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Issue(s):	Transmission Line Design, Project Construction, Real Estate Matters, Tartan Factors
Witness:	Daniel Mayers
Type of Exhibit:	Direct Testimony
Sponsoring Party:	NextEra Energy Transmission Southwest, LLC
File No.:	EA-2022-0234
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MISSOURI PUBLIC SERVICE COMMISSION

FILE NO.

EA-2022-0234

DIRECT TESTIMONY

OF

DANIEL MAYERS

ON

BEHALF OF

NEXTERA ENERGY TRANSMISSION SOUTHWEST, LLC

JULY 7, 2022

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I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Daniel Mayers. I work for NextEra Energy Resources, LLC ("NEER") at 700 Universe Boulevard, Juno Beach, Florida 33408.

Q. What is your position with NEER?

A. I am the Director of Transmission and Substation Engineering within the Engineering & Construction ("E&C") organization at NEER, working as a shared service employee on behalf of NextEra Energy Transmission Southwest, LLC ("NEET Southwest" or the "Applicant"). As the Director of Transmission and Substation Engineering, one of my primary roles is to coordinate or provide support for the development of new transmission systems, including right of way ("ROW") 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 highly regulated, environmentally sensitive, multi-system operational environments.

Q. Please describe your educational background and employment experience.

A. I have over 38 years of experience in transmission system planning, substation, and transmission line design and engineering, transmission line siting and permitting, project management, and construction at both NEER and its regulated utility affiliate in Florida, Florida Power & Light Company ("FPL"). I hold a Bachelor of Science Degree in Electrical Engineering from the University of Pittsburgh and a Master of Science Degree in Engineering Management from the University of South Florida.

Q. Has this direct testimony been prepared by you or under your direct supervision?

A. Yes, it has.

Q. Have you previously provided testimony before the Missouri Public Service Commission ("Commission")?

A. No, I have not.

Q. Have you previously provided testimony before any other regulatory commission?

A. A. Yes, I have testified before a number of state regulatory commissions on behalf of various NextEra Energy Transmission, LLC ("NEET") and NEER subsidiaries:

- I testified on behalf of NEET Southwest in support of the Kansas portion of the Project in the in the matter currently before the Kansas Corporation Commission ("KCC") in Docket No. 22-NETE-419-COC;

- I served as a witness before the Ontario Energy Board ("OEB") on behalf of NextBridge Infrastructure LP ("NextBridge") in its Leave to Construct Application for the East-West Tie Transmission Project (Docket No. EB-2017-0182) and in the Hydro One Networks, Inc.'s Leave to Construct Application for the Lake Superior Link (Docket No. EB-2017-0364). I also filed testimony before the OEB in Docket Nos. EB-2017-0194, regarding NextBridge's Leave to Construct, as well as the OEB's Docket No. EB-2021-0276, NextBridge's revenue requirement case.

- I testified before the California Public Utilities Commission ("CPUC") in Docket No. A.15-08-027 on behalf of NEET subsidiary, Horizon West Transmission, LLC ("Horizon West"), in obtaining a certificate of public convenience and necessity for the Suncrest Dynamic Reactive Power Support Project.

- I testified before the South Dakota Public Utility Commission in Docket No. EL17-050 in support of the application of a NEER subsidiary, Crowned Ridge Wind, LLC, for a facility permit to construct a 230 kV transmission line and associated facilities from Codington County to the Big Stone South Substation. □

- I filed testimony before the State of New York Public Service Commission ("New York PSC") in Docket Nos. 13-T-0455 and 13-T-0456 related to NextEra Energy Transmission New York, Inc.'s ("NEETNY") proposals to develop the Marcy to Pleasant Valley transmission project and the Oakdale to Fraser transmission project, as well as in New York PSC Docket No. 18-T-0499 in support of 31 NEETNY's application for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the Public Service Law for the Construction of a 20 Mile 345 Kilovolt Transmission Line Located in the Town of Royalton, Niagara County, and the Towns of Alden, Newstead, Lancaster, and Elma in Erie County.

- I testified before the Maine Public Utilities Commission in Docket 2014-00048 in support of NEET subsidiary New Hampshire Transmission, LLC's proposal to develop a transmission solution to address reliability problems in Northern Maine.

- Finally, I filed testimony before the Public Utility Commission of Texas ("PUCT") in Docket Nos. 40020 and 42469, on behalf of NEET subsidiary, Lone Star Transmission, LLC ("Lone Star"), in its two rate cases. I also testified before the PUCT in Docket No. 38230, which related to Lone Star's application for a certificate of convenience and necessity.

Q. What authority is the Applicant seeking to obtain in this proceeding?

A. The Applicant is seeking to obtain a Certificate of Public Convenience and Necessity ("CCN"), pursuant to 393.170.1 RSMo., to become a transmission-only public utility in Missouri and to construct, own, operate, and maintain a 345 kV transmission line project that will connect the existing Blackberry Substation in Jasper County, Missouri with the existing Wolf Creek Substation in Coffey County, Kansas (the "Project" or the "Wolf Creek-Blackberry Project"). The Missouri portion of the Project will be approximately nine miles, traversing through portions of Barton and Jasper counties. The Kansas portion of the proposed Project will be approximately 85 miles, traversing through Coffey, Anderson, Allen, Bourbon, and Crawford counties, for a total Project length of approximately 94 miles. The Project was identified by the Southwest Power Pool, Inc. ("SPP") as required to address multiple needs identified in the 2019 Integrated Transmission Planning ("ITP") process, including an economic need to increase the transmission capability from west to east within SPP.

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to:

- Demonstrate NEET Southwest's affiliates' experience and qualifications in designing and constructing electric transmission facilities;

- Describe the Project that NEET Southwest proposes to construct, own, operate, and maintain, including providing an overview of the Project's location, construction schedule, and construction cost;

- Describe NEET Southwest's approach to land acquisition for the Project; and
- Address the Commission's *Tartan*[1] Factor 4, which requires that an applicant for a CCN must be qualified to provide the proposed service, by showing that NEET Southwest is qualified to engineer, design, and construct the Project.

Q. Are you sponsoring any schedules or exhibits as part of your direct testimony?

A. Yes, I sponsor Highly Confidential Schedule DM-1 and Schedule DM-2, which was prepared or assembled by me or under my supervision and direction.

II. NEET SOUTHWEST'S TRANSMISSION CONSTRUCTION EXPERIENCE

Q. Please describe NEET Southwest.

A. As explained in more detail by NEET Southwest witness Becky Walding in her Direct Testimony, NEET Southwest is a Delaware limited liability company formed in 2014. NEET Southwest is a direct, wholly-owned subsidiary of NEET, which is an indirect, wholly-owned subsidiary of NextEra Energy, Inc. ("NextEra Energy"). A Fortune 200 company, NextEra Energy is the world's largest electric utility by market capitalization, with revenues in calendar year 2021 of approximately $17 billion and approximately 15,000 employees as of December 31, 2021.

NextEra Energy's principal businesses are FPL, the largest electric utility in the nation as measured by retail electricity produced and sold, which serves more than 5.7 million homes and businesses in Florida, and NEER, the largest generator of renewable energy from the wind and sun in North America. NextEra Energy and its wholly-owned subsidiaries, NEET and NEET Southwest, are headquartered in Juno Beach, Florida.

[1] *In re Tartan Energy Company, L.C. dba Southern Missouri Gas Company*, Case No. GA-94-127 (Sept. 1994).

Q. Do NEET Southwest's affiliates have experience constructing transmission infrastructure?

A. Yes, NextEra Energy affiliates have decades of experience in the construction of transmission lines, substation facilities, and related infrastructure. NextEra Energy companies have proven capabilities in engineering, procurement, constructing, operating, and maintaining high-voltage transmission line projects in compliance with the design, reliability, and operation standards set by a variety of authorities in North America. NextEra Energy owns approximately 11,800 circuit miles of high-voltage transmission, approximately 77,400 miles of distribution lines, and over 1,000 substations across North America. These transmission lines and other infrastructure assets have been built in 38 states and four Canadian provinces across a wide range of geographies, including Kansas, Missouri, Oklahoma, Texas, California, New York, Montana, North Dakota, and Florida. NextEra Energy subsidiaries have built over 1,000 miles of 345 kV transmission lines in Missouri, Kansas, Texas, and Oklahoma.

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

A. Yes. As shown in the table below, from 2003 to 2021, NextEra Energy completed 308 major capital projects, reflecting an aggregate investment of $65.9 billion in generation and transmission assets. Of these major capital projects, 80 percent were completed on time or early, at an average of 14 days ahead of schedule, and these projects were completed at a collective $1.1 billion below their initial budgets.

On Budget Performance (2003- YE 2021)					On Time Completion (2003-YE 2021)		
Energy	Budget ($B)	Actual ($B)	Variance ($B)		No. of Projects	% On time or early	Avg. Days ahead of Schedule
Fossil[2]	13.8	13.1	0.6		16	75%	19
Solar	16.5	16.2	0.4		107	82%	13
Wind	34.9	35.0	0.0		180	78%	14
Transmission	1.7	1.6	0.0		5	80%	10
Total	**$66.9**	**$65.9**	**$1.1**		**308**	**80%**	**14**

Q. Please describe the infrastructure assets NextEra Energy subsidiaries have constructed or are constructing in Missouri and neighboring states.

A. NEET Southwest's affiliate, Osborn Wind Energy, LLC, a subsidiary of NEER, owns and operates the Osborn wind generation facility, located in Clinton and DeKalb counties, Missouri. In neighboring states, NEET Southwest's affiliate GridLiance High Plains LLC ("GridLiance HP") jointly owns 29 miles of transmission lines in Winfield, Kansas with the City of Winfield, and owns 444 miles of transmission lines in the Oklahoma Panhandle that serve Tri-County Electric Cooperative. NEER subsidiaries own and operate 32 wind generation facilities, approximately 829 miles of transmission lines and 40 substations in Kansas and Oklahoma.

Q. Will NEET Southwest use the services of its affiliates to engineer and construct the Project?

A. Yes. NEET Southwest currently utilizes support services from various of its NextEra Energy affiliates, including NEET, NEER, FPL, and Lone Star, and NEET Southwest plans to utilize these services to construct and engineer the Project. Doing so allows NEET Southwest to access the significant expertise of the NextEra Energy corporate organization and

[2] Including pipelines.

will enable NEET Southwest to provide service in a cost-efficient manner. With respect to engineering and construction, NEET Southwest plans to utilize the significant expertise in the E&C organization within NEER to engineer, design, and construct the Project. NEET Southwest also plans to utilize the services of NextEra Energy's Integrated Supply Chain ("ISC") for procurement of equipment and services for the Project. NEET Southwest's use of other affiliate resources is discussed in more detail in the Direct Testimonies of Ms. Walding, LaMargo Sweezer-Fischer, and Amanda Finnis.

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

A. Yes. At NextEra Energy and its subsidiaries, safety is a core value and is recognized as the cornerstone of sustaining operational excellence. NextEra Energy's vision for its employees is to establish and promote a safety culture based on the principle that zero injuries at work and home is an achievable result. NextEra Energy consistently ranks within the industry top-decile on safety metrics.

NEET Southwest will implement this focus on a "Zero Today" policy in its internal and contractor safety programs, plans, and procurement throughout the lifecycle of the Project. NEET Southwest has adopted best management practices that include frequent communication among the land services, environmental, engineering, and construction teams during the permitting and construction phases to ensure a safe and successful project. The Project will be designed to meet or surpass applicable local and state codes, the National Electric Safety Code ("NESC"), North American Electric Reliability Corporation ("NERC") requirements, SPP System Operator requirements, the interconnecting transmission owners' requirements, and NextEra Energy standards. Appropriate standards and applicable permit requirements will be met for construction and installation, and applicable safety procedures will be followed during and after installation.

NEET Southwest also expects companies providing services to NextEra Energy to have the same high standards of safety and health as we do. During construction of the Project, each morning, field teams will convene a safety and environmental meeting to discuss specific activities planned for the day, including daily safety-related behaviors, conditions, and job hazard analyses as well as review any environmental compliance requirements that could impact construction activities. In addition, the Project will have a dedicated Safety Manager for all safety and health concerns who will have access to the significant safety resources within the NextEra Energy organization. Ms. Sweezer-Fischer describes the safety efforts that NEET Southwest will undertake during operations of the Project in her Direct Testimony.

III. DESCRIPTION OF THE WOLF CREEK-BLACKBERRY PROJECT

Q. Please describe the proposed Project.

A. NEET Southwest's proposed Project will consist of a new, approximately 94-mile, single-circuit 345 kV transmission line between the existing Blackberry Substation in Jasper County, Missouri, owned by Associated Electric Cooperative, Inc. ("AECI"), and the existing Wolf Creek Substation in Coffey County, Kansas, owned by Evergy Kansas Central, Inc. ("Evergy").

Q. What type of conductor does NEET Southwest plan to use for the Project?

A. NEET Southwest's design will consist of a horizontal double-bundled 1590 "Falcon" 42-19 ACSS/TW HS conductor bundle, along with 7#8 alumoweld shield wire and a 48-stainless steel loose tube optical ground wire ("OPGW") to facilitate lightning shielding and provide the primary communication path for line protection. Redundant communication will be provided via a leased fiber path.

Q. Why did NEET Southwest select this conductor for the Project?

A. NEET Southwest selected the 1590 "Falcon" 42-19 ACSS/TW HS conductor bundle because it will provide the lowest losses of any conductor that NEET Southwest evaluated, offers excellent structural reliability, and exceeds SPP's minimum standards for capacity for the Project. In fact, the SPP Independent Evaluator Panel ("IEP") noted in its recommendation that NEET Southwest's proposal included "design and materials not offered by other Respondents, including the use of the highest thermal-rated conductor among any of the proposals."[3]

Q. What types of transmission structures does NEET Southwest propose to use for the Project?

A. NEET Southwest proposes to primarily utilize self-supporting spun concrete monopole structures with silicone rubber-braced post insulators in a delta configuration. The typical structure height will be approximately 100 to 130 feet tall. NEET Southwest estimates that it will install approximately seven structures per mile with an average span range of 800 to 1,000 feet between structures. The typical self-supported steel monopole structure will have a 10- to 12-foot-diameter drilled pier concrete foundation. The foundations are expected to range from 20 to 30 feet deep, depending on soil conditions. NEET Southwest also may utilize angled or dead-end structures as appropriate. Angled structures primarily will be guyed concrete monopole structures with either braced post or I-string insulators in a vertical configuration. Dead-end structures primarily will be guyed spun concrete monopoles with strain insulators. Direct embedded steel poles or base plated steel poles placed on drilled shaft foundations will be utilized where necessary due to height requirements or where guying of angle structures is not feasible. Diagrams of the expected structure types are provided as Highly Confidential Schedule DM-1.

[3] *See* Schedule BW-5 (IEP Report) at 46.

Q. Why did NEET Southwest select these transmission structures for the Project?

A. NEET Southwest, aided by its professional estimators, determined that spun concrete monopoles are the most cost-effective and reliable solution for the Project. Specifically, NEET Southwest selected spun concrete monopole structures as the primary transmission structure for the Project because they offer structural reliability, reduce visual impacts, are lower cost, have a shorter fabrication time, require fewer inspections and less maintenance than steel or lattice towers, and offer a longer life than steel or wood structures. Using transmission structures made primarily of concrete also minimizes NEET Southwest's exposure to fluctuating steel prices and steel supply chain delays. In addition, NEET Southwest understands that landowners prefer the use of such structures, as they have a reduced structure footprint, which generally results in fewer impacts to land and reduces interference with current land uses, *e.g.*, ranching and farming.

NEET Southwest's structure selection was informed by many decades of experience with extra high-voltage transmission lines across various NextEra Energy subsidiaries. NEET Southwest and its affiliates have more experience with precast concrete poles than any utility in the nation, having utilized spun concrete monopoles on a number of 345 kV transmission facilities throughout the U.S., including Lone Star's 345 kV transmission lines in Texas and NEER-owned transmission lines in Oklahoma and Kansas. The shared-services model within the NextEra Energy organization allows NEET Southwest to leverage these experiences in designing the most reliable and cost-effective transmission solutions.

Q. Are the proposed Project's facilities designed to meet necessary reliability and safety requirements or concerns?

A. Yes. In its Project design, NEET Southwest is designing the Project according to applicable Commission and KCC requirements, SPP's specifications for the Project, Institute of

Electrical and Electronics Engineers guidelines, American National Standards Institute standards, Occupational Safety and Health Administration requirements, NERC standards, the NESC, and prudent utility practice. Public safety and worker safety are critical considerations in the design, construction, and operation of transmission facilities, and safety and security have been and will continue to be a major focus in the preparation of all specifications and designs. Based on the results of its engineering studies conducted to date, NEET Southwest has designed the Project to ensure safe and reliable operation.

Q. Does the design of NEET Southwest's facilities conform to generally accepted practices for a project of this type?

A. Yes. In all instances, NEET Southwest will utilize experienced design, procurement, and construction personnel to prepare the design specifications, drawings, and scope of work documents. Also, NEET Southwest's construction management team, safety personnel, engineering consultants, and the respective contractors assigned to the Project will complete field verification and validations to ensure the facilities are constructed to the approved design so that the transmission facilities can be operated reliably and safely.

