APPLICATION TO AMEND A CERTIFICATE OF CONVENIENCE AND NECESSITY FOR A PROPOSED 115-KV TRANSMISSION LINE WITHIN DEAF SMITH COUNTY (NE HEREFORD TO LA PLATA)

DOCKET NO. 45158

Submit seven (7) copies of the application and all attachments supporting the application. If the application is being filed pursuant to P.U.C. SUBST. R. 25.101(b)(3)(D) or P.U.C. Subst. R. 25.174, include in the application all direct testimony. The application and other necessary documents shall be submitted to:

Public Utility Commission of Texas Attn: Filing Clerk 1701 N. Congress Ave. Austin, Texas 78711-3326

- Applicant:
 Southwestern Public Service Company

 Certificate Number:
 30153

 Street Address:
 600 South Tyler Street

 Mailing Address:
 Amarillo, TX 79105-1261
- 2. Please identify all entities that will hold an ownership interest or an investment interest in the proposed project but which are not subject to the Commission's jurisdiction.

N/A

3.

Person to Contact:	James M. Bagley
Title/Position:	Manager Regulatory Administration
Phone Number:	806-378-2868
Mailing Address:	P.O. Box 1261
	Amarillo, TX 79105-1261
Email Address:	James.Bagley@xcelenergy.com
Alternate Contact:	Lucas Suelflow
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Phone Number:	512-480-5739
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	Austin, TX 78701
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4. **Project Description:**

Name or Designation of Project:

SOUTHWESTERN PUBLIC SERVICE COMPANY'S APPLICATION TO AMEND A CERTIFICATE OF CONVENIENCE AND NECESSITY FOR A PROPOSED 115-kV TRANSMISSION LINE WITHIN DEAF SMITH COUNTY, TEXAS. THE PROJECT NAME IS NE HEREFORD TO LA PLATA.

Provide a general description of the project, including the design voltage rating (kV), the operating voltage (kV), the CREZ Zone(s) (if any) where the project is located (all or in part), any substations and/or substation reactive compensation constructed as part of the project, and any series elements such as sectionalizing switching devices, series line compensation, etc. For HVDC transmission lines, the converter stations should be considered to be project components and should be addressed in the project description.

Southwestern Public Service Company ("SPS"), a subsidiary of Xcel Energy Inc., is proposing to construct and operate a single circuit, 115-kilovolt ("kV") electric transmission line between the existing NE Hereford Substation and the new La Plata Substation, both located in Deaf Smith County, Texas ("Proposed Project"). This application for the Proposed Project will hereinafter be referred to as the "Application."

The Project will involve the construction of a new 115-kV transmission line, which will originate at the existing NE Hereford Substation, located 3.5 miles northeast of Hereford, Texas in Deaf Smith County, and terminate at the new La Plata Substation, a half mile west of the existing Centre Street Substation, south of County Road 7, near the western portion of the City of Hereford.

The existing NE Hereford Substation will be reconfigured from a four breaker ring bus configuration to a breaker and a half configuration. A third bay will be added to the east within the existing site to accommodate this proposed transmission line.

The La Plata Substation will be constructed as a radial feed from NE Hereford, with no 115-kV breakers. The La Plata Substation is being constructed to replace the Centre Street Substation, which is currently fed from the NE Hereford Substation, but cannot accommodate the proposed 115-kV line due to real estate constraints. This installation will include a 115/13.2-kV 28 MVA transformer with a high side gas circuit switcher. The low side distribution will be a double box bay with two feeders to serve the existing Centre Street loads. The La Plata Substation will be constructed with provisions for expansion to an ultimate arrangement of a three string 115-kV breaker and a half, with four 115-kV lines and a second distribution transformer. Once the La Plata Substation is energized, the Centre Street Substation will eventually be removed from service and decommissioned. The 69-kV single-circuit line that currently taps into the Centre Street Substation will remain and serve as a redundant source to the Deaf Smith #5 Substation from the NE Hereford Substation.

Route	Segments	Route
		Length
1	A, C, D, E, K, R, T	11.34
2	A, B, E, I, L, O, S, T	11.27
3	A, B, E, I, L, O, P, Q	9.50
4	A, C, D, E, K, N, O, P, Q	9.58
5	A, C, D, F, G, M, P, Q	7.53
6	A, B, F, G, M, P, Q	7.50
7	A, B, F, H, L, O, P, Q	7.49
8	A, B, F, G, J, Q	7.48
9	A, B, F, G, M, S, T	9.27

SPS is proposing nine different routes for the project. The segments that comprise each route are as follows:

Refer to Figures 2-2, 2-4, and 6-1 of the Environmental Assessment and Alternative Route Analysis for the Proposed NE Hereford to La Plata 115-kV Transmission Line Project, Deaf Smith County, Texas ("EA/Routing Study"), Attachment 1, for the route maps, which show the 20 individual segments that comprise the nine routes.

