and approval	1 day	Fri 20-06-12	Fri 20-06-12	1
5	Meet with FEMA and DHS OIG to answer & resolve questions	5 days	Mon 20-06-15	Fri 20-06-19	0
36	FEMA and DHS OIG review Federal Funding Procurement Manual	30 days	Mon 20-06-22	Fri 20-07-31	
37	FEMA and DHS OIG approve Federal Funding Procurement Manual	1 day	Mon 20-08-03	Mon 20-08-03	1
88	8. Staffing for Front-End Transition Period	185 days	Fri 19-12-20	Thu 20-09-03	•
39	8.d Draft, revise and finalize Operator Employment Requirements	185 days	Fri 19-12-20	Thu 20-09-03	▼
90	Recruiting and Staffing	185 days	Fri 19-12-20	Thu 20-09-03	<b>—</b>
1	Redesign and Staff New Organization	102 days	Mon 20-03-16	Tue 20-08-04	•
2	Complete job descriptions	20 days	Mon 20-03-16	Fri 20-04-10	
3	Create new organizational structure	20 days	Mon 20-03-23	Fri 20-04-17	
4	Conduct screening interviews with all PREPA employees	60 days	Mon 20-03-23	Fri 20-06-12	
15	Clean hire all employees into ServCo on day one of the commencement period	20 days	Wed 20-05-13	Tue 20-06-09	
16	Identify staffing vacancies	20 days	Wed 20-05-13	Tue 20-07-07	
7	Define plan to fill vacancies	20 days	Wed 20-00-10	Tue 20-08-04	
8	Develop Labor Relations Strategy and Action Plan	146 days	Fri 19-12-20	Fri 20-07-10	
99	Create ServCo's initial Terms and Conditions of Employment (T&C) in accordance with federal and	20 days	Fri 19-12-20	Thu 20-01-16	
	Puerto Rican employment laws	20 days	FII 19-12-20	111u 20-01-16	_
00	Establish initial communications/relationships with the Union Leadership early to demonstrate ServCo	's 5 davs	Fri 20-01-17	Thu 20-01-23	•
	desire to negotiate and bargain in good faith				
01	In coordination with ServCo's leadership, create ServCo proposals to bring to the negotiating table	20 days	Fri 20-01-24	Thu 20-02-20	
02	Notify unions of ServCo's initial T&C	5 days	Fri 20-01-24	Thu 20-01-30	0
03	Prepare, review and issue offer letters to desired applicants with ServCo's new T&C of Employment	20 days	Mon 20-06-15	Fri 20-07-10	
)4	Proposed Recruitment and Staffing Plan	176 days	Fri 19-12-20	Fri 20-08-21	•
)5	Determine recruiting tool to be used (current system or Quanta's ATS)	1 day	Fri 19-12-20	Fri 19-12-20	I
06	Utilize ATS as a bridging tool	60 days	Mon 19-12-23	Fri 20-03-13	
)7	Coordinate with each department to develop a department specific people strategy plan	20 days	Mon 20-03-16	Fri 20-04-10	
18	Determine number of roles needed in each department. Finalize job descriptions and pre-hiring	20 days	Mon 20-03-23	Fri 20-04-17	
	assessment tools per role	20 00,5		20 0 . 17	
9	Coordinate with Administrator on details of timing of jobs offers for employees	10 days	Mon 20-04-20	Fri 20-05-01	
.0	Post all job descriptions identified for each department	15 days	Mon 20-02-24	Fri 20-03-13	
.1	Ensure current PREPA employees apply for new, desired roles	5 days	Mon 20-03-16	Fri 20-03-20	•
L2	Interview PREPA employees and external applicants who have applied for jobs	60 days	Mon 20-03-23	Fri 20-06-12	
13	Create offer letters with ServCo's T&C's & conduct pre employment screening	60 days	Mon 20-04-06	Fri 20-06-26	
14	Design Comprehensive Onboarding Program to Enhance the "Employee Experience"	95 days	Mon 20-04-13	Fri 20-08-21	
.5	Plan new hire orientation and welcome to ServCo	15 days	Mon 20-04-13	Fri 20-05-01	_
.6	Create policies and procedures	20 days	Mon 20-05-04	Fri 20-05-29	
.7	Identify external hires from outside PREPA into ServCo	20 days	Mon 20-06-01	Fri 20-06-26	
.8	Develop payroll and benefits package during transition	20 days	Mon 20-06-29	Fri 20-00-24	
.9	Structure consulting package to bridge transition	20 days	Mon 20-07-27	Fri 20-07-24 Fri 20-08-21	_
20	Structure consulting package to bridge transition  Stand Up Human Capital Management (HCM)				_
		103 days	Fri 19-12-20	Tue 20-05-12	<u> </u>
1	Research vendors that will support the operational needs of the organization. This system should	1 day	Fri 19-12-20	Fri 19-12-20	· '
21	include a time and attendance module				

) Tas	k Name	Duration	Start	Finish	October January April July October January
823	Select vendor and consultant for HCM implementation	1 day	Fri 19-12-20	Fri 19-12-20	1
824	Work to facilitate data feeds for vendors and finance	60 days	Mon 19-12-23	Fri 20-03-13	
825	Build out training material for new system/upgrades	10 days	Mon 20-03-16	Fri 20-03-27	•
826	Develop communication and change management	10 days	Mon 20-03-30	Fri 20-04-10	•
827	Complete integration of all HCM modules	1 day	Mon 20-04-13	Mon 20-04-13	I
828	Testing for HCM	20 days	Tue 20-04-14	Mon 20-05-11	_
829	Go live with HCM system upgrades	1 day	Tue 20-05-12	Tue 20-05-12	I
830	Communication	160 days	Fri 20-01-24	Thu 20-09-03	•
831	Create a Comprehensive Employee Communication Strategy	2 days	Wed 20-05-13	Thu 20-05-14	₩
832	Identify key milestones of the ServCo transition and commencement	1 day	Wed 20-05-13	Wed 20-05-13	I I
333	Create documents in both Spanish and English	1 day	Thu 20-05-14	Thu 20-05-14	I I
834	ServCo Leadership to Deliberately Define and Communicate Culture, Mission Statement and Core Values	160 days	Fri 20-01-24	Thu 20-09-03	
835	Conduct town hall meetings, frequently asked questions (FAQ's) memos, newsletters, group sessions, one-on-one meetings, intranet updates and other forms of media to communicate applicable employee and ServCo information.	120 days	Fri 20-01-24	Thu 20-07-09	
836	Establish a Communications transition team of stakeholders to approve all communications to employees during transition and commencement.	120 days	Fri 20-01-24	Thu 20-07-09	
837	Create an employee value proposition that defines ServCo and the reason why employees will want to stay or come work with the organization.	20 days	Fri 20-07-10	Thu 20-08-06	-
838	Implement employee ethics helpline for employees to provide feedback anonymously/without fear o reprisal.	f 20 days	Fri 20-08-07	Thu 20-09-03	
339	Training (Workforce Development)	80 days	Fri 20-01-24	Thu 20-05-14	•
40	Develop Employee Training Programs	78 days	Fri 20-01-24	Tue 20-05-12	•
41	Assess employee training policies, standards and practices	40 days	Fri 20-01-24	Thu 20-03-19	
42	Assess education, training, curriculum, career paths, and facilities	40 days	Fri 20-02-21	Thu 20-04-16	
343	Stand up an Learning Management System (LMS) module of the HCM	10 days	Wed 20-04-29	Tue 20-05-12	
344	Assess and Observe Employees for Training	60 days	Fri 20-02-21	Thu 20-05-14	-
345	In coordination with department leadership, complete a gap analysis and subsequent phased plan to comprehensively address findings	60 days	Fri 20-02-21	Thu 20-05-14	
346	Create Go-Forward Training Plans (immediate and long-term)	20 days	Fri 20-04-03	Thu 20-04-30	<b>=</b>
47	Develop Employee Retirement Plan	80 days	Fri 20-01-24	Thu 20-05-14	•
48	Pension	80 days	Fri 20-01-24	Thu 20-05-14	•
49	Establish a Retirement Plan committee	5 days	Fri 20-01-24	Thu 20-01-30	0
50	Research administration (outsourcing) for plan, actuarial and consultant	5 days	Fri 20-01-31	Thu 20-02-06	•
51	Sign contract with consultant and actuary	5 days	Fri 20-02-07	Thu 20-02-13	0
52	Research extensively on viable SIP plan design	10 days	Fri 20-02-14	Thu 20-02-27	
53	Talk to Union and gain buy-in	20 days	Fri 20-01-24	Thu 20-02-20	
54	Create on-line employee retirement portal for retirement estimate calculations and retirement execution	60 days	Fri 20-02-21	Thu 20-05-14	
55	Stand up employee retirement portal	5 days	Wed 20-05-06	Tue 20-05-12	•
356	Develop extensive employee communication. This will include printed material, town halls, one on one. It will also include election forms for employees to choose legacy pension or new ServCo retirement plan	60 days	Wed 20-02-19	Tue 20-05-12	
357	•	1 day	Wed 20-05-13	Wed 20-05-13	I
58	Health and Welfare	55 days	Fri 20-01-24	Thu 20-04-09	•
59	Engage broker and consultant	5 days	Fri 20-01-24	Thu 20-01-30	0
60	Review existing program	5 days	Fri 20-01-31	Thu 20-02-06	•
61	Assess and implement retiree health care obligations	5 days	Fri 20-02-07	Thu 20-02-13	•
62	Stand up new Health and Welfare plan	10 days	Fri 20-02-14	Thu 20-02-27	
63	· · · · · · · · · · · · · · · · · · ·	10 days	Fri 20-02-28	Thu 20-03-12	•
64	Benchmark plans for design, cost and contributions	10 days	Fri 20-02-28	Thu 20-03-12	
365		10 days	Fri 20-03-13	Thu 20-03-26	