Q. What other approvals are required for the Project?

A. In addition to the CCN that NEET Southwest is requesting in this Application, NEET Southwest also is seeking a certificate of convenience and necessity from the KCC. NEET Southwest also expects to request line siting approval and wire-stringing approval from the KCC. NEET Southwest also will undertake coordination with, and as necessary, obtain approvals and permits from the following agencies and governmental entities: the U.S. Army Corps of Engineers; the U.S. Fish and Wildlife Service; the Missouri and Kansas State Historic Preservation Offices; the Missouri Department of Conservation; the Missouri Department of Natural Resources;

the Missouri Department of Transportation; the Kansas Department of Wildlife and Parks; the Kansas Department of Agriculture – Division of Water Resources; the Kansas Department of Health and Environment; and the various counties in which the Project will be located. Many of these approvals, as well as the outreach that NEET Southwest has undertaken with various local, state, and federal agencies, are described in the testimony of NEET Southwest witness Dusty Werth and in the Routing Study and Environmental Report ("Routing Study") provided as Schedule DW-1 to his testimony.

Q. How will the Project be interconnected to the transmission grid?

A. As I explained above, the eastern end of the Project will interconnect to AECI's Blackberry Substation in Jasper County, Missouri. The western end of the Project will interconnect to the SPP transmission grid outside of Evergy's existing Wolf Creek Nuclear Plant property in Coffey County, Kansas. NEET Southwest expects to enter into interconnection agreements with AECI and Evergy and has initiated discussions with these entities regarding the necessary interconnections. These transmission interconnection agreements will be filed with FERC.

Q. Will the Project require any transmission upgrades on the interconnecting utilities' systems?

A. Yes. As part of its RFP for the Project, SPP identified that certain upgrades would be required at the Blackberry and Wolf Creek Substations, which upgrades are to be performed by AECI and Evergy, respectively. SPP has issued separate Notifications to Construct to AECI and Evergy for their upgrades.

Q. What is NEET Southwest's proposed cost for the Project?

A. As Ms. Walding testifies, NEET Southwest's proposed cost for the Project is $85.2 million in 2021 dollars **[redacted]**[4], subject to a binding cap on construction costs. Ms. Walding describes NEET Southwest's cost containment measures in more detail in her testimony.

Q. How will NEET Southwest procure services and equipment for the Project?

A. NEET Southwest will procure third-party services and materials through NextEra Energy's ISC, which utilizes NextEra Energy's unique market position as the largest electric utility in the country, to procure services and materials with favorable prices and terms. ISC is the procurement group for all NextEra Energy companies, and it consists of over 400 sourcing and procurement specialists that leverage NextEra Energy's significant purchasing power and relationships with strategic industry vendors. This team procured $16 billion in materials and services in 2021 alone. The ISC team that will be responsible for procuring equipment and materials for the Project has over 50 years of relevant procurement experience.

NEET Southwest will leverage ISC's significant purchasing power, which will provide NEET Southwest with a number of important benefits:

- Favorable commercial terms and competitive pricing for high quality, reliable, and durable components from well-known and highly respected industry providers. In addition to preferred pricing, competitive terms include improved flexibility in managing suppliers, greater leverage to complete the Project on time and within budget, and other contractual protections that minimize risk to NEET Southwest and the Project.

[4] This highlighted portion has been designated as "Highly Confidential" as defined in NEET Southwest's pending Motion for Protective Order filed on July 7, 2022. The highlighted portion contains confidential information that is competitively sensitive for the purpose of future bidding on SPP and other RTO bidding events.

- Access to supply is enhanced with a strong commercial position with key suppliers, which allows NEET Southwest to leverage supplier relationships for priority access to products, reducing Project risk.

- Strategic long-term contracts across the NextEra Energy enterprise, which durations provide flexibility for both parties to adjust to market conditions.

- NextEra Energy utilizes a robust competitive bidding process applying specification documents developed by internal subject matter experts ("SME") during detailed design. In addition to the bidding and contracting effort, ISC will coordinate deliveries to the site, monitor vendor progress, and expedite delivery of materials if needed to maintain Project schedule.

NextEra Energy's philosophy for project construction is for ISC to directly procure the most critical and high value major materials to leverage the company's purchasing power across multiple business lines. This strategy will allow NEET Southwest to maximize its control of supply and delivery of the Project's most critical long-lead items. For the Project, this means that ISC will directly procure transmission poles, conductor, insulators and hardware, shield wire, and OPGW, while the Project's construction contractor will procure all other minor materials.

Q. Does NEET Southwest plan to competitively bid for services and equipment?

A. Yes. NEET Southwest has strong established supplier networks through the NextEra Energy ISC, which procures large volumes of materials, equipment, and services on an annual basis. To ensure the best price for major transmission line components including labor, ISC competitively bids, evaluates, and sources for delivery using well-established procurement processes. Through these processes, bids are requested from at least three bidders whenever practical. Upon the receipt of proposals, ISC evaluates the proposals received and coordinates written requests for clarifications or requests for additional technical or commercial information between the bidders and subject matter experts. Upon completion of the commercial and technical evaluation, ISC substantiates the results of the competitive bid (commercial and technical). There are certain exceptions and circumstances where a non-competitive single or sole source

procurement may be justified, and in those cases NEET Southwest would document and justify the exceptions.

The competitive bid process helps ensure that our projects can obtain the best price available at that time. In addition, due to the magnitude of business with the suppliers, NextEra Energy's ISC is well positioned to address emerging issues during material production (*e.g.*, specification changes, additional quantities required) with minimal impact to cost or schedule. Besides material and labor pricing, the procurement contracts negotiated with suppliers impose strict terms and conditions ("T&C") that, although hard to quantify, are likely to result in additional contract administration benefit. These T&Cs generally include: favorable payment schedules and terms, often with no payments prior to delivery; avoidance of restocking or other fees if an order is reduced or changed, and warranties on products from defects and shipping damage.

