COMPANY EVALUATION AND CONSTRUCTABILITY INFORMATION FOR NEET MIDATLANTIC 2B_2016 DEQUINE – EUGENE 345 KV TRANSMISSION LINE PROJECT

Submitted to:

pjm®

August 15, 2016

2016 RTEP Proposal Window #2

Prepared by:

NEXTera™ ENERGY TRANSMISSION MIDATLANTIC

[redacted]

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ACRONYMS AND DEFINITIONS

Abbreviation	Definition
AEP	American Electric Power
AFUDC	Allowance for Funds Used During Construction
AMP	Asset Management Program
ANSI	American National Standard Institute
ASCE	American Society of Civil Engineers
BGEPA	Bald and Golden Eagle Protection Act
CAISO	California Independent System Operator
CEII	Critical Energy Infrastructure Information
CEMP	Corporate Emergency Management Plan
CIP	Critical Infrastructure Protection
CRO	Compliance and Responsibility Organization
CWA	Clean Water Act
EHV	Extra High-Voltage
EMS	Energy Management System
ERCOT	Electric Reliability Council of Texas
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FPL	Florida Power & Light Company

Abbreviation	Definition
GIS	Geographic Information System
ICP	Internal Compliance Program
ICS	Incident Command System
[redacted]	[redacted]
IEEE	Institute of Electrical and Electronics Engineers
IPaC	Information for Planning and Conservation
ISC	Integrated Supply Chain
kV	Kilovolt
[redacted]	[redacted]
Lone Star	Lone Star Transmission, LLC
MVA	Megavolt-Ampere
MVAR	Megavolt-Ampere Reactive
MW	Megawatt
NEECH	NextEra Energy Capital Holdings, Inc.
NEER	NextEra Energy Resources, LLC
NEET	NextEra Energy Transmission, LLC
NEET MidAtlantic	NextEra Energy Transmission MidAtlantic, LLC
NERC	North American Electric Reliability Corporation
NESC	National Electrical Safety Code
NextEra	NextEra Energy, Inc.
NFHL	National Flood Hazard Layer

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Abbreviation	Definition
NHD	National Hydrography Dataset
NWI	National Wetland Inventory
O&E	Outreach and Education
O&M	Operations and Maintenance
OPGW	Optical Ground Wire
OSHA	U.S. Occupational Safety and Health Administration
PDDC	Power Delivery Diagnostic Center
PG&E	Pacific Gas & Electric
PJM	PJM Interconnection, LLC
Project	The Dequine-Eugene 345 kV Transmission Line Project
PSS/E	Power Transmission System Planning Software (Siemens)
PUA	Possession and Use Agreement
RTEP	Regional Transmission Expansion Plan
ROE	Return on Equity
ROW	Right of Way
SCE	Southern California Edison
SCG	Southern California Gas
SIS	System Impact Studies
SMEs	Subject Matter Experts
T&Cs	Terms and Conditions
T&S	Transmission & Substation

Abbreviation	Definition
TO	Transmission Owner
TOP	Transmission Operator
TP	Transmission Planner
UCA	Unrestricted Construction Access
UCT	Upper Canada Transmission Inc.
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
V&V	Verification and Validations
WBS	Work Breakdown Structure

SIGNATURE PAGE

Approvals:

8/15/2016

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Executive Director, Development

Date

8/15/2016

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Date

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A. EXECUTIVE SUMMARY

Name of Proposing Entity

NextEra Energy Transmission, LLC (NEET) and NextEra Energy Transmission MidAtlantic, LLC (NEET MidAtlantic) are pleased to submit the Dequine-Eugene 345 kV Transmission Line Project (the Project) for consideration by PJM Interconnection LLC (PJM) in the 2016 Regional Transmission Expansion Plan (RTEP) Proposal Window #2.

NextEra Energy, Inc. (NextEra) is a leading clean energy company with consolidated revenues of approximately $17 billion, approximately 46,400 megawatts of generating capacity, and approximately 14,300 employees in 27 states and 4 Canadian provinces as of year-end 2015. Headquartered in Juno Beach, Florida, NextEra's principal subsidiaries are:

- Florida Power & Light Company (FPL), which serves more than 4.8 million customer accounts in Florida and is one of the largest rate-regulated electric utilities in the United States,
- NextEra Energy Resources, LLC (NEER), which, together with its affiliated entities, is the world's largest generator of renewable energy from the wind and sun, and
- NEET, which owns, operates, and is building transmission assets in several US states and Canada.

Through its subsidiaries, NextEra has been recognized by third parties for its efforts in sustainability, corporate responsibility, ethics and compliance, and diversity. In March of 2016, NextEra was ranked No. 1 in the electric and gas utilities industry in Fortune's 2016 list of "World's Most Admired Companies" and has been named a World's Most Ethical Company® for the 9th time by the Ethisphere Institute, the global leader in defining and advancing the standards of ethical business practices.

As requested by PJM, NEET MidAtlantic has organized this proposal in conformance with PJM's Greenfield Project Proposal Template.

Name and Address of the Proposing Entity

NextEra Energy Transmission MidAtlantic, LLC
700 Universe Blvd
UST/JB
Juno Beach, FL 33408

Proposal Window and associated violation/issue being addressed

- 2016 RTEP Proposal Window #2
- Generator Deliverability Overloads – Flowgates 128, 130, 131, and 134 – Eugene-Dequine 345 kV

- N-1 Thermal Overloads – Flowgates 101 and 102 – Eugene-Dequine 345 kV

Violations Caused by Proposal/Nearby Violations Not Addressed by Proposal

Powerflow analysis results show that when the Project is studied there are no new violations based on data supplied by PJM.

Identify Projects That Span Zones

[redacted] The Project does not span two zones.

Intent to Construct/Own/Operate/Maintain

NEET MidAtlantic is seeking to be designated to construct, own, and maintain the proposed project. Based on PJM's approval in the prequalification process, NEET MidAtlantic requests Designated Entity status for this Project.

Proposed Solution and Corresponding Violation(s) Resolves

[redacted]

Project Consideration

The Project should be considered as a whole.

High Level Cost Overview and Commitment

NEET estimates that the total project will cost $32.5 million, with $3.4 million in work to be performed by the incumbent Transmission Owner (TO). A more detailed cost breakdown is included in Appendix 6 of this Proposal. As described in this Proposal, NEET MidAtlantic has invested substantial resources in developing its project cost estimate and believes that the Project can be completed for this project cost estimate.

[redacted]

Additional Benefits of the Proposal

The proposed project resolves the targeted generation deliverability overloads and N-1 Thermal overloads identified by PJM. Further, it enhances the 345 kV transmission system allowing for more efficient delivery of power to key load pockets. There are also potential market efficiency improvements that could be associated with the project.

B. COMPANY EVALUATION INFORMATION

Name and Address of Entity

The name and address of the proposing entity is:

Name of company:		**NextEra Energy Transmission MidAtlantic, LLC**			
Mailing Address:		700 Universe Boulevard, UST/JB			
City:	Juno Beach	State:	Florida	Zip:	33408

The points of contact are:

	Primary Contact	Secondary Contact
Contact Name:	**David Davis** **Executive Director, Development** **NextEra Energy Transmission, LLC**	**Stephen Gibelli** **Director of Regulatory Affairs** **NextEra Energy Transmission, LLC**
Address:	700 Universe Boulevard, UST/JB Juno Beach, Florida 33408	700 Universe Boulevard, FEW/JB Juno Beach, FL 33408
Telephone:	(561) 691-7941	(561) 694-3583
Email:	david.davis@nexteraenergy.com	neet.development@nexteraenergy.com

Please ensure that all correspondence regarding this Proposal is sent to both the primary and secondary contact personnel.

Pre-Qualification Number

NEET's and NEET MidAtlantic's PJM pre-qualification ID Number is Q13-18.

[redacted]

Additional Company Information

NextEra's Transmission Experience

To prepare its response to PJM's 2016 RTEP Proposal Window #2, NEET MidAtlantic engaged a number of legal, environmental, permitting, engineering, land acquisition, and other specialty groups in the NextEra family of companies with experience in the jurisdiction in which the Project will be located. With respect to the facility design, a routing and permitting study effort was completed prior to the route being provided to the engineering team (consisting of both in-house and external Subject Matter Experts (SMEs)) for the facility design effort. While not a construction-ready final design, this design is quite detailed and based on an actual anticipated route.

The NextEra family of companies has a wealth of experience in transmission line and substation siting, design, construction, operation and maintenance (O&M), and financing – including a substantial amount of experience for extra high-voltage (EHV) transmission line and substation projects. The NextEra companies operate over 8,500 circuit miles of high-voltage transmission lines.

The construction of large-scale infrastructure projects is a core competency of NEET MidAtlantic through its experienced team and NextEra affiliates. NEET MidAtlantic brings depth of experience in construction management of transmission facilities. Our team has proven capabilities in constructing and managing high voltage transmission line projects of similar size, type, and technology as this Project. NextEra affiliates have completed projects comply with the design, reliability, and operational standards of applicable authorities across the region. Please see Table 1 below for a list of some major 345 kV and 500 kV transmission line projects completed over the last decade throughout the United States.

NEET MidAtlantic will establish a local construction management office within the construction site and will staff the Project with an execution project manager, transmission construction leads, safety manager, environmental compliance manager, commissioning manager, and administrative support. During the project execution phase, NEET MidAtlantic will draw upon the resources of its affiliates to ensure success. This includes personnel from FPL, NEET, and NEER. These substantial resources give NEET MidAtlantic access to pools of specialized talent within the NextEra organization, and enable NEET MidAtlantic to assemble a team of accomplished professionals and SMEs to make up the core project team. NEET MidAtlantic can draw on the following NextEra resource capabilities in different areas of expertise:

- 90+ design, engineering and construction professionals with transmission experience
- 70+ materials and equipment procurement experts
- 20+ land acquisition experts and technical supporting staff
- 750+ transmission operations and maintenance personnel

- 35+ environmental assessment, licensing, and permitting experts
- 35+ safety experts
- 30+ regulatory affairs professionals

NextEra's substantial experience developing, constructing, and operating 345 kV facilities, most notably Lone Star Transmission, LLC (Lone Star) and ability to meet aggressive construction schedules (e.g., the Texas Clean Energy Express), is summarized below.

