

**THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS**

Received
on

MAY 31 2013

In the Matter of the Application of Westar Energy,
Inc. for a Siting Permit for the Construction of a 345
kV Transmission Line in Saline and Ottawa Counties,
Kansas.

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by
State Corporation Commission
of Kansas
Docket No. 13-WSEE-676-MIS

DIRECT TESTIMONY

OF

MICHAEL J. WEGNER, P.E.

ON BEHALF OF THE STAFF OF

**THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS**

May 31, 2013

1 **Q. Please state your name.**

2 A. Michael J. Wegner.

3 **Q. By whom, and in what capacity, are you employed?**

4 A. I am employed by the Kansas Corporation Commission (KCC or Commission) at
5 1500 SW Arrowhead Road, Topeka, Kansas, 66604-4027. I am the Chief of
6 Energy Operations.

7 **Q. Please summarize your educational and professional background.**

8 A. I received a Bachelor of Science degree in Electrical Engineering with an
9 emphasis on Power Engineering from North Dakota State University (Fargo,
10 North Dakota) in 1993. I am a registered Professional Engineer in the State of
11 Kansas, PE #14968, and hold a Project Management Professional Certificate from
12 the Project Management Institute (PMI). My professional experience started in
13 1993 with Black and Veatch, where I worked on power plant projects designing
14 cathodic protection, grounding, and lightning protection systems. In 1999, I
15 shifted from design work to customer interaction with Kansas City Power & Light
16 Company (KCP&L), where I was assigned to the Education Segment as an
17 Account Service Engineer. I was responsible for working with the largest
18 education customers in the Kansas City metro area. Specifically, I was
19 responsible for project management of improvements to KCP&L's distribution
20 system that resulted from the growth and additional energy demand requests from
21 my assigned customers. I also worked with KCP&L's largest
22 telecommunications customers. In 2006, I started a consulting firm and

1 performed contract work for Cricket Communications. In 2010, I began work
2 with the KCC in my current position as Chief of Energy Operations.

3 **Q. Have you previously testified before this Commission?**

4 A. Yes. I have testified in the following Dockets: 10-ITCE-557-MIS, 11-WSEE-
5 377-PRE, 11-PWTE-600-MIS, 11-ITCE-644-MIS, 11-KCPE-581-PRE, 11-
6 MDWE-609-RTS, 11-GBEE-624-COC, 11-GIME-597-GIE, 12-WCNE-136-GIE,
7 12-MKEE-650-TAR, 12-KCPE-764-RTS, 13-SEPE-433-TAR, 13-MKEE-434-
8 TAR, 13-MKEE-447-MIS, and 13-ITCE-677-MIS.

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

10 A. My testimony will address the "reasonableness" of the location of Westar
11 Energy's (Westar or Company) preferred route for a 345,000 volt (345 kV)
12 transmission line from Westar's Summit Substation to an interconnect point with
13 ITC Great Plains, LLC (ITC) along Justice Road, approximately one mile east of
14 210th Road in central Ottawa County, Kansas, consistent with the "Electric
15 Transmission Line Siting Act", K.S.A. 66-1,177 et seq., and amendments thereto.
16 This line will complete an important link in SPP's long-range plan to strengthen
17 the transmission grid from Oklahoma to Nebraska.¹ The addition of this project
18 will reduce the reliability risk of losing the Manhattan to Elm Creek 230 kV line.
19 The installation of this project will address potential voltage collapse for the
20 Concordia area during certain contingency conditions, increasing opportunities
21 for load growth and economic growth in and around Concordia, providing for a

¹ Direct Testimony of Mr. Kelly B. Harrison, page 4, lines 1-3.

1 stronger and more robust grid, reduce line losses, and provide for more efficient
2 use of existing generation resources.²

3 Staff member Tom DeBaun will provide testimony to address the necessity of the
4 line as well as the benefits of building the line.