	Fask Name	Duration	Start	Finish	October January April July October Janu
366	Implement stop loss coverage - conduct RFP if necessary	10 days	Fri 20-03-27	Thu 20-04-09	
67	Review of PREPA's Past Claims Experience	15 days	Fri 20-01-24	Thu 20-02-13	•
68	Request past claims experience from PREPA	5 days	Fri 20-01-24	Thu 20-01-30	
9	Identify cost drivers	10 days	Fri 20-01-31	Thu 20-02-13	
0	Occupational Health and Wellness	100 days	Fri 20-01-24	Thu 20-06-11	
71	Evaluate services of the Occupational Health and Wellness Department	20 days	Fri 20-01-24	Thu 20-02-20	
72	Ensure compliance with all labor, privacy and patient treatment laws	20 days	Fri 20-02-21	Thu 20-03-19	
73	Perform a cost analysis and compare with outsourcing all areas; Wellness, D&A Testing, Fit for Duty, etc.	20 days	Fri 20-03-20	Thu 20-04-16	<b>—</b>
74	Based on above audit, begin transition to outsourcing or begin to assess area for improvement/efficiencies	40 days	Fri 20-04-17	Thu 20-06-11	
'5	Compliance	120 days	Fri 20-01-24	Thu 20-07-09	•
76	Review compliance of Federal and local employment laws	20 days	Fri 20-01-24	Thu 20-02-20	<b>—</b>
7	Assess resources dedicated to ADA and EEOC	20 days	Fri 20-02-21	Thu 20-03-19	
8	Establish written policies and procedures	20 days	Fri 20-03-20	Thu 20-04-16	_
9	Auditing and monitoring of systems	60 days	Fri 20-04-17	Thu 20-07-09	•
0	Plan internal quality audits by reviewing past audits	20 days	Fri 20-04-17	Thu 20-05-14	
1	Conduct audits by including relevant stakeholders	20 days	Fri 20-05-15	Thu 20-06-11	
2	Report on audits	20 days	Fri 20-06-12	Thu 20-07-09	
3	Engagement	60 days	Wed 20-03-11	Tue 20-06-02	-
4	Design employee engagement plan that will allow employees to adjust to new leadership, direction and generate excitement		Fri 20-03-20	Thu 20-05-14	_
35	Develop plans for employee and family picnics with ServCo.	60 days	Wed 20-03-11	Tue 20-06-02	
6	Design a plan for employee appreciation events	60 days	Wed 20-03-11	Tue 20-06-02	
7		30 days	Wed 20-04-22	Tue 20-06-02	
8	Create a feedback process where leaders value contributions without fear of retaliation throughout the entire process		Wed 20-05-06	Tue 20-06-02	-
9	Design engagement and pulse surveys	20 days	Wed 20-05-06	Tue 20-06-02	
0	Develop a Comprehensive Community Investment Plan	30 days	Fri 20-03-20	Thu 20-04-30	•
1	Reach out to community leaders	10 days	Fri 20-03-20	Thu 20-04-02	
2	Talk to employees	10 days	Fri 20-04-03	Thu 20-04-16	
3	Research not-for-profit organizations in the community	5 days	Fri 20-04-17	Thu 20-04-23	
4	Enquire about schools in need	5 days	Fri 20-04-24	Thu 20-04-23	
5					
	9. Additional Front-End Transition Period Activities	187 days	Wed 20-01-01	Thu 20-09-17	· ·
5	9.c Regulatory Approvals and Coordinating Subsequent Implementation	187 days	Wed 20-01-01	Thu 20-09-17	•
7		1 day	Fri 20-01-24	Fri 20-01-24	I
8	9.c.i Genco Shared Services and the related Shared Services Agreement	121 days	Fri 20-01-24	Fri 20-07-10	<b>▼</b>
9	Generation	121 days	Fri 20-01-24	Fri 20-07-10	•
0	Physical Assessment of Each Plant's Asset Condition	121 days	Fri 20-01-24	Fri 20-07-10	<b>—</b>
1	Site assessment and walk through of each generation facility and related infrastructure	120 days	Mon 20-01-27	Fri 20-07-10	
2	Identify any major safety or operational red-flag issue that needs immediate actions	120 days	Fri 20-01-24	Thu 20-07-09	
)3	Assess status of any on-going capital modification or major maintenance projects	120 days	Fri 20-01-24	Thu 20-07-09	
4	Review any near-term planned Capital Project for each plant to validate rationale	120 days	Fri 20-01-24	Thu 20-07-09	
15				Thu 20-07-09	
16	, , , , , , , , , , , , , , , , , , , ,	120 days	Fri 20-01-24		
	(substations, warehouses, data centers)	120 days	Fri 20-01-24	Thu 20-07-09	
7	Review emerging perspective on ring-fencing assets, systems, and people	120 days	Fri 20-01-24	Thu 20-07-09	
8		120 days	Fri 20-01-24	Thu 20-07-09	
19	Review how economic merit dispatch priorities are (informally) estimated and established	120 days	Fri 20-01-24	Thu 20-07-09	
LO	Review recent "forecast to actual" track record to assess accuracy of generation forecast	120 days	Fri 20-01-24	Thu 20-07-09	
1		120 days	Fri 20-01-24	Thu 20-07-09	