Lone Star

NEET's subsidiary, Lone Star, was awarded a Certificate of Convenience and Necessity from the Public Utility Commission of Texas to become a new-entrant regulated public utility to develop, construct, and operate approximately 300 miles of double circuit and 30 miles of single circuit 345 kV lines, five 345 kV substations, and associated facilities. In early 2013, Lone Star completed construction and energized the project on-time and for tens of millions of dollars less than its initial cost estimate for the $700+ million project. This project is part of the Electric Reliability Council of Texas (ERCOT) Competitive Renewable Energy Zone transmission grid improvement program, mandated by the Texas Legislature. The Lone Star team, including support from NEET and other NextEra affiliates, managed all aspects of this project including development, permitting, land acquisition, regulatory filings, design, construction, and operations to establish a new transmission utility in Texas.

NEET established a Lone Star operations team, which included targeted support from FPL personnel. The operations team assisted Lone Star in obtaining the necessary pre-operations certifications from the North American Electric Reliability Corporation (NERC) and the Texas Reliability Entity, Inc. as a NERC registered Transmission Operator, and also, a Transmission Service Provider from ERCOT. Lone Star relies on shared NextEra affiliate Transmission and Substation personnel, processes and procedures to operate the business. Further, Lone Star benefits from the operational efficiencies of a well-established, shared support organization in the NextEra family of companies. The Lone Star business demonstrates how NextEra successfully applies resources to projects located anywhere in the U.S.

Texas Clean Energy Express

The Texas Clean Energy Express project is an example of an EHV transmission project completed on a very aggressive schedule. A NextEra subsidiary launched this long gen-tie at a transmission voltage level to interconnect a large wind generation site to a host utility. The project includes a 213 mile, 345 kV transmission voltage level line with two 345 kV substations. From conception to commercial operation, this project was completed in only 16 months. This project demonstrates NextEra's ability to design, develop, and construct voltage level transmission lines on extremely short timeframes, while completing appropriate processes for engineering, land acquisition, material and equipment

procurement, geotechnical and ground-based surveying, environmental permitting, mitigation measures for existing utility crossings, and pre-operational testing.

[redacted]

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NextEra's Development Experience

NEET is a wholly-owned, indirect subsidiary of NextEra. NEET MidAtlantic, through NEET, will draw upon the resources of the NextEra family of companies to ensure successful project execution. NextEra companies have a long-standing presence in PJM as developers, owners, and operators of clean energy generation and transmission voltage level facilities. NEET can draw on these resources and this experience to operate effectively and efficiently in the region.

NextEra

NextEra, headquartered in Juno Beach, Florida, is a leading clean energy company with consolidated revenues of approximately $17 billion, with approximately 46,400 megawatts of generating capacity, and 14,300 employees in 27 states and 4 Canadian provinces as of year-end 2015. NextEra has over 50 years of technical expertise in engineering, constructing, and operating large infrastructure projects, including transmission systems. NextEra's family of companies constructed, owns, operates, and maintains more than 66,000 miles of distribution lines, approximately 8,500 circuit miles of transmission lines between 69 kV and 500 kV, and 770 substations across North America. Additionally, NextEra is a nationally recognized company, which has a demonstrated capability for completing large transmission projects in a timely and cost-effective manner.

FPL

A principal subsidiary of NextEra and affiliate of NEET, FPL is the largest rate-regulated electric utility in Florida, and one of the largest in the United States. As of December 31, 2015, FPL's assets totaled approximately $42.5 billion, and FPL's generating resources for serving load consisted of 26,073 megawatts (MW), of which 25,254 MW were served from FPL-owned facilities. FPL serves more than 9.5 million people through approximately 4.8 million customer accounts in Florida. Due to FPL's ongoing investment in smart, cost-effective, and efficient technologies, FPL is able to provide the most affordable electric service in Florida. For example, FPL's typical residential customer bill continues to be the lowest of the state's 55 electric utilities (based on a 1,000 kilowatt-hour typical bill) and 30% lower than the national average in 2015.

NEER

A principal subsidiary of NextEra and affiliate of NEET, NEER is the largest producer of energy from the wind and sun in the world. As of December 31, 2015, NEER had nearly 12,414 MWs of wind generating capacity and nearly 1,026 MWs of solar generation in its portfolio. Electric output from NEER's generating assets is sold to companies and businesses with an interest in clean energy, including utilities, retail electricity providers, power cooperatives, municipal electric providers, and large industrial customers. NEER has earned a strong reputation in power plant development, construction, and operations including numerous transmission voltage level gen-ties and generation switchyards, using standardized processes, best practices, and superior execution.

NEET

NEET currently owns, operates, and maintains transmission utilities in New Hampshire and Texas, and is developing transmission projects throughout North America. In January of 2015, the California Independent System Operator (CAISO) selected NEET West, a subsidiary of NEET, as the developer for the Suncrest 230 kV 300 Megavolt-Ampere Reactive (MVAR) dynamic reactive power support project

under its 2013-2014 transmission plan. CAISO specifically cited NEET West's operational experience, which it draws from the NextEra family of companies, as one of the factors in its selection. NEET West was the first non-incumbent to win a CAISO competitive solicitation transmission project. In March of the same year, CAISO again selected NEET West as the developer for the Estrella 230/70 kV substation located in the Pacific Gas & Electric (PG&E) service territory, in San Luis Obispo County, California.

In August 2013, the Ontario Energy Board selected Upper Canada Transmission Inc. (UCT), a partnership of NextEra Energy Canada ULC (a NEET affiliate), Enbridge Transmission Holdings Inc., and Borealis EWT Inc. as the developer for the East-West Tie, which involves construction of a new, approximately 250-mile long double circuit 230 kV electrical transmission line running between Thunder Bay and Wawa, Ontario. The East-West Tie, in conjunction with an existing transmission line, will increase the capacity and reliability of the Bulk Electric System between northeast and northwest Ontario. UCT prevailed in a competitive proceeding involving six applicants who submitted detailed proposals for the project.

In addition, as explained above, Lone Star, a wholly-owned subsidiary of NEET, constructed, operates, and maintains 300 miles of double-circuit and 30 miles of single-circuit 345 kV transmission line, using spun concrete and tubular steel monopoles with braced post insulators. The project traverses various terrains and geological conditions, which required multiple specialized foundation types. The project also required the construction of three large greenfield substations and two series compensation stations. In June 2016, Lone Star constructed a 4th 345/138 kV greenfield transmission substation on schedule and under budget in order to serve localized load to Big Country Electric Cooperative.

Lone Star's primary and backup Energy Management System is in Florida and primary and back-up control centers are located in Austin, Texas for system operations. In addition to its Texas operations team, Lone Star relies on shared affiliate transmission and substation personnel, processes and procedures, and benefits from the operational efficiencies of a well-established shared services organization.

NextEra's Engineering Expertise

The NextEra family of companies has a highly qualified engineering organization that will lead the execution of the Project. NextEra affiliates' design and engineering capabilities include:

- In-house engineering expertise in transmission line and substation engineering and design; civil and structure engineering; protection, control, and communications systems expertise;
- Experienced transmission line designers and SMEs who will develop the scope of work documents for the construction plan, including structure drawings, plan and profile drawings, and construction specifications; and
- Long-standing, collaborative relationships with many of the most experienced engineering firms in the power industry, which are already being used to support wind, solar, fossil, and transmission projects in development – bringing cost certainty and execution confidence.

- Strength in material and equipment procurement:
- Experienced in-house procurement staff with the ability to work though vendor selection;
- Long-standing relationships with vendors and significant buying power that allows NEET to access better pricing from reputable suppliers, as well as expedite purchase and delivery during critical times;
- Established procurement processes that incorporate quality, cost, reliability, financial stability, delivery, field support, safety track record, commitment to continuous improvement, and innovation when selecting suppliers; and
- Practice of buying major and critical equipment in advance, mitigating risks such as delivery delays or material cost escalation.

Also, the NextEra family of companies has a long history and significant experience in the construction of transmission lines, substation facilities, and related infrastructure. The NextEra team has proven capabilities in constructing and managing high voltage transmission line projects in compliance with the design, reliability, and operational standards set forth by a variety of authorities in North America. Since 2007, NEET and its affiliates completed over 1,476 miles of new transmission voltage level line construction at voltages ranging from 69 kV to 500 kV. NextEra's experience includes the full range of activities needed to support successful project development. We have extensive experience with licensing and permitting processes in PJM, as well as other jurisdictions. We have over 35 staff members who are specifically focused on permitting and licensing activities, and have the following capabilities:

- Experience developing strategy and planning for emerging federal and state legislative and regulatory developments that have the potential to impact ongoing activities;
- Ability to evaluate and ensure compliance with and the appropriate adherence to federal, state and local environmental requirements including environmental audits;
- Expertise identifying and obtaining required licenses and regulatory agency approvals to construct new non-utility fossil and renewable energy generating facilities, gas infrastructure and transmission facilities;
- Experience performing environmental due diligence for potential acquisitions, divestitures, and financings; and
- Experience promoting environmental relationships with external environmental groups, and integrating and communicating sustainability.