Refer to Attachment 10 for the segment descriptions.

The proposed 115-kV single circuit transmission line will be constructed utilizing primarily singlepole steel structures, which require a smaller surface area than H-frame structures and eliminate the need for guy wires for corner structures. The proposed transmission line will be constructed entirely on new right-of-way ("ROW") with a proposed easement width of 70 feet. In some circumstances, a wider easement may be necessary, but these locations and easement widths cannot be determined until the selected route is surveyed.

Design Voltage Rating (kV): 115 kV Operating Voltage Rating (kV): 115 kV Normal Peak Operating Current Rating (A): 1385 amps

If the project will be owned by more than one party, briefly explain the ownership arrangements between the parties and provide a description of the portion(s) that will be owned by each party. Provide a description of the responsibilities of each party for implementing the project (design, Right-Of-Way acquisition, material procurement, construction, etc.).

SPS will own 100 percent of the project.

If applicable, identify and explain any deviation in transmission project components from the original transmission specifications as previously approved by the Commission or recommended by a PURA §39.151 organization.

- Not applicable.
- **5.** Conductor and Structures: Conductor Size and Type:

The conductor will be 477 kcMIL, aluminum conductor steel supported (ACSS), 26/7 stranded, code name HAWK. One AFL Optical Ground Wire will provide the static protection.

Number of conductors per phase: 1 (one) Continuous Summer Static Current Rating (A): 1385 Amps Continuous Summer Static Line Capacity at Operating Voltage (MVA): 276 MVA Continuous Summer Static Line Capacity at Design Voltage (MVA): 276 MVA Type and composition of Structures:

SPS proposes to construct the 115-kV transmission line using single-circuit, self-supporting steel single pole structures within new ROW. Depending on which route is approved, it is possible that some H-frame and/or double circuit structures will also be utilized. SPS proposes to use direct embedment for tangent structures and drilled pier foundations for structures at dead-end and high angle locations. Typical heights are shown on the structure drawings (Attachment 2) and actual heights are dependent on the clearance requirements to be determined. Highway crossings will utilize structures with heights greater than the minimum heights required by the Texas Department of Transportation ("TxDOT") and/or the National Electric Safety Code.

Height of Typical Structures:

The typical heights for these structures are between 80 and 140 feet.

Explain why these structures were selected; include such factors as landowner preference, engineering considerations, and costs comparisons to alternate structures that were considered. Provide dimensional drawings of the typical structures to be used in the project.

SPS chose single-pole steel structures over wood structures, in part, because of the low maintenance cost, strength of the line during adverse conditions, resistance to fire damage, increased span lengths, and the unavailability of wood poles in heights greater than 100 feet. Transmission lines constructed with wood poles have an estimated maintenance cost of \$50,000/mile for the expected life of the line; whereas, there are minimal maintenance and repairs associated with a transmission line built with steel structures. The estimated life of a typical steel structure is approximately 20 years longer than a comparable wood structure (i.e., SPS expects a wood structure to last for 50 years and a steel structure to last for 70+ years).

In addition to the other benefits previously mentioned, wood pole lengths exceeding 100 feet capable of supporting 3-phase "HAWK" conductors at 660-foot spans are difficult to find at a comparable cost and quality to an equivalent steel structure. Steel monopoles are also typically easier to construct and cost less to transport since they are fabricated in multiple sections. Thus, the use of steel structures is not only expected to decrease costs over the life of the transmission line, but will also address the concerns of the Public Utility Commission of Texas ("PUC" or "Commission") regarding storm-hardening the system.

The primarily agricultural land use and the presence of residential buildings in the area was an additional factor in selecting this type of structure because a single-pole steel line minimizes the impact to both farmers and landowners by: (1) reducing the space required for an H-frame structure and typically eliminating the need for guy wires, both of which result in a smaller footprint and (2) allowing for larger span lengths, which results in the use of fewer structures and makes it easier to span existing irrigation systems.

Refer to Attachment 2 for the following structure drawings:

- A typical 115-kV single-circuit steel 80-100° corner structure is shown on SPS drawing SD-T0-506.
- A typical 115-kV single-circuit steel 3-30° angle structure is shown on SPS drawing SD-T0-577.
- A typical 115-kV single-circuit steel tangent/direct embedded 1-3° angle structure with strutted suspension insulators is shown on SPS drawing SD-T0-578.
- A typical 115-kV single-circuit steel tangent structure with suspension insulators is shown on SPS drawing SD-T0-579.
- A typical 115-kV single-circuit steel termination structure is shown on SPS drawing SD-T0-647.