5 **Q. Are you sponsoring exhibits in this testimony?**

6 A. No. I will frequently reference Exhibit SF-1³ in the Direct Testimony of Mr.
7 Salvatore Falcone, which is part of Westar's Application. Exhibit SF-1 illustrates
8 the overall route designated by Westar as its "Preferred Route" and is defined by a
9 red line on the map provided in Appendix B of Exhibit SF-1 of Mr. Falcone's
10 testimony.⁴ Exhibit SF-1 of Mr. Falcone's testimony was prepared by Black &
11 Veatch Corporation (B&V) and will be referred to as the "Route Selection Study"
12 throughout my testimony.

13 The Application, including the Route Selection Study, reflects commentary and
14 analysis as of the end of March 2013. However, the Commission and Westar
15 have continued to receive additional public input since the Application was filed
16 on May 3, 2013, which should be considered as well.

17 **Q. Please provide an overview of the Preferred Route.**

18 A. Westar will build a double circuit for 6.88 miles from its Summit Substation
19 outward to a point where the existing Jeffrey Energy Center line will part ways
20 with the new line.

² Direct Testimony of Mr. Kelly B. Harrison, page 4, lines 13 – 20.

³ Route Selection Study, Elm Creek to Summit 345 kV Transmission Line Project Ottawa and Saline Counties for Westar Energy.

⁴ Map of Preferred Route.

1 Westar plans to build this new double circuit in this corridor, transferring an
2 existing circuit to the new structures upon completion and then demolishing the
3 existing line that will be paralleled.

4 Most of the Preferred Route is routed through uninhabited areas, row crop fields
5 and pasture. The Westar portion of this project does come in proximity to some
6 homes, a small subdivision east of Salina, Kansas, and is routed adjacent to a
7 cattle stock yard.

8 **Q. What is Staff's recommendation on reasonableness of the Preferred Route?**

9 A. Staff recommends that the Preferred Route is reasonable because the Preferred
10 Route was determined using a scoring system, landowner input, efforts to
11 minimize the length of the line, and it avoids areas of concerns such as critical
12 environmental habitat.

13 **Q. On what do you base your recommendation that the Preferred Route is**
14 **reasonable?**

15 A. I base my opinion on the Route Selection Study, the Testimony of Mr. Salvatore
16 Falcone, and Staff's reconnaissance of the Preferred Route.

17 **Q. Please explain how your testimony on the "reasonableness" issue is**
18 **organized.**

19 A. My testimony will address the reasonableness of the selected route in the
20 following order:

- 21 1) Westar's route selection methodology;
- 22 2) Staff's review of the Preferred Route;
- 23 3) Other considerations and public comment; and

4) Conclusion

Westar's Route Selection Methodology

Q. What did Staff look for in Westar's Application?

A. Staff reviewed the Application to confirm the Applicant had considered and included in its filing the following:

1) Valid criteria to evaluate the different proposed routes was established and followed;

2) Confirmation that careful consideration was given regarding the impact of routes upon sensitive resources which include houses, irrigation, oil and natural gas related equipment and storage, general farm use, environmental and archeological aspects and other resources; and

3) Confirmation that public input was solicited early in the route study.

Q. Did Westar seek outside help in routing this line?

A. Yes. Westar contracted with B&V for routing assistance. B&V was also the contractor that supported ITC with the routing of its portion of this project. As such, the Preferred Route filed in this Docket and Docket 13-ITCE-677-MIS combines the best ranked score of Westar with the second best ranked score of ITC.⁵

Q. How did Westar select the preliminary routes?

A. Westar identified six (6) areas of concern for use when developing the preliminary routes. In an effort to develop alternatives that would provide

⁵ See the Direct Testimony of Michael J Wegner in Docket 13-ITCE-677-MIS for further explanation of using the second best scored route as the Preferred Route.

1 economical routes and minimize the adverse social and environmental impacts,
2 the following criteria were used⁶:

- 3 1) Avoid proximity of the line to residences, businesses and public
4 facilities;
- 5 2) Avoid crossing over center pivot irrigation systems;
- 6 3) Parallel existing utilities, roads or railroads when practical;
- 7 4) Avoid wetlands, riparian areas and conservation lands;
- 8 5) Avoid placing the line directly over tanks and oil, gas, or water wells;
9 and
- 10 6) Maintain reasonable length with as few angles as possible to minimize
11 costs.

