BEFORE THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

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22-NETE-419-COC Docket No. 22-___-COC

DIRECT TESTIMONY OF DANIEL MAYERS DIRECTOR, TRANSMISSION AND SUBSTATION ENGINEERING NEXTERA ENERGY RESOURCES, LLC

ON BEHALF OF

NEXTERA ENERGY TRANSMISSION SOUTHWEST, LLC

Docket No. 22-___-COC

FEBRUARY 28, 2022

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1 I. <u>INTRODUCTION</u>

- 2 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
- A. My name is Daniel Mayers. My business address is 700 Universe Boulevard, Juno Beach,
 Florida 33408.

5 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

6 A. I am the Director of Transmission and Substation Engineering within the Engineering & 7 Construction ("E&C") organization at NextEra Energy Resources, LLC ("NEER"), 8 working as a shared service employee on behalf of NextEra Energy Transmission 9 Southwest, LLC ("NEET Southwest" or the "Applicant"). As the Director of Transmission 10 and Substation Engineering, one of my primary roles is to coordinate or provide support 11 for the development of new transmission systems, including right of way ("ROW") 12 identification and selection, land acquisition, permit acquisition, system engineering, 13 specification and standards development, material and services procurement, construction 14 management, commissioning, system integration, compliance, and project close-out in 15 highly regulated, environmentally sensitive, multi-system operational environments.

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Q. ON WHOSE BEHALF ARE YOU TESTIFYING?

17 A. I am testifying on behalf of the Applicant in this proceeding, NEET Southwest.

18 Q. WHAT IS YOUR EDUCATIONAL AND PROFESSIONAL BACKGROUND?

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.

1Q.HAS THIS DIRECT TESTIMONY BEEN PREPARED BY YOU OR UNDER2YOUR DIRECT SUPERVISION?3

4 A. Yes, it has.

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5Q.HAVE YOU PREVIOUSLY PROVIDED TESTIMONY BEFORE THE KANSAS6CORPORATION COMMISSION ("COMMISSION") OR ANY OTHER7REGULATORY COMMISSION?

- 8 A. Yes, I have testified before a number of state regulatory commissions on behalf of various
- 9 NextEra Energy Transmission, LLC ("NEET") and NEER subsidiaries:
- 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.
- 26 I filed testimony before the State of New York Public Service Commission ("New • 27 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 28 29 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 30 31 NEETNY's application for a Certificate of Environmental Compatibility and 32 Public Need Pursuant to Article VII of the Public Service Law for the Construction 33 of a 20 Mile 345 Kilovolt Transmission Line Located in the Town of Royalton, 34 Niagara County, and the Towns of Alden, Newstead, Lancaster, and Elma in Erie 35 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.

6 Q. DO YOU SPONSOR ANY EXHIBITS IN SUPPORT OF NEET SOUTHWEST'S 7 APPLICATION?

- 8 A. Yes. I sponsor Confidential Exhibit DM-1, which was prepared or assembled by me or
- 9 under my supervision and direction.

10Q.WHAT AUTHORITY IS THE APPLICANT SEEKING TO OBTAIN IN THIS11PROCEEDING?

- 12 A. The Applicant is seeking to obtain a Certificate of Convenience and Necessity ("CCN"),
- 13 pursuant to K.S.A. 66-131, to transact business as a transmission-only public utility in
- 14 Kansas and to construct, own, operate, and maintain a 345 kV transmission line project
- 15 that will connect the existing Wolf Creek Substation in Coffey County, Kansas to the
- 16 existing Blackberry Substation in Jasper County, Missouri (the "Project" or the "Wolf
- 17 Creek-Blackberry Project"). The Project was identified by the Southwest Power Pool, Inc.
- 18 ("SPP") as required to address multiple needs identified by SPP, including an economic
- 19 need to increase the transmission capability from west to east within SPP.
- 20 Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?
- 21 A. The purpose of my testimony is to:

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- 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;
- Demonstrate that NEET Southwest meets certain of the Commission's applicable merger standards, including that the Project does not adversely affect the environment;