For joint applications, provide and separately identify the above-required information regarding structures for the portion(s) of the project owned by each applicant.

• Not applicable.

6.

Right-of-way:Miles of Right-of-Way:Approximately 7 to 12 milesMiles of Circuit:Approximately 7 to 12 milesWidth of Right-of-Way:70 feet; wider in some circumstancesPercent of Right-of-Way Acquired:0%

In addition to the typical 70 foot easement, SPS will purchase a 30 foot easement for temporary work space adjacent to the permanent easement that will be used during construction to allow for a larger work area during construction. The 30 feet of temporary work space will be released after construction is complete. Additionally, where possible, SPS will purchase an additional 100 ft. x 300 ft. temporary easement for each angle that is 45 degrees or more on a temporary basis to ensure enough room for construction.

Provide a brief description of the area traversed by the transmission line. Include a description of the general land uses in the area and the type of terrain crossed by the line.

The study area is located in Deaf Smith County, Texas (refer to Figure 2-1 of EA/Routing Study, Attachment 1 to this Application), which is located within the High Plains Physiographic Province. In Texas, the High Plains Physiographic Province is divided into the Central High Plains, the Canadian Breaks, and the Southern High Plains. The study area occurs in the Southern High Plains, which forms a nearly flat plateau, and has historically been referred to as the Llano Estacado. Elevations in the study area range from a high of approximately 3,887 ft. in the western portion of the study area to a low of 3,720 ft. in the extreme eastern portion of the study area along Tierra Blanca Creek. Land use within the study area is dominated by agricultural uses, including rangeland, center-pivot irrigated cropland, and numerous large-scale feed lot operations. However, the City of Hereford, which is located in the center of the study area, but is not crossed by any of the proposed routes, is the only urban area within the entire county and thus contains concentrated commercial and residential development, as well as light industrial uses. The areas of residential development mainly consist of single-family and multi-family structures. Rural ranch homes are scattered throughout the study area, and numerous mobile home developments are also located in various locations throughout the study area. Commercial development is generally located in the city center and along major roadways.

7. Substations or Switching Stations:

List the name of all existing HVDC converter stations, substations or switching stations that will be associated with the new transmission line. Provide documentation showing that the owner(s) of the existing HVDC converter stations, substations and/or switching stations have agreed to the installation of the required project facilities.

• NE Hereford Substation.

This substation is owned by SPS.

For joint applications, provide and separately identify the above-required information for each route for the portion(s) of the project owned by each applicant.

• Not applicable.

List the name of all new HVDC converter stations, substations or switching stations that will be associated with the new transmission line. Provide documentation showing that the owner(s) of the new HVDC converter stations, substations and/or switching stations have agreed to the installation of the required project facilities.

• La Plata Substation.

This substation will be owned by SPS.

8. Estimated Schedule:

Estimated Dates of:	<u>Start</u>	<u>Completion</u>
Right-of-way and Land Acquisition	Following CCN approval	12 months following CCN approval
Engineering and Design	Ongoing	8 weeks before construction
Material and Equipment Procurement	Following CCN approval	6 weeks before construction
Construction of Facilities	As ROW is acquired	9 months following ROW acquisition
Energize Facilities	Following completion of construction	Within 30 days of completion of construction

9. Counties:

For each route, list all counties in which the route is to be constructed.

All routes are located in Deaf Smith County, Texas.

10. Municipalities:

For each route, list all municipalities in which the route is to be constructed.

None of the proposed routes cross through any Texas municipality.

For each applicant, attach a copy of the franchise, permit or other evidence of the city's consent held by the utility, if necessary or applicable. If franchise, permit, or other evidence of the city's consent has been previously filed, provide only the docket number of the application in which the consent was filed. Each applicant should provide this information only for the portion(s) of the project which will be owned by the applicant.

11. Affected Utilities:

Identify any other electric utility served by or connected to facilities in this application.

- Deaf Smith Electric Cooperative ("DSEC"); and
- Golden Spread Electric Cooperative ("GSEC").

Describe how any other electric utility will be affected and the extent of the other utilities' involvement in the construction of this project. Include any other electric utilities whose existing facilities will be utilized for the project (vacant circuit positions, ROW, substation sites and/or equipment, etc.) and provide documentation showing that the owner(s) of the existing facilities have agreed to the installation of the required project facilities.