Affiliates of NEET MidAtlantic have numerous environmental professionals who work solely on new project development activities. They are involved in projects from the concept stage through the first year of operation and bring the following capabilities:

- An emphasis on environmental sustainability and responsibility for assessing environmental issues and developing mitigation strategies; ensuring the timely receipt of environmental approvals; assisting project teams in understanding environmental regulatory requirements and ensuring environmental compliance during construction; and liaising with regulators;
- In-house aquatic environment experts, soils experts, wildlife biologists, geotechnical engineers, and environmental engineers;
- Established environmental compliance monitoring program via a permit condition compliance matrix, regular compliance team meetings, and formal environmental audits; and
- Relationships with qualified and trained environmental inspectors to monitor work being completed on rights-of-way (ROW), and specifically to identify any additional mitigation to ensure compliance with regulations.

NextEra Project Operation Experience

Affiliates of NextEra have a substantial O&M organization that delivers operational excellence. Its capabilities include:

- Supporting NEET's operations with in-house and external specialists that have industry experience operating and maintaining a variety of transmission equipment, including switched capacitors, series compensators, substations, and transmission lines up to 500 kV. NextEra's transmission specialists currently support NEER's existing transmission-voltage level facilities in the PJM region. In addition to receiving support from the existing staff supporting assets in the PJM region, the project would be monitored and controlled by NEET's in-house Transmission Operations team, located in Austin, Texas;
- O&M of more than 8,500 circuit miles of transmission voltage level lines and 770 substations across North America, including more than 3,200 miles of 230 kV lines, more than 1,000 miles at 345 kV and over 1,100 miles of 500 kV lines; and
- Owning, operating, and maintaining reactive power support equipment, including 365 MVARs of synchronous condensers, 8,115 MVARs of transmission level switched capacitors, and 3,000 MVARs of series compensation equipment. These assets include 345 kV reactive power compensation equipment. The total power transformer capability operated and maintained by NextEra affiliates is approximately 160,000 Megavolt-Ampere (MVA), of which over 139,000 MVA is subject to NERC Reliability Standards.

As explained above, NextEra has a well-qualified O&M team, and NEET MidAtlantic will leverage both internal resources and external contractors for the safe, reliable, and efficient operation and maintenance of the project. Below are highlights of our O&M capabilities:

- NextEra companies own NERC registered assets in all eight NERC regions; including being a NERC registered Transmission Owner in five regions and a Transmission Operator in two regions. NextEra has processes and procedures in place to comply with all applicable reliability criteria, including compliance with all NERC operation and maintenance Reliability Standards.
- NextEra companies have access to over 750 power system professionals including technicians and other staff with expertise in all aspects of transmission and substation equipment installation, maintenance, and repair. The Power Delivery Performance & Diagnostics Center (PDDC) in South Florida serves as a hub for technical knowledge, as well as remote condition assessment in support of operations; the PDDC (pictured below) uses advanced technology to monitor and manage equipment, and detect and prevent issues before they happen.

- NextEra affiliates oversee a large number of transmission projects annually, including major system upgrades and maintenance initiatives, and also supports O&M services in 27 U.S. states and in 4 Canadian provinces at transmission level facilities and for regulated transmission assets in Florida, ISO New England, and ERCOT.
- NEET affiliate FPL exhibited top-decile transmission reliability performance in a recent benchmarking study (2015 Southeast Electric Exchange Reliability Survey, SAIDI performance).
- NextEra affiliates implement O&M transmission solutions that include new designs, new condition assessment processes, and/or new products. Our staff often works directly with equipment manufacturers to develop these solutions in order to continually improve the reliability of our transmission systems. This background prepares us well to manage geographic and climate conditions that we are likely to face in future projects.

- NEET MidAtlantic will rely on affiliate transmission operations personnel both in the project area and in support functions to ensure a rapid response to emergency operating conditions. NextEra field operations personnel, directly and through applicable contracts with third-party vendors in the project area, will respond to all operating events during normal and emergency conditions. NextEra companies are experienced at devising recovery plans, specifically for storms, to help respond to system emergencies.

The NextEra companies have extensive experience adhering to standardized construction, maintenance, and operating practices, including the following:

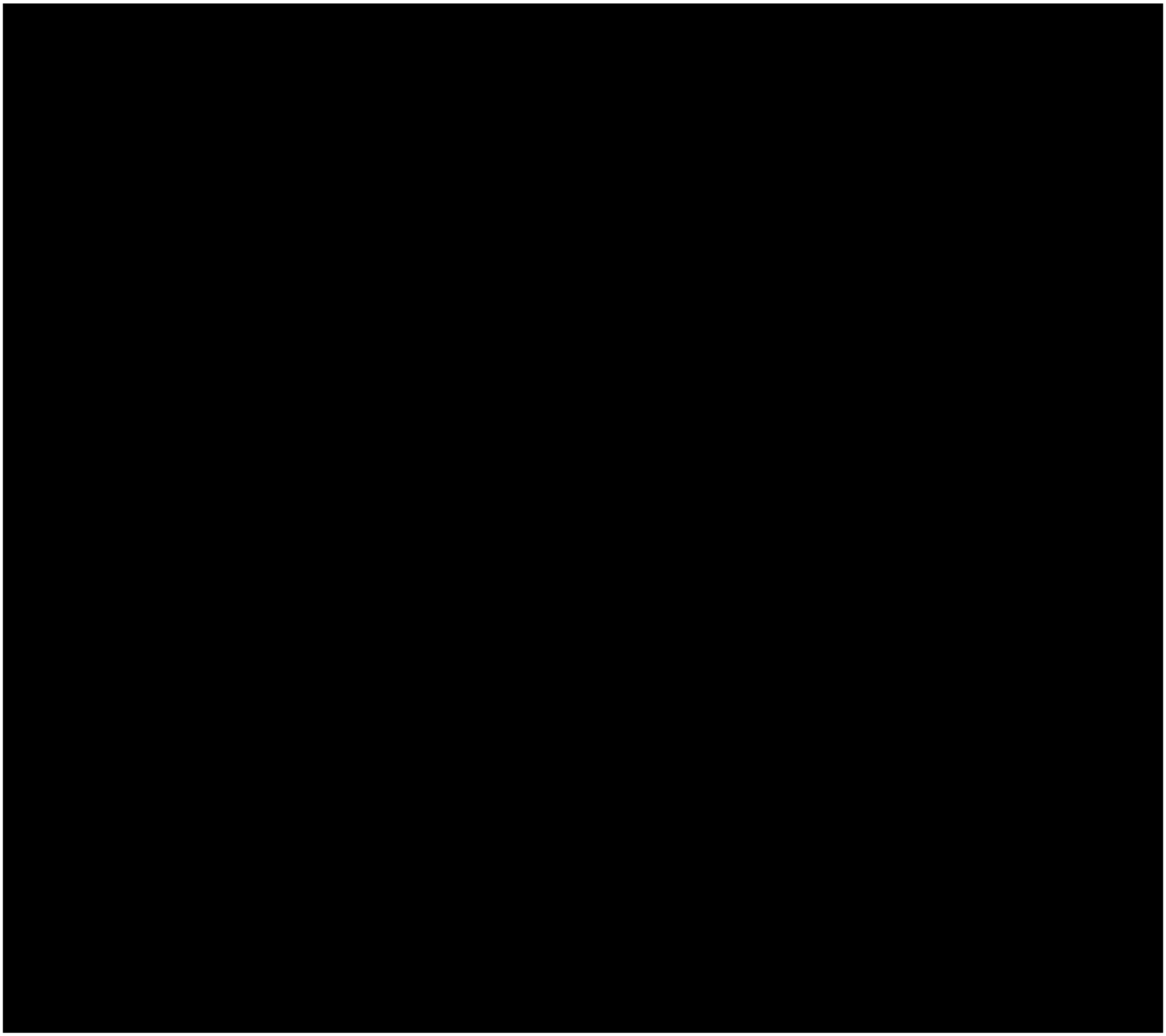
- NERC Reliability Standards ;
- American National Standard Institute (ANSI) C2-2012 National Electrical Safety Code (NESC);
- American Society of Civil Engineers (ASCE) 74 Guidelines for Electrical Transmission Line Structure, 3rd Edition, 2010;
- ASCE 10-97 Design of Latticed Steel Transmission Structures;
- CIGRE 299 Guide for Selection of Weather Parameters for Bare Overhead Conductor Ratings;
- Institute of Electrical and Electronics Engineers (IEEE) 738-2006 Standard for Calculating the Current-Temperature of Bare Overhead Conductors ;
- IEEE 1243 Guide for Improving the Lightning Performance of Transmission Lines; and
- IEEE 1313.2 Guide for the Application of Insulation Coordination.

NextEra's Experience in PJM

The following table describes NEER's experience working in the geographical region of PJM on transmission voltage level projects.

[redacted]

[redacted]



NextEra's Project Execution Track Record

NEET MidAtlantic, by being able to draw from expertise across the NextEra family of companies, supplemented with key consultant expertise, has the capacity to successfully execute the Project on-time and within budget. NextEra affiliates' project management experience in managing and adhering to scope and schedule for transmission projects is highlighted by summaries of the two following projects:

Blythe Energy Project: This 230 kV voltage level transmission interconnection line—located approximately seven miles west of the California and Arizona border—is an excellent example of a challenging project that was delivered ahead of schedule and under budget. The 67 mile, single and double circuit 230 kV voltage level transmission line was built to interconnect NEER's 520 MW natural gas-fired Blythe Energy Plant with the Southern California Edison (SCE) 230 kV transmission grid. The line paralleled existing 161 kV and 500 kV lines for 30% of the route and was constructed within a 100-foot ROW. Additionally, the project was built in an environmentally sensitive Desert Tortoise and Mojave Fringe-Toed Lizard habitat in the Mojave Desert in Southeastern California. The project required cultural, archaeological, biological, paleontological, and Native American inspectors on site during all periods of construction. In addition, the new line crossed numerous existing transmission lines and paralleled a major gas infrastructure line into Southern California, creating various design and execution challenges. NEER, in conjunction with Southern California Gas (SCG), initiated pipeline mitigation studies and identified mitigation improvements, and SCG constructed the improvements. Despite these challenges, the project was completed approximately 25% below its original budget of $100 million and 51 days ahead of schedule.

