

*Exhibit No.:*  
*Issue(s):* CCN Conditions  
*Witness:* Claire M. Eubanks, PE  
*Sponsoring Party:* MoPSC Staff  
*Type of Exhibit:* Rebuttal Testimony  
*Case No.:* EA-2022-0234  
*Date Testimony Prepared:* October 14, 2022

**MISSOURI PUBLIC SERVICE COMMISSION**

**INDUSTRY ANALYSIS DIVISION**

**ENGINEERING ANALYSIS DEPARTMENT**

**REBUTTAL TESTIMONY**

**OF**

**CLAIRE M. EUBANKS, PE**

**NextEra Energy Transmission Southwest, LLC**

**CASE NO. EA-2022-0234**

*Jefferson City, Missouri*  
*October 2022*

1 **REBUTTAL TESTIMONY**

2 **OF**

3 **CLAIRE M. EUBANKS, PE**

4 **NextEra Energy Transmission Southwest, LLC**

5 **CASE NO. EA-2022-0234**

6 Q. Please state your name and business address.

7 A. Claire M. Eubanks, PE and my business address is Missouri Public Service  
8 Commission, P.O. Box 360, Jefferson City, Missouri, 65102.

9 Q. By whom are you employed and in what capacity?

10 A. I am employed by the Missouri Public Service Commission (“Commission”) as  
11 the Manager of the Engineering Analysis Department, Industry Analysis Department,  
12 Commission Staff Division.

13 Q. Are you the same Claire M. Eubanks, PE who contributed to the Staff  
14 Recommendation Report filed on September 22, 2022 in this case?

15 A. Yes.

16 Q. What is the purpose of your rebuttal testimony?

17 A. I am responding to the Direct Testimony of Evergy witness Darrin R. Ives  
18 regarding certain recommended conditions. Staff witness Sarah L.K. Lange responds to  
19 Evergy recommended condition (a) regarding FERC formula rate filings. Dr. Seoung Joun Won  
20 responds to Evergy recommended condition (b) related to the financial integrity of the Project.  
21 I respond to Evergy recommended conditions (c) through (m).

22 Q. Does Mr. Ives recommend identical conditions as those recommended by Staff  
23 in its Direct Report?

1           A.     No. On page 19 of his Direct Testimony Mr. Ives represents that Staff and  
2     Evergy's recommended conditions are very similar though Evergy's are more detailed.  
3     Evergy's recommended conditions are more detailed on certain conditions but others less so,  
4     further Staff recommended landowner conditions not addressed by Evergy and Evergy  
5     recommended conditions not related to those initially proposed by Staff.

6           Q.     Are there any clarifications or corrections to Staff's report that you are making  
7     through testimony?

8           A.     Yes. Staff's recommended conditions are included in the Report under  
9     heading 5, "Does the service promote the public interest?" and in the "Summary of  
10    Recommendations" section of the Report. While they are appropriately numbered 1 – 11 in the  
11    Summary section, the numbering inadvertently continued 12 – 22 in the Public Interest section.  
12    For ease of discussion Staff will use the numbering presented in the Summary of  
13    Recommendation section. The first four conditions are related to landowner interactions  
14    (Staff numbered 1-4). The remaining Staff conditions are similar to many of Evergy's  
15    recommended conditions (c) through (m); however, Evergy proposes conditions that Staff did  
16    not propose.

17          Q.     Is Staff opposed to the modifications Evergy proposed through its recommended  
18    condition (c) (Staff Condition 5) related to SPP design criteria?

19          A.     No. Staff is not opposed to the additional detail provided by Evergy noting the  
20    use of two optical ground wires to facilitate lightning shielding.

21          Q.     Did Evergy propose modifications through its condition (d) (Staff Condition 7)  
22    related to any material changes in the design and engineering of the Project?

23          A.     No.

1 Q. Is Staff opposed to Evergy condition (e)?

2 A. No. Evergy condition (e) relates to NextEra Energy Transmission Southwest,  
3 LLC (“NEET SW”) coordinating with Evergy regarding line crossing and paralleling of any  
4 Evergy Right of Way. Staff did not propose a similar condition.