IV. PROJECT LOCATION AND PROPOSED ROUTE

Q. Where will the Project be located?

A. The Project is anticipated to be located across two counties in Missouri (Barton and Jasper counties) and five counties in Kansas (Coffey, Anderson, Allen, Bourbon and Crawford counties). At a high level, NEET Southwest's proposed route ("Proposed Route") will connect to the Wolf Creek Substation outside of the Wolf Creek Nuclear Plant Owner Controlled Area to the east and then continues diagonally to the southeast for approximately 68 miles, 27 miles of which parallels an existing Evergy 161 kV transmission line. The Proposed Route then turns east for about 7 miles to avoid the Federal Aviation Administration obstruction areas around the Atkinson Municipal Airport on the northwest side of Pittsburg, Kansas, then continues south/southeast for another 16 miles, extending into Missouri and approximately 2 miles of which parallels a 69 kV transmission line and approximately 3 miles of which parallels an existing 161 kV transmission

line. The Proposed Route then turns slightly southwest for approximately 2.5 miles to connect with the Blackberry Substation. The Proposed Route is described in detail in the Routing Study provided as Schedule DW-1 to Mr. Werth's testimony, and a legal description of the Proposed Route is provided as Schedule DW-3.

Q. How did NEET Southwest select the proposed route for the Project?

A. In SPP's request for proposals ("RFP") for the Project,[5] SPP directed respondents to propose a transmission line between the existing Wolf Creek Substation and the existing Blackberry Substation, which would require the construction of up to approximately 100 miles of 345 kV transmission line within a 150-foot-wide easement. NEET Southwest retained Burns & McDonnell, Engineering Company, Inc. ("Burns & McDonnell"), an expert transmission line design and permitting firm with transmission project experience in Kansas and Missouri, to assist with the engineering, environmental, and routing aspects of NEET Southwest's response to the RFP. Burns & McDonnell prepared a preliminary routing analysis, through which NEET Southwest identified a preliminary route for the project, which NEET Southwest presented to SPP in its bid. NEET Southwest has continued to refine this routing analysis following its selection by SPP, including by incorporating feedback received from landowners and governmental agencies, and is presenting the Proposed Route set forth in the Routing Study attached to Mr. Werth's testimony.

Q. What were NEET Southwest's considerations in developing the preliminary route?

A. During our initial review of potential routes for the Project, NEET Southwest and a cross-functional team that included Burns & McDonnell, as well as development,

[5] *See* Schedule BW-4 to the Direct Testimony of Becky Walding (SPP RFP).

legal/regulatory, ROW, environmental, engineering, construction, and operations team members evaluated the socioeconomic and landowner, environmental, and infrastructure impacts of each of the potential routes. In reviewing the socioeconomic and landowner impacts of the potential routes, it was our objective to reduce greenfield routing impacts for landowners by paralleling or co-locating with existing transmission lines, roads, and property lines when feasible, maximizing distances from residences and public facilities to the extent possible, and minimizing impacts to public airports, including the Atkinson Municipal Airport in Pittsburg, Kansas.

In reviewing the environmental impacts of the proposed routes, NEET Southwest's team sought to minimize or avoid impacts to forested wetlands, protected or sensitive species and habitats, known cultural and archeological resources, and federal and state-owned lands and easements, as well as impacts to tribal lands to the maximum extent practicable. Additionally, NEET Southwest analyzed the proximity of the route to existing structures including bridges, culverts, existing oil and gas wells, existing transmission lines, and telecom towers.

In Missouri, the primary route constraints were state conservation lands, residences, previously mined lands, and forested areas. The route was selected to avoid residences and state conservation lands. Where possible, previously mined lands were avoided and tree clearing was minimized.

Q. How did NEET Southwest refine this preliminary route to develop the Proposed Route?

A. Following SPP's selection of NEET Southwest as the designated transmission owner for the Project, NEET Southwest's routing team continued to refine the preliminary route. As described in the Routing Study, the final set of route alternatives consists of individual segments that can be combined in different arrangements to form a continuous path between the Project

endpoints. The set of route alternatives for the Project consisted of 53 individual segments, and ultimately, 729 distinct routes were developed using forward-progressing combinations of these 53 segments.[6] NEET Southwest's routing team ultimately identified its preferred route, which is presented as the Proposed Route, as described in more detail by Mr. Werth and in the Routing Study.

In addition, as described by NEET Southwest witness Sarah Nettels in her Direct Testimony, NEET Southwest undertook a public outreach process that included outreach to local, state, and federal agencies and potentially affected landowners along the preliminary route. NEET Southwest held two virtual open house public meetings on March 22, 2022 to provide information and solicit additional feedback from landowners. Through this public outreach process, NEET Southwest has made refinements to its initial route to determine the Proposed Route.

Q. Has NEET Southwest considered the potential need to deviate from the Proposed Route?

A. Yes. While NEET Southwest's planning of the Proposed Route was based on considerable due diligence, there may, in some circumstances, be a need to deviate from the Proposed Route. NEET Southwest therefore proposes in its CCN Application that it will use reasonable efforts to abide by the Proposed Route on the parcels identified in the CCN Application and over which an easement will be acquired, but that NEET Southwest be allowed to deviate from the Proposed Route within those parcels to address the following situations:

(1) If surveys or testing do not necessitate a deviation, NEET Southwest may deviate from the depicted route on a particular parcel upon request of NEET Southwest or the landowner and mutual agreement; or

(2) If NEET Southwest determines that surveys or testing require a deviation from the Proposed Route, NEET Southwest will negotiate in good faith with the affected

[6] Schedule DW-1 (Routing Study) at § 3.2.

landowner and, if agreement can be reached, NEET Southwest may deviate from the Proposed Route, as agreed upon with the affected landowner.

V. LAND RIGHTS ACQUISITION

Q. How much right of way is needed for the Project?

A. The amount of land and ROW that NEET Southwest will acquire will be driven by NEET Southwest's final design in accordance with the final route approved by the Commission and the KCC, as well as good utility practices in Missouri and Kansas. NEET Southwest will seek to obtain easements that are typically 150 feet wide, based upon NEET Southwest's Project design, anticipated structure types, number of structures, span distances, terrain, and soil conditions. This proposed ROW width may vary at some locations to accommodate topographic features and crossing requirements and to provide flexibility in final structure placement. At all times, the width of the ROW will be sufficient to ensure the safe and reliable operation of the Project.

NEET Southwest also anticipates acquiring land rights associated with construction and ongoing access to the Project, as well as material laydown yards. This additional ROW may be required where NEET Southwest cannot access the ROW directly from the road, *e.g.*, due to water bodies or wetlands or other environmentally significant terrain features. In addition, NEET Southwest will be working with local landowners to secure easements for material and equipment laydown areas. These laydown areas will generally require about 25 acres and will be spaced approximately 25 miles apart to allow the contractor to efficiently store and source the materials and equipment to complete the Project construction. These laydown yards are graded, rocked, and fenced but only used temporarily. Upon construction completion, the landowner's property will be restored to its original use or left as is should the landowner request.

Q. How many parcels of property would NEET Southwest need to acquire and rights to in order to construct the Project?

A. The Proposed Route will cross about 26 parcels of land in Missouri, which are owned by 23 different landowners.

Q. Has NEET Southwest used significant efforts to inform landowners of the Proposed Route?

A. Yes. As Ms. Nettels testifies in her Direct Testimony, NEET Southwest held virtual public meetings for affected landowners along the Proposed Route and provided notice to landowners in the Project's Study Area of these meetings. Ms. Nettels describes the notice process, public meetings, and other public engagement in further detail in her testimony. NEET Southwest also provided notice of its CCN Application to landowners within 300 feet of the Proposed Route's centerline, as described by Ms. Nettels.

Q. How will NEET Southwest acquire the easement rights it needs to construct the Project?

A. Based upon the final route selected by the Commission and the KCC, and upon receipt of other regulatory permits and approvals, NEET Southwest will negotiate with landowners to obtain easements from the landowners for the ROW for the Project. NEET Southwest will make reasonable efforts to acquire land rights through the negotiation of mutually acceptable agreements with landowners through the application of a consistent compensation offering that is based on the fair market value of land. NEET Southwest has retained Doyle Land Services ("Doyle") to assist with land options, land acquisition, ROW development, and land valuation services, and Doyle is utilizing local land agents to reach out to landowners along the Proposed Route.

Q. What is NEET Southwest's approach to land acquisition?

A. In acquiring land for the Project, NEET Southwest seeks to facilitate timely resolutions and fair settlements with directly affected landowners along the Proposed Route. NEET Southwest is committed to creating long-term relationships in the communities within which it works. To achieve this, NEET Southwest follows an established code of conduct when engaging with landowners that is based upon NextEra Energy's core values: "We treat people with respect, we are committed to excellence, and we do the right thing."

Accordingly, NEET Southwest's preferred approach is to acquire necessary land rights for the Project through the negotiation of mutually acceptable agreements with landowners through the application of a consistent compensation offering that is based on fair market value of lands. NEET Southwest ensures that its land acquisition approach and associated compensation principles are openly discussed and understood by landowners. Landowners are engaged in an open and respectful manner, with a commitment to timely, meaningful, and transparent dialogue as it relates to compensation and land rights. NEET Southwest's local land agents provide a single point of contact with landowners throughout the duration of the Project, so that landowners may work consistently with one person throughout the process.

Q. Through the acquisition process, what information is given to landowners?

A. I will describe the process in general. In making contact with landowners along the Proposed Route, NEET Southwest's land agents explain the reason for the contact and the purpose of the Project, and they answer any questions the landowners may have about the Project and how it impacts their property. During initial conversations, the land agents also give landowners a written statement of the purpose of the Project, a parcel map with aerial photography of the easement area needed, the estimated acreage on a landowner's property, and information regarding

the type and location of the Project facilities that NEET Southwest proposes to construct. NEET Southwest's land agents also provide a copy of the proposed transmission option and easement agreement and NEET Southwest's formal offer of compensation. Following review of NEET Southwest's offer of compensation, the landowner will decide whether to move forward with the acquisition process, and the parties will finalize the transaction and execute the easement agreements. A sample copy of NEET Southwest's standard form of transmission option and easement agreement is provided as Schedule DM-2 to my Direct Testimony. Schedule DM-2 also includes a copy of the Project Fact Sheet that the land agents provide to landowners.

Q. How will NEET Southwest determine the compensation that it will offer to landowners to acquire easements for the Project?

A. As I noted above, NEET Southwest proposes to acquire land rights for the Project by signing mutually acceptable agreements with landowners to the greatest extent possible and to establish strong relationships in the communities within which we work. Ensuring fair compensation plays a role in building trust with landowners and within the community in general. Compensation will be fair and equitable. To support fair compensation, NEET Southwest will obtain services from an independent third party licensed by the Missouri Real Estate Appraisers Commission to complete appraisals that will identify fair market land values for each land use in each county impacted by the Project. These values will be used as the basis for compensation to landowners, with consideration given to damages or other property-specific needs. The type of property being crossed (including unique characteristics as soil types and productivity) and the location of the easement upon the property, among other items, will be factors in determining value. In addition, NEET Southwest will pay for crop damage and/or physical damage to property resulting from construction and/or maintenance of the Project.

Q. Will NEET Southwest need to exercise eminent domain to construct the Project?

A. Only as a last resort. NEET Southwest's goal is to voluntarily obtain as many land rights as possible through negotiation and mutually acceptable agreements with landowners. NEET Southwest will seek to exercise eminent domain only if it determines that it cannot acquire the land rights through negotiation.

Q. How will NEET Southwest determine if it needs to exercise eminent domain to complete construction of the Project?

A. NEET Southwest will not seek to condemn property until it has engaged in good faith, reasonable negotiations with each landowner. As I testified above, NEET Southwest has retained professional, experienced land agents to represent it in negotiations. These land agents will meet with the landowners to explain NEET Southwest's offer, promptly respond to any counteroffers and attempt to address landowners' concerns. If, after engaging in reasonable negotiations, the parties are unable to reach a voluntary agreement, and NEET Southwest believes that further negotiations will not result in an agreement, then NEET Southwest will make a determination regarding eminent domain.

Q. Once a transmission line easement or other ROW agreement is executed, who within NEET Southwest is responsible for administering the agreements and responding to any requests for the payment of damages, complaints, or claims related to NEET Southwest's activities pursuant to an easement or agreement?