) Tas	k Name	Duration	Start	Finish	October January April July October January
912		120 days	Fri 20-01-24	Thu 20-07-09	
913	•	120 days	Fri 20-01-24	Thu 20-07-09	
914		120 days	Fri 20-01-24	Thu 20-07-09	
915		120 days	Fri 20-01-24	Thu 20-07-09	
16	Begin implementing on a shadow basis, any contract administration changes contemplated as part of		Fri 20-01-24	Thu 20-07-09	
	ring-fencing and planned unbundling scenarios (non-binding, no financial penalties for non-compliance)	120 days	111 20-01-24	111u 20-07-03	
917	Review fuel consumption trends for each plant and total fleet	120 days	Fri 20-01-24	Thu 20-07-09	
18	Support completion of GridCo-GenCo PPOA acting as agent for GridCo and as Dispatch Manager	100 days	Fri 20-01-24	Thu 20-06-11	•
19	Review existing thermal PPOAs in greater depth for operating and dispatching impacts on T&D opera	100 days	Fri 20-01-24	Thu 20-06-11	
20	Review existing No. 2 and No. 6 fuel contracts in greater depth for operating and dispatching impacts on T&D operator	100 days	Fri 20-01-24	Thu 20-06-11	
21	Review provisions of Costa Sur take-or-pay contract	100 days	Fri 20-01-24	Thu 20-06-11	
22	Review performance and compliance record of AES/Ecoelectrica from contract oversight perspective	100 days	Fri 20-01-24	Thu 20-06-11	
	(what info is typically reviewed, any management actions taken, any open issues?)				
923	Review San Juan fuel conversion and related infrastructure project status, timeline and expenditure forecast	100 days	Fri 20-01-24	Thu 20-06-11	
24	Review Palo Seco fuel conversion and related infrastructure project status, timeline and expenditure forecast	100 days	Fri 20-01-24	Thu 20-06-11	
25	Review any other natural gas thermal or infrastructure projects project status, timeline and expenditure forecast	100 days	Fri 20-01-24	Thu 20-06-11	
26	Review all solar PPOA currently under active status to understand status, pricing, timeline and rationale why still being negotiated	100 days	Fri 20-01-24	Thu 20-06-11	
27	Define longer term PPOA solicitation schedule to integrate IRP concepts with potential T&D impacts and to develop timeline for future RFPs	100 days	Fri 20-01-24	Thu 20-06-11	
28	Review status and timeline of any active RFQ for new generation	100 days	Fri 20-01-24	Thu 20-06-11	
29	Legal and Regulatory Requirements and Complexities from Planned Unbundling	120 days	Fri 20-01-24	Thu 20-07-09	•
30	Define process to be adopted to interface with legacy fleet (e.g. necessary contracts, authorizations, performance tracking, regulatory reporting)	120 days	Fri 20-01-24	Thu 20-07-09	
931	Define and negotiate pricing framework model for how PREPA legacy fleet will be compensated in future (e.g. capacity, energy, ancillary services, penalties and performance incentives) to support GridCo-GenCo PPOA	120 days	Fri 20-01-24	Thu 20-07-09	
932	Review issues related to fuel conversion to natural gas (volumes to be delivered, cost allocation for existing infrastructure, potential for non-PREPA commercial customers to acquire LNG as a result of PREPA acting as "anchor customer".)	120 days	Fri 20-01-24	Thu 20-07-09	
933	Review major planned generation capital expenditures to ensure projects are prudent and reasonable and in best interest of customers	120 days	Fri 20-01-24	Thu 20-07-09	
34	Explore opportunities for T&D Operator to install self-generation solar at it's facilities or to otherwise be involved in solar procurement (whether through GridCo-GenCo or not)	120 days	Fri 20-01-24	Thu 20-07-09	
35	Generation Shared Services Agreement	87 days	Fri 20-01-24	Mon 20-05-25	•
36	Develop methodology and timeline for negotiating shared services contract	20 days	Fri 20-01-24	Thu 20-02-20	
37	Establish negotiating team members	3 days	Fri 20-02-21	Tue 20-02-25	0
38	Identify service scope and requirements	20 days	Wed 20-02-26	Tue 20-03-24	
39	Adjust scope and requirements based on PPOA contract (if necessary)	20 days	Wed 20-03-25	Tue 20-04-21	
40	Finalize service requirements	5 days	Wed 20-04-22	Tue 20-04-28	•
11	Identify individuals and / or groups to perform service requirements	5 days	Wed 20-04-29	Tue 20-05-05	0
42	Negotiate contract (includes cost)	10 days	Wed 20-05-06	Tue 20-05-19	•
43	Finalize Contract	3 days	Wed 20-05-20	Fri 20-05-22	1
14	Both parties sign Contract	1 day	Mon 20-05-25	Mon 20-05-25	1
45	· · · · · ·	13 days	Fri 20-04-10	Tue 20-04-28	₩₩
46		1 day	Fri 20-04-10	Fri 20-04-10	I
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	ask Name	Duration	Start	Finish	October January April July October Janua
48 49	Present Plan to Management Co.	1 day	Mon 20-04-20	Mon 20-04-20	
	Revise Plan per Transition Management Co. comments / recommendations	1 day	Tue 20-04-21	Tue 20-04-21	
0	Management Co. approves Plan	1 day	Wed 20-04-22	Wed 20-04-22	
1	Provide Emergency Response Plan to Administrator	1 day	Thu 20-04-23	Thu 20-04-23	
2	Present Emergency Response Plan to Administrator	1 day	Fri 20-04-24	Fri 20-04-24	
3	Provide Emergency Response Plan to PREB	1 day	Mon 20-04-27	Mon 20-04-27	
1	Present Plan to PREB	1 day	Tue 20-04-28	Tue 20-04-28	
5	9.c.iii Non-Federal Funding Procurement Manual Approval	94 days	Wed 20-01-01	Mon 20-05-11	
,	Assess existing reference materials from PREPA and additional requirements from ManagementCo	30 days	Fri 20-01-24	Thu 20-03-05	
_	Develop Non Federal Funding Procurement Manual	60 days	Wed 20-01-01	Tue 20-03-24	
	Draft Procurement Guidelines including Contractual Provisions	30 days	Wed 20-01-01	Tue 20-02-11	
	Draft procedures for Contract Administration, oversight, and Standards and Methods	60 days	Wed 20-01-01	Tue 20-03-24	
	Coordinate with Federal Funding Manual as appropriate	5 days	Fri 20-03-06	Thu 20-03-12	
	Non-Federal Funding Procurement Manual Approval	94 days	Wed 20-01-01	Mon 20-05-11	
	Submit to Management Co. for approval	5 days	Fri 20-03-13	Thu 20-03-19	•
	Present manual contents & change accordingly	3 days	Wed 20-01-01	Fri 20-01-03	<u> </u>
	ManagementCo approves Non-Federal Funding Procurement Manual	1 day	Wed 20-01-01	Wed 20-01-01	I
	Submit to Administrator for review	1 day	Fri 20-03-20	Fri 20-03-20	I I
	Administrator reviews Manual (45 days)	29 days	Mon 20-03-23	Thu 20-04-30	_
'	Adjust Manual as needed	5 days	Fri 20-05-01	Thu 20-05-07	0
	Administrator approves Manual	2 days	Fri 20-05-08	Mon 20-05-11	0
	9.c.iv Physical Security Plan	83 days	Fri 20-01-24	Tue 20-05-19	•
	Review and understand PREPA's Physical Security Plan	15 days	Fri 20-01-24	Thu 20-02-13	
	Compile list of assets to be physically secured	1 day	Fri 20-02-14	Fri 20-02-14	I
	Physical Security of Transmission and Substation Assets	67 days	Mon 20-02-17	Tue 20-05-19	<b>▼</b>
	Assess security at substations with security guards (Data in 1.3.2.15)	1 day	Mon 20-02-17	Mon 20-02-17	1
	Assess Substations with Camera security along with support network (Data 1.3.2.13 & 1.3.2.14	1 day	Tue 20-02-18	Tue 20-02-18	I
	Identify gaps, assess effectiveness and develop initiatives / solutions	20 days	Wed 20-02-19	Tue 20-03-17	
	Develop Physical Security Plan	30 days	Wed 20-03-18	Tue 20-04-28	
	Stage locks at all substations and distribution equipment to change locks on Commencement date at Physical Security Plan is approved by the Parties	fter 15 days	Wed 20-04-29	Tue 20-05-19	
3	Physical Security Plan - Management Co. Approval	12 days	Wed 20-04-29	Thu 20-05-14	₩₩
	Submit Physical Security Plan to Management Co. for approval	1 day	Wed 20-04-29	Wed 20-04-29	1
	Management Co. reviews Plan	3 days	Thu 20-04-30	Mon 20-05-04	0
	Present Physical Security Plan to Management Co.	1 day	Tue 20-05-05	Tue 20-05-05	1
	Adjust per comments and recommendations of Management Co.	3 days	Wed 20-05-06	Fri 20-05-08	•
	Resubmit Plan for approval	1 day	Mon 20-05-11	Mon 20-05-11	1
	Management Co. approves Physical Security Plan	1 day	Tue 20-05-12	Tue 20-05-12	I
	Provide Physical Security Plan to Administrator	1 day	Wed 20-05-13	Wed 20-05-13	I
	Provide Physical Security Plan to PREB	1 day	Thu 20-05-14	Thu 20-05-14	1
+	9.c.v Data Security Plan	17 days	Wed 20-05-20	Thu 20-06-11	-
+	Compile cyber strategy roadmap into Data Security Plan	5 days	Wed 20-05-20	Tue 20-05-26	
	Submit Data Security Plan to Management Co. for approval	1 day	Wed 20-05-27	Wed 20-05-27	
+	Management Co. reviews Plan	3 days	Thu 20-05-28	Mon 20-06-01	
+	Present Physical Security Plan to Management Co.	1 day	Tue 20-06-02	Tue 20-06-01	
+	Adjust per comments and recommendations of Management Co.		Wed 20-06-03	Fri 20-06-05	
	, ,	3 days			
_	Resubmit Plan for approval  Management Co. approves Pata Security Plan	1 day	Mon 20-06-08	Mon 20-06-08	1
	Management Co. approves Data Security Plan	1 day	Tue 20-06-09	Tue 20-06-09	1
+	Provide Data Security Plan to Administrator	1 day	Wed 20-06-10	Wed 20-06-10	1
_	Provide Data Security Plan to PREB	1 day	Thu 20-06-11	Thu 20-06-11	1
	9.c.vi Vegetation Management Plan	52 days	Fri 20-01-24	Mon 20-04-06	
	Draft Vegetation Management Plan	40 days	Fri 20-01-24	Thu 20-03-19	

	ask Name	Duration	Start		October January April July October Januar
999	Submit Vegetation Management Plan to Management Co. for approval	1 day	Fri 20-03-20	Fri 20-03-20	I
000	Management Co. reviews Plan	3 days	Mon 20-03-23	Wed 20-03-25	1
01	Present Vegetation Management Plan to Management Co.	1 day	Thu 20-03-26	Thu 20-03-26	I
02	Adjust per comments and recommendations of Management Co.	3 days	Fri 20-03-27	Tue 20-03-31	•
)3	Resubmit Plan for approval	1 day	Wed 20-04-01	Wed 20-04-01	I
04	Management Co. approves Vegetation Management Plan	1 day	Thu 20-04-02	Thu 20-04-02	1
05	Provide Vegetation Management Plan to Administrator	1 day	Fri 20-04-03	Fri 20-04-03	1
06	Provide Vegetation Management Plan to PREB	1 day	Mon 20-04-06	Mon 20-04-06	Ī
07	9.c.vii System Operation Principles	169 days	Mon 20-01-27	Thu 20-09-17	
08	Jointly develop System Operation Principles	70 days	Mon 20-01-27	Fri 20-05-01	
09	Develop and discuss preliminary timeline tied to defined milestones for regulatory targets	20 days	Mon 20-01-27	Fri 20-02-21	
10	Finalize definition of any actions, protocols, or administrative requirements that might be needed to support unbundling timeline	20 days	Mon 20-02-24	Fri 20-03-20	
11	Define any contract administration changes contemplated as part of ring-fencing and planned unbundling scenarios	20 days	Mon 20-03-23	Fri 20-04-17	
12	Draft System Operation Principles	10 days	Mon 20-04-20	Fri 20-05-01	•
.3	Approval of System Operations Principles	99 days	Mon 20-05-04	Thu 20-09-17	•
14	Present System Operations Principles to Management Co. Leadership for approval	1 day	Mon 20-05-04	Mon 20-05-04	I
15	Adjust System Operations Principles per Management Co. comments and / or recommendations	3 days	Tue 20-05-05	Thu 20-05-07	•
16	Management Co. Approves System Operations Principles	1 day	Fri 20-05-08	Fri 20-05-08	I
L7	Administrator Approval of Proposed System Operations Principles (Up to 30 days)	24 days	Mon 20-05-11	Thu 20-06-11	
18	Submit System Operations Principles to Administrator for approval	1 day	Mon 20-05-11	Mon 20-05-11	1
19	Present System Operations Principles to Administrator	1 day	Tue 20-05-12	Tue 20-05-12	I
10	Administrator reviews plan, provides comments, modification requests, and recommendations (up to 30 days)	o 19 days	Tue 20-05-12	Fri 20-06-05	-
21	Management Co. reviews and incorporates or resolves comments (up to 30 days)	2 days	Mon 20-06-08	Tue 20-06-09	1
22	Management Co. resubmits System Operations Principles for approval	1 day	Wed 20-06-10	Wed 20-06-10	I
23	Administrator approves System Operations Principles	1 day	Thu 20-06-11	Thu 20-06-11	I
24	PREB Approval of Proposed System Operations Principles (Up to 90 days)	70 days	Fri 20-06-12	Thu 20-09-17	
25	Management Co. submits Proposed System Operations Principles to PREB	1 day	Fri 20-06-12	Fri 20-06-12	I
26	Management Co. presents System Operations Principles to PREB	1 day	Fri 20-06-12	Fri 20-06-12	I
!7	PREB reviews and approves, denies or proposed modifications to System Operations Principles (up to 120 days to respond)	59 days	Mon 20-06-15	Thu 20-09-03	
28	Management Co. resolves comments and / or incorporated modifications to System Operations Principles and resubmits to PREB	5 days	Fri 20-09-04	Thu 20-09-10	•
29	PREB performs seconds review (if necessary)	5 days	Fri 20-09-11	Thu 20-09-17	•
30	PREB approves System Operations Principles	0 days	Thu 20-09-17	Thu 20-09-17	<b>♦</b>
31	10. Asset Acquisition (Supply Chain)	120 days	Fri 20-01-24	Thu 20-07-09	
32	10.a Evaluating Existing Procurement and Subcontracting Policies, Procedures and Systems	120 days	Fri 20-01-24	Thu 20-07-09	
33	Evaluate existing procurement team staffing and reporting structure	120 days	Fri 20-01-24	Thu 20-07-09	
34	Identify all applicable purchasing processes and controls connected to the planned activities, including manual and IT/OT processes throughout the source to pay cycle.	100 days	Fri 20-02-21	Thu 20-07-09	
85	Review applicable purchasing process and controls connected to the planned activities, and prepare preliminary recommendations on opportunities to streamline.	100 days	Fri 20-02-21	Thu 20-07-09	
6	Develop procurement process and procedure establishing operational approach to properly integrate and comply with applicable PREPA (laws of Puerto Rico) and other procurement rules in purchasing activities.	80 days	Fri 20-03-20	Thu 20-07-09	
7	Identify and Document List of Procurement and Subcontracting Policies, Procedures and Systems Governing and being Used by PREPA	g80 days	Fri 20-03-20	Thu 20-07-09	
88	Evaluate existing procurement team staffing and reporting structure (including operational and major programs)	60 days	Fri 20-04-17	Thu 20-07-09	
39	Develop staffing and organization structure plan regarding integrated procurement team	60 days	Fri 20-04-17	Thu 20-07-09	
40	Document Integration and Compliance Strategy and Objectives in Procurement Procedure Manual	60 days	Fri 20-04-17	Thu 20-07-09	