1 Describe the historical presence of NEET Southwest's affiliates in Kansas; and ٠ 2 Address several of the Commission's Merger Standards in reference to the Project. II. 3 NEXTERA ENERGY'S TRANSMISSION CONSTRUCTION EXPERIENCE 4 Q. PLEASE DESCRIBE NEET SOUTHWEST. 5 A. As explained in more detail by Ms. Becky Walding in her Direct Testimony, NEET 6 Southwest is a Delaware limited liability company formed in 2014. NEET Southwest is a 7 direct, wholly-owned subsidiary of NEET, which is an indirect, wholly-owned subsidiary 8 of NextEra Energy, Inc. ("NextEra Energy"). A Fortune 200 company, NextEra Energy is 9 the world's largest electric utility by market capitalization, with revenues in calendar year 10 2021 of approximately \$17 billion and approximately 15,000 employees as of December 11 31, 2021. 12 NextEra Energy's principal businesses are FPL, the largest electric utility in the 13 nation as measured by retail electricity produced and sold, which serves more than 5.7 14 million homes and businesses in Florida, and NEER, the largest generator of renewable 15 energy from the wind and sun in North America. NextEra Energy and its wholly-owned 16 subsidiaries, NEET and NEET Southwest, are headquartered in Juno Beach, Florida. DO NEXTERA ENERGY AFFILIATES HAVE EXPERIENCE CONSTRUCTING 17 **Q**. 18 **TRANSMISSION INFRASTRUCTURE?** 19 A. Yes, NextEra Energy affiliates have decades of experience in the construction of 20 transmission lines, substation facilities, and related infrastructure. NextEra Energy 21 companies have proven capabilities in engineering, procurement, constructing, operating, 22 and maintaining high-voltage transmission line projects in compliance with the design, 23 reliability, and operation standards set by a variety of authorities in North America. 24 NextEra Energy owns approximately 11,800 circuit miles of high-voltage transmission,

1		approximately 77,400 miles of distribution lines, and over 1,000 substations across North
2		America. These transmission lines and other infrastructure assets have been built in 38
3		states and four Canadian provinces across a wide range of geographies, including Kansas,
4		Missouri, Oklahoma, Texas, California, New York, Montana, North Dakota, and Florida.
5		NextEra Energy subsidiaries have built over 1,000 miles of 345 kV transmission lines in
6		Kansas, Texas, and Oklahoma, and in the last five years, NextEra Energy subsidiaries have
7		constructed 116 miles of 345 kV transmission lines in Kansas alone.
8 9	Q.	HAS NEXTERA ENERGY ESTABLISHED A TRACK RECORD OF DEVELOPING INFRASTRUCTURE PROJECTS ON TIME AND ON BUDGET?
10	A.	Yes. As shown in the table below, from 2003 to 2021, NextEra Energy completed 308
11		major capital projects, reflecting an aggregate investment of \$65.9 billion in generation

12 and transmission assets. Of these major capital projects, 80 percent were completed on

13 time or early, at an average of 14 days ahead of schedule, and these projects were completed

14 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 ¹	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

¹ Including pipelines.

1Q.PLEASE DESCRIBE THE INFRASTRUCTURE ASSETS NEXTERA ENERGY2SUBSIDIARIES HAVE CONSTRUCTED OR ARE CONSTRUCTING IN KANSAS3AND NEIGHBORING STATES.

- A. NextEra Energy subsidiaries have invested approximately \$1.9 billion in electric
 generation and transmission infrastructure in the State of Kansas. NEET Southwest's
 affiliate, GridLiance High Plains LLC ("GridLiance HP"), jointly owns 29 miles of
 transmission assets in Winfield, Kansas with the City of Winfield. In addition, NEER
 subsidiaries own and operate ten wind generation facilities in Kansas and operate
 approximately 231 miles of transmission lines and multiple substations related to these
- In neighboring states, GridLiance HP also jointly owns 11 miles of transmission lines in Nixa, Missouri with the City of Nixa,² and owns 444 miles of transmission lines in the Oklahoma Panhandle that serve Tri-County Electric Cooperative. NEER subsidiaries own and operate 23 wind generation facilities and 637 miles of transmission lines and 34 substations in Missouri and Oklahoma.

16Q.WILL NEET SOUTHWEST USE THE SERVICES OF ITS AFFILIATES TO17ENGINEER 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 will enable NEET Southwest to provide service in a cost-efficient manner. With

² The Missouri Public Service Commission ("MPSC") recently approved a proposal by GridLiance HP to transfer its ownership interests in the City of Nixa assets to the Missouri Joint Municipal Electric Utility Commission. Order Approving Application to Transfer Assets and Granting Waiver, File No. EM-2022-0156 (Feb. 9, 2022).