12 **Q. What criteria were used to establish the "Preferred Route" in Westar's**
13 **Application?**

14 A. Westar and B&V defined a study area for possible transmission routes.⁷ B&V
15 established evaluation criteria and assigned a value to each type of land in order to
16 compute a composite score. The Route Selection Study indicates that a total of 27
17 routes were identified for the entire project.⁸ The Westar portion of the project
18 identified 19 routes and the ITC portion of the project identified 4 routes. B&V
19 scored each of the 27 routes individually⁹ and the route with the lowest score was
20 submitted as the Preferred Route.¹⁰

⁶ Direct Testimony of Salvatore Falcone, page 3, lines 16-21.

⁷ *Id.*, Figure 1-1, Elm Creek to Summit Study Area.

⁸ *Id.*, Table 4-1: Route Numbers and Segments, page 4-3.

⁹ *Id.*, Table 4-2: Elm Creek to Summit Route Scores, page 4-5

¹⁰ Route 4 has the lowest overall score.

1 **Q. What types of land use ranked as most important and least important?**

2 A. The Route Selection Study cited Developed-High Intensity and Open Water as the
3 two areas to avoid; while Barren Land and Flood Zones no greater than 800 feet
4 wide were given the highest preference as land to site transmission towers on or
5 near.¹¹

6 **Q. Were construction issues weighted in the composite score?**

7 A. Yes. The Route Selection Study considered the number of angle structures¹²,
8 river crossings, railroad crossings, and highway crossings.

9 **Q. What method did Westar use to solicit early public input?**

10 A. Westar sought public input during public open houses hosted December 4 through
11 December 6, 2012, in Miltonville, Bennington, and Salina, Kansas. During the
12 open houses, the project routing details were presented to landowners and other
13 interested parties and the Company sought to obtain individual perspectives on
14 proposed line routes.

15 **Q. Do you believe Westar's public awareness method was reasonable?**

16 A. Yes. Because the Commission's time is so limited after the Application is filed, it
17 is important for the Company to get public feedback upfront.

18 **Q. Was the route selection process reasonable?**

19 A. The selection process of the Preferred Route was a rigorous undertaking which
20 seems to have successfully considered both technical requirements and subjective
21 preferences based on comments received from landowners. In Staff's opinion the
22 route selection methodology is logical and thorough. Section 4.0 of the Route

¹¹ *Id.* Table 4-5, page 4-10.

¹² *Id.* Table 4-5, page 4-10, assigned different weights to angles depending on their degrees.

1 Selection Study explains the alternate routes and the results of the evaluation
2 process in depth.

3 It is Staff's opinion that the process described in Route Selection Study is
4 reasonable and results in a reasonable location of the Preferred Route.

5 **Staff's Review of the Preferred Route**

6 **Q. Has Staff conducted a visual inspection of the Preferred Route as filed in**
7 **Westar's Siting Application?**

8 A. Yes. I observed the route and areas adjacent to the route on May 9, 2013, to the
9 extent possible on a one-day route inspection.

10 Some portions were in areas that I was not able to be view from public access
11 roadways. These inaccessible areas were reviewed via Google Earth, an online
12 aerial photography tool.

13 In examining the route, Staff was primarily interested in observing land use,
14 specifically looking at:

- 15 1) Proximity to residences;
- 16 2) The position of homes with respect to the line and any groves
17 separating homes from the preferred route;
- 18 3) Cemeteries;
- 19 4) Terrain features;
- 20 5) Public parks and recreation areas;
- 21 6) Areas that appeared to be sensitive to wildlife and prairie vegetation
22 native to the area woodlands;
- 23 7) Line construction challenges; and

1 8) Impacts in the segments of new Right of Way ("ROW").

2 **Q. What is the width of the ROW for this project?**

3 A. The route will require new easements or ROW that are 150 feet wide.¹³ This
4 width may vary some and will be determined by the detailed design of the project.

5 **Q. Were any interested parties interviewed during your field investigation?**

6 A. No. Land owners were not interviewed during Staff's visual inspection. The
7 purpose of the route inspection was to drive the entire route and observe the use
8 of the land and structural developments.