	k Name	Duration	Start	Finish	October January April July October January
1041	Submit Post Commencement Plan for PREPA Review and Approval	40 days	Fri 20-05-15	Thu 20-07-09	
1042	Develop Plan and Recommendation for Operational Integration and Compliance with Existing Policies, Procedures and Systems (Including Approval Matrix)	40 days	Fri 20-05-15	Thu 20-07-09	_
1043	Coordinate with PREPA on Executing Post Commencement Plan	20 days	Fri 20-06-12	Thu 20-07-09	_
1044	10.b Assuming Responsibility for Securing Use of Assets, Facilities, IT / OT, etc.	120 days	Fri 20-01-24	Thu 20-07-09	•
1045	Identify and Document List of Facilities and Furnishings Being Used by PREPA that are Required for ServCo T&D Operations	5 days	Fri 20-01-24	Thu 20-01-30	•
1046	Assess Health and Condition of Identified Facilities and Furnishings for Use by ServCo	5 days	Fri 20-01-31	Thu 20-02-06	0
1047	Review and Document Existing Facility and Furnishing Arrangements to Determine Appropriate Transfer Process to ServCo	5 days	Fri 20-02-07	Thu 20-02-13	•
1048	Develop Plan and Recommendation for Securing Access and Use of Facilities and Furnishings by ServCo	5 days	Fri 20-02-14	Thu 20-02-20	•
1049	Submit Plan for PREPA Review and Approval	5 days	Fri 20-02-21	Thu 20-02-27	•
1050	Coordinate with PREPA on Executing the Plan	5 days	Fri 20-02-28	Thu 20-03-05	•
1051	Identify and Document List of Materials and Supplies (and Respective Vendors) Being Used by PREPA that are Required for ServCo T&D Operations	5 days	Fri 20-03-06	Thu 20-03-12	0
1052	Assess Health and Condition of Identified Materials and Supplies for Use by ServCo	5 days	Fri 20-03-13	Thu 20-03-19	
1053	Develop Plan and Recommendation for Access, Control and Use of Material and Supplies	5 days	Fri 20-03-20	Thu 20-03-26	0
1054	Submit Plan for PREPA Review and Approval	5 days	Fri 20-03-27	Thu 20-04-02	•
1055	Coordinate with PREPA on Executing the Plan	5 days	Fri 20-04-03	Thu 20-04-09	0
1056	Identify and Document List of Assets and Equipment (and Respective Subcontractors) Being Used by PREPA that are required for ServCo T&D Operations	5 days	Fri 20-04-10	Thu 20-04-16	0
1057	Assess Health and Condition of Identified Assets and Equipment for Use by ServCo	5 days	Fri 20-04-17	Thu 20-04-23	0
1058	Develop Plan and Recommendation for Securing Access, Control and Use	10 days	Fri 20-04-24	Thu 20-05-07	
1059	Submit Plan for PREPA Review and Approval	5 days	Fri 20-05-08	Thu 20-05-14	
1060	Coordinate with PREPA on Executing the Plan	5 days	Fri 20-05-15	Thu 20-05-21	•
1061	Identify and Document List of IT/OT Systems Being Used by PREPA that are required for ServCo T&D Operations	5 days	Fri 20-05-22	Thu 20-05-28	•
1062	Assess Health and Condition of Identified IT/OT Systems for Use by ServCo	5 days	Fri 20-05-29	Thu 20-06-04	0
1063	Review and Document Existing IT/OT System Arrangements to Determine Appropriate Transfer Process to ServCo	5 days	Fri 20-06-05	Thu 20-06-11	•
1064	Develop Plan and Recommendation for Securing Access, Control and Use IT/OT Systems	10 days	Fri 20-06-12	Thu 20-06-25	
1065	Submit Post Commencement Plan for PREPA Review and Approval	5 days	Fri 20-06-26	Thu 20-07-02	0
1066	Coordinate with PREPA on Executing the Plan	5 days	Fri 20-07-03	Thu 20-07-09	0
1067	10.c Assuming Existing Subcontracts	120 days	Fri 20-01-24	Thu 20-07-09	•
1068	Compile listing of all existing subcontracts, including executed copies of subcontracts	10 days	Fri 20-01-24	Thu 20-02-06	
1069	Review all applicable subcontracts to determine and document status (expiration) and key terms and conditions (e.g. price and payment, renewal and termination mechanisms, assignment requirements, etc.)	10 days	Fri 20-02-07	Thu 20-02-20	
1070	Identify all existing subcontracts to be assumed as System Contracts as well as those to be discontinued/terminated with supporting rationale/justification	10 days	Fri 20-02-21	Thu 20-03-05	
1071	Identify all major subcontracts to be assumed, and categorize by activity type (e.g. MRO, vegetation, wires, hardware, transformers, excavation, etc.) and spend	10 days	Fri 20-03-06	Thu 20-03-19	
1072	Identify any discontinued or expired subcontracts that require replacement after the Commencement Date	10 days	Fri 20-03-20	Thu 20-04-02	
1073	Complete gap analysis (expired, missing etc.) of subcontracts being assumed against the immediate needs of O&M of the T&D System (i.e. first 9mths)	10 days	Fri 20-03-20	Thu 20-04-02	
1074		10 days	Fri 20-04-03	Thu 20-04-16	•
		10 days	Fri 20-04-03	Thu 20-04-16	
1075		40.1	Fri 20-04-17	Thu 20-04-30	
1075	Identify, coordinate with PREPA, and monitor all Vendor Claims / Notices made under assumed System Contracts	10 days			
	Identify, coordinate with PREPA, and monitor all Vendor Claims / Notices made under assumed System	10 days	Fri 20-05-01	Thu 20-05-14	•

