

NextEra Energy Transmission, LLC
Company Evaluation and Constructability Information
For
NEET 1D Greenfield Solution – AP South

Submitted to:

PJM Interconnection, LLC

February 27, 2015

For the 2014/15 RTEP Long Term Proposal Window

Signature Page

Approvals:



David Davis _____

Executive Director, Development

Date 2/27/2015



Cindy Tindell _____

Vice President, Development

Date 2/27/2015

Inquiries:

Questions and comments regarding this document should be referred to:

David Davis
Executive Director, Development
NextEra Energy Transmission, LLC
700 Universe Boulevard, UST/JB
Juno Beach, FL 33408
Phone: 561-691-7941
Email: david.davis@nexteraenergy.com

Table of Contents

Signature Page	i
A. EXECUTIVE SUMMARY	1
NAME AND ADDRESS OF THE PROPOSING ENTITY	1
A general description of the proposed project	1
The reliability problem(s) or market efficiencies that the project is proposed to resolve	3
Total proposed project cost	3
Overall schedule duration	3
Entities that will be requesting Designated Entity status are required to submit a statement affirming that the company pre-qualification information on record with PJM and as posted on PJM’s website reflects the company’s current qualifications to be eligible for Designated Entity status as defined in the PJM Amended and Restated Operating Agreement (“PJM OA”) in Section 1.5.8(a). The entity’s PJM pre-qualification ID must also be referenced.	3
If the proposing entity seeks to be designated to construct, own, operate, maintain and finance the proposed project or some portion of the project, the proposing entity must provide a statement within the project proposal package stating the intent to be considered the Designated Entity for the proposed project.	4
B. COMPANY EVALUATION INFORMATION.....	4
Description of proposing entity’s (or its affiliate, partner or parent company) technical and engineering qualifications relevant to construction, operation and maintenance of the proposed project	4
Detailed description of proposing entity’s (or its affiliate, partner or parent company) experience in developing, constructing, operating and maintaining the types of transmission facilities included in the project proposal	7
Detailed description of proposing entity’s (or its affiliate, partner or parent company) experience in adhering to standardized construction, maintenance, and operating practices, including the capability for emergency response and restoration of damaged equipment	10
Detailed description of proposing entity’s (or its affiliate, partner or parent company) experience in working in the geographical region in which the project has been proposed.....	12
Proposed financing plan for the project including discussion of any cost advantages available to the proposing entity as a result of their financing plan and structure.....	14
Description of proposing entity’s (or its affiliate, partner or parent company) managerial ability to contain costs and adhere to construction schedules for the proposed project, including a description of verifiable past achievement of these goals.....	16
Details of any construction cost caps or commitment the proposing entity wishes PJM to consider in its analysis, including the conditions and exceptions to such construction cost caps or commitments (Note: As per the Tariff, submittal of such proffered cost caps are at the discretion of the proposing entity but will be considered by PJM in its analysis of the costs of various proposals)	18
Description of any other unique qualifications the entity may have to construct, operate, and maintain the proposed project, including any cost commitment the entity may wish to submit.	19

List of assumptions used in developing the project proposal package such as work to be executed by incumbent Transmission Owner(s)	19
C. PROPOSED PROJECT CONSTRUCTABILITY INFORMATION	21
GREENFIELD TRANSMISSION LINE ELEMENT DETAIL	21
Terminal Points	21
A general description of the routing study area	21
Geographic description of any terrain traversed by the proposed new line or the study area:.....	21
ELECTRICAL AND PHYSICAL PROJECT CHARACTERISTICS	22
Geographic map with proposed transmission line study area superimposed.....	22
Optional supporting information	22
Transmission facilities to be constructed by others.....	22
Transmission line relocation	22
Substation Expansion or Modification	22
OPTIONAL SUPPORTING INFORMATION.....	24
D. ENVIRONMENTAL, PERMITTING AND LAND ACQUISITION	24
Assessment of environmental impacts related to all facilities (i.e. environmental impact study requirements, environmental permitting, sediment, and erosion control issues).....	24
Discussion of potential public opposition	30
PROJECT COMPONENT COST ESTIMATES	31
ON-GOING TRANSMISSION FACILITY ITEMS	33
Operations Plan.....	33
Maintenance Plan	33

A. Executive Summary

Name and address of the proposing entity

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

A general description of the proposed project

NextEra Energy Transmission, LLC (NEET) proposes to build a new [REDACTED] 230 kilovolt (kV) switchyard with [REDACTED]

[REDACTED]

Further details for NEET's proposed project can be found in Table 1:

Table 1: Project Details

Substation Details	
Substation	[REDACTED] Switchyard
Nominal Voltage	230 kV
Location	[REDACTED]
Reactive Capability	[REDACTED]
Transmission Line Details	
From Substation	[REDACTED]
To Substation	[REDACTED]
Length	[REDACTED]
Nominal Voltage	230 kV
Conductor	[REDACTED]
Rating (Normal/Emergency)	[REDACTED]
Shield Wire	[REDACTED]
Structure Type	Single-Circuit Steel Monopole

NEET, working with its consultant [REDACTED] modeled the project using the latest powerflow and ProMod data available from PJM Interconnection, LLC (PJM). Through this modeling, NEET was able to verify that its proposed project increases transfer capability on the AP South Interface as well as provides market benefits of [REDACTED]. Additional details concerning the project can be found in the appendices as outlined below:

- Appendix 1: Powerflow Study showing the increased limit on AP South Interface;
- Appendix 2: Promod results showing the market benefit of increasing the AP South Interface limits;
- Appendix 3: Single-Line Diagram of the proposed project;
- Appendix 4: Aerial Maps of the proposed project;

- Appendix 5: Powerflow Modeling of the proposed project;
- Appendix 6: ProMod Modeling of the proposed project; and
- Appendix 7: Contingency files associated with the proposed project;

In sum, NEET's proposed project provides a cost-effective solution to reducing congestion by increasing the limit of the AP South Interface.

The reliability problem(s) or market efficiencies that the project is proposed to resolve¹

The AP South Interface has been identified by PJM as a constrained interface resulting in significant congestion. An increase of the AP South Interface limit will result in significant market benefits through a reduction in load payments and production costs to the PJM Market as a whole. Through the studies described above that were performed by NEET's consultant PWR Solutions, NEET's proposed project should increase the AP South Interface limit [REDACTED]. This translates into a market benefit of [REDACTED] calculated according to PJM's Market Efficiency Benefit Cost Evaluation Tool. Additionally, NEET believes there may be additional stability benefits associated with an SVC solution over the long run.

Total proposed project cost

NEET estimates that the total project will cost [REDACTED]. A more detailed breakdown is included in Table 9 of this application. [REDACTED]

Overall schedule duration

NEET estimates the total project schedule duration is [REDACTED]. Assuming an August 2015 award by PJM, NEET anticipates an in-service date of [REDACTED]. A milestone schedule is included in Table 10.

Entities that will be requesting Designated Entity status are required to submit a statement affirming that the company pre-qualification information on record with PJM and as posted

¹ PJM's RTEP – 2014/15 RTEP Long Term Proposal at (v) also states that PJM is soliciting market efficiency projects.

on PJM’s website reflects the company’s current qualifications to be eligible for Designated Entity status as defined in the PJM Amended and Restated Operating Agreement (“PJM OA”) in Section 1.5.8(a). The entity’s PJM pre-qualification ID must also be referenced.

NEET affirms that its pre-qualification information on record with PJM and posted on PJM’s website reflects the company’s current qualifications to be eligible for Designated Entity status as defined in the PJM Amended and Restated Operating Agreement in Section 1.5.8(a). NEET’s PJM pre-qualification ID is Q13-18.

If the proposing entity seeks to be designated to construct, own, operate, maintain and finance the proposed project or some portion of the project, the proposing entity must provide a statement within the project proposal package stating the intent to be considered the Designated Entity for the proposed project.

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

B. Company Evaluation Information

Description of proposing entity’s (or its affiliate, partner or parent company) technical and engineering qualifications relevant to construction, operation and maintenance of the proposed project.

NEET is a wholly-owned, indirect subsidiary of NextEra Energy, Inc. (NextEra). 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 Energy, Inc.

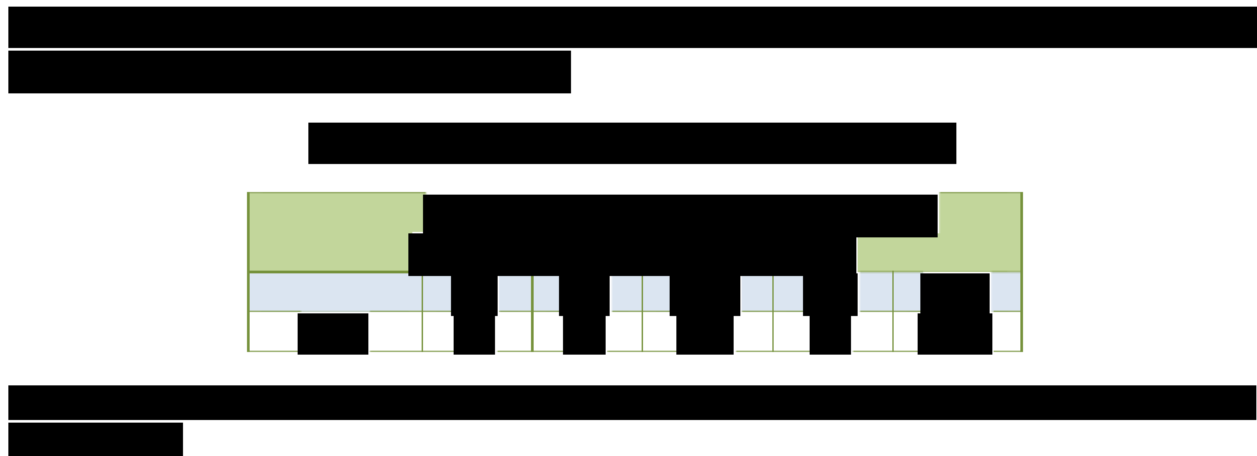
NextEra, headquartered in Juno Beach, Florida, is a leading clean-energy company with revenues of over \$17 billion, more than 44,900 megawatts of generating capacity, and 13,800 employees in 27 states and 4 Canadian provinces as of year-end 2014. NextEra has over 50 years of technical expertise in engineering, 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 that has a reputation for completing large transmission projects in a timely and cost-effective manner.

Florida Power & Light (FPL) Company

A principal subsidiary of NextEra and affiliate of NEET, Florida Power & Light Company is the largest rate-regulated electric utility in Florida, and one of the largest in the United States. At December 31, 2014, FPL's assets totaled approximately \$39.31 billion, and FPL's generating resources for serving load consisted of 26,060 MW, of which 24,057 MWs were from FPL-owned facilities. FPL serves approximately 9 million people through 4.7 million customer accounts in Florida and is a leading employer in the state with approximately 10,000 employees.

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 KWh typical bill) and 26% lower than the national average in 2012.



NextEra Energy Resources, LLC

A principal subsidiary of NextEra and affiliate of NEET, NextEra Energy Resources, LLC (NEER) is the largest producer of energy from the wind and sun and is one of the largest owners of renewable energy facilities in North America. As of December 31, 2014, NEER had nearly 11,300 megawatts of wind generation capacity facilities and nearly 800 megawatts 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 based on standardized processes, best practices, and superior execution.

NextEra Energy Transmission, LLC

NEET currently owns, operates, and maintains transmission utilities in New Hampshire and Texas, and is developing transmission projects throughout North America. Appendix 8 contains typical organization charts for each project phases, including NEET's leadership structure and the structure of the team during the development, construction, and operations phases. Most recently, 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 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 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 high-voltage electrical transmission line running between Thunder Bay and Wawa, Ontario. The East-West Tie, in conjunction with an existing transmission line, will increase 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, Lone Star Transmission, LLC (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 switching stations and two series compensation stations.

Lone Star's primary and backup energy management system (EMS) 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 NextEra affiliate transmission and substation personnel, processes and procedures, and benefits from the operational efficiencies of a well-established shared services organization.

Detailed description of proposing entity's (or its affiliate, partner or parent company) experience in developing, constructing, operating and maintaining the types of transmission facilities included in the project proposal.

Please see the chart documenting the NEET leadership structure in Appendix 8.

The NextEra family of companies has a highly qualified engineering organization that will lead the execution of the project. NextEra's 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 subject-matter experts that 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 other 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 through 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 often buying major and critical equipment in advance, mitigating risks such as delivery delays or material cost escalation.

The NextEra family of companies have 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. Between 2007 and 2013, NEET and its affiliates completed over 1,100 miles of new transmission line construction at voltages ranging from 69kV to 500 kV. NextEra’s experience includes the full range of activities needed to support successful project development, including:

- Licensing and Permitting: 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 in 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 in performing environmental due diligence for potential acquisitions, divestitures, and financings; and

- Experience promoting environmental relationships with external environmental groups, and integrating and communicating sustainability.
- Environmental and other regulatory approvals: NEET has 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 the rights of way (ROW), and specifically to identify any additional mitigation to ensure compliance with regulations.
- Operations and maintenance: NextEra has a substantial operations and maintenance (O&M) organization that delivers operational compliance. These capabilities include:
 - NEET’s operations are supported by in-house and external specialists that have industry experience operating and maintaining a variety of transmission equipment, including [REDACTED]
 - [REDACTED] NextEra’s transmission specialists currently support NEET’s existing transmission-voltage level facilities in the PJM region, listed below in Table 3. [REDACTED]
 - [REDACTED]
 - [REDACTED]

- NextEra’s operation and maintenance of more than 8,500 circuit miles of transmission lines and 770 substations across North America, including more than 3200 miles of 230kV lines and over 1100 miles of 500kV lines; and
- NextEra’s experience owning, operating, and maintaining reactive power support equipment, including [REDACTED]
[REDACTED]
[REDACTED] These assets include [REDACTED]
[REDACTED] The total power transformer capability operated and maintained by NextEra affiliates is approximately 160,000 MVA, of which over 139,000 MVA is subject to NERC jurisdiction.

Detailed description of proposing entity’s (or its affiliate, partner or parent company) experience in adhering to standardized construction, maintenance, and operating practices, including the capability for emergency response and restoration of damaged equipment.

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

- NextEra companies own North American Electric Reliability Corporation (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 NERC Reliability Standards in all regions in which it operates;
- [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
- NextEra staff oversees 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 the Florida, ISO New England, and Electric Reliability Council of Texas systems;

- As part of FPL’s experience in the Florida peninsula, FPL has faced and overcome a wide variety of operating challenges ranging from hurricanes, tornados, and other high wind conditions, to salt spray contamination, avian interaction, lightning, and managing a peninsular system at the edge of the Eastern Interconnection. Every outage in the FPL transmission system is followed up by an Event Response Process in which FPL uses diagnostic techniques to identify the root cause in an effort to prevent a reoccurrence;
- NextEra staff’s capabilities are confirmed by the low transmission outage rate. NEET affiliate FPL exhibited top-decile transmission reliability performance in a recent benchmarking study (2014 Southeast Electric Exchange Reliability Survey, SAIDI performance);
- [REDACTED]
- NEET 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 any and 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
- ANSI C2-2012 National Electrical Safety Code

- 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
- IEEE 738-2006 Standard for Calculating the Current-Temperature of Bare Overhead Conductors
- IEEE 1243 Guide for Improving the Lightning Performance of Transmission Lines
- IEEE 1313.2 Guide for the Application of Insulation Coordination

Detailed description of proposing entity's (or its affiliate, partner or parent company) experience in working in the geographical region in which the project has been proposed.

Below is a table that provides a detailed description of NEER's experience working in the geographical region of PJM on transmission voltage level projects.

Table 3: NEER's PJM Territory Transmission Voltage Level Substations and Transmission Lines

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Detailed description of proposing entity's (or its affiliate, partner or parent company) experience in acquiring rights of way with specific emphasis on the geographical region in which the project has been proposed

NextEra and its subsidiaries, including NEET, have significant and geographically diverse experience in acquiring ROW for energy infrastructure across North America. In constructing a transmission project, many of NextEra's business organizations, such as Land Services, Law, and Environmental Services, are responsible for negotiating and acquiring the necessary land interests for a project. These professionals also provide an active field presence through the corridor and route selection process, and the environmental assessment phase in support of regulatory applications.



With respect to the PJM region, NEER's generating assets required the acquisition of property and ROWs in numerous states. While the individual manner of acquiring property and ROWs varies slightly from project to project, most projects generally follow the processes described above.

Proposed financing plan for the project including discussion of any cost advantages available to the proposing entity as a result of their financing plan and structure.

NEET benefits from the extensive, enterprise-wide financial resources of NextEra. A Fortune 200 company, NextEra's year-end 2014 balance sheet included over \$74 billion of assets, with more than 70% of NextEra's \$17 billion in 2014 revenues derived from regulated utility sources. Consequently, NEET, 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 links:

[NextEra- Annual Reports](#)²

[NextEra- Financial Statements](#)³

NextEra Energy Capital Holdings, Inc.



NEECH's current corporate credit ratings are as follows:

Table 4: NEECH's Credit Ratings

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



² Link references www.investor.nexterenergy.com

³ Link references www.investor.nexterenergy.com

[REDACTED]

[REDACTED]

NEET's affiliate, Lone Star Transmission, recently utilized a similar permanent financing structure for its recently energized transmission assets. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Description of proposing entity's (or its affiliate, partner or parent company) managerial ability to contain costs and adhere to construction schedules for the proposed project, including a description of verifiable past achievement of these goals

NEET has the experience, team, resources, and track record to stand behind and deliver on the proposed schedule. [REDACTED]

[REDACTED]

Table 5: NEET’s ability to meet project schedules

	Number of Projects	% On Time or Early	Avg. Days Ahead of Schedule
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

NEET, by being able to draw from expertise across NextEra, supplemented with key consultant expertise, has the capacity to successfully execute all aspects of the project, on-time and within budget. NextEra’s 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 megawatt (MW) natural gas-fired Blythe Energy Plant with the Southern California Edison (SCE) 230 kV transmission grid at the Julian Hines Substation. The line paralleled existing 161 kV and 500 kV lines for 30% of the route and was constructed within a 100-foot right of way. The Blythe Plant was awarded a Power Purchase Agreement with SCE, which included daily penalties of \$250,000 for failure to deliver plant energy by an agreed upon date using the transmission line. Additionally, the project was built in 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. [REDACTED]

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 NextEra's change management processes. [REDACTED]

As with the other comparable projects described above and throughout this application, NEET 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.

Details of any construction cost caps or commitment the proposing entity wishes PJM to consider in its analysis, including the conditions and exceptions to such construction cost caps or commitments (Note: As per the Tariff, submittal of such proffered cost caps are at the discretion of the proposing entity but will be considered by PJM in its analysis of the costs of various proposals).



Description of any other unique qualifications the entity may have to construct, operate, and maintain the proposed project, including any cost commitment the entity may wish to submit.

Please refer to the filed pre-qualification documents of NEET for information regarding its unique qualifications.

List of assumptions used in developing the project proposal package such as work to be executed by incumbent Transmission Owner(s).

Please see Table 6 for a list of assumptions used in project development.

Table 6: List of Assumptions

[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]

C. Proposed Project Constructability Information

Provide a general description which identifies the elements that comprise the component

Greenfield Transmission Line Element Detail

Terminal Points

[REDACTED]

[REDACTED] Please refer to Appendix 4 for the location of the terminal points.

A general description of the routing study area

[REDACTED]

Geographic description of any terrain traversed by the proposed new line or the study area:

Transmission Line

[REDACTED]

Route description by segment that includes lengths and widths and that classifies by:

Table 7: Transmission Line Details

Classification	Length	Width
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

Electrical and physical project characteristics

See Table 1 for electrical and physical project characteristics.

Geographic map with proposed transmission line study area superimposed

Appendix 4 shows the aerial map of the project

Optional supporting information

[REDACTED]

Transmission facilities to be constructed by others

[REDACTED]

Transmission line relocation

The proposed project does not require transmission line relocation.

Substation Expansion or Modification

Please see Appendix 3 for a single-line diagram and Appendix 4 for an aerial map.

Greenfield Substation/Switchyard Facility Element Detail

General description of the proposed location(s)

[REDACTED]

Land ownership in vicinity of proposed location(s)

[REDACTED]

One-line diagram and general arrangement drawing

See Appendix 3 for a single-line diagram of the proposed project.

Electrical design including specifications and ratings for transformers or reactive devices

Table 8: Substation Details

Substation Details	
Substation	[REDACTED] Switchyard
Nominal Voltage	230 kV
Location	[REDACTED]
Reactive Capability	[REDACTED]

Relay communications plan

NEET will coordinate relay plans and settings with other utilities and specify an overall protection scheme during the project design phase. The protection scheme will meet all relaying scheme and redundancy requirements.

Geographic map with proposed substation location superimposed

See Appendix 4 for an aerial view of the proposed location.

Optional supporting information

No optional supporting information is included in this application.

D. Environmental, Permitting and Land Acquisition

The proposing entity shall include:

Assessment of environmental impacts related to all facilities (i.e. environmental impact study requirements, environmental permitting, sediment, and erosion control issues).

Site feasibility studies were conducted to assess potential development locations for the presence or absence of natural and cultural resources. The presence of jurisdictional waters of the U.S., including wetlands, threatened and endangered species, unique habitats, cultural resources, floodplains, erodible soils, and existing easements could significantly impact the ability to develop a site if they are not identified early in the planning process. Initial investigations of available databases and online resources provide an overview of known resources, but ultimately, field investigations by experienced biologists and cultural resource specialists during the design and permitting processes should be completed. [REDACTED]

[REDACTED] The purpose of the review is to identify known constraints, understand the permitting and approval process based on existing site conditions, and uncover potential critical issues in proceeding with the proposed substation development.

Summary of Methods

[REDACTED]

- | [REDACTED]
- | [REDACTED]
- | [REDACTED]
- | [REDACTED]
- | [REDACTED]
- | [REDACTED]
- | [REDACTED]
- | [REDACTED]
- | [REDACTED]
- | [REDACTED]
- | [REDACTED]
- | [REDACTED]

These data were used to map parcel boundaries along with topographic, environmental, and cultural resources within the study area. Sites satisfying the minimum criteria were identified as a result of this effort. The sites were further refined based on the extent of constraining factors present onsite, as well as the potential difficulty in obtaining the required land for development. [REDACTED]

[REDACTED]

Potential Siting Issues Related to Environmental and Cultural Impacts

Utilizing available GIS data layers and information accessed through state agency websites, potential constraints to development as well as impacts to streams, wetland habitats, floodplains, known bald eagle nest sites, potential T&E species, and cultural resources were assessed. [REDACTED]

[REDACTED]

[REDACTED]

A summary of potential environmental and cultural resources that may be impacted by the proposed substation location and associated connecting transmission line is provided below. However, verification of actual potential impacts can only be completed through future field studies.

[REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

[REDACTED]

Right of way and land acquisition plan and approach for both public and private lands

Key elements in NEET's approach to the landowner negotiation process for this project, and other projects in PJM, include:

- Proactively conducting a market analysis of land values in the project area;
- Producing a fair and comprehensive land acquisition plan and schedule for securing necessary land rights and site control;
- Utilizing local land acquisition teams knowledgeable of the project area; and
- Taking a transparent approach in discussing the project and NEET development interests in the subject property.

While NEET will negotiate agreements with the landowners of the proposed project area, NEET's landowner engagement process does not stop here. NEET's philosophy for landowner relations is to work with residents during all phases of a project to address issues as they arise, before and after acquisition of land rights. NEET is committed to serving as the point of contact for residents, whether directly or indirectly affected by the project, for the duration. We use a collaborative and consultative approach to working with landowners, focusing on regular communication, to understand and address issues on an ongoing basis. NEET is also committed to using design and construction techniques that minimize impacts on private lands, and to restoring the construction sites of our projects to be both good stewards of the environment and good neighbors in the communities in which we live and work.

Permitting plan and approach

NEET has assembled an excellent team of legislative and regulatory liaisons as well as local and national experts with experience in all aspects of development, permitting, construction, and operations. NEET has successfully completed the project site screening and we believe that we have what it takes to get the project done in a cost efficient and timely manner. NEET proposes additional environmental due diligence activities to further refine the future plans to provide a successful project with PJM.

1. NEET will contract with a firm with extensive state regulatory experience to assist with regulatory strategy, environmental documentation, permit acquisition, environmental plan preparation, resource surveys, monitoring, and environmental compliance.

2. NEET plans to conduct as much up-front environmental analysis as possible. This includes conducting habitat assessments and protocol-level special-status species surveys.
3. NEET has conducted preliminary desktop environmental and permitting analysis of the project route, which provides an initial understanding of the regulatory requirements to ensure on time execution of the project.
4. NEET will develop and execute a detailed project implementation plan following project award. This implementation plan will be a living document that will include the approach for scheduling and conducting agency meetings, detailed site surveys during proper survey windows, obtaining discretionary environmental permits, and developing an environmental compliance program to carry out agency commitments.
5. NEET has developed a preliminary schedule that includes the permitting tasks. This schedule shows the longest and more conservative permitting time line which is part of the project critical path. This sequence and timeline is used in developing the cost estimate for permitting activities.

Discussion of potential public opposition

NEET is aware of the potential for public opposition to the project. NEET is committed to working with all interested stakeholders through a robust outreach and education (O&E) program to address/respond to community concerns and inform the public about the project to the greatest extent practicable. NEET believes a well-designed O&E program can have numerous benefits, including fostering a cooperative relationship with landowners and other stakeholders, expediting the regulatory permitting process, and assisting with project development. In general, the purpose of the community outreach plan is to gain community support for the project, in particular the affected community, to enable NEET to expeditiously comply with all relevant regulatory requirements that would permit timely construction and operation of the proposed project. All community outreach will be coordinated with PJM. Elements of the community outreach plan will include the following:

- Identify potential issues at an early stage by engagement with key community stakeholders at the outset;
- Broaden the community engagement process to identify potential and relevant community benefits that can facilitate community support for the proposed project;
- Develop a broad base of community support for the proposed project before the regulatory agencies; and
- Develop a comprehensive administrative record documenting the community outreach process that can be presented to the regulatory agency or, in the event of a legal challenge, to the appropriate court.

The plan proposes to dedicate considerable time and resources in engaging the community, and specifically the affected community during the planning process to identify highly sensitive areas that have the least amount of cultural, environmental, and social impacts on the community. The plans will reflect avoidance of impacts rather than mitigation. However, in some cases, if avoidance is not possible, then we need to involve the community in providing appropriate and practical mitigation measures.

On-going Transmission Facility Items

Operations Plan

The package shall contain the proposing entity's plan for operating the new transmission facilities for the proposed project. At a minimum, the plan should discuss the proposing entity's plan for securing a control center facility and provide required telemetry to PJM.

[REDACTED]

[REDACTED]

Maintenance Plan

The package shall contain the proposing entity's plan for maintaining the new transmission facilities for the proposed project including equipment spares.

NEET will rely on transmission maintenance personnel both in the project area and in support functions throughout the NextEra affiliate company organizations to ensure 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 any and all operating events during normal and emergency conditions. In addition to proven event response processes NextEra companies are experienced at devising recovery plans, specifically for storms, to help respond to system emergencies.

The NextEra family of companies has existing overhead line, substation, and environmental service level agreements for their assets throughout North America. These existing agreements provide the special tools, spares and skill-sets needed for non-emergency routine maintenance work and emergency response services for high voltage transmission facilities. [REDACTED]

[REDACTED]

NEET will leverage in-house and third-party resources for the safe, reliable and efficient maintenance of the project. In particular, NEET will bring significant O&M capabilities as outlined below:

- Well-established O&M practices and standardized processes, which are already being used at NextEra’s operating transmission facilities.
- 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. Many of these personnel will provide support to NEET through our PDDC located in south Florida. This center serves as a hub for technical knowledge, as well as remote condition assessment and field asset health information, in support of operations.
- Experiences from operating and maintaining power delivery assets in all NERC jurisdictions at voltages up to 500kV.
- 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.
- Experience addressing a wide variety of operating challenges ranging from hurricanes, tornadoes, and other high wind conditions, dust contamination, avian interaction, and lightning. For example, every outage in the FPL transmission system, as well as the Lone

Star system, is followed up by an Event Response Process in which NextEra uses diagnostic techniques to identify the root cause to prevent reoccurrence. Solutions to transmission O&M problems include new designs, new conditions assessment processes, and/or new products. NextEra often works directly with equipment manufacturers to develop these solutions in order to continually improve the reliability of its transmission systems. This has prepared us well to manage extreme geographic and climate conditions that NEET is likely to face in future projects.

[REDACTED]

The existing maintenance plan for NextEra companies covers all elements of the proposed project. NextEra practices are controlled by a formalized program of procedures and processes and reinforced by continuous monitoring and condition assessment practices.

[REDACTED]

[REDACTED]



The NextEra family of companies has inventory and spare strategies for routine maintenance requirements and loss of functionality for all its facilities. NextEra’s practices include spare parts management, storage plans for spares, spare parts identification and records, periodic inventory of spare parts, usage of spare parts and replenishment of inventory. NEET will develop Service Level Agreements with experienced vendors for its facilities in the PJM region. These agreements will provide necessary consumable spares for all types of line, substation, protection and control, vegetation management, and environmental needs.