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 and future projects. 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, Ms. LaMargo Sweezer-Fischer, and Ms.
Amanda Finnis.

8 Q. DOES NEXTERA ENERGY EMPHASIZE SAFETY IN ITS CONSTRUCTION 9 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.

15 NEET Southwest will implement this focus on a "Zero Today" policy in its internal 16 and contractor safety programs, plans, and procurement throughout the lifecycle of the 17 Project. NEET Southwest has adopted best management practices that include frequent 18 communication among the land services, environmental, engineering, and construction 19 teams during the permitting and construction phases to ensure a safe and successful project. 20 The Project will be designed to meet or surpass applicable local and state codes, the 21 National Electric Safety Code ("NESC"), North American Electric Reliability Corporation 22 ("NERC") requirements, SPP System Operator requirements, the interconnecting 23 transmission owners' requirements, and NextEra Energy standards. Appropriate standards

1 2 and applicable permit requirements will be met for construction and installation, and applicable safety procedures will be followed during and after installation.

3 NEET Southwest also expects companies providing services to NextEra Energy to 4 have the same high standards of safety and health as we do. During construction of the 5 Project, each morning, field teams will convene a safety and environmental meeting to 6 discuss specific activities planned for the day, including daily safety-related behaviors, 7 conditions, and job hazard analyses as well as review any environmental compliance 8 requirements that could impact construction activities. In addition, the Project will have a 9 dedicated Safety Manager for all safety and health concerns who will have access to the 10 significant safety resources within the NextEra Energy organization.

11 NextEra Energy also is at the forefront of developing safety programs to navigate 12 the coronavirus (COVID-19) crisis. The Project is routed through rural areas of Kansas and Missouri that may have relatively fewer healthcare resources to deal with COVID-19 13 14 issues. Distancing procedures, disinfecting procedures, symptom checks, rigorous 15 screening of essential visitors to the site, training behaviors, and vaccination will be 16 integrated into the Project safety policy and applied during all phases of the Project. 17 Communications and interactions with local communities also will be managed to 18 minimize risk to the communities themselves.

Ms. Sweezer-Fischer describes the safety efforts that NEET Southwest will
 undertake during operations of the Project in her Direct Testimony.

1 III. DESCRIPTION OF THE WOLF CREEK-BLACKBERRY PROJECT, 2 INCLUDING PRELIMINARY PROJECT ROUTING, CONSTRUCTION 3 COST, PROJECT SCHEDULE, AND ENVIRONMENTAL IMPACTS

4 Q. PLEASE DESCRIBE THE ENGINEERING ASPECTS OF THE PROPOSED 5 PROJECT IN MORE DETAIL.

6 A. NEET Southwest's proposed Project will consist of a new, approximately 94-mile, single-7 circuit 345 kV transmission line between the existing Wolf Creek Substation in Coffey 8 County, Kansas, owned by Evergy Kansas Central, Inc. ("Evergy"), and the existing 9 Blackberry Substation in Jasper County, Missouri, owned by Associated Electric 10 Cooperative, Inc. ("AECI"). NEET Southwest's design will consist of a horizontal double-11 bundled 1590 "Falcon" 42-19 ACSS/TW HS conductor bundle, along with 7#8 12 Alumoweld shield wire and a 48-fiber stainless steel loose tub ("SSLT") optical ground 13 wire ("OPGW") to facilitate lightning shielding and provide the primary communication 14 path for line protection. Redundant communication will be provided via a leased fiber 15 path.

16 NEET Southwest's proposed design for the Project also will utilize primarily selfsupporting spun concrete monopole structures with silicone rubber-braced post insulators. 17 Angled structures primarily will be guyed concrete monopole structures with either braced 18 19 post or I-string insulators in a vertical configuration. Dead-end structures primarily will 20 be guyed spun concrete monopoles with strain insulators. Direct embedded steel poles or 21 base plated steel poles placed on drilled shaft foundations will be utilized where necessary 22 due to height requirements or where guying of angle structures is not feasible. Diagrams 23 of the expected structure types are provided as Confidential Exhibit DM-1.

1Q.WHY DID NEET SOUTHWEST SELECT THIS CONDUCTOR FOR THE2PROJECT?