79	Task Name	Duration	Start		October January April July Octob
-	Plan vendor relationship handover discussions for existing subcontracts	10 days	Fri 20-05-15	Thu 20-05-28	-
	Determine assignment requirements for each System Contract (notice, consent, amendment, etc.)	10 days	Fri 20-05-15	Thu 20-05-28	•
L	Prepare template legal documentation for assignments of existing subcontracts delineating scope of assigned responsibilities and retention by PREPA of liabilities and payment obligations.	10 days	Fri 20-05-29	Thu 20-06-11	•
2	Develop plan in coordination with PREPA for cash management planning and contractual obligations payment process	10 days	Fri 20-06-12	Thu 20-06-25	
83	Review Contract Sourcing and Procurement contract templates and propose revisions as necessary to PREPA for approval	10 days	Fri 20-06-26	Thu 20-07-09	•
34	11. Back-End Transition Plan	65 days	Fri 20-03-20	Thu 20-06-18	•
5	Back End Transition Plan	65 days	Fri 20-03-20	Thu 20-06-18	
86	Develop a detailed back-end transition plan per outline in Annex IV	40 days	Fri 20-03-20	Thu 20-05-14	
87	Present Back End Transition Plan to ManagementCo	5 days	Fri 20-05-15	Thu 20-05-21	
88	Adjust Back End Transition Plan per ManagementCo comments	5 days	Fri 20-05-22	Thu 20-05-28	
89	ManagementCo approves Back End Transition Plan	5 days	Fri 20-05-29	Thu 20-06-04	
90	Prepare Plan for submission	10 days	Fri 20-06-05	Thu 20-06-18	
91	Submit Back-End Transition Plan to Administrator	0 days	Thu 20-06-18	Thu 20-06-18	_ ♦
92	Submit Back-End Transition Plan to PREB	0 days	Thu 20-06-18	Thu 20-06-18	•
	DP Form 1.7 Performance Metrics		Fri 20-01-24	Tue 20-10-27	•
94	Initial Analysis	59 days	Fri 20-01-24	Wed 20-04-15	•
95	Perform performance data initial analysis to assess data quality	24 days	Fri 20-01-24	Wed 20-02-26	
96	Establish methodology for review of performance levels	5 days	Thu 20-02-27	Wed 20-02-20 Wed 20-03-04	
97	Submit data quality findings and methodology for determining baseline performance level to Transition	2 days	Thu 20-03-05	Fri 20-03-06	1
	Executive Leaders for review	•			•
98	Present methodology to PREB and discuss to obtain mutual agreement	5 days	Mon 20-03-09	Fri 20-03-13	_
99	Determine proposed baseline performance levels	20 days	Mon 20-03-16	Fri 20-04-10	_
00	Submit proposed baseline performance levels to ManagementCo for review	3 days	Mon 20-04-13	Wed 20-04-15	•
01	Approval of Performance Metrics	139 days	Thu 20-04-16	Tue 20-10-27	
02	Present Performance Metrics to Management Co. for approval	1 day	Thu 20-04-16	Thu 20-04-16	I
03	Adjust Performance Metrics per Management Co. comments and / or recommendations	3 days	Fri 20-04-17	Tue 20-04-21	•
04	Management Co. Approves Performance Metrics	1 day	Wed 20-04-22	Wed 20-04-22	T .
05	Administrator Approval of Proposed Performance Metrics (Up to 30 days)	47 days	Thu 20-04-23	Fri 20-06-26	•
06	Submit Performance Metrics to Administrator for approval	1 day	Thu 20-04-23	Thu 20-04-23	I
07	Present Performance Metrics to Administrator	1 day	Fri 20-04-24	Fri 20-04-24	I
08	Administrator provides comments, modification requests, and recommendations (up to 30 days)	19 days	Fri 20-05-22	Wed 20-06-17	
09	Management Co. reviews and incorporates or resolves comments (up to 30 days)	5 days	Thu 20-06-18	Wed 20-06-24	•
10	Management Co. resubmits Performance Metrics for approval	1 day	Thu 20-06-25	Thu 20-06-25	I
11	Administrator approves Performance Metrics	1 day	Fri 20-06-26	Fri 20-06-26	I
12	PREB Approval of Proposed Performance Metrics (Up to 90 days)	87 days	Mon 20-06-29	Tue 20-10-27	-
13	Management Co. submits Performance Metrics to PREB	1 day	Mon 20-06-29	Mon 20-06-29	I
14	Management Co. presents Performance Metrics to PREB	1 day	Tue 20-06-30	Tue 20-06-30	I
15	PREB reviews and approves, denies or proposed modifications to Performance Metrics (up to 120 days to respond)	59 days	Thu 20-07-23	Tue 20-10-13	
16	Management Co. resolves comments and / or incorporated modifications to Performance Metrics and resubmits to PREB	5 days	Wed 20-10-14	Tue 20-10-20	0
17	PREB performs seconds review (if necessary)	E days	Wod 20 10 21	Tue 20-10-27	
18	, , , , , , , , , , , , , , , , , , , ,	5 days	Wed 20-10-21		•
_	PREB approves Performance Metrics	0 days	Tue 20-10-27	Tue 20-10-27	·
20	Front End Transition Period (Additional Requirements in Agreement)	-		Mon 20-11-09	
21	Operator Responsibilities	157 days	Wed 20-01-01	Thu 20-08-06	
	Handover Checklist (Prior to the 10th of every month)	218 days	Thu 20-01-09	Mon 20-11-09	
22	Obtain Updates and Additions (if any) to Checklist from Transition Working Teams	218 days	Thu 20-01-09	Mon 20-11-09	<b>▼</b>