Lone Star's Competitive Renewable Energy Zone Project: This project is another example of superior management of project scope and schedule. Lone Star's transmission system consists of 300 miles of double circuit and 30 miles of single circuit 345 kV transmission lines, broken into three segments, with five 345 kV substations. Managing a project which traverses a long distance and diverse terrains presents scope and schedule challenges. The Lone Star project team used geographic information system (GIS) based project management software to coordinate land acquisition and construction activities, as well as to track progress, report to management and document quality assurance and quality control processes. Using Primavera software, the project team conducted weekly project schedule reviews, including validation sessions with management and monthly executive dashboard reviews on all work streams. The project team also participated in regular engineering design reviews; assisted in managing the coordination of design criteria, system studies, equipment and material specifications, procurement, and relay protection settings with all interconnecting utilities in Texas; and ensured that all required changes were executed according to change management processes. The Lone Star team was able to effectively manage design and construction of this large, complex project and successfully complete it on time and more than $50 million under budget.

As with the other comparable projects described above and throughout this application, NEET MidAtlantic will employ best practices in project management, including rigorous adherence to schedule and effective oversight, to complete the Project. These proven project management techniques, as well as our transmission and substation experience will be used to ensure timely project delivery and cost control.

NextEra's Record of Standardized Construction, Maintenance, and Operating Practices

Construction Practices

The construction of large-scale infrastructure projects is a core competency of NEET MidAtlantic. Through its team and affiliates, NEET MidAtlantic brings depth of experience in construction management of transmission and substation facilities. NextEra affiliates' have proven capabilities in constructing and managing high voltage transmission line projects of similar size, type, and technology as the Project. NextEra affiliates' completed projects comply with the design, reliability, and operational standards of applicable authorities across North America.

NEET MidAtlantic will staff the Project with a project manager, transmission construction lead, project engineer, safety manager, environmental compliance manager, commissioning manager, and administrative support.

[redacted]

Project Execution Plan

NEET MidAtlantic's experience has shown that the best way to manage project execution and risk is with a thorough accounting, understanding, and documentation of the project scope and early identification of risks and mitigation strategies. At a minimum, the scope document will include the project's specifications, milestones, necessary approvals and permits, and other requirements that form the basis for the Project Execution plan described below.

The project team's primary guide for managing the project is the Project Execution Plan. NEET MidAtlantic will draft this plan early in the project life cycle to create a framework for project execution. The plan's content includes project scope, best practices, master schedule, project budget, project tracking, controls and reporting requirements, identification of project risks, team structure, communications plan, roles & responsibilities, and change control processes. This plan is available to anyone on the project team, giving a consistent guide throughout the project development and construction cycle.

For tracking of the project budget and schedule, NEET MidAtlantic will set up the Project in its Work Breakdown Structure (WBS) accounting system and utilize Primavera for creating and maintaining a critical path based schedule. The WBS system enables NEET MidAtlantic to track internal and third-party costs and time spent on the Project.

[redacted]

NEET will assemble a team of accomplished professionals and SMEs to make up the project management team. The team will be led by the Project Director and will draw upon NextEra's matrixed organization of shared resources and contractors for the project execution.

Throughout the project execution phase, the schedule, budget, and risk logs for the Project will be updated and optimized based on current information. The Project Director will use the WBS cost and time account data, in conjunction with the man-hour forecasts provided in the budget and schedule to forecast project resource requirements. The Project Director will utilize this data for early identification of any required changes to the construction plan allowing the execution strategy to be continually optimized.

During the project execution phase, the project team will track project progress, prepare project status and compliance reports, and forecast future project resource requirements. To accomplish this, the team will utilize the WBS cost and time accounting system, budget and schedule. As with other NextEra projects, the team will produce a project dashboard for the Project to provide an up-to-date status of pertinent project metrics. Team members and senior management will have a quick and easy tool to access the Project's status by viewing the dashboard.

Based on NextEra affiliates' established practice, NEET MidAtlantic will use a four-part approach in addressing inspection and quality assurance and control during the execution of this Project:

Construction Inspections

NEET MidAtlantic construction leads and managers are required to perform construction inspections using the Verification and Validations (V&V) matrix developed for the Project. Developed before construction commences, the V&V matrix is project-specific, addressing necessary inspections, witness points, confirmations, and verification of documentation and drawings. The V&V process verifies that the facilities are constructed as designed and that all compliance documentation is provided by the appropriate construction or engineering contractor. This allows NEET MidAtlantic to document all of the required compliance activities, manage the commissioning process, and ensure that the facilities perform as designed prior to energization.

The team developing the V&V matrix will consist of the Project Director, engineering and environmental leads, construction lead, and director of commissioning, as well as SMEs from NextEra affiliate's Engineering and Construction organization. The V&Vs are categorized and can be sorted for the specific phase of the project. For example, all design drawing and document checks can be filtered for completeness prior to site mobilization or start of construction. Another critical checkpoint in the project schedule is just prior to energization, when all required verifications can be sorted and confirmed prior to energization of any equipment. During the construction phase of the Project, the NEET MidAtlantic construction lead and team will witness and inspect the work as required using the V&V matrix. Additionally, the NEET MidAtlantic commissioning manager and team working in conjunction with the Transmission Substation owner will witness and verify the electrical/mechanical

operation and functionality of any communication systems prior to energization. The V&Vs are be confirmed and signed off by qualified NEET MidAtlantic construction managers and engineers.

In addition, NEET MidAtlantic will have independent compliance field inspectors on the Project including environmental and agricultural monitors. The monitors will be equipped with sufficient documentation, transportation, and communications equipment to effectively monitor each compliance-required activity.

Contractor Quality Assurance and Control Plans

NEET MidAtlantic's quality control process applies to all work products, including reports, planning studies, calculations, material/equipment specifications, construction drawings, and every other exhibit, drawing, or document associated with the design and construction of the facility. NEET MidAtlantic will require the contractor to develop and provide QA/QC plans. The transmission construction contractor must, prior to site mobilization, produce a site-specific plan for the SOW, including applicable procedures, and proper verification forms and checklists with adequate supervisory sign-off. NEET MidAtlantic project management, with support of SMEs, Engineer of Record, and managers responsible for quality, will review each contractor's QA/QC plan for completeness and require the contractor to make any necessary changes.

The transmission contractor, along with on-site NEET MidAtlantic construction management, will be responsible for daily and weekly inspection and construction quality control, as will be detailed in the QA/QC plan. NEET MidAtlantic's contractor will supply personnel experienced in transmission line construction who will perform construction inspections. When completed, inspectors will review the completed forms and add them to the Project's database for review by contractor, engineering, and project management staff. When issues are identified, engineering staff will provide an appropriate response addressing the issue for NEET MidAtlantic's review. If NextEra's engineering staff determines that the response does not adequately address the identified issue, the contractor will be required to perform mitigation, which may include additional work to meet NextEra's requirements and specifications. This inspection process is ongoing and continues until project completion.

Throughout the course of the work, NEET MidAtlantic's construction management and inspection team will conduct preparatory meetings with the construction contractor prior to initiation of major work scopes. The preparatory meetings will help ensure that the engineers, managers, and inspectors are fully knowledgeable and capable of approving the work processes, materials, safety processes and plans that the construction contractor will apply to a specific component of work. For example, a specific preparatory meeting will be scheduled for drilled pier foundations. The construction contractor will be required to submit written plans prior to each preparatory meeting. Inspectors will review these plans for discrepancies, which are defined as materials and installations that fall outside of the Project specifications, or are not addressed in the Project specifications.

Engineers of Record to Perform Site Visits, Inspections, Walk Downs, and Witnessing of Tests Prior to Energization

The third element of quality control and assurance includes the requirement that the transmission line Engineer of Record perform site visits, inspections, walk downs, and witnessing of tests prior to energization to ensure all specified equipment is actually installed and that the equipment installation meets the construction specifications. The final site walk downs are the critical final step in verifying that the Project is ready to be energized.

Constructability, Drawings, Specifications, Material Orders Review

NEET MidAtlantic will coordinate several design review and constructability review meetings with the transmission line design engineer (Engineer of Record) and transmission line construction contractor for the transmission line. Included in these reviews will be the NEET MidAtlantic construction management team including the Project Director, Project Manager, Site Construction Lead, Safety Manager, Project Engineer, Commissioning Manager, Permit Coordinator, and SMEs from NextEra's Engineering & Construction organization. The design reviews will take place at 30%, 60%, and just prior to issuance for construction and encompass all aspects of the design, including tower and structure assembly drawings, wire pulling and staging plans, design criteria, materials and equipment installation details, material and equipment specifications and construction specifications. NextEra's SMEs will review the design criteria to verify that such criteria are valid, correct, and adequate. Subsequent project deliverables are compared to the design criteria and checked for consistency across all drawings and specifications. NEET MidAtlantic will conduct these reviews at various stages of the Project, in accordance with its V&V matrix. Upon successful completion of these reviews, the task will be signed off by the qualified person responsible (generally the Project Director or Project Engineer).

Prior to site mobilization and the issuance of construction documents, the project team, including NEET MidAtlantic project management, construction managers and engineers, along with the NEET MidAtlantic contractors, will undertake constructability reviews. During these reviews the construction contractor will review the design, determine completeness of drawings, review environmental and construction permit status, review land acquisition status, obtain material and equipment delivery status, ask questions of the Engineer of Record, and make suggestions for design changes that improve constructability. At this time, the same group will review the construction installation specifications for completeness, accuracy, and site-specific applicability. Any changes or modifications to the design and/or construction specifications will be incorporated by the design engineer, as applicable. Any items identified during these review meetings requiring a field inspection or witness point will be added to the V&V matrix.