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

10Q.WHY DIDNEETSOUTHWESTSELECTTHESETRANSMISSION11STRUCTURES FOR THE PROJECT?

12 A. NEET Southwest, aided by its professional estimators, determined that spun concrete 13 monopoles are the most cost-effective and reliable solution for the Project. Specifically, 14 NEET Southwest selected spun concrete monopole structures as the primary transmission 15 structure for the Project because they offer structural reliability, reduce visual impacts, are 16 lower cost, have a shorter fabrication time, require fewer inspections and less maintenance 17 than steel or lattice towers, and offer a longer life than steel or wood structures. Using 18 transmission structures made primarily of concrete also minimizes NEET Southwest's 19 exposure to fluctuating steel prices and steel supply chain delays. In addition, NEET 20 Southwest understands that landowners prefer the use of such structures, as they have a 21 reduced structure footprint, which generally results in fewer impacts to land and reduces 22 interference with current land uses, e.g., ranching and farming.

³ See Exhibit BW-5 (IEP Report) at 46.

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

11 A. The Project is anticipated to be located across five counties in Kansas (Coffey, Anderson, 12 Allen, Bourbon and Crawford counties) and two counties in Missouri (Barton and Jasper 13 counties). NEET Southwest proposed a preliminary route to SPP as part of its bid, which 14 is shown on the map in Exhibit BW-2 to Ms. Walding's Direct Testimony. NEET 15 Southwest is currently undertaking its public outreach process to develop its more detailed 16 route and any adjustments to its preliminary route. Prior to constructing the Project, NEET 17 Southwest will file a separate application with the Commission under the Kansas Electric 18 Transmission Line Siting Act, K.S.A. 66-1,177 et seq., requesting approval of the Project's location. 19

20Q.HOW DID NEET SOUTHWEST DETERMINE ITS PRELIMINARY PROJECT21ROUTE?

A. In SPP's request for proposals ("RFP"), a copy of which is provided as Exhibit BW-4 to
Ms. Walding's direct testimony, SPP directed respondents to propose a transmission line
between the existing Wolf Creek Substation and the existing Blackberry Substation, which

1 would require the construction of up to approximately 100 miles of 345 kV transmission 2 line within a 150-foot-wide easement. NEET Southwest retained Burns & McDonnell, 3 Engineering Company, Inc. ("B&M"), an expert transmission line design and permitting firm with transmission project experience in Kansas and Missouri, to assist with the 4 5 engineering, environmental, and routing aspects of NEET Southwest's response to the 6 RFP. B&M prepared a preliminary routing analysis, through which NEET Southwest 7 identified a preliminary proposed route for the project, which NEET Southwest presented 8 to SPP in its bid.

9Q.WHAT ARE THE KEY CONSIDERATIONS NEET SOUTHWEST EVALUATED10TO DETERMINE THE PRELIMINARY ROUTE FOR THE PROJECT?

11 A. During our review of potential routes for the Project, NEET Southwest and a cross-12 functional team that included B&M, as well as development, legal/regulatory, ROW, 13 environmental, engineering, construction, and operations team members evaluated the 14 socioeconomic and landowner, environmental, and infrastructure impacts of each of the 15 potential routes. In reviewing the socioeconomic and landowner impacts of the potential 16 routes, it was our objective to reduce greenfield routing impacts for landowners by 17 paralleling or co-locating with existing transmission lines, roads, and property lines when 18 feasible, maximizing distances from residences and public facilities to the extent possible, 19 and minimizing impacts to public airports, including the Atkinson Municipal Airport in 20 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 stateowned lands and easements, as well as impacts to tribal lands to the maximum extent

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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.

4 NEET Southwest is continuing to refine this preliminary route and review 5 additional alternatives through its ongoing public outreach process and will present a 6 proposed route to the Commission for review in NEET Southwest's line siting application.

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Q. HOW MUCH ROW IS NEEDED FOR THE PROJECT?

8 A. The determination of land requirements will be driven by NEET Southwest's design in 9 accordance with the final route approved by the Commission and the Missouri Public 10 Service Commission ("MPSC"), as well as good utility practices in Kansas and Missouri. 11 NEET Southwest's initial estimated ROW is 150 feet, based upon its anticipated structure 12 type, number of structures, span distance, terrain, and soil conditions. This proposed ROW 13 width also may vary at some locations to accommodate topographic features and crossing 14 requirements and to provide flexibility in final structure placement. At all times, the width 15 of the ROW will be sufficient to ensure the safe and reliable operation of the project. 16 Where possible, NEET Southwest's preliminary route parallels existing transmission line 17 corridors to reduce land requirements and impacts to landowners and the environment.