)	Task Name	Duration	Start	Finish	October Janu	ary April	July	October	Januar
123	Submit Handover Checklist to Administrator- January	1 day	Thu 20-01-09	Thu 20-01-09	I				
.24	Submit Handover Checklist to Administrator- February	1 day	Fri 20-02-07	Fri 20-02-07	1				
25	Submit Handover Checklist to Administrator- March	1 day	Mon 20-03-09	Mon 20-03-09		I			
26	Submit Handover Checklist to Administrator- April	1 day	Wed 20-04-08	Wed 20-04-08		I			
27	Submit Handover Checklist to Administrator- May	1 day	Fri 20-05-08	Fri 20-05-08		I			
28	Submit Handover Checklist to Administrator- June	1 day	Tue 20-06-09	Tue 20-06-09			I		
29	Submit Handover Checklist to Administrator- July	1 day	Thu 20-07-09	Thu 20-07-09			I		
30	Submit Handover Checklist to Administrator- August	1 day	Fri 20-08-07	Fri 20-08-07			I		
31	Submit Handover Checklist to Administrator- September	1 day	Wed 20-09-09	Wed 20-09-09				I	
32	Submit Handover Checklist to Administrator- October	1 day	Fri 20-10-09	Fri 20-10-09				1	
33	Submit Handover Checklist to Administrator- November	1 day	Mon 20-11-09	Mon 20-11-09				I	
34	Confirmation of Acceptable Operator Security	2 days	Tue 20-01-21	Wed 20-01-22	₩				
35	Execute Acceptable Operator Security	1 day	Tue 20-01-21	Tue 20-01-21	1				
36	Deliver confirmation to Administrator	1 day	Wed 20-01-22	Wed 20-01-22	1				
37	Required Insurance	96 days	Fri 20-01-24	Fri 20-06-05	-		₽		
38	Determine insurance requirements jointly with PREPA	60 days	Fri 20-01-24	Thu 20-04-16					
39	Obtain bids for insurance from insurance brokers	30 days	Fri 20-04-17	Thu 20-05-28					
40	Obtain bids for insurance from insurance brokers  Obtain required insurance	5 days	Fri 20-05-29	Thu 20-05-28					
41	Submit certificates of insurance to Administrator	1 day	Fri 20-05-29	Fri 20-06-05		·	I		
42			Mon 20-03-16	Mon 20-06-15			-		
43	Employment Interviews (See Recruitment and Staffing Plan Project for Activity details)	66 days				1			
14	Post all job descriptions	1 day	Mon 20-03-16	Mon 20-03-16		1			
45	Employment Interviews	1 day	Mon 20-06-15	Mon 20-06-15			1		
46	Employment Interviews Conclude	0 days	Mon 20-06-15	Mon 20-06-15					
	Employment Offers	150 days	Wed 20-01-01	Tue 20-07-28					
47	Issue Employment offer letters	1 day	Mon 20-07-13	Mon 20-07-13			1		
48	Allow 10 business days (per Section 4.2.k.i) for acceptance of employment offers by potential candidates	10 days	Tue 20-07-14	Mon 20-07-27			-		
49	Submit report to Administrator of employment offers accepted	1 day	Tue 20-07-28	Tue 20-07-28			1		
50	Periodic Reports (Weekly, Monthly & Quarterly	1 day	Wed 20-01-01	Wed 20-01-01					
51 52	Representations	107 days	Fri 20-01-24	Mon 20-06-22		_	_		
	Operator Representations and Warranties	1 day	Tue 20-03-03	Tue 20-03-03					
53	Provide documentation for "Existence and Powers"	1 day	Tue 20-03-03	Tue 20-03-03		I			
54			Tue 20-03-03	Tue 20-03-03		1			
	Operator provides "Due Authorization and Binding Obligation" documentation	1 day				I			
	No Conflicts	1 day	Tue 20-03-03	Tue 20-03-03	_	_			
56	No Conflicts No Consents	1 day 1 day	Tue 20-03-03	Tue 20-03-03		I			
56 57	No Conflicts No Consents No Litigation	1 day 1 day 1 day	Tue 20-03-03 Tue 20-03-03	Tue 20-03-03 Tue 20-03-03		I I			
56 57 58	No Conflicts No Consents No Litigation Intellectual Property	1 day 1 day 1 day 1 day	Tue 20-03-03 Tue 20-03-03 Tue 20-03-03	Tue 20-03-03 Tue 20-03-03 Tue 20-03-03		I I I			
56 57 58 59	No Conflicts No Consents No Litigation Intellectual Property Applicable Law Compliance	1 day 1 day 1 day 1 day 1 day	Tue 20-03-03 Tue 20-03-03 Tue 20-03-03 Tue 20-03-03	Tue 20-03-03 Tue 20-03-03 Tue 20-03-03 Tue 20-03-03		I I I			
56 57 58 59	No Conflicts No Consents No Litigation Intellectual Property Applicable Law Compliance Accuracy of Information	1 day 1 day 1 day 1 day 1 day 1 day	Tue 20-03-03 Tue 20-03-03 Tue 20-03-03 Tue 20-03-03 Tue 20-03-03	Tue 20-03-03 Tue 20-03-03 Tue 20-03-03 Tue 20-03-03 Tue 20-03-03		I I I I			
55 56 57 58 59 60 61	No Conflicts No Consents No Litigation Intellectual Property Applicable Law Compliance Accuracy of Information Ability to Perform Obligations	1 day	Tue 20-03-03 Tue 20-03-03 Tue 20-03-03 Tue 20-03-03 Tue 20-03-03 Tue 20-03-03	Tue 20-03-03 Tue 20-03-03 Tue 20-03-03 Tue 20-03-03 Tue 20-03-03 Tue 20-03-03		I I I I I I I I I I I I I I I I I I I			
56 57 58 59 60 61 62	No Conflicts No Consents No Litigation Intellectual Property Applicable Law Compliance Accuracy of Information Ability to Perform Obligations Knowledge of Requirements	1 day	Tue 20-03-03	Tue 20-03-03 Tue 20-03-03 Tue 20-03-03 Tue 20-03-03 Tue 20-03-03 Tue 20-03-03 Tue 20-03-03		1 1 1 1 1 1			
56 57 58 59 60 61 62 63	No Conflicts No Consents No Litigation Intellectual Property Applicable Law Compliance Accuracy of Information Ability to Perform Obligations Knowledge of Requirements No Litigation with Owner	1 day	Tue 20-03-03	Tue 20-03-03		1 1 1 1 1 1 1			
56 57 58 59 60 61 62 63	No Conflicts No Consents No Litigation Intellectual Property Applicable Law Compliance Accuracy of Information Ability to Perform Obligations Knowledge of Requirements	1 day	Tue 20-03-03	Tue 20-03-03 Tue 20-03-03 Tue 20-03-03 Tue 20-03-03 Tue 20-03-03 Tue 20-03-03 Tue 20-03-03		1 1 1 1 1 1 1 1			
56 57 58 59 60 61 62 63 64	No Conflicts No Consents No Litigation Intellectual Property Applicable Law Compliance Accuracy of Information Ability to Perform Obligations Knowledge of Requirements No Litigation with Owner	1 day	Tue 20-03-03	Tue 20-03-03		1 1 1 1 1 1 1 1			
56 57 58 59 50 51 52 53 54 55	No Conflicts No Consents No Litigation Intellectual Property Applicable Law Compliance Accuracy of Information Ability to Perform Obligations Knowledge of Requirements No Litigation with Owner SECTION 4.3 Owner and Administrator Responsibilities Owner Representations and Warranties Provide documentation for "Existence and Powers"	1 day	Tue 20-03-03	Tue 20-03-03		1 1 1 1 1 1 1 1 1 1			
56 57 58 59 50 51 52 53 54 55 56	No Conflicts No Consents No Litigation Intellectual Property Applicable Law Compliance Accuracy of Information Ability to Perform Obligations Knowledge of Requirements No Litigation with Owner SECTION 4.3 Owner and Administrator Responsibilities Owner Representations and Warranties	1 day	Tue 20-03-03	Tue 20-03-03		1 1 1 1 1 1 1 1 1 •			
56 57 58 59 60 61 62 63 64 65 66 67	No Conflicts No Consents No Litigation Intellectual Property Applicable Law Compliance Accuracy of Information Ability to Perform Obligations Knowledge of Requirements No Litigation with Owner SECTION 4.3 Owner and Administrator Responsibilities Owner Representations and Warranties Provide documentation for "Existence and Powers"	1 day	Tue 20-03-03	Tue 20-03-03		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
56 57 58 59 60 61 62 63 64 65 66 67 68	No Conflicts No Consents No Litigation Intellectual Property Applicable Law Compliance Accuracy of Information Ability to Perform Obligations Knowledge of Requirements No Litigation with Owner SECTION 4.3 Owner and Administrator Responsibilities Owner Representations and Warranties Provide documentation for "Existence and Powers" Owner provides "Due Authorization and Binding Obligation" documentation	1 day	Tue 20-03-03	Tue 20-03-03		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
56 57 58 59 60 61 62 63 64 65 66 67 68	No Conflicts No Consents No Litigation Intellectual Property Applicable Law Compliance Accuracy of Information Ability to Perform Obligations Knowledge of Requirements No Litigation with Owner SECTION 4.3 Owner and Administrator Responsibilities Owner Representations and Warranties Provide documentation for "Existence and Powers" Owner provides "Due Authorization and Binding Obligation" documentation No Conflicts	1 day	Tue 20-03-03	Tue 20-03-03		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
56 57 58 59 60 61 62 63 64 65 66 67 68 69 70	No Conflicts No Consents No Litigation Intellectual Property Applicable Law Compliance Accuracy of Information Ability to Perform Obligations Knowledge of Requirements No Litigation with Owner SECTION 4.3 Owner and Administrator Responsibilities Owner Representations and Warranties Provide documentation for "Existence and Powers" Owner provides "Due Authorization and Binding Obligation" documentation No Conflicts No Consents No Litigation No Legal Prohibition	1 day	Tue 20-03-03	Tue 20-03-03		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
56 57 58 59 60 61 62	No Consents No Litigation Intellectual Property Applicable Law Compliance Accuracy of Information Ability to Perform Obligations Knowledge of Requirements No Litigation with Owner  SECTION 4.3 Owner and Administrator Responsibilities Owner Representations and Warranties Provide documentation for "Existence and Powers" Owner provides "Due Authorization and Binding Obligation" documentation No Conflicts No Consents No Litigation	1 day	Tue 20-03-03	Tue 20-03-03					

D 1	ask Name	Duration	Start	Finish	October	January	April	July	October	January
1174	Operation of T&D System	1 day	Tue 20-03-03	Tue 20-03-03	- COLOBEI	I	φ	July	October	Januari
1175	Identification of System Contracts	1 day	Tue 20-03-03	Tue 20-03-03		I				
1176	Notices with respect to System Contracts	1 day	Tue 20-03-03	Tue 20-03-03		I				
177	Owner provides confirmation that Service Accounts are opened and funded per Section 7.5	1 day	Tue 20-03-03	Tue 20-03-03		I				
178	SECTION 4.4 Governmental Approvals	107 days	Fri 20-01-24	Mon 20-06-22		-		7		
179	Operator, Owner and Administrator coordinate identifying the applications for Governmental Approvals	30 days	Fri 20-01-24	Thu 20-03-05						
180	Operator coordinates with Owner and Administrator to prepare and for support of application documents	15 days	Fri 20-03-06	Thu 20-03-26						
	required									
181	Submit all applications for governmental approvals	1 day	Fri 20-03-27	Fri 20-03-27		1				
82	Governmental Approvals are obtained	60 days	Mon 20-03-30	Fri 20-06-19						
83	Provide Governmental Approval documents to Owner and Administrator	1 day	Mon 20-06-22	Mon 20-06-22			I			
84	SECTION 4.5 Conditions Precedent to Service Commencement Date	204 days	Tue 20-02-04	Fri 20-11-13					_	
85	Operator Responsibilities are Met	143 days	Mon 20-04-27	Thu 20-11-12			•		-	
86	System Remediation Plan approved (4.1 d)	0 days	Fri 20-10-30	Fri 20-10-30					•	
87	Federal Procurement Manual approved (4.1 e)	0 days	Thu 20-06-11	Thu 20-06-11			•			
88	Non-Federal Procurement Manual approved (4.1f)	0 days	Mon 20-05-11	Mon 20-05-11			<b>\Phi</b>			
89	Liability Waiver implemented (4.1 g)	0 days	Thu 20-11-12	Thu 20-11-12					<b>♦</b>	
90	System Operation Principles (4.1 h)	0 days	Thu 20-09-17	Thu 20-09-17					<b>♦</b>	
91	Handover Checklist (4.2 b)	0 days	Mon 20-11-09	Mon 20-11-09					•	
92	Operator Security (4.2 c)	0 days	Thu 20-11-12	Thu 20-11-12					<b>♦</b>	
93	Required Insurance (4.2 d)	0 days	Thu 20-11-12	Thu 20-11-12					•	
14	Initial Budgets approved (4.2 e)	0 days	Thu 20-11-12	Thu 20-11-12					•	
95	Performance Metrics (4.2 f)	0 days	Tue 20-10-27	Tue 20-10-27					•	
16	Emergency Response Plan (4.2 g)	0 days	Mon 20-04-27	Mon 20-04-27			•			
97	Physical Security, Data Security and Vegetation Managements Plans (4.2 h)	0 days	Thu 20-06-11	Thu 20-06-11			•			
98	Back End Transition Plan (4.2 i)	0 days	Thu 20-06-18	Thu 20-06-18			•	•		
99	Employment Evaluations (4.2 j)	0 days	Fri 20-06-12	Fri 20-06-12			•			
00	Employment Offers (4.2 k)	0 days	Fri 20-06-26	Fri 20-06-26			•	•		
)1	Shared Services Agreement (4.2 I)	0 days	Mon 20-05-25	Mon 20-05-25			•			
02	Representations (4.2 n)	0 days	Mon 20-06-01	Mon 20-06-01			•			
03	All Responsibilities are Met	0 days	Thu 20-11-12	Thu 20-11-12					•	
04	Owner and Administrator Responsibilities are met	1 day	Wed 20-03-04	Wed 20-03-04		I				
)5	Governmental Approvals are obtained	1 day	Tue 20-06-23	Tue 20-06-23			1	I		
06	Acceptability and Effectiveness of Documents by Administrator	1 day	Fri 20-11-13	Fri 20-11-13					1	
07	No Governmental Prohibitions or Injunctions	1 day	Wed 20-03-04	Wed 20-03-04		I				
80	Validate that there are no governmental prohibitions or injunctions	1 day	Wed 20-03-04	Wed 20-03-04		I				
09	Owner has identified all known Pre-Existing Environmental Conditions	1 day	Fri 20-08-21	Fri 20-08-21				I		
10	Rate Order issued by PREB	1 day	Fri 20-11-13	Fri 20-11-13					1	
11	Owner provides evidence to Operator of Federal Funding	1 day	Mon 20-08-03	Mon 20-08-03				I		
12	Operator provides Owner copy of Servicing Contract duly executed by Operator	1 day	Tue 20-02-04	Tue 20-02-04		I				
13	Tax	1 day	Mon 20-08-03	Mon 20-08-03				1		
_	SECTION 4.7 Closing the Front-End Transition Period	17 days	Tue 20-11-10	Wed 20-12-02					~~	
15	Notice of Service Commencement Date	17 days	Tue 20-11-10	Wed 20-12-02					-	1
16	IT (435), Financial (472) and HR Systems (507) set up and working	0 days	Thu 20-11-26	Thu 20-11-26					•	
L7	Provide Administrator with written notice (copy to PREB) of Commencement Date and include completed Handover Checklist	1 day	Tue 20-11-10	Tue 20-11-10					I	
8	Administrator reviews Handover Checklist (10 days)	8 days	Wed 20-11-11	Fri 20-11-20						
19	Administrator provides written statement of disputes	2 days	Mon 20-11-23	Tue 20-11-24					1	
20	Operator clarifies and / or provides proof of item in dispute	5 days	Wed 20-11-25	Tue 20-12-01						
21	Administrator confirms and approves Handover Checklist	1 day	Wed 20-12-02	Wed 20-12-02					- 1	
22	Transition Ends	1 day	Wed 20-12-02	2 Thu 20-12-03					₩	I