In addition to document reviews by the NEET MidAtlantic project team, its consultants may conduct independent reviews, utilizing qualified internal engineers and construction professionals who are not otherwise working on this specific project. All of these peer reviews will take place during the design phase of the project prior to the submission of the final plans to the NEET MidAtlantic project team.

All final documents and drawings will be diligently maintained by NEET MidAtlantic. The Project's drawing index will include detailed information on each drawing (drawing number, title) and which versions are most current. The most important drawings are the Issued for Construction (IFC) versions because after these are developed, any changes to drawings and construction-related documents such as the bill of material, structure list, etc., will be updated to a release version ("Revision 1"), and the new revision will highlight what changed in the drawing or document. NEET MidAtlantic requires contractors to establish a documented engineering change notice process for addressing field modifications, corrections, clarifications, and design changes after drawings have been finalized and issued for construction. The project management team will be responsible for assuring that all project stakeholders have the most current version of documents and drawings. A secure and protected electronic depository will be used to disseminate drawings.

Operations and Maintenance Practices

NextEra affiliates' transmission businesses have well established, practices and procedures for the operations and maintenance of its facilities, which are derived from FPL's practices for its transmission line and substation facilities. NextEra's safety culture, organizational structure, and internal auditing processes ensure compliance with maintenance standards. This is evidenced by:

- FPL's and Lone Star's annual reporting obligations to their respective Public Service Commissions. These include the actual transmission inspection and maintenance tasks completed each year compared to the previously reported annual maintenance plan.
- Transmission line ROW vegetation management and compliance reporting obligations are routinely provided to the respective NERC regional entities policing NextEra's project locations.
- For its protection schemes, as applicable, NextEra facilities provide quarterly protection status information to their respective NERC Regional Entities.
- SMEs within the NextEra Technical Services team continuously monitor all aspects of transmission and substation equipment to ensure adequate levels of reliability are maintained. Equipment SMEs work closely with the NextEra Energy's 24/7 Transmission PDDC. This center serves as a hub for asset health data continuously gathered by remote condition assessment technologies and assessed by the center's smart-analytic tools. The PDDC provides oversight of NextEra affiliates' and the Technical Services team continuously audit the information collected.

To ensure the safety and reliability of NEET MidAtlantic facilities, its maintenance practices will be based on those of NextEra affiliate's existing O&M organization, responsible for approximately 8,500 miles of transmission lines up to 500 kV across the United States. These facilities are operated and maintained in compliance with NERC TO and TOP Standard requirements. The existing NextEra affiliate's O&M organization has a program of maintenance standards providing the capability to manage compliance to the provisions of the PJM operating agreement and standards and procedures. The NEET MidAtlantic O&M team is supported by NextEra affiliate's O&M SMEs with experience in complying

with ISO operating agreements and NERC Reliability Standards across a significant number of jurisdictions in North America.

The existing maintenance plan for NextEra companies covers all elements of the proposed project. NextEra companies' practices include a formalized program of procedures and processes and reinforced by continuous monitoring and condition assessment practices. NEET MidAtlantic transmission line patrols, inspections, and maintenance practices will address: conductor, (overhead ground wire and optical fiber ground wire); bonding and grounding; guys and anchors; hardware; insulators; rights-of-way; structures and foundations; thermography inspection; corona inspection; vegetation management.

Operations and Maintenance Capabilities

NEET MidAtlantic will leverage in-house and third-party resources for the safe, reliable and efficient maintenance of the Project. NEET MidAtlantic, in conjunction with the NextEra affiliate's power delivery team, brings significant O&M capabilities as outlined below:

- Well-established O&M practices and standardized processes, which are already being used at NextEra's operating EHV transmission facilities.
- Access to over 766 power system professionals, including technicians and other staff, with expertise in all aspects of transmission and substation equipment installation, maintenance and repair. Many of these personnel will provide support to NEET MidAtlantic through our PDDC located in south Florida.
- Experiences from operating and maintaining power delivery assets in all NERC jurisdictions at voltages up to 500 kV, and in several jurisdictions that have transmission operation agreement Terms and Conditions (T&Cs) similar to the PJM operating agreement.
- An excellent record of transmission and substation reliability, built on robust design and O&M programs that incorporate condition assessment, diagnostics, and asset management for effective and efficient investment of resources and capital.
- Inspection and maintenance practices cover all elements of transmission line circuit maintenance and station maintenance for operating voltages between 69-500 kV.
- Central equipment SMEs based in Florida are responsible for NERC compliance and the health of facility asset groups such as transformers and protection equipment. The centralized groups of SMEs provide technical support for field staff and also manage specialized support vendors who provide resources for vegetation management and equipment failure recovery at facilities.

- Reliability Metric SMEs work within the Delivery Assurance group and are responsible for transmission and substation availability/reliability reporting for facilities across all NERC regions. This group will leverage its current role to support the proposed projects compliance with PJM procedures addressing: maintenance; outage data formatting; maintenance reporting for the past and future periods; and classifying forced outages. Any deviations from a facility availability target are assessed by members of the Technical Services group. This approach ensures that expertise in all aspects of transmission and substation equipment is adequately engaged to ensure the correct action plans quickly restore availability and equipment reliability to acceptable levels.
- Equipment SMEs in the Technical Services team are responsible for assessing maintenance practice effectiveness and introducing innovative new maintenance techniques. This capability will be leveraged for the Project to ensure compliance with PJM procedures and reviews. The team will support the preparation of the Project maintenance practices to ensure PJM grants their approval before the start of commercial operations. The team will also support any amendments to the agreed maintenance practices to ensure compliance with PJM maintenance change protocols.

[redacted]

NEET MidAtlantic will leverage the extensive experience of NextEra affiliates, such as FPL and Lone Star Transmission, to develop NEET MidAtlantic specific plans to respond to large-scale emergencies involving project facilities.

[redacted]

[redacted]

The NextEra family of companies has inventory and spare strategies for routine maintenance requirements and loss of functionality for all its facilities. NEET MidAtlantic will have its own strategic spares covering facility equipment.

NextEra affiliates' operating procedures describe the processes for scheduling and reporting planned and unplanned transmission outages that may affect the reliability of interconnected. NextEra affiliates are familiar with major system disturbances and the procedures in place to cope with events and restore the integrity of the system to a normal state as quickly as possible.

NextEra's Compliance and Responsibility Organization (CRO) is a centralized group of compliance SMEs who manage, report and audit the NextEra affiliates Registered Entities NERC compliance programs. CRO will work with NEET MidAtlantic to establish the required agreements, processes, and procedures for assuring compliance. NEET MidAtlantic will follow the NextEra Internal Compliance Program (ICP) to address the NERC requirements. NextEra's CRO oversees the implementation of the ICP. Compliance monitoring is accomplished by internal reviews, spot checks, investigations, along with letters of certification, and data submittals. Internal audits are conducted to ensure NextEra affiliates are compliant in accordance with the applicable NERC Reliability Standards. NEET's existing projects have had no NERC standards violations to date. NEET MidAtlantic support personnel have recent project experience in establishing and executing TOP Reliability Standards compliance programs with ERCOT.

NEET MidAtlantic will follow NextEra's robust practice of complying with numerous requirements. NextEra's transmission businesses have well-established, reasonable practices and procedures for the operations and maintenance of its facilities, which are derived from FPL's practices for its facilities.

NEET MidAtlantic is confident its transmission vegetation management program will meet all NERC compliance requirements and local-specific requirements for vegetation management.

NextEra's vegetation management program preserves the reliability of the electric transmission systems by preventing outages from vegetation located on transmission ROW, and minimizing outages from vegetation located adjacent to ROW, and by maintaining clearances between transmission lines and vegetation on and along transmission ROW. The program ensures that NEET MidAtlantic will be compliant with all governmental vegetation related regulations and restrictions, and in particular NERC Standard FAC 003.

NextEra's Financial Strength

NEET MidAtlantic benefits from the extensive, enterprise-wide financial resources of NextEra's affiliates. A Fortune 100 company, NextEra's year-end 2015 balance sheet included over $82 billion of assets and $22 billion of shareholder equity, with more than 67% of NextEra's $17 billion in 2015 revenues derived from regulated utility sources. Consequently, NEET MidAtlantic, through its parent company, has the financial capacity to finance, develop, construct, operate, and maintain projects over the long-term.

Current and historical financial information related to NextEra, including Annual Reports and financial statements filed with the Securities and Exchange Commission can be obtained from the following:

- Appendix 9 for NextEra 2013-2015 Annual Reports
- Appendix 10 for NextEra 2nd Quarter 2016 Financial Statements

NextEra Energy Capital Holdings (NEECH)

NextEra Energy Capital Holdings, Inc. (NEECH) is a wholly-owned subsidiary of NextEra, which holds ownership interests in and provides funding for NextEra's operating subsidiaries, other than FPL. NEET MidAtlantic plans to finance the project from development through operations with corporate parent funding, both equity and debt, received from NEECH. NEECH maintains a strong investment grade credit rating and has access to and regularly secures financing in public debt and equity markets on behalf of NextEra and affiliates, including NEET MidAtlantic. At some point in the future, after construction and during operation, the project could benefit from a portfolio financing of multiple assets that could be undertaken by NEET, or another NextEra affiliate. NEET's project will be supported by NEECH's approximately $4.6 billion of net available liquidity, primarily consisting of bank revolving line of credit facilities and cash equivalents, less letters of credit issued under the credit facilities, and commercial paper outstanding and notes payable. Consequently, NEET MidAtlantic, through NextEra and its financial affiliate NEECH, has the financial capacity to finance, develop, construct, operate, and maintain projects over the long-term.

NEECH's current credit ratings are as follows:

Table 3: **NEECH's Credit Ratings as of 31st December 2015**

Company	Moody's	S&P	Fitch
NEECH	Baa1	A-	A-

As discussed previously, during development, permitting and construction, and operation, the project will be supported 100% through corporate parent funding, which will consist of both equity and debt. Therefore, ratepayers will receive the benefit of a project constructed with strong equity support, without any risk of project-level leverage. Further, corporate parent funding benefits ratepayers by avoiding unnecessary and costly third-party transaction costs and providing the flexibility to complete the Project under a range of possible scenarios (e.g., construction delays, regulatory interventions, etc.).

On or around the date of commercial operation, NEET MidAtlantic will seek to convert its short-term variable rate debt into long-term fixed rate financing.

The Project may further benefit from a portfolio financing post-construction that could include a series of multiple fixed rate debt issuances that align with the forecasted depreciable net book value of the project assets, when viewed as a diversified portfolio. Such a structure allows ratepayers to benefit from a portfolio of debt terms and rates, which minimize the overall financing cost.

NEET's affiliate, Lone Star, recently utilized a similar permanent financing structure for its recently energized transmission assets. Lone Star was able to issue its debt, excluding issuance costs, at a blended weighted average long-term cost of 3.46%, which was lower than the 3.59% weighted average cost of debt for A-rated utility debt of the same weighted average life as Lone Star debt. Additionally, comparable transaction analysis indicated that such financing carries the lowest credit spreads of any private placement, and the lowest coupon rate for a 30-year debt issuance in recent history for a regulated utility in Texas. As a result of this financing, Lone Star has the lowest cost of debt and the lowest cost of capital of any investor-owned utility in Texas.

Another NEET affiliate, New Hampshire Transmission, LLC, owner of a controlling interest in and operator of the Seabrook Substation in New Hampshire, recently refinanced its long-term debt with NEECH. The flexible financing, approved by both state and federal regulators, provides access to commercially attractive cost debt, when needed, without incurring unnecessary or costly transaction fees.

In addition to the capital markets, NextEra often looks to the bank market for attractive financing opportunities. Banks can sometimes provide greater flexibility with respect to our financing needs, but generally speaking, bank loans are considered an equivalent source of financing and the two are used interchangeably to support the company's development pipeline. Strong demand exists from banks to lend to good quality credits with stable cash flow at attractive rates. Through NEECH, NEET MidAtlantic has access to a balanced and well-diversified lending group that can support bank financing.

Commitment to Execute the Consolidated Transmission Owners Agreement

If it is selected to be the Designated Entity, NEET MidAtlantic is prepared to execute the Consolidated Transmission Owners Agreement.

NextEra's Experience Responding to Contingencies

The NextEra Corporate Emergency Management Plan (CEMP) describes the processes and procedures that guide how NextEra plans for and responds to incidents. CEMP applies to all threats or incident responses including, but not limited to: severe weather; cybersecurity; grid or supply disruptions; physical security; floods; fires; chemical spills; pandemics; civil unrest; or any other hazards that threaten NextEra systems, reputation, employees, or contractors. NEET MidAtlantic will rely upon the CEMP to respond effectively. The objectives of the CEMP are to ensure that:

- All employees have been accounted for;
- Resources will be effectively deployed from across the enterprise to respond to the incident;
- Response personnel understand the common emergency response organization and incident management practices used by NextEra;
- Response team members understand their roles and responsibilities and key processes applicable during any incident;
- There is clear, effective communication regarding the incident to both employees and the public;
- NextEra uses a "one voice" approach to communicating with all internal and external stakeholders;
- The principles of the Incident Command System (ICS) are employed, including the activation of an emergency response organization; and
- Assistance is provided to impacted employees and their families.

NEET MidAtlantic will develop an event response plan supported by a comprehensive spare strategy and emergency plans, to ensure an appropriate response to catastrophic events. NEET MidAtlantic will augment the process and strategies in the emergency plan to account for the effects of a project's unique environmental, weather and topography conditions. In particular, NEET MidAtlantic will incorporate specific weather operating plans and experiences from NextEra's operation of assets throughout North America. NEET MidAtlantic will leverage the extensive experience of NextEra affiliates, such as FPL and Lone Star, to develop NEET MidAtlantic specific plans to respond to large-scale emergencies involving project facilities.

It continuously works to improve its response plans to catastrophic events, by bolstering guidelines and regularly training staff with storm drills.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

NEET MidAtlantic will leverage these skills and the knowledge used to develop its existing transmission line emergency response plan utilized for its more than 1,100 miles of 500 kV transmission lines in Florida. The plan actions include the material required to repair significant conductor and structure damage. SMEs in the FPL transmission engineering department are responsible for maintaining the plan.

Where a rebuild is required, the NEET MidAtlantic's intent is to return the transmission line, at the time of the restoration, with the needed new poles, conductor, and accessories based on the original line design.

The estimated time to rebuild one mile is 10 – 12 days, but is contingent on the weather and the amount of ground clearing to maintain a safe work area. The outage time includes:

- Damage Assessment
- Clearing Site
- Engineering and Material Order
- Material Turn Around
- Construction

[redacted]

[redacted]

The approach adopted by NEET MidAtlantic following a catastrophic event is described below:

- At the time of an incident, the local HV Technician will perform the first responder role assessing the severity of damage. It is anticipated the response will start in less than 60 minutes.
- NEET MidAtlantic working with the incumbent Transmission Owner's protection and control team will support the rapid assessment of the transmission line once a determination has been made where on the line the problem occurred.
- The local HV Technicians will report back to the NEET MidAtlantic operations manager who will coordinate the response. The function of monitoring the transmission line status and acting as NEET MidAtlantic's 24/7 point of communication contact with the lines interconnecting entities will be performed by NEET's transmission control center in Austin, Texas. The operations manager will oversee coordination of the restoration.
- The first priority will be to ensure the safety of the general public and the workers at the jobsite and coordinate the effort to prevent further damage and/or cascading of the transmission line.
- Equipment critical to the emergency, including materials such as conductors, splices, insulators, hardware, and structures will be mobilized. If sufficient permanent steel is not available or if there is foundation damage, the modular lightweight IEEE Standard 1070 ERS structures are brought to the jobsite along with the 20 feet storage container containing all the polymer insulators, hardware and anchoring for these modular temporary structures.
- After the line is stabilized and the area around the line is made safe for the general public and the workers, the next priority is to restore the line permanently. It is NEET MidAtlantic's intent to provide the fastest possible permanent restoration scheme.

NEET MidAtlantic will implement a specific spares strategy for the Project based on the final design, which will consist of uniquely identified parts held specifically for the line, and leverage common spare parts held by NextEra affiliates in Florida, Oklahoma and Texas. A potential backup source for spares will be through the existing mutual assistance programs NextEra has in place.

NextEra's Experience Acquiring Rights of Way

NextEra and its subsidiaries, including NEET MidAtlantic, have significant and geographically diverse experience in acquiring ROW for energy infrastructure across North America. In constructing a

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

C. PROPOSED PROJECT CONSTRUCTABILITY INFORMATION

Scope of Project

[redacted]

NEET MidAtlantic will own the first transmission line structure located outside of each substation. It will also own all insulators and hardware required to dead-end the transmission circuit conductors and OPGW shield wires on the line-side of the first transmission structure. It is assumed that AEP will be responsible for the conductor and OPGW shield wire span located between the first transmission line structure and the substation structure inside each substation.

[redacted]

The lightning protection system, grounding methods, aeolian vibration mitigation measures, and communication systems have all been preliminarily designed and engineered to support a robust cost estimate and thorough understanding of the project implementation and operations and maintenance requirements.

Solution to Cross-Border Issues

The Project is not being proposed as a solution to Cross-Border issues.

Interregional Cost Allocation

Evaluation for Interregional Cost Allocation is not desired.

[redacted]

Coordinated Interregional Analysis

Not Applicable

Regional and Interregional Violations

- 2016 RTEP Proposal Window #2
- Generator Deliverability Overloads – Flowgates 128, 130, 131, and 134 – Eugene-Dequine 345 kV
- N-1 Thermal Overloads – Flowgates 101 and 102 – Eugene-Dequine 345 kV

Detailed Breakdown of All Proposal Elements

General Description

For a general description of the Project, please see the paragraphs above under the heading "Scope of Project." Further details on the various components and elements of the facility design are set forth below.

Conductor Specifications

[redacted]

Lightning Protection System

The lightning protection system will be analyzed per IEEE Standard 1243 "Guide for Improving the Lightning Performance of Transmission Lines" with the IEEE Flash program". This will provide the anticipated lightning performance through detailed analysis of the structure configuration, anticipated structure footing resistances, regional ground flash density, estimated stroke current magnitude, and line insulation.

[redacted]

[redacted]

Typical Grounding Specifications

The proposed structure grounding will include 1 to 3 ground rods, connected in series as required to meet a targeted grounding resistance of 25 ohms. If the grounding specifications are unachievable during construction, and the achieved footing resistance is insufficient to facilitate reliable operation, location specific grounding infrastructure such as a second set of parallel ground rods or counterpoise will be evaluated and installed.

Conductor Vibration Mitigation

As part of the preliminary engineering completed in support of this Proposal, NEET MidAtlantic performed an aeolian vibration analysis to evaluate performance at the Average Annual Temperature and the Average Temperature of the Coldest Month for the Project area. This analysis was used to estimate the likely quantity and placement of Stockbridge-style phase conductor vibration dampers. Spiral vibration dampers will be used on OPGW per manufacturer recommendations based on span lengths and wire tensions.

NEET MidAtlantic incorporated galloping mitigation into the preliminary design by establishing conductor phase spacing such that minimum clearances of 3.5 feet and 2.5 feet will be maintained between conductor-to-conductor and conductor-to-OPGW galloping ellipses, respectively. It also analyzed galloping ellipses for single-loop galloping for spans less than or equal to 750 feet, and double-loop was evaluated for spans greater than 750 feet.

Switchgear

No field mounted switchgear is anticipated.

Protective Relaying Communication System

Two independent OPGW's in the shield wire position will be provided to accommodate the redundant fiber optic communication and protection paths.

Geographic Description

[redacted]

[redacted]

[redacted]

Route Description

Not Applicable.

Assessment of Environmental Impacts

NEET MidAtlantic completed a desktop review of the proposed transmission line route. To conduct the review, NEET MidAtlantic utilized publicly available GIS information and online database sources such as:

- U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI);
- National Hydrography Dataset (NHD);
- Federal Emergency Management Agency (FEMA) 100-year floodplain boundaries;
- U.S. Department of Agriculture (USDA) web soil survey;
- USFWS Information Planning and Conservation System (IPaC);

[redacted]

Potential Siting Issues Related to Environmental and Cultural Impacts

NEET MidAtlantic has completed a routing and siting evaluation, which took into account the following general criteria:

- Land Use
- Visual Impacts
- Wildlife and Threatened and Endangered Species
- Vegetation
- Hydrology

[redacted]

- Wetlands
- Floodplains
- Other Jurisdictional Waters
- Cultural Resources

Potential constraints to development including streams, wetlands, regulatory floodplains, known bald eagle nest sites, potential threatened and endangered (T&E) species, and cultural resources were assessed. [redacted]

[redacted]

[redacted]

[redacted]

[redacted]

ROW and Land Acquisition Plan

[redacted]

[redacted]

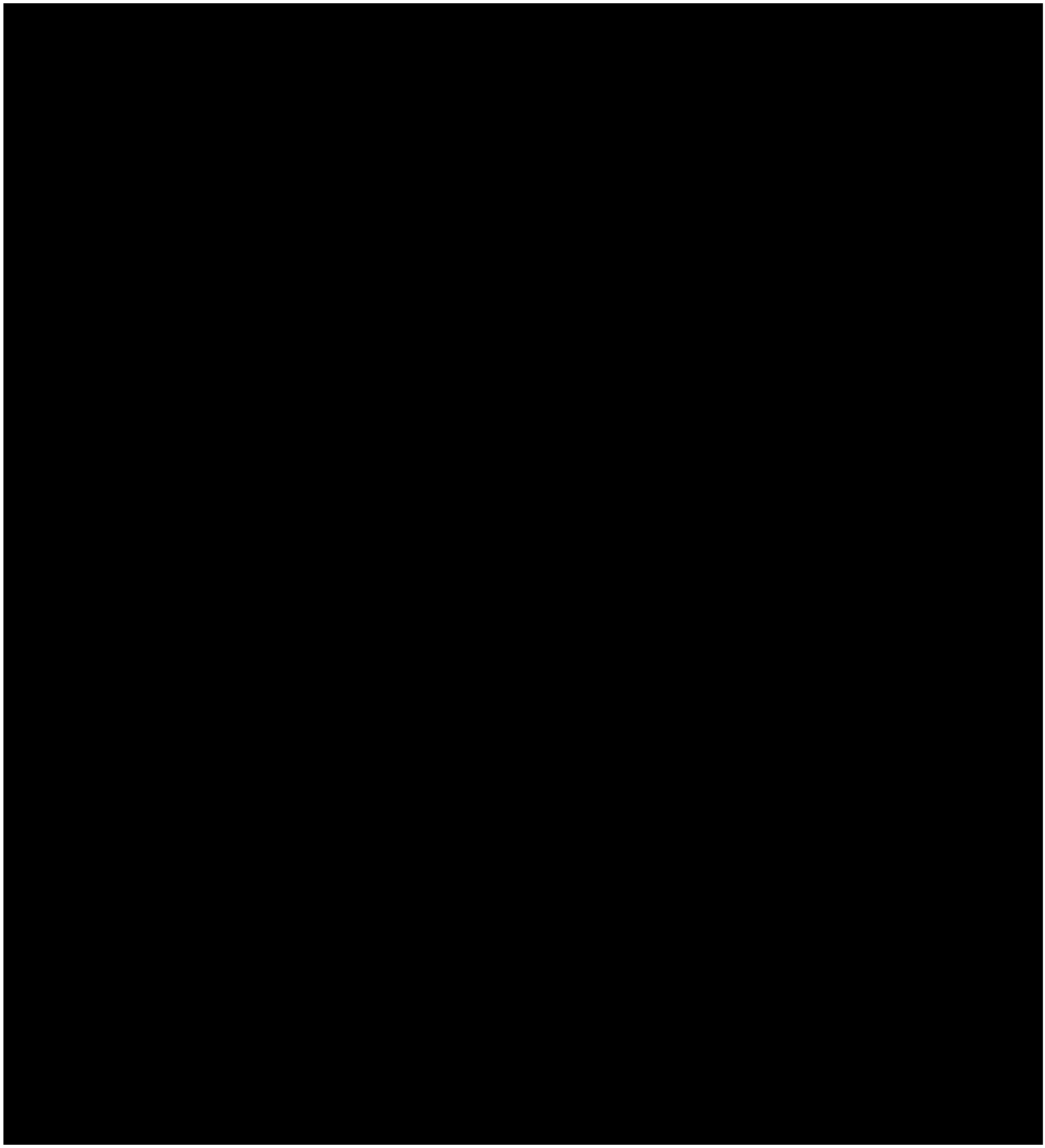
[redacted]

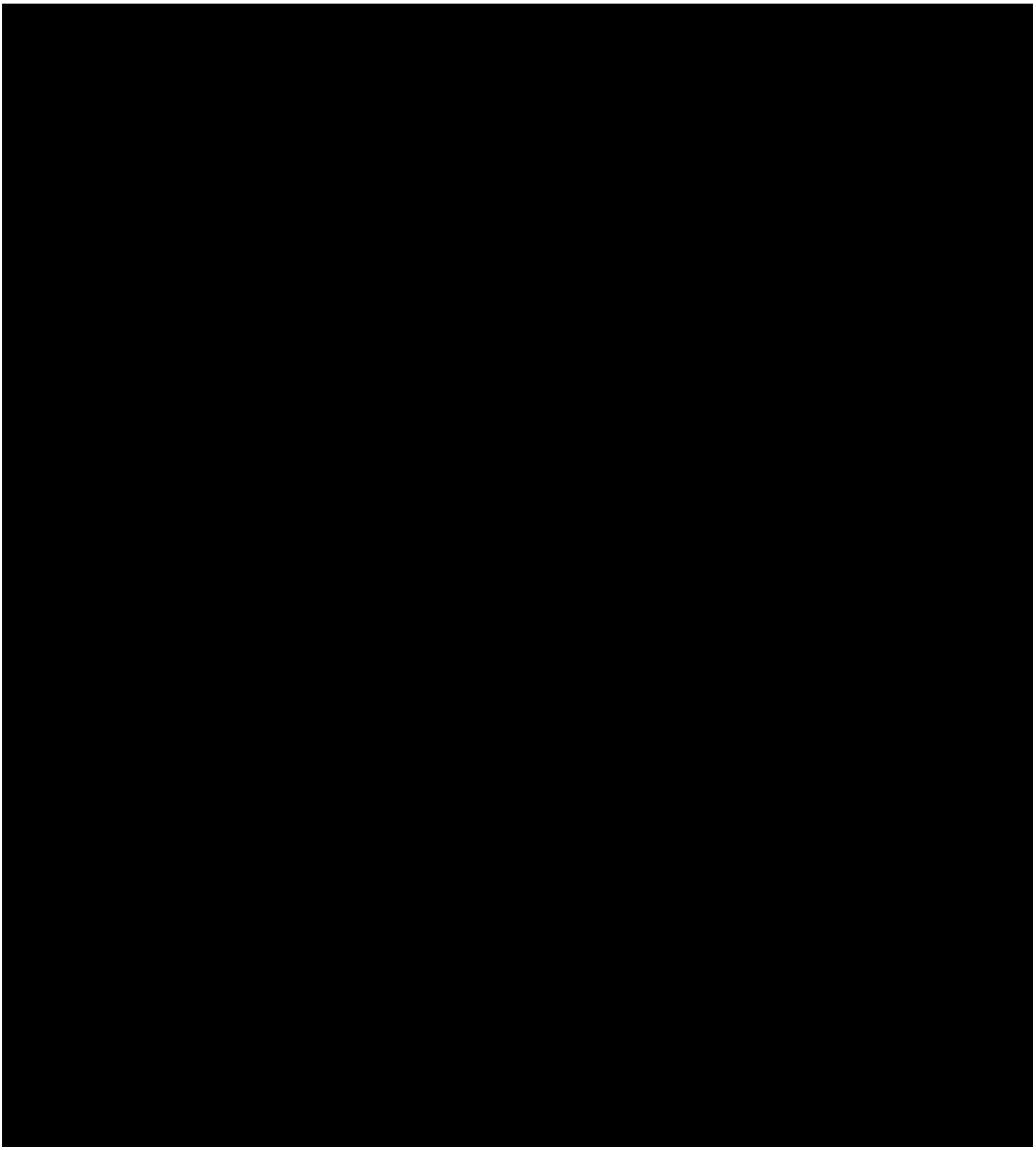
[redacted]