18 Q. HOW WILL NEET SOUTHWEST ACQUIRE ROW?

A. NEET Southwest will make every effort 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's
 approach to ROW acquisition will be further discussed in its line siting application. NEET
 Southwest has retained Doyle Land Services for land options, land acquisition, ROW
 development, and land valuation services.

1Q.WILL THE PROJECT COMPLY WITH THE REQUIREMENTS OF K.S.A. 66-1832REGARDING STRINGING AND MAINTENANCE OF ITS WIRES?

A. Yes. NEET Southwest will comply with the requirements of K.S.A. 66-183 to string and
maintain its wires to avoid unreasonable injury or interference from or with the wires of
other utilities. NEET Southwest expects to submit a wire-stringing application pursuant to
K.A.R. 82-12-1, *et seq.*, for the Commission's review and approval after design of the
facilities are complete.

8 Q. WILL NEET SOUTHWEST DESIGN ITS FACILITIES TO MEET NECESSARY 9 RELIABILITY AND SAFETY REQUIREMENTS OR CONCERNS?

10 A. Yes. NEET Southwest will design the Project according to applicable Commission and 11 MPSC requirements, SPP's specifications for the Project, Institute of Electrical and 12 Electronics Engineers guidelines, American National Standards Institute standards, 13 Occupational Safety and Health Administration requirements, NERC standards, the NESC, 14 and prudent utility practice. Public safety and worker safety are critical considerations in 15 the design, construction, and operation of transmission facilities, and safety and security 16 have been and will continue to be a major focus in the preparation of all specifications and 17 designs. Based on the results of its preliminary engineering studies, NEET Southwest has 18 designed the Project to ensure safe and reliable operation.

19Q.DOES THE DESIGN OF NEET SOUTHWEST'S FACILITIES CONFORM TO20GENERALLY 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.

3 Q. WHAT OTHER APPROVALS ARE REQUIRED FOR THE PROJECT?

4 A. In addition to the CCN that NEET Southwest is requesting in this Application, as described 5 above, NEET Southwest also plans to request line siting approval and wire-stringing 6 approval from the Commission. NEET Southwest also anticipates that it will seek a 7 certificate of public convenience and necessity from the MPSC. NEET Southwest also 8 will undertake coordination with, and as necessary, obtain approvals and permits from the 9 following agencies and governmental entities: the U.S. Army Corps of Engineers; the U.S. 10 Fish and Wildlife Service; the Kansas and Missouri State Historic Preservation Offices; 11 the Kansas Department of Wildlife and Parks; the Missouri Department of Conservation; 12 the Kansas Department of Agriculture - Division of Water Resources; the Kansas Department of Health and Environment; the Missouri Department of Natural Resources; 13 14 the Missouri Department of Transportation; and the various counties in which the Project 15 will be located.

16 Q. HOW WILL THE PROJECT BE INTERCONNECTED TO THE TRANSMISSION 17 GRID?

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

1		The Wolf Creek Substation is interconnected to the Wolf Creek nuclear generating
2		station. For interconnection of the Project to the Wolf Creek Substation, it is important to
3		note that the Wolf Creek Substation is located outside of the Wolf Creek Generating Station
4		Protected Area ("PA") and inside the Wolf Creek Owner Controlled Area. This means that
5		the work in this area is not subject to stringent U.S. Nuclear Regulatory Commission
6		regulatory requirements. NEET Southwest's structure designs related to the Wolf Creek
7		PA take into account existing transmission, roads, facility access, and all Wolf Creek
8		Substation requirements. In addition, NEET Southwest has built in flexibility in its project
9		schedule to accommodate the Wolf Creek Generating Station's 18-month refueling outage
10		schedule and will coordinate the optimal interconnection window. NEET Southwest's
11		affiliates have extensive experience owning, operating, and maintaining nuclear facilities,
12		which includes managing and leading the complex dynamics among nuclear generation
13		facilities, substations associated with nuclear facilities, and transmission interconnections
14		into these substations. NEET Southwest will draw upon this experience in order to ensure
15		a successful interconnection to the Wolf Creek Substation.
16 17	Q.	WILL THE PROJECT REQUIRE ANY TRANSMISSION UPGRADES ON THE INTERCONNECTING UTILITIES' SYSTEMS?
18	A.	Yes. As part of its RFP for the Project, SPP identified that certain upgrades would be
19		required at the Wolf Creek and Blackberry Substations, which upgrades are to be
20		performed by Evergy and AECI. SPP has issued separate Notifications to Construct to

21 Evergy and AECI for their upgrades.

22 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

, subject to a binding cap on

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construction costs. Ms. Walding describes NEET Southwest's cost containment measures in more detail in her testimony.