ID	Task Name	Duration	Start	Finish	October	January	April	July	October	January
1223	Establishment of Service Commencement Date	1 day	Wed 20-12-02	Thu 20-12-03					₩	
1224	Administrator delivers certificate to Operator confirming that all Service Commencement Date Conditions have been met	0 days	Wed 20-12-02	Wed 20-12-02					•	
1225	Service Commencement Date is set (1/1/21) and agreed to by Parties	1 day	Thu 20-12-03	Thu 20-12-03					I	
1226	Service Commencement Begins	11 days	Fri 20-12-18	Fri 21-01-01					₩'	₩
1227	Public and Internal announcement of commencement of activities (At least 3 business days after receipt of Certificate)	1 day	Fri 20-12-18	Fri 20-12-18					I	
1228	New Operator leadership in place	2 days	Fri 20-12-25	Mon 20-12-28					(	1
1229	Operator takes over operation	0 days	Fri 21-01-01	Fri 21-01-01					•	<b>*</b>

# **Appendix 3: OCI Avoidance and Mitigation Principles**



# 1. BACKGROUND

These draft OCI Avoidance and Mitigation Principles (Principles) have been prepared and included as part of our proposal to demonstrate that the Consortium understands the potential conflicts of interest that it may encounter as Operator under the Puerto Rico Transmission and Distribution System Operation and Maintenance Agreement (the O&M Agreement), and to illustrate how the Consortium would go about avoiding and/or mitigating those potential conflicts should they arise. Although we recognize that a document such as this one is not an explicit requirement of the proposal, we include these principles for two reasons. First, the Consortium members have many affiliate and subsidiary companies that are well-suited to perform and support Operator services as well as capital projects, construction, repairs, and modernization related to the transmission and distribution (T&D) System. Indeed, these entities augment and complement the strength of our offer in many respects. It is in the interests of all parties to maximize eligible bidders and participants, consistent with applicable rules and competitive procurement best practices. As such, we are committed to working with all stakeholders to identify, avoid, and neutralize any potential conflicts as early as possible, and to help ensure that our subsidiary and affiliate entities are eligible to participate and do not benefit from any improper advantage.4 These Principles underscore our commitment. Second, we understand the importance of diligent compliance with both the letter and the spirit of applicable procurement rules and regulations. These Principles illustrate our expertise regarding compliance matters and the level of diligence and know-how we will bring to bear.

# 2. PURPOSE AND SCOPE OF THESE PRINCIPLES

While no specific, identifiable conflict of interest currently exists, we have carefully reviewed the OCI regulations and, in an abundance of caution, identified techniques to avoid, eliminate or mitigate any potential conflicts. The purpose of these Principles is to outline those techniques in broad terms and to help ensure that all parties are aligned. Of course, we and other parties will address any OCI issues in greater detail as they may arise during performance of the O&M Agreement via the Federal Funding Procurement Manual (the Procurement Manual) and the Operator's inhouse compliance monitoring program (see, e.g., para. 4.e).

These Principles will provide the necessary framework to identify, avoid and mitigate actual or potential conflicts of interest concerns and issues in accordance with the Federal Acquisition Regulation (FAR) Subpart 9.5,5 2 C.F.R. § 200 (the Uniform Rules), the Puerto Rico Public-Private

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<sup>&</sup>lt;sup>4</sup> As a point of clarification, it is important that these principles not be read in the context of an Emergency Event. In an Emergency, the Operator would utilize all appropriate resources to protect and mitigate, consistent with the requirements of the O&M Agreement. See, e.g., O&M Agreement, Section 5.14; see also Form 1.4 Section 1.J of this Proposal.

<sup>&</sup>lt;sup>5</sup> While the Federal Acquisition Regulations (FAR) are not strictly applicable to the O&M Agreement, we nonetheless reference FAR Subpart 9.5 as a guide because its requirements and considerations

Partnerships Authority (Administrator) Guidelines for the Evaluation of Conflicts of Interest and Unfair Advantages in the Procurement of Public-Private Partnership Contracts (promulgated by the Administrator, dated as of December 19, 2009), and other applicable laws, regulations, policies, and codes of ethics. We are committed to complying with all ethics and procurement laws related to performance of the O&M Agreement.

Given the work anticipated under the O&M Agreement, these Principles seek to:

Provide safeguards to ensure that the Operator can and will perform objectively and in the best interest of the public;

Prevent the existence of conflicting roles that might bias the judgment of the Consortium; Eliminate circumstances that could potentially provide an unfair competitive advantage; Provide a mechanism for resolution of any OCI issues that may arise during performance of the O&M Agreement; and

Address both actual and perceived issues related to OCIs.

## 3. IDENTIFICATION OF POTENTIAL CONFLICTS

We are committed to developing a systematic approach to identify and avoid, mitigate, or neutralize OCI issues under all our contracts. Based upon the scope of work as provided in the O&M Agreement, we have preliminarily identified areas in which OCIs could arise.

Impaired objectivity arises where a contractor is unable, or potentially unable, to provide impartial and objective assistance or advice to a non-Federal entity (NFE) due to other relationships, contacts, or circumstances. This would comprise circumstances where a contractor's work under one contract could entail it evaluating itself through an assessment of performance under another contract or an evaluation of proposals. Impaired objectivity might become an issue where the Consortium is evaluating proposals and one of those proposals is from an affiliate of a Consortium member.

Unequal access to information occurs when a contractor has access to nonpublic information as part of its performance under another contract with the NFE and where that information may provide the contractor with a competitive advantage in a later competition for an NFE contract. This OCI might become an issue where the Consortium, due to its performance of the O&M Agreement, has access to non-public information that may provide it with a competitive advantage in subsequent NFE procurements.

Biased ground rules issues arise where a contractor, as part of its performance of work under a contract with the NFE, has in some sense set the ground rules for another NFE contract. Biased ground rules concerns might arise where the Consortium prepares a statement of work or specifications for a contract and later competes for that contract itself. Notably, the Uniform Rules require that contractors that develop or draft specifications, statements of work, and

regarding organizational conflicts of interest are often mirrored in other applicable authorities and codes of conduct.



invitations for bids, or requests for proposals be excluded from competing for such procurements. Biased ground rules concerns may also arise where an affiliate of a Consortium member competes for a contract that includes a statement of work or specifications drafted by a Consortium member

## 4. MITIGATION TECHNIQUES

Our goal is to avoid OCI's whenever possible. Close communication between the Operator and government stakeholders is essential to ensure that a conflict-free environment exists. However, when an OCI is unavoidable, it must be documented and a strategy developed to neutralize or mitigate the OCI.

Considering the potential OCIs identified above, the Operator will implement the following techniques, or combination of techniques, as appropriate, to eliminate or mitigate potential OCIs. These techniques are commonly used across many industries and have been recognized by a wide variety of forums as effective means of avoiding and/or mitigating potential OCIs. See, e.g., Organizational Conflicts of Interest, Cantu, Daniel, 06-12 Briefing Papers 1.

### A. FIREWALLS

Firewalls — or communication barriers — are a common mitigation technique but are not by themselves sufficient in many circumstances. While walling off employees and/or Consortium members using a firewall arrangement may resolve certain types of conflicts of interest (such as those involving unfair access to information), it may not resolve an OCI involving potentially impaired objectivity. As a result, the Operator may use firewalls in combination with other mitigation techniques.

Firewalls focus on preventing the communication or sharing of information between two separate organizations or groups of people (e.g., employees who may have access to certain customersensitive data vs. employees who would gain a competitive advantage from access to such information). Therefore, written firewall procedures are typically prepared on a project-specific or work-specific basis, distributed to all affected employees and administered and overseen by a single organization (e.g., Human Resources, Corporate Compliance).

Effective firewall procedures typically identify:

Two or more divisions or groups of employees to be separated;

Notices and instructions to be provided to each group;

Measures to segregate and prevent sharing of information between the groups, including electronic separation and denials of access;

Prohibitions on oral and written communications between the groups:

Procedures for non-transfer of personnel between groups;

Any common management or executive personnel who will have oversight of both groups, and any restrictions on their activities: and

Method for escalating and addressing any problems that may arise.