5 Q. Does Staff recommend any modifications to Evergy condition (f)?

6 A. Yes. Evergy condition (f) is related to ensuring NEET SW is coordinating with  
7 SPP and SPP members and completing required studies as needed. Staff recommends Evergy  
8 condition (f) be modified by the bolded language below:

9 NEET SW will coordinate with SPP and SPP members, as appropriate,  
10 and complete any studies required related to the Project and  
11 interconnections to the Project. **NEET SW will provide Staff a copy of**  
12 **any completed studies related to the Project and interconnections to**  
13 **the Project.**

14 Q. Is Staff opposed to Evergy proposed condition (g) (similar to Staff Condition 6)  
15 related to galloping?

16 A. Not necessarily. Evergy restated the condition agreed to in the KCC settlement  
17 that included a requirement that NEET SW provide the KCC Staff a galloping study.<sup>1</sup> However,  
18 Staff requested the referenced galloping study in Staff Data Request 12. NEET SW provided a  
19 response. To the extent an additional study is undertaken or to the extent NEET SW’s response  
20 is incomplete, Staff is not opposed to Evergy’s proposed condition (g).

21 Q. Is Staff opposed to Evergy condition (h) related to maintaining sufficient  
22 emergency response personnel in the region?

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<sup>1</sup> Galloping refers to the vibration of transmission lines under the action of wind load. In the Kansas docket (22-NETE-419-COC) regarding this project, KCC Staff identified an issue with outages related to galloping of generator tie-lines operated by NEET SW’s affiliate NextEra Energy Resources. NEET SW’s response to Staff Data Request No. 0011 is attached as Schedule CME-r1.

1 A. No.

2 Q. Is Staff opposed to Evergy condition (i) related to acknowledging the  
3 Commission's jurisdiction and authority to oversee NEET's SW certificate, if granted?

4 A. No. However, Staff does not believe this condition is necessary and its  
5 inclusion in this case may confuse other matters in other cases where a similar condition has  
6 not been included.

7 Q. Is Staff opposed to Evergy condition (j) related to NEET SW complying with  
8 all applicable statutes for future proposals to extend or relocate an existing transmission line,  
9 obtaining ownership interest, or constructing a new transmission line?

10 A. No. However, Staff does not believe this condition is necessary or particularly  
11 meaningful.

12 Q. Is Staff opposed to Evergy condition (k) related to future transmission certificate  
13 applications filed by NEET SW?

14 A. No, Staff is not opposed to receiving the information outlined in Evergy  
15 condition (k) as it is information that is helpful in reviewing CCN applications. However, Staff  
16 recommends additional clarification be made regarding the existing rules and standards  
17 related to CCN applications. Staff recommends Evergy condition (k) be modified by the  
18 bolded language below:

19 Future transmission certificate applications filed by NEET SW  
20 must explain: (1) why the project is necessary; (2) why current facilities  
21 could not address the same needs as the proposed project; (3) why the  
22 proposed project avoids imposing unreasonable costs; (4) the estimated  
23 cost of the project; (5) economic and environmental impacts of the  
24 project; and (6) the identification of any alternative solutions proposed  
25 by affected stakeholders.

26 To the extent NEET SW determines that any of this information  
27 is inapplicable or not necessary with respect to a project, it shall include  
28 in its application an explanation as to why such information is not

1 applicable or is unnecessary. NEET SW shall confer and work with Staff  
2 and other parties to determine if NEET SW has provided sufficient  
3 information to allow Staff and other parties to conduct its review of any  
4 future application. **This condition is not intended to replace any rule**  
5 **requirements related to CCN applications or the standards by which**  
6 **the Missouri PSC reviews CCN applications.**

7 Q. Does Staff recommend modification to Evergy proposed condition (l) related to  
8 the Commission's affiliate transaction rules?

9 A. Yes. Staff recommends Evergy condition (l) be modified as shown below:

10 If the MPSC's affiliate ~~statutes~~ **transaction rules** are waived,  
11 such waivers are subject to the following:

12 1. NEET SW must file a list of affiliate contracts specific to  
13 operations, maintenance and reliability of the Project in a compliance  
14 docket established for this proceeding, including a summary of any  
15 material changes to such contracts since the granting of the Certificate;  
16 ~~and~~

17 2. NEET SW must implement asymmetrical pricing in its  
18 transactions with affiliates; **and**

19 **3. If NEET SW or an affiliate request authority to become a**  
20 **rate-regulated utility, the variance will be revoked.**

21 Q. Does Staff oppose the modifications Evergy made to Staff's recommended  
22 Conditions 8-11 through its proposed condition (m) related to reporting requirements?

23 A. Not necessarily. To the extent Evergy can articulate the benefit it sees to its  
24 wording, Staff is open to revision, but for purposes of this testimony, Staff recommends  
25 proceeding with its direct-filed language. While Evergy's proposed condition (m) is similar to  
26 Staff Conditions 8-11, Evergy introduced the idea of a compliance filing; Staff recommends  
27 NEET SW file any required reports in this docket. Evergy proposed additional detail on  
28 reporting related to vendor contracts. Staff is not opposed to inclusion of the additional detail.

29 Q. Does this conclude your rebuttal testimony?

30 A. Yes.

**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

Case No. EA-2022-0234

**AFFIDAVIT OF CLAIRE M. EUBANKS, PE**

STATE OF MISSOURI     )  
                                  )     ss.  
COUNTY OF COLE     )

COMES NOW CLAIRE M. EUBANKS, PE and on her oath declares that she is of sound mind and lawful age; that she contributed to the foregoing *Rebuttal Testimony of Claire M. Eubanks, PE*; and that the same is true and correct according to her best knowledge and belief.

Further the Affiant sayeth not.

  
CLAIRE M. EUBANKS, PE

**JURAT**

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 13<sup>th</sup> day of October 2022.

D. SUZIE MANKIN  
Notary Public - Notary Seal  
State of Missouri  
Commissioned for Cole County  
My Commission Expires: April 04, 2025  
Commission Number: 12412070

  
Notary Public

Missouri Public Service Commission  
Data Request

**Data Request No.:** 0011  
**Company Name:** NextEra Energy Transmission Southwest, LLC-Investor(Electric)  
**Case/Tracking No.:** EA-2022-0234  
**Date Requested:** 9/1/2022  
**Issue:** General Information & Miscellaneous - Certificates of Convenience/Feasibility Analysis  
**Requested From:** Andrew Schulte  
**Requested By:** Casi Aslin  
**Brief Description:** KCC Settlement

**Description:** The KCC staff report in docket 22-NETE-419-COC, states: “As part of discovery, Staff reviewed outages that have occurred on the generator tie-lines. Over the last six years, there have been 19 outages on the tie-lines. For those outages, NextEra personnel initial response time was generally less than 60 minutes. The majority of the outages on the lines were from lines “galloping” in high wind conditions. Although the first incident of line galloping occurred over five years ago, the NextEra affiliates have not completed a study to mitigate the line galloping problem.” Please provide a description of all generator tie-lines owned by NextEra Southwest and all affiliates located in Kansas. Please include, in the description, structures used as well as length, conductor size, etc. Please provide all outages on NextEra generator tie-lines in Kansas that occurred in the last five years. Please include the date-time the outage started, the duration of the outage as well as the cause of the outage. DR by Shawn Lange (shawn.lange@psc.mo.gov).

**Due Date:** 9/15/2022

**RESPONSE:**

NextEra Energy Transmission Southwest, LLC (NEET Southwest) does not own any generator tie-lines in Kansas or Missouri. A description of the generator tie-lines owned by NEET Southwest’s affiliates (owned by subsidiaries of NextEra Energy Resources, LLC (NextEra Energy Resources)) located in Kansas, including line length, voltage, the structures used, and conductor size for each wind project is provided in the table below.