The addition of the proposed line will increase SPS's system reliability and capacity, which will in turn benefit DSEC and GSEC because they will be able to serve additional load in their service area. Since SPS owns the substation affected by the Proposed Project, DSEC and GSEC will not be directly involved in the construction of facilities proposed under this Application.

12. Financing:

Describe the method of financing this project. For each applicant that is to be reimbursed for all or a portion of this project, identify the source and amount of the reimbursement (actual amount if known, estimated amount otherwise) and the portion(s) of the project for which the reimbursement will be made.

The Proposed Project will be financed through internally-generated funds.

13. Estimated Costs:

Provide cost estimates for each route of the proposed project using the following table. Provide a breakdown of "Other" costs by major cost category and amount. Provide the information for each route in an attachment to this application.

Refer to Attachment 3 for the estimated cost table.

For joint applications, provide and separately identify the above-required information for the portion(s) of the project owned by each applicant.

• Not applicable.

14. Need for the Proposed Project:

For a standard application, describe the need for the construction and state how the proposed project will address the need. Describe the existing transmission system and conditions addressed by this application. For projects that are planned to accommodate load growth, provide historical load data and load projections for at least five years. For projects to accommodate load growth or to address reliability issues, provide a description of the steady state load flow analysis that justifies the project. For interconnection projects, provide any documentation from a transmission service customer, generator, transmission service provider, or other entity to establish that the proposed facilities are needed. For projects related to a Competitive Renewable Energy Zone, the foregoing requirements are not necessary; the applicant need only provide a specific reference to the pertinent portion(s) of an appropriate commission order specifying that

the facilities are needed. For all projects, provide any documentation of the review and recommendation of a PURA §39.151 organization.

SPS is a member of, and its entire transmission system is located within, the Southwest Power Pool ("SPP"). The SPP is an organization that meets the requirements of Public Utility Regulatory Act ("PURA") § 39.151 as an independent system operator. SPS does not operate in the Electric Reliability Council of Texas ("ERCOT") region, and ERCOT takes no position on SPS's transmission projects.

The proposed transmission line will connect the existing NE Hereford Substation to the new La Plata Substation, both in Deaf Smith County, Texas. The proposed transmission line was identified by SPP as needed for reliability to address the overload issues at the NE Hereford Substation 115/69-kV transformers, Circuit #1 or Circuit #2, which could occur during a single contingency event outage of either transformer. In the 2014 SPP Integrated Transmission Plan Near-Term Assessment ("ITPNT") Report, which is part of the annual Regional Transmission Organization ("RTO") Reliability Assessment, SPP studied and analyzed reliability issues in the region and identified the proposed transmission line as a needed regional reliability upgrade.

SPP issued a Notification to Construct ("NTC") letter to SPS based on the results of the 2014 ITPNT. The NTC letter identifies Project ID number 856 and Network Upgrade ID number 11127, which directs SPS to build a 115-kV transmission line from the "Centre St" Substation to the NE Hereford Substation, convert the distribution transformer high side at the Centre St. Substation from a 69-kV system to a 115-kV system, and install necessary terminal equipment at NE Hereford. Please refer to Attachment 5 for a copy of the NTC letter. Although SPP specified the proposed 115-kV line as "Centre St-Hereford NE 115 kV Ckt 1," the proposed 115-kV line could not terminate into the Centre St. Substation because of real estate constraints. Therefore, SPS will build a new substation approximately half a mile west of the existing Centre St. Substation, which will be named "La Plata Substation."

Attached to this Application is SPS's Summer Load Forecast from 2015 to 2025 for the transmission system within the Hereford service area of the SPS service territory (Attachment 8). This forecast indicates there is increasing load growth in the area for the next 10 years and supports the need for the additional transmission capacity that the proposed transmission line will provide. SPS provides its Summer Load Forecast to SPP for use in the annual RTO Reliability Assessment.

Please refer to Attachment 4 for a copy of the 2014 SPP ITPNT Report.

Please refer to Attachment 5 for a copy of the SPP NTC Letter.

Please refer to Attachment 6 for a copy of SPS's letter accepting the SPP NTC Letter.

Please refer to Attachment 7 for a graph depicting the 5-Year Historical Load for the Hereford-Clovis Service Area.

Please refer to Attachment 8 for the 10-Year Load Forecast for the SPS Hereford-Clovis Service Area from 2015 to 2025.