# B. ORGANIZATIONAL/PHYSICAL/GEOGRAPHIC SEPARATION

Another common mitigation technique, sometimes used as a complement to firewalls, is organization, physical, and/or geographic separation of the conflicted groups or entities. The purpose of this



technique is to formalize the separation between the groups and reduce the risk of inadvertent disclosures among organizations or employees. Geographic separation establishes an environment that prevents inappropriate information from being released. Separation can also be done on at the organizational level or at the office level within the same building (e.g., dedicated areas with access controls and dedicated telecommunications equipment). These steps can be helpful in conjunction with other mitigation techniques.

Factors to consider in this area include.

The degree of the organizational, physical, or geographic separation, if any, that already exists between the two conflicted groups of employees (for example, work areas separate from other business segments and work in a controlled access facility, precluding access by other contract or proposal teams);

The degree to which there is separate management responsibility for the two conflicted groups of employees;

The degree to which there are separate accounting/financial systems and controls for the two conflicted groups of employees; and

The degree to which there are separate IT systems or controls for document storage/access.

### C. NON-DISCLOSURE AGREEMENTS

The use of Non-Disclosure Agreements (NDAs), in which affected employees agree to protect and not disclose certain information to which they are privy, is another common mitigation technique. NDAs are particularly important where the OCI concern relates to the transfer of non-public information that could provide an unfair competitive advantage or result in unequal access to information. NDAs can also be important in preventing the transfer of knowledge of future requirements.

Factors to consider in this area include:

Who will be responsible for determining if NDAs are necessary;

Who will be responsible for administering and overseeing NDAs;

The specific contents of the NDA; and

Storage and management of executed NDAs.

### D. INCREASED CUSTOMER MONITORING/OVERSIGHT OF CONFLICTED WORK

Another mitigation technique is for government stakeholders to assume an enhanced, ongoing role in identifying and resolving OCIs during contract performance. We anticipate this technique being particularly useful during performance of the O&M Agreement due, in part, to the existing joint efforts among the Parties in preparing and updating the Procurement Manual, and because of the Administrator's review and analysis procedures as provided in the P3 Guidelines for the Evaluation of Conflicts of Interest and Unfair Advantages in the Procurement of Public Private Partnership Contracts. For example, one of the mitigation techniques might be for the appropriate government personnel to independently review proposed procurement actions, followed by tailored updates to the Procurement Manual to address specific concerns, if any.



# E. COMPLIANCE MONITORING

All Operator employees working on federally funded procurement will receive a copy of the Procurement Manual, including the OCI policy, and execute a certification regarding organizational conflicts of interest (see Form of Certification A) at the start of their involvement, as well as an exit certification (see Form of Certification B) upon completion of the assignment or exit from work under the Operator Agreement. The Consortium's Compliance Office will maintain the information compiled from the individual certifications.

Compliance monitoring is designed to be a continuous and ongoing activity undertaken by the Operator to verify compliance with these Principles. The Operator will be responsible for developing an appropriate avoidance, neutralization, or mitigation strategy to address each new actual, apparent, or potential conflict of interest identified during the monitoring and review process. We will also develop OCI resolution strategies and establish remedial measures to address any instances of noncompliance. We intend for the Operator's inhouse compliance monitoring to overlap with, and reinforce, the conflict avoidance and mitigation procedures provided in the Procurement Manual.

In-process reviews play an important role in ensuring that a high-quality, proactive OCI Avoidance/Mitigation plan exists for achieving OCI compliance. We will conduct in-process reviews on a periodic basis.

#### F. VIOLATIONS AND ENFORCEMENT

Violations of OCI policy shall be reported to the individual's immediate manager. Appropriate administrative and/or disciplinary action will be taken for violations, up to and including termination. Additionally, the Office of Federal Procurement Policy Act (41 U.S.C. Section 423, Procurement Integrity) and Puerto Rico's Anticorruption Code state that violations thereof may subject an employee to criminal liability.

The Operator will conduct a timely and thorough investigation of any suspected or reported violations of OCI policy.

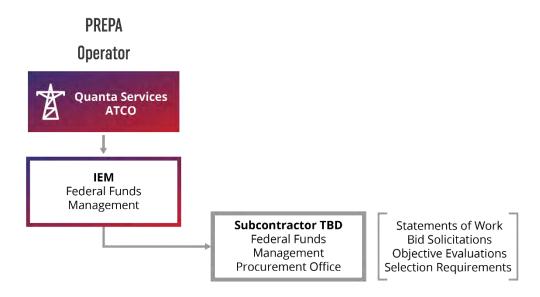
Each Consortium employee will be required to sign a certification document [Form of Certification A] stating that (a) the employee has read and understands the OCI policy, and (b) the employee will report to managers/supervisors any past, present or future relationship that may result in an actual, perceived or potential OCI. This certification also requires acknowledgement that the employee will comply with authorized uses and mandatory protections of sensitive information required in performing the contract.

# 5. IMPAIRED OBJECTIVITY/BIASED GROUND RULES — AN EXAMPLE OF AVOIDANCE AND MITIGATION

A Biased Ground Rules OCI could potentially arise where an affiliate of a Consortium member submits a proposal for a scope of work that was drafted by the Operator. Similarly, there could be Impaired Objectivity issues where the affiliate's proposal is evaluated by the Operator. In addition to the techniques described above, the Operator may employ an avoidance and mitigation strategy that includes delegating to a third-party material procurement activities associated with Federal grant



funding. Under such a strategy, the Operator's subcontractor, IEM, would hire its own qualified subcontractor, which would be dedicated as the Federal Funds Management Procurement Office (the Procurement Office). The Procurement Office would be involved with creating statements of work, producing bid solicitations, establishing evaluation panels evaluating bids and potentially making awards.



This strategy would help mitigate potential OCI issue under procurements for which one of the Operator's affiliates might compete and ensure that Operator affiliates and non-affiliates are on equal footing, on an actual and perceived basis. While the Operator would have no control over the Procurement Office, the separation between the organizations would be further fortified through additional measures, such as:

Procurement Office employees would sign NDAs prohibiting the sharing of information outside of their office, with emphasis on prohibition against sharing information with Consortium members. Under the NDAs, employees would be subject to termination upon unauthorized disclosures, among other penalties;

The Procurement Office subcontract would invite the Administrator and PREPA to oversee its contract actions to verify compliance with all relevant authorities and agreements; and The above would be implemented in the Procurement Manual, as appropriate, with input from the Administrator and the PREPA, among other stakeholders.

### 6. SUMMARY

We are committed to avoiding and/or mitigating any actual or potential OCIs and protecting proprietary information in its performance of the O&M Agreement. These OCI Principles address potential conflicts of interest in connection with the work to be performed and would be implemented at no additional cost, consistent with the proposed pricing reflected in this offer. As noted above, these Principles would be updated, as appropriate, during performance and incorporated as part of an OCI policy and the broader Federal Funding Procurement Manual. Even at this early stage, these Principles establish a strong framework to facilitate awareness of and compliance with avoidance and mitigation of OCIs in performance of the O&M Agreement.



# (FORM OF CERTIFICATION A)

# CERTIFICATION REGARDING ORGANIZATIONAL CONFLICTS OF INTEREST

As a Consortium employee, I recognize and endorse the Consortium's efforts to comply fully with the procurement laws and regulations that govern work being done by the Consortium. In some cases, performance of such work may provide the Consortium access to proprietary information, or to sensitive procurement information. In connection with my efforts on the Operator Agreement, I understand that I may have access to information that is considered to be Sensitive Information. To ensure that information is handled appropriately, and in support of the Consortium's ongoing compliance efforts, I hereby certify that:

- I have read and will comply with the Conflict of Interest Principles for the Operator Agreement.
- I fully understand the sensitivity of procurement-related data which may be entrusted to the Consortium by government stakeholders during performance of the Operator Agreement.
- I will use the information made available under the Operator Agreement only for official and/or authorized purposes.
- I agree that the protected information obtained from the government stakeholders is procurementsensitive and may not be disclosed to the public or used for private gain by myself or another person, either directly or indirectly; and I understand that this is a continuing responsibility.
- I agree not to use, publish, or otherwise disclose either during or subsequent to my employment, any sensitive procurement information, or data of the Consortium or data of others, which the Consortium is obligated to maintain in confidence.
- I agree to safeguard procurement-sensitive information in accordance with established Consortium policies and procedures;
- I will return all protected procurement-sensitive information when my work in connection with the Operator Agreement is completed or prior to my exit from work under the Operator Agreement;

I understand what to do should an actual or potential conflict of interest be identified.

Employee's Name (printed):
Signature:
Date:



# (FORM OF CERTIFICATION B)

# EXIT INTERVIEW ACKNOWLEDGEMENT REGARDING ORGANIZATIONAL CONFLICT OF INTEREST

I have been reminded that, as set forth in the Certification Regarding Organizational Conflicts of Interest and Procurement Integrity, which I have previously executed, I agree not to use, publish, or otherwise disclose either during or subsequent to my efforts on the Operator Agreement any sensitive procurement information to which I have had access. I hereby certify that I have surrendered any and all sensitive procurement information under the Operator Agreement. I also recognize that my obligations under the certification do not expire as a result of my departure.

Employee Name:
Employee's Operator Agreement Involvement:
Employee's New Assignment:
Employee's Duties at New Location, if known:
Employee's Signature:
Date:
Reason for leaving:



