

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33

**STATE OF NEW YORK
DEPARTMENT OF PUBLIC SERVICE
PUBLIC SERVICE COMMISSION**

Application of NextEra Energy Transmission
New York, Inc. for a Certificate of Environmental
Compatibility and Public Need for the Empire State Line

PSC Case No. _____

**DIRECT TESTIMONY OF
DANIEL MAYERS
ON BEHALF OF
NEXTERA ENERGY TRANSMISSION NEW YORK, INC.
ARTICLE VII APPLICATION (ELECTRIC FACILITY)**

Q. Mr. Mayers, please state your full name, employer and business address.

A. My name is Daniel Mayers. I am employed by NextEra Energy Resources, LLC (“NEER”), an indirect, wholly owned subsidiary of NextEra Energy, Inc. (“NextEra Energy”), and my business address is 700 Universe Blvd, Juno Beach, FL, 33408.

Q. In what capacity are you employed?

A. I am the Director of Transmission Engineering within the Engineering & Construction (“E&C”) organization at NEER, working as a shared service employee on behalf of NextEra Energy Transmission New York, Inc. (“NEETNY”). As the Director of Transmission Engineering, one of my primary roles is to coordinate or provide support for the development of new transmission systems, including right-of-way identification and selection, land acquisition, permit acquisition, system engineering, specification and standards development, material and services procurement, construction management, commissioning, system integration, compliance and project close-out in heavily regulated, environmentally sensitive, multi-system operational environments.

1 **Q. Please summarize your background and qualifications.**

2 A. I have over 35 years of experience in transmission system planning, substation, and
3 transmission line design and engineering, transmission line siting and permitting, project
4 management, and construction at both Florida Power & Light Company (“FPL”) and
5 NEER. I hold a Bachelor of Science Degree in Electrical Engineering from the University
6 of Pittsburgh and a Master of Science Degree in Engineering Management from the
7 University of South Florida.

8 **Q. Have you testified before this or any other regulatory commission?**

9 A. Yes. I filed testimony before the State of New York Public Service Commission
10 (“NYPSC” or “the Commission”) in Docket Nos. 13-T-0455 and 13-T-0456 related to
11 NEETNY’s proposals to develop the Marcy to Pleasant Valley transmission project and
12 the Oakdale to Fraser transmission project, respectively. I also filed testimony before the
13 Public Utility Commission of Texas (“PUCT”) in Docket Nos. 40020 and 42469, which
14 related to two rate cases of Lone Star Transmission, LLC (“Lone Star”), and testified before
15 the PUCT in Docket No. 38230, which related to Lone Star’s earlier application for a
16 certificate of convenience and necessity. I testified before the Maine Public Utilities
17 Commission in Docket 2014-00048 in support of New Hampshire Transmission, LLC’s
18 proposal to develop a transmission solution to address reliability problems in Northern
19 Maine. I testified before the California Public Utilities Commission in Docket No. A.15-
20 08-027, in support of the application for a Certificate of Public Convenience and Necessity
21 of NextEra Energy Transmission West, LLC for the Suncrest Dynamic Reactive Power
22 Supply Project. I testified before the South Dakota Public Utility Commission in Docket
23 No. EL17-050 in support of the application of Crowned Ridge Wind, LLC for a facility

1 permit to construct a 230 kV transmission line and associated facilities from Codrington
2 County to the Big Stone South Substation. Finally, I served as a witness before the Ontario
3 Energy Board on behalf of NextBridge Infrastructure LP in its Leave to Construct
4 Application for the East-West Tie Transmission Project (Docket No. EB-2017-0182) and
5 in the Hydro One Networks, Inc.'s Leave to Construct Application for the Lake Superior
6 Link (Docket No. EB-2017-0364).

7
8 **PURPOSE OF TESTIMONY**

9 **Q. What is the purpose of your testimony?**

10 A. The purpose of my testimony is to support the Application of NEETNY ("Application")
11 for a Certificate of Environmental Compatibility and Public Need ("Certificate") for the
12 approximately 20-mile 345 kV Empire State Line transmission line, and two new
13 switchyards ("ESL Project"). Specifically, my testimony will provide a background on
14 NEETNYs affiliates' experience and capabilities in constructing transmission facilities.