A. During construction of the line, NEET Southwest and Doyle will be responsible for administering the easement agreements along with NEET Southwest's construction project manager, who will work with the construction contractor to ensure the easement agreement is

enforced and that any questions, complaints, and or claims are handled to the satisfaction of the landowner and per the underlying agreement. After construction is completed, NEET Southwest's operations lead will be administering the easement agreements and will respond to requests made by the landowner. Please also see the Direct Testimony of Ms. Sweezer-Fischer.

Q. How will NEET Southwest engage with landowners prior to beginning construction?

A. Each and every landowner affected by the route will be notified of the start of construction activities via phone, mail, e-mail, or direct contact a few weeks prior to start. Any temporary removal or relocation of fences that are necessary, or installation of temporary or permanent gates would be coordinated with the landowner. Depending on the timing of construction, the ROW agent will work with the property owner for early harvest of crops, where possible, with compensation to be paid for any actual crop losses or per the landowner easement. During the construction process, it may be necessary for the property owner to remove or relocate equipment and livestock from the ROW. Compensation related to these activities will be discussed with the landowner during easement negotiations.

Q. How does NEET Southwest plan to treat trees that must be removed from the ROW?

A. NEET Southwest's construction contractor will install the preliminary access roads and matting if required, and begin removal of trees, clearing and grubbing to ensure that any remaining vegetation meets the NESC standards and that the construction crew will have easy access to the construction site. Some low-growing brush or specific tree species that remain below 14 feet at mature height may be allowed at the outer limits of the easement area. Taller trees within the ROW that might compromise the safe and reliable operation of the transmission line will be

removed. In developed areas and to the extent practical, existing low-growing vegetation that will not pose a risk to the transmission line or impede construction or maintenance may remain in the easement area. Trees beyond the easement area that are in danger of falling into the energized transmission line will be removed or trimmed to eliminate the hazard as allowed by the terms in the acquired landowner easement. In special circumstances, tree trimming agreements may be required to minimize tree removal. All materials resulting from clearing will either be chipped on site and spread on the ROW, stacked in the ROW for use by the property owner, or removed and disposed of as agreed to with the property owner.

Q. Will the construction of the Project remove any agricultural land from cultivation?

A. NEET Southwest has sought through the design of the Project (including through the use of concrete monopoles, which have smaller structure footprints) and will continue to work with landowners to minimize the land removed from future agricultural cultivation. Other than the footprint of the foundations for the transmission structures (which are in general approximately four to five feet in diameter), guys and anchors if required, and any permanent access roads necessary for maintenance and operations, construction generally will not remove agricultural land from future cultivation. If a landowner has a guyed structure with anchors on their property, there will be some additional cultivation limitation in order to maintain a safe work clearance from the transmission line equipment. Cultivation will also be limited adjacent to the pole base to prevent inadvertent damage to farm equipment or to the structure. Ms. Sweezer-Fischer discusses this in more detail in her Direct Testimony.

Q. How will the Project's construction impact landowners?

A. NEET Southwest will work with landowners to minimize impacts during construction. Construction of the transmission line follows a typical sequence of events, as I will explain later. Various phases of construction occur at different locations throughout the construction process and in many cases at the same time at different locations throughout the project area. This sequencing will minimize landowner impacts and allow the most efficient transmission line construction so NEET Southwest can safely complete the line in a timely manner.

In addition, NEET Southwest will work closely with landowners to minimize impacts on their existing land uses during the construction process. For example, NEET Southwest's affiliates have worked with farmers and ranchers to accommodate livestock during construction of transmission lines, and NEET Southwest would expect to undertake similar coordination here. NEET Southwest will reimburse landowners for their time required to move livestock from one location to another and, where feasible, may install temporary fences or gates to keep livestock out of the construction area. In addition, NEET Southwest expects to undertake most of its initial construction activities in the late fall after most of the harvesting is complete, thereby reducing impacts to farm production.

VI. CONSTRUCTION PROCESS

Q. Once necessary approvals and permits are obtained, and land is acquired, how does NEET Southwest expect to construct the Project?

A. NEET Southwest will utilize a combination of highly skilled NextEra Energy E&C personnel, along with experienced third-party contractors to construct the Project. The E&C team that will oversee the Project's construction has over 90 years of construction experience. As I testified above, NEET Southwest partnered with Brink Constructors to facilitate and assess

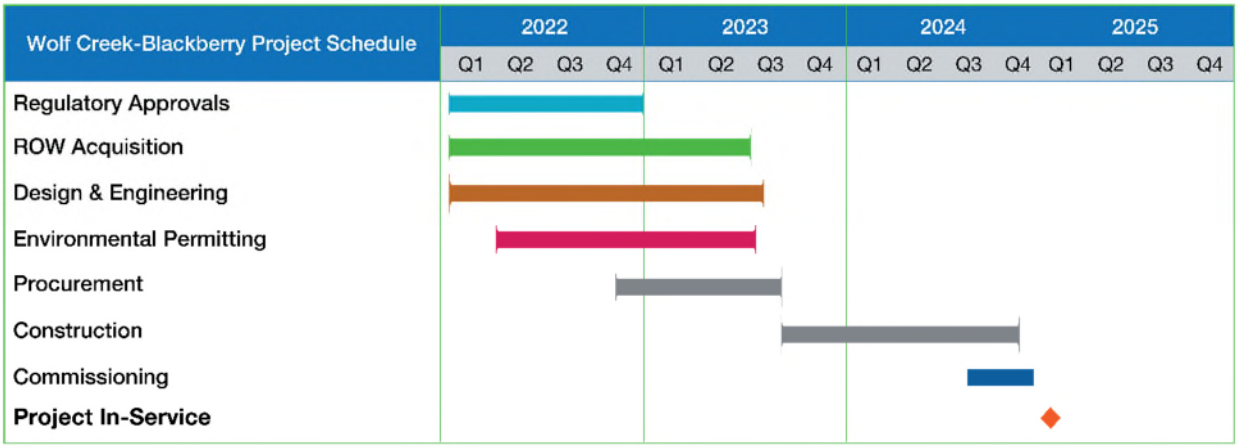
preliminary construction activities for the Project. NEET Southwest and their construction contractor will establish a local construction management office within the construction site and will staff the Project with a team of experienced professionals.