3 Q. HOW WILL NEET SOUTHWEST PROCURE SERVICES AND EQUIPMENT 4 FOR THE PROJECT?

5 NEET Southwest will procure third-party services and materials through NextEra Energy's A. 6 ISC, which utilizes NextEra Energy's unique market position as the largest electric utility 7 in the country, to procure services and materials with favorable prices and terms. ISC is 8 the procurement group for all NextEra Energy companies, and it consists of over 400 9 sourcing and procurement specialists that leverage NextEra Energy's significant 10 purchasing power and relationships with strategic industry vendors. This team procured 11 \$16 billion in materials and services in 2021 alone. The ISC team that will be responsible 12 for procuring equipment and materials for the Project has over 50 years of relevant 13 procurement experience.

14 NEET Southwest will leverage ISC's significant purchasing power, which will

- 15 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.
 - 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

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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, shield wire, and OPGW, while the Project's construction contractor (Brink Constructors, Inc. ("Brink Constructors")) will procure all other materials.

10Q.ONCE NECESSARY APPROVALS AND PERMITS ARE OBTAINED, HOW11DOES 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 contactors 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 is partnering with Brink Constructors
to facilitate construction of the Project. NEET Southwest and Brink Constructors will
establish a local construction management office within the construction site and will staff
the Project with a team of experienced professionals.

19 NEET Southwest will coordinate several design and constructability review 20 meetings with B&M, which will serve as the transmission line Engineer of Record for the 21 Project, and Brink Constructors, the transmission line construction contractor. These 22 design reviews will take place at 30 percent design completion, 60 percent design 23 completion, and just prior to issuance for construction (approximately 90 percent design 24 completion), and will encompass all aspects of the Project's design, including the design 25 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.

6 Prior to site mobilization and the issuance of construction documents, the project 7 team, including NEET Southwest project management, construction managers and 8 engineers, NEET Southwest Operations and NEET Southwest contractors will undertake 9 constructability meetings to review the construction installation specifications for 10 completeness, accuracy, and site-specific applicability. NEET Southwest and its 11 consultants also will conduct independent quality assurance/quality control reviews prior 12 to commencing construction.

13 Q. WHAT IS THE CURRENT 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:



1Q.UNDER NEET SOUTHWEST'S PROJECT SCHEDULE, WHEN DOES IT2ANTICIPATE BEGINNING CONSTRUCTION OF THE PROJECT?

3 Subject to receiving all necessary regulatory approvals and permits, and obtaining the A. 4 necessary ROW, NEET Southwest's project schedule currently anticipates commencing 5 construction in mid-2023. NEET Southwest plans to begin construction activities at the 6 Blackberry Substation and work north toward the Wolf Creek Substation. NEET 7 Southwest plans to build the line in four zones and construct each zone as individual line 8 sections. This strategy will allow clearing crews to stay ahead of transmission line 9 construction. In NEET Southwest's project schedule, clearing, transmission structure 10 installation, and stringing operations have been staggered to minimize the overall schedule, 11 maximize the efficiency of each operation, and include enough float to ensure no single 12 operation is impeded by a delay in a preceding operation.

Q. WILL THE PROJECT DUPLICATE THE FUNCTIONS OF ANY CURRENT OR PLANNED TRANSMISSION LINE?

A. No. SPP identified the need for the Project as a new transmission line to relieve congestion and improve transmission capacity from western Kansas to major SPP load centers in the eastern portion of the SPP region, and SPP selected NEET Southwest to build, own, and operate the Project. The needs that will be met by the Project and by NEET Southwest are not currently being met by any other utilities in the State. Therefore, NEET Southwest building the Project will not duplicate any other current or planned transmission lines, and there will be no unnecessary duplication of utility service.