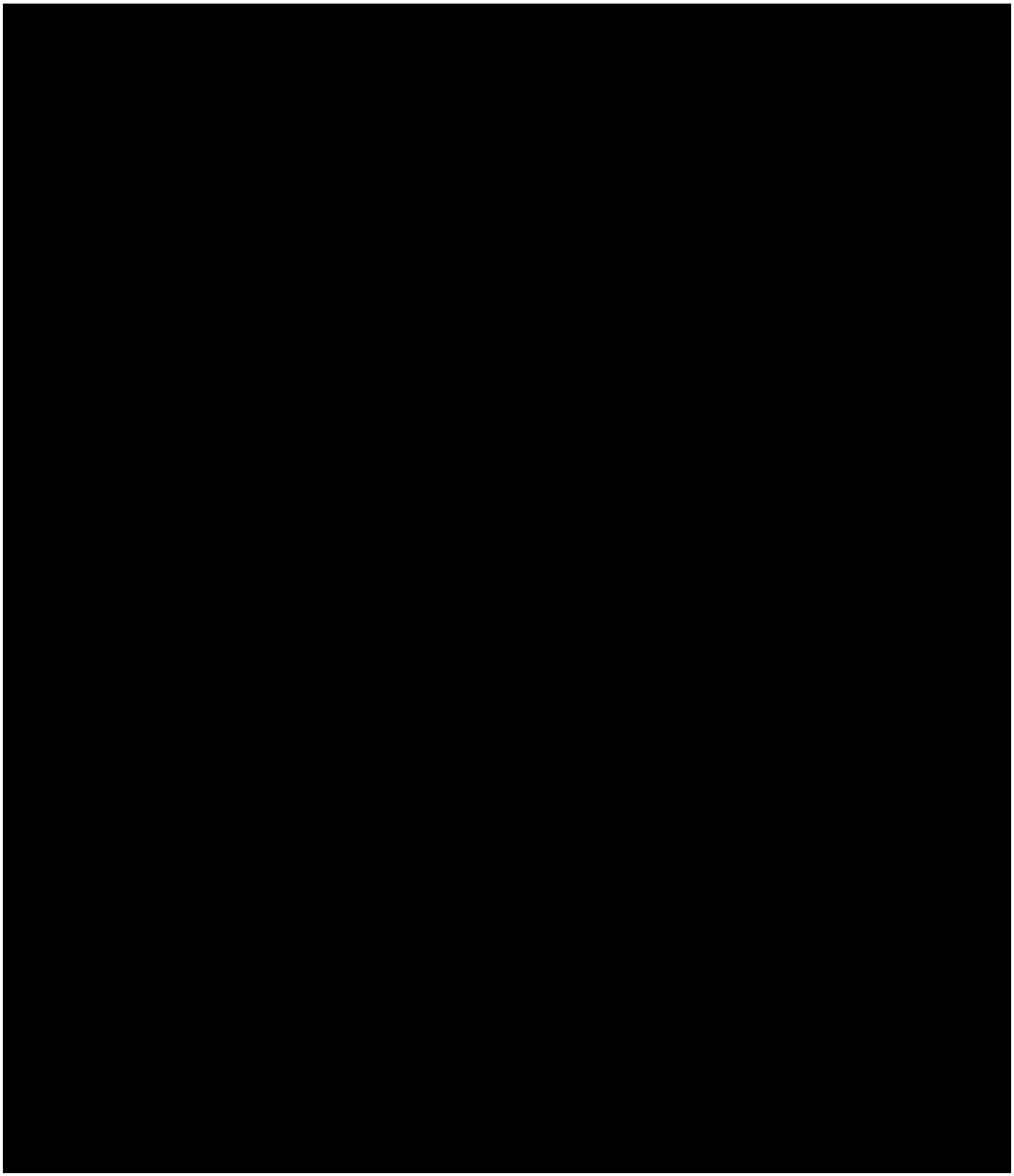
[redacted]

[redacted]

[redacted]







[redacted]

Permitting Plan and Approach

[redacted]

[redacted]

[redacted]

Discussion of Potential Public Opposition

[redacted]

[redacted]

[redacted]

Physical characteristics

[redacted]

Maps and supporting diagrams

Previously submitted confidential Appendix 3 shows the aerial map of the Project, and Appendix 3A contains a detailed Mapbook of the project route. Previously submitted confidential Appendix 2 contains a single line diagram of the proposed substation modifications, and confidential Appendix 8 contains transmission structure drawings for the Project.

[redacted]

Specific Location of Interconnection with Incumbent TO Facilities

[redacted] NEET MidAtlantic will own the first transmission line structure located outside of each substation. It will also own all insulators and hardware required to dead-end the transmission circuit conductors and OPGW shield wires on the line-side of the first transmission structure. It is assumed that AEP will be responsible for the conductor and OPGW shield wire span located between the first transmission line structure and the substation structure inside each substation.

Generation/Transmission Outages Required for Construction

[redacted]

[redacted]

Total Cost of Project and Total Cost for Each Major Component

Please see Appendix 6 for the Total Project Implementation Cost.

Identification of Construction Responsibility

[redacted]

[redacted]

D. ANALYTICAL ASSESSMENT

NEET MidAtlantic studied the project according to various PJM RTEP analyses including:

- N-1 Contingency Analysis (Thermal and Voltage)
- N-1-1 Contingency Analysis (Thermal and Voltage)
- Generator Deliverability Analysis
- Common Mode Outage

The Project resolves the generator deliverability issue for Flowgates 128, 130, 131, and 134 – Eugene-Dequine 345 kV overloads and two N-1 Thermal overloads on Flowgates 101 and 102 related to the same Eugene-Dequine 345 kV transmission line. Additionally, the Project does not result in any additional violations on the PJM transmission system.

The complete details of NEET MidAtlantic's analytical assessment can be found in the zip file uploaded to PJM's website. As verified by emails received from PJM, the following files were submitted to PJM at approximately 10:50 am July 29, 2016:

NEET2B_2016 Dequine–Eugene 345 kV Transmission Line Project Appendices & RTEP Template Final submitted.zip has been sent to PJM.

The zip file contained a number of documents as follows:

Name	Type	Compressed size	Password pr...	Size	Ratio	Date modified
Appendix 1 - Powerflow Results - NEET2B_2016.pdf	Adobe Acrobat Document	112 KB	No	138 KB	19%	8/2/2016 11:11 AM
Appendix 2 - SLG - NEET2B_2016.pdf	Adobe Acrobat Document	228 KB	No	328 KB	31%	8/2/2016 11:11 AM
Appendix 3 - Aerial Map -NEET2B_2016.pdf	Adobe Acrobat Document	581 KB	No	719 KB	20%	8/2/2016 11:11 AM
Appendix 4 - Contingencies - NEET2B_2016.con	CON File	1 KB	No	2 KB	66%	8/2/2016 11:12 AM
Appendix 5 - NEET2B_2016.idv	IDV File	1 KB	No	1 KB	31%	8/2/2016 11:12 AM
NEET2B_2016-RTEP Proposal Template 2016.xlsx	Microsoft Excel Worksheet	26 KB	No	51 KB	49%	8/2/2016 11:12 AM

NEET MidAtlantic has, through the July 29, 2016 proposal submittal, provided PJM with the following:

- Detailed analysis report on proposed solutions.
- Equipment parameters and assumptions
- All necessary PSS/E idev files as appropriate data to model upgrade
- Proposal Template spreadsheet (in excel format) including Flowgates the project is addressing, general scope, detailed solution components, and total cost
- All supporting documentation required by PJM to perform verification review, including:

- Modifications to existing contingencies and new contingencies necessary to properly model the proposed project

As requested by PJM, an updated RTEP Proposal Template (in excel format) which includes both an overall project cost and detailed cost of each component is being submitted with this Greenfield RTEP Proposal document (Redacted and Un-redacted).

[redacted]

E. COST

NEET MidAtlantic estimates that the total project will cost approximately $32.5 million (in 2016 dollars), of which approximately $29.1 million is estimated to be designated to NEET MidAtlantic, and approximately $3.4 million is estimated to be performed by the incumbent transmission owner. NEET MidAtlantic further estimates that the total project will cost approximately $35.0 million (In-Service Year dollars), of which approximately $31.3 million is estimated to be designated to NEET MidAtlantic, and approximately $3.7 million is estimated to be performed by the incumbent transmission owner.

A more detailed cost breakdown and explanation of NEET MidAtlantic's cost cap estimate is included in Appendix 6 of this application, including the details of the cost commitment being offered by NEET MidAtlantic.

[redacted]

F. SCHEDULE

NEET MidAtlantic conducted scheduling meetings with the project development team, including NextEra internal support teams (environmental and permitting, finance, engineering and construction, legal, and regulatory), as well as external consultants to develop a preliminary schedule to support this Proposal. Input from multiple sources was integrated with logic ties to ensure proper sequencing and duration of activities. This preliminary schedule has been developed using Primavera 6 software, NEET Atlantic's primary scheduling software.

NEET MidAtlantic will coordinate and conduct focused workshops to detail all permitting, pre-construction compliance tasks, environmental restrictions, construction clearance limitations, engineering, procurement, and construction activities. Full development of the schedule will require NEET MidAtlantic to conduct several schedule meetings and reviews early in the Project. NEET MidAtlantic will integrate schedules from all contractors and participating entities into the master schedule. As part of schedule development, NEET MidAtlantic will conduct several reviews to verify and confirm schedule tasks and logic.

NEET MidAtlantic will hold weekly schedule meetings with all participants throughout the development of the Project to update the schedule, review the three-week look ahead, and address critical path items. Any slip in the schedule will require the participating engineer, consultant, or contractor to develop a mitigation plan to recover the schedule. Please see Appendix 7 for detailed project schedule.

Table 4: **Project Milestones**

Schedule Milestones	Date
Project Award	[redacted]
Permitting Complete (including federal/state/local)	[redacted]
Site Acquisition/ROW Complete	[redacted]
Engineering and Design Complete	[redacted]
Material Procurement	[redacted]
Start Construction/Activities	[redacted]
Start Testing and Commissioning	[redacted]
Project COD	[redacted]

[redacted]

G. OPERATIONS/MAINTENANCE

Overview Plan for Operating and Maintaining the Transmission Facilities for the Proposed Project

[redacted]

[redacted]