Existing Transmission System

The existing transmission system in the SPS Hereford-Clovis Service Area consists of 17 miles of 230-kV transmission lines, 59 miles of 115-kV transmission lines, and 44 miles of 69-kV transmission lines. The SPS Hereford-Clovis Service Area is fed by the coal-fired SPS Harrington Plant from the north by a 230-kV transmission line from the Bushland Substation. The SPS Hereford-Clovis Service Area is also fed from the south by the gas-fired SPS Plant X through a 230-kV transmission line. The SPS Hereford-Clovis Service Area is also fed from the south by the gas-fired SPS Plant X through a 230-kV transmission line. The SPS Hereford-Clovis Service Area is also fed from the southwest through 230-kV and 115-kV transmission lines by the Deaf Smith, Plant X and Tolk Substations. The SPS Hereford-Clovis Service Area is also fed from the SPS Nichols Plant through the Amarillo East area via the 115-kV transmission line from Canyon West Substation. The total generating capacity of SPS's Harrington, Nichols, Plant X, and Tolk Generating Stations is approximately 3010 MW.

The NE Hereford, Hereford and Deaf Smith Substations are interconnected by the 115-kV transmission lines which feed the 69-kV system through Deaf Smith and Castro Counties that serves customer loads.

15. Alternatives to Project:

For a standard application, describe alternatives to the construction of this project (not routing options). Include an analysis of distribution alternatives, upgrading voltage or bundling of conductors of existing facilities, adding transformers, and for utilities that have not unbundled, distributed generation as alternatives to the project. Explain how the project overcomes the insufficiencies of the other options that were considered.

SPP conducts studies to determine whether reliability issues exist within the transmission system and whether or not additional transmission lines or upgrades to existing transmission lines are needed. In the process of conducting its analysis, SPP determines what projects will be included in NTCs issued to utilities.

16. Schematic or Diagram:

For a standard application, provide a schematic or diagram of the applicant's transmission system in the proximate area of the project. Show the location and voltage of existing transmission lines and substations, and the location of the construction. Locate any taps, ties, meter points, or other facilities involving other utilities on the system schematic.

Refer to Attachment 9.

17. Routing Study:

Provide a brief summary of the routing study that includes a description of the process of selecting the study area, identifying routing constraints, selecting potential line segments, and the selection of the routes. Provide a copy of the complete routing study conducted by the utility or consultant. State which route the applicant believes best addresses the requirements of PURA and P.U.C. Substantive Rules.

The following summary is based on information provided in Chapter 2.0 of the EA/Routing Study (Attachment 1 to this Application).

The objective of the routing study was to develop and evaluate an adequate number of geographically diverse alternative routes to allow the Commission to conduct a proper evaluation for the proposed single-circuit 115-kV transmission line. SPS and Burns and McDonnell Engineering Company, Inc. ("Burns & McDonnell") utilized a comprehensive transmission line routing and evaluation methodology to delineate and evaluate alternative transmission line routes. Methods used were governed by SPS's transmission line routing processes and criteria, and factors set forth in PURA § 37.056(c)(4)(A)-(D) and 16 Tex. Admin. Code § 25.101(b)(3)(B).

Data used in the development and evaluation of alternative routes were drawn from a variety of sources, including published literature, and information from local, state and federal agencies, recent aerial photography, and ground reconnaissance of the study area.

The first step in the development of the alternative routes was to select a study area. The study area needed to encompass the endpoints for the Proposed Project (the existing NE Hereford Substation and the new La Plata Substation) and include an area large enough in which an adequate number of geographically diverse, forward progressing alternative routes could be located. The boundaries of this area were dictated by the location of existing facilities and other physical and cultural features. Numerous land use constraints, particularly the concentrated development in the vicinity of the City of Hereford, as well as agricultural uses including centerpivot irrigation and large-scale commercial feed lots were considered as the study area boundaries were developed. To the east, the study area boundary was dictated by the location of the existing NE Hereford Substation and the Hereford Municipal Airport. The western boundary was delineated by the location of the new La Plata Substation. The northern boundary was established based on the locations of the project endpoints. The southern boundary was delineated to allow for the consideration of routing alternatives south of the dense development located in the vicinity of the City of Hereford. This resulted in the establishment of a study area approximately eight miles east to west, and seven and a half miles north to south, that encompasses an area of approximately sixty square miles in Deaf Smith County.

In an effort to minimize impacts to sensitive environmental and land use features, a constraints mapping process was used in the development and refinement of potential alternative routes. The geographic location of environmentally sensitive and other restrictive areas within the Study Area were located and considered during alternative route delineation. These constraints were mapped onto an aerial base map (Attachment 1, Figure 2-2, map pocket) created using 2014 imagery. The overall impact of the alternative routes presented in the EA/Routing Study has been greatly reduced by avoiding, to the greatest extent possible, such constraints as concentrated development surrounding the City of Hereford, intensive agricultural use, community facilities, cemeteries, historic and archeological sites, wetland areas, parks, churches, schools, and by utilizing or paralleling existing compatible ROW, and paralleling approximate property lines, where possible.