9 **Q. What observations do you have to share with the Commission?**

10 A. The following are Staff's observations related to the Preferred Route:

- 11 • Generalized potential conflicts include rugged terrain, river/creek
12 crossings, highway crossings, railroad crossings, and transmission line
13 crossings. Potential conflicts such as these will be present in any route.
- 14 • Staff observed a cattle stock yard adjacent to the route, one location where
15 the Preferred Route will be adjacent to existing metal storage farm
16 buildings, and one location where the Preferred Route appears to be
17 planned directly over a farm equipment storage shelter.
- 18 • Staff did not observe any center pivot point irrigators, oil pumps, or
19 storage tanks.

20 Staff understands that the detailed design of the project could include micro-siting
21 the towers to work around these objects.

22

¹³ Direct Testimony of Mr. Kelly B. Harrison, page 15, line 11.

1 **Q. What is the purpose of observing these potential conflicts?**

2 A. The purpose of Staff's observation was to make sure these potential conflicts were
3 accounted for in Westar's route selection methodology. After further review of
4 the Route Selection Study, Staff is of the opinion that the information and data is
5 consistent with our field observations.

6 Also, approximately seven miles¹⁴ of the line follows existing transmission lines.
7 Staff believes that this information is important because the use of that land is
8 already subjected to right-of-way for transmission lines, the land has been divided
9 by a transmission line, and the line of sight or visual impediment already exists in
10 the areas where transmission lines already exist today.

11 **Q. Did you observe any alternative routes that Staff would recommend Westar
12 and the Commission consider?**

13 A. No. My observations indicate that the routing of this line, while being routed
14 near¹⁵ a few homes, is a reasonable route.

15 **Other Considerations and Public Comment**

16 **Q. Are there other considerations that Staff uses when determining the
17 reasonableness of Westar's Preferred Route for the transmission line
18 proposed in its Application?**

19 A. Yes. In Staff's opinion the following are important considerations:

20 1) In electrical terms, generally, a straight line from point A to point B is
21 ideal because line losses are the absolute minimum, while available

¹⁴ The first 6.88 miles of line routed from the Summit Substation north and north east will parallel existing transmission lines.

¹⁵ Greater than 500 feet.

1 transmission capacity would be maximized. Routing maps were reviewed
2 and are consistent with the straight line considerations.

3 2) In terms of physical construction, generally, a straight line from point
4 A to point B is ideal because the materials and labor would be the absolute
5 minimum, which keeps financial and environmental (as related to the
6 quantity of material required) costs to a minimum.

7 3) The basis for the selection of the Preferred Route over alternative
8 routes is an importation consideration.

9 4) Reasonable public feedback should be considered and given appropriate
10 weight. Westar has solicited public feedback from the public open houses.

11 5) Proximity to structures, developments, and other physical and
12 environmental obstructions is another consideration.

13 Additional comments that arise at the public hearing in Salina, Kansas, on June 5,
14 2013, as well as other public input submitted in written form through the Kansas
15 Corporation Commission's Office of Public Affairs and Consumer Protection,
16 should be considered by the Commission.

17 **Q. Is Commission determination regarding the reasonableness of the selected**
18 **route the only determinant of whether the Preferred Route can be built?**

19 A. No. The Commission's determination in this Docket is definitive only from the
20 standpoint of jurisdictional matters such as location of the Preferred Route and
21 with respect to the Commission's responsibility for enforcing the National
22 Electrical Safety Code. If the Preferred Route is approved by the Commission,

1 Westar will still have to obtain additional permits, endorsements, or may have
2 additional studies to complete for other agencies.

3 **Q. What is Staff's opinion regarding the importance of public input?**

4 A. It is important for the public, and specifically landowners that are affected by the
5 route, to be able to provide input in the decision making process. This input aids
6 Westar in understanding how the land is used. While engineers, surveyors, and
7 biologists can exhaustively analyze routes, properties, and issues, but landowner's
8 input is critical to understanding problems that may not be obvious. So, hosting
9 public open houses early in the process is essential to the process of determining
10 the Preferred Route.