22 Q. HOW WILL THE PROJECT AFFECT THE ENVIRONMENT?

A. NEET Southwest has designed the proposed Project to minimize its effects on the
 environment and to mitigate any potential environmental impacts. NEET Southwest's
 environmental team has over 100 years of collective experience in environmental policy

1 and mitigation efforts to protect the environment, while minimizing schedule and cost risk 2 to the Project. NEET Southwest designed its preliminary Project route to minimize impacts 3 to wetlands and to protected areas such as state and federal forests, as well as avoiding key 4 Federal Aviation Administration ("FAA") regulation impacts. NEET Southwest's 5 preliminary Project route also minimizes the impacts on: local communities; habitat for 6 Gray Bat, Indiana Bat, Northern Long-Eared Bat, Eastern Spotted Skunk, Broadhead 7 Skink, Bald Eagle, and other state and federally protected species; and potential cultural 8 and archaeological sites during construction. For these reasons, NEET Southwest does not 9 anticipate that the proposed Project will have an adverse impact on the environment.

10Q.PLEASE DESCRIBE THESE POTENTIAL ENVIRONMENTAL IMPACTS AND11NEET SOUTHWEST'S EXPECTED ENVIRONMENTAL AVOIDANCE AND12MITIGATION MEASURES IN MORE DETAIL.

A. Through significant environmental evaluation and diligence performed to date, NEET Southwest has determined that any route between the Wolf Creek and Blackberry Substations could potentially impact several species of bats and migratory birds along its path, in addition to wetland features. NEET Southwest will mitigate these potential impacts through a combination of physical mitigation and avoidance efforts (*e.g.*, structure placement, routing adjustments, spanning, and construction matting), as well as conducting detailed surveys, permitting, and habitat mitigation.

20 NEET Southwest also reviewed its preliminary route for any potential impacts to 21 FAA-registered airports and Military Training Routes ("MTR"). NEET Southwest 22 determined that the preliminary route, including the currently anticipated route, line, and 23 structure placements, will avoid any potential FAA and MTR impacts or concerns. NEET 24 Southwest will provide a more detailed environmental analysis as part of its line siting 25 application.

1 Through its preliminary routing, NEET Southwest has attempted to minimize 2 visual impacts to local communities and residences to the maximum extent practicable, 3 including by selecting spun concrete monopoles as its primary structure type. As I discussed above, based upon the experience of NEET Southwest's affiliates that have used 4 5 spun concrete monopoles, NEET Southwest understands that many landowners typically 6 prefer the use of such structures, due to their reduced structure footprint, which generally 7 results in fewer impacts to land and reduces interference with current land uses, e.g., 8 ranching and farming. NEET Southwest will continue to seek to minimize visual impacts 9 through its further routing refinements and through information obtained through the public 10 outreach process that NEET Southwest is currently undertaking. 11 IV. **NEET SOUTHWEST SATISFIES KANSAS LEGAL REQUIREMENTS FOR** 12 **ISSUING A CCN** ARE YOU FAMILIAR WITH THE STATE OF KANSAS' REQUIREMENTS FOR 13 **Q**. 14 **ISSUING A CCN?** 15 Although I am not an attorney, yes. As discussed in more detail in Ms. Walding's Direct A. 16 Testimony, the Commission requires applicants seeking a CCN to demonstrate that they 17 have the necessary technical, managerial, and financial capability to conduct the business 18 of a public utility. In reviewing CCN applications, the Commission also examines the 19 Merger Standards originally adopted in Docket Nos. 172,745-U and 174,155-U.⁴ WHICH OF THE COMMISSION'S REQUIREMENTS DO YOU ADDRESS IN 20 **Q**. YOUR DIRECT TESTIMONY? 21 22 I testify that NEET Southwest satisfies the following of the Commission's applicable A. 23 requirements:

⁴ Consolidated Docket Nos. 172,745-U and 174,155-U, Order at pp. 34-35 (Nov. 4, 1991); *see also*, Docket No.08-ITCE-936-COC *et al.*, Order at ¶ 52 (Dec. 18, 2008).