Utilizing available resources described above, numerous preliminary alternative route segments were developed and evaluated. The resulting preliminary segments were presented to members of the public at an open house meeting held in the study area on February 3, 2015. At the open house meeting, attendees were asked to provide information regarding the preliminary route segments and to identify their concerns regarding specific segments. Following the open house meeting, additional communications were received from landowners, and other agencies/officials. All of these comments were considered. Some resulted in modifications to the preliminary route segments. Based on this input, some segments were deleted, and others were modified in response to issues presented at the open house meeting. These modifications are discussed in more detail in Section 2.3 of the EA/Routing Study (Attachment 1 to this Application). These modifications resulted in the identification of primary alternative routes.

Next, the environmental evaluation of the primary routes was performed by Burns & McDonnell. The environmental evaluation criteria and the environmental evaluation process are discussed in detail in Section 6.0 of the EA/Routing Study (Attachment 1 to this Application). Burns & McDonnell determined that Route 6 represents the best balance of land use, environmental, and cultural resource factors. Route 6 was the top ranked route because it:

- has the second-fewest habitable structures (9) within 300 ft. of its centerline;
- is the third-shortest route (only 100 ft. longer than the shortest alternative);
- parallels the greatest length of property lines (approximately 6.77 miles);
- parallels existing compatible ROW and property lines for 7.37 miles (98% of its total length);
- crosses the second-least length of potential wetlands (0.09 mile) and number of playa lakes (1);
- crosses the third-least amount of high-probability areas for cultural resources (1.73 miles)

Following Burns & McDonnell's review of the primary alternative routes, SPS considered Burns & McDonnell's EA/Routing Study and undertook an evaluation of reliability, constructability, operation and maintenance, and estimated costs. The final evaluation by the SPS project team resulted in the identification of Alternative Route 6 as the route that the applicant believes best addresses the requirements of PURA and PUC Substantive Rules because it:

- is the third-shortest route (only 0.02 mile longer than the shortest alternative);
- has the second-least amount of habitable structures (9) within 300 feet of the proposed ROW centerline;
- does not have any distribution underbuild, which is better from a constructability and maintenance perspective; and
- has the second lowest cost, which is only \$12,678 more than the least expensive route.

Although SPS believes that Route 6 best addresses the requirements of PURA and PUC Substantive Rules, it can construct and operate any of the routes proposed in this Application.

The EA/Routing Study is included as Attachment 1 to this Application.

18. Public Meeting or Public Open House:

Provide the date and location for each public meeting or public open house that was held in accordance with P.U.C. Proc. R. 22.52. Provide a summary of each public meeting or public open house including the approximate number of attendants, and a copy of any survey provided to attendants and a summary of the responses received. For each public meeting or public open house provide a description of the method of notice, a copy of any notices, and the number of notices that were mailed and/or published.

SPS hosted a public open-house meeting for the proposed NE Hereford to La Plata 115-kV transmission line project at the Hereford Community Center, 100 Ave. C, Hereford, Texas, on February 3, 2015, from 5:00 to 7:00 PM.

Direct mail notice of the open-house meeting was sent by first class mail to approximately 170 landowners listed on the current county tax rolls as an owner of land located within 500 ft. of the preliminary route segments. Additionally, agencies and other officials were mailed written notice of the meeting. The meeting was intended to solicit comments from landowners, citizens, and public officials concerning the Proposed Project. The meeting had the following objectives:

- promote a better understanding of the Proposed Project including the purpose, need, and potential benefits and impacts;
- inform and educate the public with regard to the procedure, schedule, and decisionmaking process; and
- ensure that the decision-making process accurately identifies and considers the values and concerns of the public and community leaders.

Rather than a formal presentation in a speaker-audience format, the meeting was held in an openhouse format. SPS representatives and Burns & McDonnell set up several information stations around the meeting room. Each station was devoted to a particular aspect of the routing study and was manned by SPS representatives and/or Burns & McDonnell staff. Large displays of maps, illustrations, and/or text explaining each particular topic were presented at the stations. Interested citizens and property owners were encouraged to visit each station in a particular order so the entire process and general project development sequence could be explained clearly. The open-

house or information-station format is advantageous because it allows attendees to process information in a more relaxed manner and also allows them to focus on their particular areas of interest and ask specific questions. More importantly, the one-on-one discussions with SPS representatives and Burns & McDonnell staff encouraged more interaction from those citizens who might be hesitant to participate in a speaker-audience format.