15 **Q. Do you sponsor or co-sponsor any exhibits in support of NEETNY's Application?**

16 A. Yes. I co-sponsor the following Exhibits to the Application:

- 17 • Exhibit 2 – Location of Facilities
- 18 • Exhibit 3 – Alternatives
- 19 • Exhibit 5 – Design Drawings
- 20 • Exhibit 6 – Economic Effects of the Proposed Facility
- 21 • Exhibit 7 – Local Ordinances
- 22 • Exhibit 9 – Cost of the Proposed Facility
- 23 • Exhibit E-1 – Description of the Proposed Transmission Line

- 1 • Exhibit E-2 – Other Facilities
- 2 • Exhibit E-3 – Underground Construction
- 3 • Exhibit E-4 – Engineering Justification
- 4 • Exhibit E-5 – Effect on Communications
- 5 • Exhibit E-6 – Effect on Transportation

6

7

NEXTERA ENERGY AND NEETNY

8

Q. Please describe NEETNY.

9

A. As explained by Mr. Brian Duncan in his Direct Testimony, NEETNY is a transportation company incorporated in the state of New York in 2013. NEETNY is a wholly owned, direct subsidiary of NextEra Energy Transmission, LLC (“NEET”), which is a wholly owned, indirect subsidiary of NextEra Energy. NextEra Energy is a leading clean energy company with revenues of approximately \$17.2 billion and approximately 14,000 employees as of December 31, 2017. NextEra Energy’s principal businesses are FPL, which is Florida’s largest electric utility serving approximately 5 million customer accounts, and NEER, which is the largest generator of renewable energy from the wind and the sun in North America and also owns and operates various other types of generating facilities.

18

19

Q. Do NEETNY affiliates have experience constructing transmission infrastructure?

20

A. Yes. NEETNY affiliates have decades of experience in the construction of transmission lines, substation facilities, and related infrastructure. NEETNY affiliates have proven capabilities in engineering, procurement, constructing, and operating high-voltage transmission line projects in compliance with the design, reliability, and operation

23

1 standards set by various regulatory authorities in North America. NEETNY affiliates also
2 have engaged in numerous upgrades of existing transmission lines. Through its affiliates,
3 NextEra Energy owns approximately 8,700 circuit miles of high-voltage transmission
4 lines¹ and 830 substations at voltages ranging from 69 kV to 500 kV. As of December 31,
5 2017, these transmission lines and other infrastructure assets have been built in 33 states
6 with a wide range of geographies, including California, Nevada, Arizona, Florida,
7 Colorado, New Hampshire, and Texas, as well as four provinces in Canada.

8 **Q. Has NextEra Energy established a track record of developing infrastructure projects**
9 **on time and on budget?**

10 A. Yes. Between 2003 and 2017, NextEra Energy affiliates constructed 153 new, stand-alone
11 infrastructure projects, of which 82 percent were completed on time or early, and an overall
12 average of 19 days ahead of schedule. Over 98 percent of these projects included a
13 transmission component.

¹ In this context, all transmission lines of voltages of 69 kV and above are considered high voltage transmission.

1 **NextEra Energy’s Project Schedules 2003-2017**

On Time Completion			
2003 - 2017			
Energy	# Projects	% On Time or Early	Avg. Days ahead of schedule
Fossil⁽¹⁾	12	75%	20
Solar	28	89%	39
Wind⁽²⁾	109	82%	15
Trans.	4	75%	5
Total	153	82%	19
(1) Includes Pipelines			
(2) Includes Repowers			

2

3

4

5

6

7

8

9

NextEra Energy has also established a track record for building projects on or below budget by incorporating project controls that have resulted in a proven history of forecasting and delivering projects within budgets. The table below highlights the budget results for the 153 projects delivered by NextEra Energy affiliates between 2003 and 2017. In the aggregate, these projects represent approximately \$43 billion of capital expenditures. NextEra Energy’s Engineering and Construction team was able to deliver these 153 projects by a combined \$0.8 billion under budget.