Project Name	State	kV	Line Length miles	Year in Service	Structure Type	Conductor Size	Shield Wire(s)
Irish Creek	KS	345	25	2021	Steel monopole	2 – 1272 “Bittern” ACSR	24 fiber OPGW & 1 3/8 Galv OHGW
Soldier Creek	KS	345	75	2020	Spun Concrete monopole	2 – 1272 “Bittern” ACSR	48 fiber OPGW & 1 3/8 Galv OHGW
Pratt Wind	KS	345	15	2018	Spun Concrete monopole	2 - 795 “Drake” ACSR	2 - 48 fiber OPGW
Kingman Wind	KS	345	46	2016	Concrete	2 – 1272 “Bittern” ACSR	2 - 48 fiber OPGW
Kingman Wind II	KS	345					
Ninnescah	KS	345	14	2016	Concrete	2 – 1272 “Bittern” ACSR	2 - 48 fiber OPGW
Cedar Bluff	KS	230	38	2015	Steel monopole	1-1272 “Bittern” ACSR	1-48 fiber OPGW
Ensign	KS	115	13	2012	Wood	1 - 795 “Drake” ACSR	1 - 48 fiber OPGW
Cimarron	KS	345	See note	2012	No t-line structure between substations	2 – 1272 “Bittern” ACSR	1 – ½” EHS OHGW
Gray County	KS	115	See note	2001	Wood	1 - 795 “Drake” ACSR	1 - 48 fiber OPGW

Note: Cimarron has a single span connection line from the Cimarron-owned substation to the oftaker’s substation (Sunflower). Gray County is tied to an existing radial line that the adjacent utility (Sunflower) uses to power one of its distribution substations, and Gray County has a single span connection to that line. These single span connection lines for Cimarron and Gray County are a few hundred feet in length.

A description of all outages on NextEra Energy Resources generator tie-lines in Kansas that occurred in the last five years, including the date-time the outage started, the duration of the outage, as well as the cause of the outage is provided in the following table.

Gen-Tie Line in Kansas Outage Events	Outage Notification Start Time, Restoration End Time, Personnel Arrive Onsite Time			Cause	Outage Notes
	Start Date, Time	End Date, Time	Initial Onsite Time		
Ensign – Crooked Creek Line	6/13/16 4:14	6/13/16 6:19	30-45 min	Weather, Lightning	Remote Terminal Unit communication lost. Line was restored locally by High Voltage staff (HV).
Ensign – Crooked Creek Line	12/18/16 0:17	12/18/16 0:55	N/A*	Human Performance	Relay testing at offtaker (third party human performance cause) substation led to trip in error. Restored remotely via control center (Dispatcher).
Pratt – Ninnescah Line	11/6/18 4:10	11/13/18 13:12	N/A*	Equipment	Failed substation metering unit occurred during wind project construction phase, prior to the official release of project to service. No local HV response required. The matter was managed by construction team.
Cedar Bluff – South Hays Line	11/25/18 9:30	11/25/18 13:34	N/A*	Weather Storm	Line galloping due to winter storms. HV visually inspected galloping. Offtaker experienced communications issues delaying restoration. Line restored remotely following energization of the line via offtaker.
Pratt – Ninnescah Line	2/7/19 10:09	2/7/19 11:59	30-45 min	Weather Storm	Line galloping due to winter storms, line slap. HV visually inspected galloping and HV requested delay in line restoration until conditions improved.
Pratt – Ninnescah Line	3/13/19 19:50	3/13/19 20:09	N/A*	Weather Storm	Line galloping due to winter storms. HV requested remote restoration and the line held in service. HV performed follow up inspection when weather improved.
Cedar Bluff – South Hays Line	8/13/19 20:37	8/14/19 5:58	N/A*	Weather, Lightning	Offtaker reported issues with their breaker delaying restoration. Dispatcher remotely restored the line following offtaker repairs.
Ensign – Crooked Creek Line	10/12/19 14:32	10/12/19 17:38	N/A*	Third Party Equipment	Fault on offtaker (third party) line. No HV response required. Line restored remotely via Dispatcher following offtaker repairs.
Pratt – Ninnescah Line	11/28/19 12:35	11/28/19 15:06	45-60 min	Weather, Storm	Line galloping due to winter storms. Line slap. HV visually inspected galloping and HV requested delay in line restoration until conditions improved. Project analysis to prevent line slap outages initiated.
Pratt – Ninnescah Line	1/22/20 5:07	1/22/20 7:54	45-60 min	Weather, Storm	Line galloping due to winter storms. Line slap. HV visually inspected galloping and HV requested delay in line restoration until conditions improved.
Pratt – Ninnescah Line	2/25/20 15:02	2/26/20 5:01	30-45 min	Weather, storm	Line galloping due to winter storms. Line slap. HV visually inspected galloping and HV requested delay in line restoration until conditions improved the following morning. HV performed follow up inspection
Pratt – Ninnescah Line	4/2/20 22:27	4/2/20 23:34	N/A*	Weather, Storm	Line galloping due to winter storms. Line slap. HV requested remote restoration and the line held in service. HV performed follow up inspection Note: Pratt line slap mitigation installed 10/2020.
Ninnescah – Kingman Line	4/3/20 2:53	4/3/20 14:22	45-60 min	Weather, Storm	Line galloping due to winter storms. Line slap. HV visually inspected galloping and HV requested delay in line restoration until conditions improved in the afternoon. HV performed follow up inspection.
Ensign – Crooked Creek Line	7/15/20 0:29	7/15/20 3:40	N/A*	Weather, Lightning	Lightning strike tripped offtaker line. No HV response required. Line restored remotely via Dispatcher following offtaker restoration.
Ensign – Crooked Creek Line	7/24/20 15:28	7/25/20 2:09	N/A*	Third Party Equipment	Offtaker equipment trouble. (third party equipment trouble CCVT). Line restored remotely via Dispatcher following offtaker repairs.