At the first station, visitors signed in and were provided project fact and safety sheets, and questionnaires to fill out. The questionnaire solicited comments on landowner/citizen concerns as well as an evaluation of the information presented at the meetings. An example copy of the questionnaire provided at the open house meeting is included in Appendix B.

Completed questionnaires were received by SPS either at the meetings or later by mail. However, not all respondents answered every question, nor did all attendees fill out a questionnaire. Additionally, several questionnaires were received from respondents who did not attend an openhouse meeting and/or who may not be directly affected by the Proposed Project.

A total of 26 persons/landowners signed in at the public meeting, and one added a family member's name on the line as well. Therefore, a total of at least 27 persons attended the openhouse meeting. A total of 13 questionnaires were submitted to SPS following the public meetings. Please refer to Section 5.2 of the EA/Routing Study, included as Attachment 1 to this Application for a summary and evaluation of responses to all questions asked on the questionnaire.

Refer to Appendix B of the EA/Routing Study, Attachment 1, for a sample copy of the notice letters sent to landowners regarding the open house meeting.

Refer to Appendix B of the EA/Routing Study, Attachment 1, for a copy of the questionnaire.

19. Routing Maps:

Base maps should be a full scale (one inch = not more than one mile) highway map of the county or counties involved, or other maps of comparable scale denoting sufficient cultural and natural features to permit location of all routes in the field. Provide a map (or maps) showing the study area, routing constraints, and all routes or line segments that were considered prior to the selection of the routes. Identify the routes and any existing facilities to be interconnected or coordinated with the project. Identify any taps, ties, meter points, or other facilities involving other utilities on the routing map. Show all existing transmission facilities located in the study area. Include the locations of radio transmitters and other electronic installations, airstrips, irrigated pasture or cropland, parks and recreational areas, historical and archeological sites (subject to the instructions in Question 27), and any environmentally sensitive areas (subject to the instructions in Question 29).

Please refer to Figure Nos. 2-2 and 6-1 in the EA/Routing Study, included as Attachment 1 to this Application.

Provide aerial photographs of the study area displaying the date that the photographs were taken or maps that show (1) the location of each route with each route segment identified, (2) the locations of all major public roads including, as a minimum, all federal and state roadways, (3) the locations of all known habitable structures or groups of habitable structures (see Question 19 below) on properties directly affected by any route, and (4) the boundaries (approximate or

estimated according to best available information if required) of all properties directly affected by any route.

Please refer to Figure Nos. 2-2 and 6-1 in the EA/Routing Study, included as Attachment 1 to this Application.

For each route, cross-reference each habitable structure (or group of habitable structures) and directly affected property identified on the maps or photographs with a list of corresponding landowner names and addresses and indicate which route segment affects each structure/group or property.

Please refer to Attachment 10 (Landowner List) for a spreadsheet that is a cross-reference of directly affected properties and habitable structures whose locations are shown on Figure No. 6-1, with the names and addresses of the landowners.

20. Permits:

List any and all permits and/or approvals required by other governmental agencies for the construction of the proposed project. Indicate whether each permit has been obtained.

Once a route has been approved by the Commission, SPS will coordinate with permitting agencies to determine permits required for the approved route. Below is a list of permits that may be required for construction of the transmission line project depending on which route is selected:

• U.S. Army Corps of Engineers

Consultation with the U.S. Army Corps of Engineers will occur following the Commission's approval of this Application to determine appropriate requirements under Section 404/Section 10 Permit criteria (not yet obtained).

• U.S. Fish and Wildlife Service

Consultation with the U.S. Fish and Wildlife Service will occur following the Commission's approval of this Application to determine appropriate requirements under the Endangered Species Act (not yet obtained).

• Texas Parks and Wildlife Department

Consultation with TPWD will occur following the Commission's approval of this Application to determine appropriate requirements under the TPW Code Section 12.0011(b) (not yet obtained).

• Federal Aviation Administration

Based on Federal Aviation Administration ("FAA") guidelines, SPS, will make a final determination of the need for FAA notification based on the alignment of the approved route, structure locations, and structure designs. The result of this notification, and the subsequent coordination with the FAA, could include changes in the design and/or potential requirements to mark and/or illuminate portions of the line (not yet obtained).

Texas Commission on Environmental Quality

A Storm Water Pollution Prevention Plan will be prepared and a Notice of Intent will be submitted at least 48 hours prior to the beginning of construction to the Texas Commission on Environmental Quality under the Texas Pollutant Discharge Elimination System General Permit (not yet obtained).