Direct Testimony of Daniel Mayers

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1		• The historical presence of NEET Southwest and its affiliates in Kansas;
2		• The effect of the transaction on the environment;
3		• What impact, if any, the transaction has on public safety; and
4 5		• Whether NEET Southwest has the technical and managerial capability to build the Project.
6 7	Q.	PLEASE DESCRIBE THE HISTORICAL PRESENCE OF NEET SOUTHWEST AND ITS AFFILIATES IN KANSAS.
8	A.	As I described above, NextEra Energy and its affiliates have over 90 years of experience
9		in the energy industry. In the last five years, NextEra Energy subsidiaries have constructed
10		116 miles of 345 kV transmission lines in Kansas alone. NEER subsidiaries own and
11		operate ten wind generation facilities in Kansas and operate approximately 231 miles of
12		transmission lines and multiple substations related to these assets. These Kansas
13		enterprises fit into NextEra Energy subsidiaries' network of transmission systems in
14		surrounding states, including over 1,000 miles of 345 kV transmission lines in Kansas,
15		Texas, and Oklahoma.
16 17	Q.	PLEASE DESCRIBE THE EFFECT OF THE PROJECT ON THE ENVIRONMENT.
18	A.	Discussed in more detail above, NEET Southwest considers effects on the environment at
19		each stage of the Project's development, starting at initial planning. The proposed Project
20		is designed to minimize effects on the environment and to mitigate any potential
21		environmental impacts. The environmental team assigned to the Project is experienced
22		and well-qualified to develop and implement environmental policy and mitigation efforts
23		to protect the environment, while minimizing schedule and cost risk to the Project. Further,
24		as discussed, NEET Southwest is working and will work with a number of federal, state,
25		and local regulators and governmental entities to design and implement the Project to

protect state and federal resources and to minimize impacts on: local communities; habitat
 for state and federally protected species; and potential cultural and archaeological sites
 during construction. For these reasons, NEET Southwest does not anticipate that the
 proposed Project will have an adverse impact on the environment.

5Q.PLEASE DESCRIBE WHAT IMPACT, IF ANY, THE PROJECT HAS ON PUBLIC6SAFETY.

7 As stated above, safety is a core value of NEET Southwest and its affiliates. Between the A. 8 experience of NEET Southwest and its NextEra Energy affiliates, NEET Southwest can 9 access a wealth of knowledge of best management practices to ensure a safe Project site 10 for both the public and workers during construction and operation of the site. These 11 practices include frequent communication among the land services, environmental, 12 engineering, and construction teams during the permitting and construction phases that will 13 ensure a safe and successful project, as well as performing daily safety pre-job briefings 14 and environmental meetings during construction to discuss specific activities planned for 15 the day, including daily safety-related behaviors, conditions, and job hazard analyses and 16 review of environmental compliance requirements that could impact construction 17 activities. In addition, the Project will have a dedicated Safety Manager to focus 18 specifically on safety and health concerns.

19Q.DOES NEET SOUTHWEST HAVE THE TECHNICAL AND MANAGERIAL20CAPABILITY TO ENGINEER, DESIGN, AND CONSTRUCT THE PROJECT?

A. Yes, as stated throughout my testimony, NEET Southwest has the financial, technical, and
managerial expertise to engineer, design, and construct the Project. NEET Southwest has
assembled a dedicated team of employees, affiliate resources, and contractors with a wealth
of technical and managerial knowledge and experience to conduct the work on this Project.
At each stage of construction of the Project, we will rely on this team of experts to design

- 1 and construct a safe, efficient, and well-built transmission system that will serve the people
- 2 of Kansas and the surrounding region responsibly.

3 Q. DOES THIS CONCLUDE YOUR TESTIMONY?

4 A. Yes, it does.

VERIFICATION

STATE OF FLORIDA)) ss. COUNTY OF PALM BEACH)

I, Daniel Mayers, being duly sworn, on oath state that I am Director of Transmission and Substation Engineering of NextEra Energy Resources, LLC, and that I have read the foregoing pleading and know the contents thereof, and that the facts set forth therein are true and correct to the best of my knowledge and belief.

Daniel Mayers

The foregoing pleading was subscribed and sworn to before me this 24 h day of February, 2022.

Notary Public

SANDRA CLARCHICK MY COMMISSION # GG 224849 EXPIRES: October 2, 2022 Bonded Thru Notary Public Underwriters

My Commission Expires:

10-2-22

Exhibit DM-1

Public

This document displays engineering diagrams that NEET Southwest has labeled confidential in their entireties as containing commercially sensitive information. Therefore, no public version is available.