10 **NextEra Energy’s Project Budget Results 2003-2017**

On Budget Performance			
2003 - 2017			
Energy	Budget	Actual	Variance
Fossil⁽¹⁾	11.7	11.3	0.4
Solar	8.1	7.8	0.3
Wind⁽²⁾	22.2	22.1	0.1
Trans.	1.5	1.4	0
Total	43.5	42.6	0.8
(1) Includes Pipelines			
(2) Includes Repowers			

11

1 **Q. Please describe the infrastructure assets NextEra Energy affiliates have constructed**
2 **or are constructing in New York.**

3 A. Existing NextEra Energy affiliate assets currently in service in New York state include
4 natural gas fired power plants at Bayswater and Jamaica Bay in Far Rockaway and various
5 small scale solar projects in Albany, Fulton, Oneida, Suffolk, and Tompkins Counties. In
6 addition, there are two battery energy storage system projects in East Hampton and
7 Montauk and a distributed generation photovoltaic solar project in Kingston (Tesla Ulster)
8 that are currently being permitted and are expected to be under construction and be
9 completed in 2018.

10 **Q. Will NEETNY use the services of its affiliates to engineer and construct the ESL**
11 **Project?**

12 A. Yes. NEETNY currently utilizes support services from various NextEra Energy affiliates,
13 including NEET, NEER, and FPL. NEETNY will continue to utilize these services to
14 engineer, construct, commission, and operate the ESL Project. Doing so allows NEETNY
15 to access the significant expertise of the NextEra Energy corporate organization and will
16 enable NEETNY to provide service in a cost-efficient manner. With respect to engineering
17 and construction, NEETNY proposes to utilize the significant expertise in the E&C
18 organizations within NEER and FPL to engineer, design, construct and commission the
19 ESL Project. NEETNY's proposed use of other affiliate resources is discussed in more
20 detail in the direct testimony of Mr. Michael Lannon.

21 **Q. Does NextEra Energy emphasize safety in its construction projects?**

22 A. Yes. At NextEra Energy and all of its affiliates, safety is a core value and is recognized as
23 the cornerstone of sustaining operational excellence. NextEra Energy's vision for its

1 employees is to establish and promote a safety culture based on the principle that zero
2 injuries at work and home is an achievable result. NEETNY has adopted best management
3 practices that include frequent communication among the land services, environmental,
4 engineering, and construction teams during the permitting and construction phases that will
5 ensure a safe and successful project. NEETNY also expects that companies providing
6 services to NextEra Energy have the same high standards of safety and health as we do.
7 During construction of the ESL Project, each morning field teams will convene a safety
8 and environmental meeting to discuss specific activities planned for the day, including
9 daily safety-related behaviors, conditions, and job hazard analyses as well as review any
10 environmental compliance that could impact construction activities.

11
12 Safety was also a major focus in the preparation of all specifications and designs, especially
13 those involving on-site construction, to ensure Occupational Safety and Health
14 Administration (“OSHA”) and National Electrical Safety Code (“NESC”) compliance.
15 The ESL Project will be designed to meet or surpass all applicable local and state codes,
16 the NESC, North American Electric Reliability Corporation (“NERC”) requirements, and
17 NEETNY’s standards. Appropriate standards and all applicable permit requirements will
18 be met for construction and installation, and all applicable safety procedures will be
19 followed during and after installation.

20
21 The ESL Project will be equipped with protective devices to safeguard the public from the
22 transmission lines if an accident occurs, such as damage to a structure or something coming
23 into contact with a live conductor. The protective devices include circuit breakers and

1 relays located where the line connects to the switchyards. The protective equipment will
2 de-energize the line should such an event occur. Proper signage will be posted warning
3 the public of the risk of coming into contact with the energized equipment. NEETNY has
4 incorporated security requirements for its cyber assets, perimeter, and control house
5 security protection in the design of its facilities. Mr. Lannon also describes the safety
6 efforts that NEETNY will undertake during operations of the ESL Project.

7 **Q. Does this conclude your testimony?**

8 A. Yes.