Gen-Tie Line in Kansas Outage Events	Outage Notification Start Time, Restoration End Time, Personnel Arrive Onsite Time			Cause	Outage Notes
	Start Date, Time	End Date, Time	Initial Onsite Time		
Cedar Bluff – South Hays Line	9/20/20 17:31	9/21/20 18:10	30-45 min	Equipment	Overhead/Static ground wire/Guy wire broke loose due to farmer running into the base of the guy. Initial inspection at night did not locate the trouble. HV identified the issue in the morning and contractor crews mobilized and arrived at site in 3 hours to make repairs.
Kingman – Buffalo Creek Line	12/3/20 1:48	12/3/20 2:40	N/A*	Weather, Storm	Line galloping due to winter storms. Line Slap. HV requested remote restoration and the line held in service. HV performed follow up inspection when weather improved.
Irish Creek – Soldier Creek Line	1/1/22 11:18	1/1/22 12:19	N/A*	Weather, Storm	Line galloping due to winter storms. Line slap. HV requested remote restoration and the line held in service. HV performed follow up inspection when weather improved.
Kingman – Buffalo Creek Line	2/17/22 4:44	2/17/22 9:58	45-60 min	Weather, Storm	Line galloping due to winter storms. Line Slap. HV visually inspected galloping and HV requested delay in line restoration until conditions improved. Line slap mitigation project analysis initiated. HV performed follow up inspection when weather improved.

\*N/A: Line restored remotely via Dispatcher; no site attendance by NextEra Energy Resources required.

### VERIFICATION OF RESPONSE

The response provided to the foregoing Data Request has been collected from various sources at NextEra Energy Transmission Southwest, LLC and affiliated companies, and are true and accurate to the best of my knowledge and belief.

Signed: /s/ LaMargo Sweezer-Fischer

LaMargo Sweezer-Fischer  
Senior Director, Operations  
NextEra Energy Transmission,  
LLC, on behalf of NextEra  
Energy Transmission Southwest,  
LLC

/s/ Daniel Mayers

Daniel Mayers  
Director of Transmission and  
Substation Engineering  
NextEra Energy Resources, LLC,  
on behalf of NextEra Energy  
Transmission Southwest, LLC

**CERTIFICATE OF SERVICE**

I hereby certify that a copy of the foregoing was served upon all parties of record by email or U.S. mail, postage prepaid, this 15th day of September, 2022.

/s/ Andrew O. Schulte  
NextEra Energy Transmission Southwest, LLC