11 **Q. Do Kansas statutes require the public open house meetings you discussed**
12 **above?**

13 A. No. Informational meetings (public open houses) or solicitation of public
14 comment prior to filing an Application for transmission siting with the
15 Commission are not required by Kansas statute. However, Staff's experience
16 suggests that communication and solicitation of public comment is desirable prior
17 to the filing of an Application for transmission line siting of a specific route.
18 Staff's use of the phrase "public comment" means solicited or voluntarily
19 contributed input from any "person" meaning generally any individual,
20 partnership, corporation, unit of government, or other interested parties, including
21 non-governmental organizations. The statutory requirement for a Commission
22 public hearing after a transmission routing Application has been filed appears in

1 K.S.A 66-1,178 and will be met with a public hearing scheduled by the
2 Commission for June 5, 2013, in Salina, Kansas.

3 **Q. To your knowledge, did B&V contact federal, state, and local agencies to**
4 **acquire data from other third party sources?**

5 A. Yes. Appendix D of the Route Selection Study includes the feedback that B&V
6 received from the following agencies:

7 1) The University of Kansas on threatened, endangered and special
8 concern species;

9 2) Kansas Historical Society;

10 3) Kansas Department of Wildlife, Parks and Tourism;

11 4) Kansas Department of Health and Environment;

12 5) United States Department of Agriculture (USDA);

13 6) United States Department of Army; and

14 7) United States Department of Interior.

15 **Q. Based on your review, did the Route Selection Study consider the feedback**
16 **from these agencies?**

17 A. Yes, it did. The USDA indentified a quarter section of land that is a designated
18 part of the Grassland Reserve Program. The Preferred Route submitted will be
19 routed along the west edge of this designated quarter section of land.

20 It is Staff's opinion that Westar has worked with public agencies and has made
21 small adjustments to reach the route that has been presented in the Application.

1 Certainly, the Commission will need to consider all comments received in this
2 Docket, including those from the June 5, 2013, public hearing and during the
3 public comment period which follow the filing of testimony.

4 Staff acknowledges the efforts of Westar and its consultant in producing valuable
5 information regarding public feedback on matters pertaining to reasonableness of
6 the route.

7 **Conclusion**

8 **Q. Are there statutory limitations the Commission should be aware of regarding**
9 **your testimony and the conclusions you present?**

10 A. Yes. The statutory time allotted for Commission response to any Transmission
11 Siting Application is very brief. After Staff's filing, other state and federal
12 agencies, non-governmental organizations, and the public will have the
13 opportunity to present additional evidence to the Commission. In this Docket,
14 Westar has had a year or more to develop its Line Siting Application, while Staff
15 has had approximately four-weeks to evaluate the aspects of "necessity" and
16 "reasonableness of route."

17 Given that time frame, Staff has attempted to evaluate the Application and routing
18 process and address landowner concerns, as well as, geographic, environmental,
19 and other matters based upon observation of the route, public input prior to the
20 date of Staff's filing, and the content of Westar's Application. Other concerns may
21 come to light after Staff's filing of testimony which may need to be addressed in
22 supplemental filings.

1 **Q. What are your conclusions or recommendations regarding this filing?**

2 A. Based on an examination of the Application and information available to Staff at
3 this time, it is Staff's opinion that Westar's study of the possible routes is
4 comprehensive and the Preferred Route proposed in the Application is reasonable.
5 Generally, some inconvenience will result with respect to some individual
6 interests along the route of any proposed transmission line. The interests of those
7 inconvenienced along a proposed line must be balanced against the benefits of the
8 route pertaining to all other stakeholders along the line and others benefiting from
9 its construction.

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

11 A. Yes.

12

13

CERTIFICATE OF SERVICE

13-WSEE-676-MIS

I, the undersigned, hereby certify that a true and correct copy of the above and foregoing Direct Testimony of Michael Wegner was served by electronic service on this 31st day of May, 2013, to the following parties who have waived receipt of follow-up hard copies.

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CERTIFICATE OF SERVICE

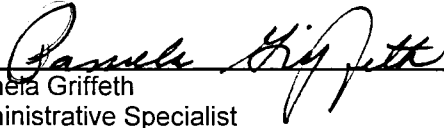
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