NEET Southwest will coordinate several design and constructability review meetings with Burns & McDonnell, which will serve as the transmission line Engineer of Record for the Project, along with the transmission line construction contractor. These design reviews will take place at 30 percent design completion, 60 percent design completion, and just prior to issuance for construction (approximately 90 percent design completion), and will encompass all aspects of the Project's design, including the design criteria, structure framing and assembly drawings, conductor, shield wire, and OPGW pulling and staging plans, sag and tensioning charts, foundations, grounding, materials and equipment installation details, bills of material, material and equipment specifications, ROW access, environmental permitting requirements, and construction specifications. NEET Southwest's SMEs will review the design criteria to verify that such criteria are valid, correct, and adequate and meet the SPP Minimum Transmission Design Standards (rev. 2).

Construction of the transmission line will follow a typical sequence of events starting with surveying the boundaries and centerline, determining applicable construction access, storm water pollution prevention mitigation installation, ROW clearing, grubbing and grading, material delivery, installing foundations, assembling and installing insulators followed by the, erecting and setting of structures, pulling in shield wires and conductors, installing ground rods, followed by cleanup and site reclamation.

Q. What is the current projected in-service date for the Project?

A. NEET Southwest has committed to an in-service date for the Project of January 1, 2025, which is 365 calendar days prior to the in-service date of January 1, 2026 required by SPP's RFP. NEET Southwest's Project schedule is provided below:



Q. Under NEET Southwest's Project schedule, when does it anticipate beginning construction of the Project?

A. Subject to receiving all necessary regulatory approvals and permits, and obtaining the necessary ROW, NEET Southwest's project schedule currently anticipates commencing construction in mid-2023. NEET Southwest plans to begin construction activities at the Blackberry Substation and work northwest toward the Wolf Creek Substation. NEET Southwest plans to build the line in four zones and construct each zone as individual line sections. This strategy will allow clearing crews to stay ahead of transmission line construction. In NEET Southwest's project schedule, clearing, transmission structure installation, and stringing operations have been staggered to minimize the overall schedule, maximize the efficiency of each operation, and include enough float to ensure no single operation is impeded by a delay in a preceding operation.

Q. Does NEET Southwest utilize any standards and procedures regarding construction, repair, and maintenance in ROW areas on and around the Project footprint?

A. Yes. Prior to beginning construction of the Project, NEET Southwest will be negotiating and signing road use and maintenance agreements with all the affected counties and local municipalities to ensure we can construct, operate and maintain the Project in an orderly manner. In addition, NEET Southwest will require that its construction contractor adhere to the strict requirements dictated within its contract, which will include construction and maintenance of all temporary and permanent access roads as required for the transmission facilities, inclusive of all required culverts (temporary and permanent), access approaches, pipeline/utility crossings, matting, reclamation and restoration. Upon construction completion, the contractor will provide all equipment, labor, and material to restore all temporarily disturbed land to pre-construction conditions. NEET Southwest will require its contractor to de-compact all soils to pre-construction conditions. Unless in farmland, or as otherwise requested by a landowner, the Contractor shall re-vegetate the areas with native species and in accordance with Project permits and reclamation plans. NEET Southwest will require its contractor to reseed per the Project permit and reclamation plans. In highly erodible areas, the contractor shall install temporary and/or permanent stabilization measures to enhance vegetation re-growth. Prior to NEET Southwest's final acceptance temporary erosion controls shall be removed by the contractor if and when vegetation reaches 70 percent re-growth in the particular location of the erosion control devices. Upon completion of reseeding and as a provision of final acceptance, NEET Southwest will require its contractor to refurbish all remaining erosion control devices so that they are in compliance with the Stormwater Pollution and Prevention Plan, at which time the maintenance and/or removal of the remaining erosion control devices shall become the responsibility of NEET Southwest. NEET

Southwest will respect the landowner property and intends to restore the property to its original condition.

VII. NEET SOUTHWEST MEETS THE *TARTAN* FACTORS FOR ISSUING A CCN

Q. Are you familiar with the Commission's factors for granting a CCN, referred to as the "*Tartan* Factors"?

A. While I am not an attorney, yes, it is my understanding that, in its review of CCN applications, the Commission has traditionally applied several criteria, which it refers to as the "*Tartan* Factors." Ms. Walding and other NEET Southwest witnesses address several of the *Tartan* Factors in their testimonies. In this testimony, I provide support for the *Tartan* Factor 4, which requires that an applicant for a CCN must be qualified to provide the proposed service.

Q. In your view, does NEET Southwest meet this factor?

A. Yes. I have testified that NEET Southwest is fully qualified to design, engineer, and construct the proposed Project and provide the proposed service, utilizing the significant expertise and resources of its NextEra Energy affiliates.

VIII. CONCLUSION

Q. Should the Commission grant NEET Southwest a CCN?

A. Yes, as I and other NEET Southwest witnesses testify, NEET Southwest has satisfied the Commission's requirements for granting a CCN.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of NextEra Energy Transmission Southwest, LLC for a Certificate of Public Convenience and Necessity to Construct, Install, Own, Operate, Maintain, and Otherwise Control and Manage a 345 kV Transmission Line and associated facilities in Barton and Jasper Counties, Missouri	)	File No. EA-2022-0234

Affidavit of Daniel Mayers

1. My name is Daniel Mayers. I am the Director of Transmission and Substation Engineering within the Engineering & Construction organization at NextEra Energy Resources, LLC at 700 Universe Blvd., Juno Beach, FL 33408.

2. I have read the above and foregoing Direct Testimony and the statements contained therein are true and correct to the best of my information, knowledge, and belief.

3. I am authorized to make this statement on behalf of NextEra Energy Transmission Southwest, LLC.

4. Under penalty of perjury, I declare that the foregoing is true and correct to the best of my knowledge and belief.

Daniel Mayers
Director – Transmission/Substation Engineering
NextEra Energy Resources, LLC

Date: 7-6-2022