Texas Historical Commission

Cultural resources clearance will be obtained from the Texas Historical Commission ("THC") for the Proposed Project if necessary. Clearance will be obtained after the Commission has approved a route.

• Texas Department of Transportation

TxDOT permit(s) will be required for crossing state-maintained roadways or using TxDOT ROW to access the project (not yet obtained).

• General Land Office

A miscellaneous easement from the Texas General Land Office will be obtained as necessary for any ROW that crosses a state-owned riverbed or navigable stream.

• Deaf Smith County

Depending on the location of structures, road crossing permits might be required by Deaf Smith County (not yet obtained).

21. Habitable structures:

For each route list all single-family and multi-family dwellings and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business structures, churches, hospitals, nursing homes, schools, or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 300 feet of the centerline if the proposed project will be constructed for operation at 230-kV or less, or within 500 feet of the centerline if the proposed project will be constructed for operation at greater than 230-kV. Provide a general description of each habitable structure and its distance from the centerline of the route. In cities, towns or rural subdivisions, houses can be identified in groups. Provide the number of habitable structures in each group and list the distance from the centerline of the route to the closest and the farthest habitable structure in the group. Locate all listed habitable structures or groups of structures on the routing map.

Table 6-1 of the EA/Routing Study, Attachment 1, identifies by route, the number of habitable structures located within 300 feet of the centerline of the proposed alternative routes. A general description of each habitable structure within 300 feet and its distance from the centerline of the proposed alternative routes are presented in Tables 6-3 through 6-11 of the EA/Routing Study (Attachment 1 to this Application). The location of listed habitable structures or groups of structures is shown on Figures 6-1 of the EA/Routing Study (Attachment 1 to this Application).

22. Electronic Installations:

For each route, list all commercial AM radio transmitters located within 10,000 feet of the center line of the route, and all FM radio transmitters, microwave relay stations, or other similar electronic installations located within 2,000 of the center line of the route. Provide a general description of each installation and its distance from the center line of the route. Locate all listed installations on a routing map.

There are no AM radio transmitters located within 10,000 ft. of any of the nine primary alternative routes. The number of FM radio transmitters and other electronic communication/cellular towers located within 2,000 ft. of the alternative routes ranges from a low of one (Routes 3 - 7) to a high of three (Routes 1, 2, and 9). A general description of each installation and its distance from the centerline of the proposed alternative routes are presented in Tables 6-3 through 6-11 of the

EA/Routing Study (Attachment 1 to this Application). The location of listed installations is shown on Figures 6-1 of the EA/Routing Study (Attachment 1 to this Application).

23. Airstrips:

For each route, list all known private airstrips within 10,000 feet of the center line of the project. List all airports registered with the Federal Aviation Administration (FAA) with at least one runway more than 3,200 feet in length that are located within 20,000 feet of the center line of any route. For each such airport, indicate whether any transmission structures will exceed a 100:1horizontal slope (one foot in height for each 100 feet in distance) from the closest point of the closest runway. List all listed airports registered with the FAA having no runway more than 3,200 feet in length that are located within 10,000 feet of the center line of any route. For each such airport, indicate whether any transmission structures. For each such airport, indicate whether any transmission structures will exceed a 5,000 feet of the closest runway. List all listed airports runway. List all heliports located within 5,000 feet of the center line of any route. For each such airport, indicate such heliport, indicate whether any transmission structures will exceed a 50:1 horizontal slope from the closest point of the closest runway. List all heliports located within 5,000 feet of the center line of any route. For each such heliport, indicate whether any transmission structures will exceed a 25:1 horizontal slope from the closest point of the

One FAA-registered airport, the Hereford Municipal Airport, is located within 20,000 ft. of each alternative route.

One private landing strip is located within 10,000 ft. of each of the alternative routes.

One heliport located at the Hereford Regional Medical Center is located within 5,000 ft. of each of the alternative routes.

A general description of each facility and its distance from the centerline of the proposed alternative routes are presented in Tables 6-3 through 6-11 of the EA/Routing Study (Attachment 1 to this Application). The location of listed installations is shown on Figures 6-1 of the EA/Routing Study (Attachment 1 to this Application).

After the PUC approves a route for the project, and engineering and pole placement along the route is finalized, SPS will provide the FAA Notice of Proposed Construction or Alteration (FAA Form 7560-1) for all transmission structures proposed to be located within the specified distances of the Hereford Municipal Airport and the heliport at the Hereford Regional Medical Center. The result of this notification and subsequent coordination with the FAA, could include changes in the line design and/or potential requirements to add markers.

24. Irrigation Systems:

For each route identify any pasture or cropland irrigated by traveling irrigation systems (rolling or pivot type) that will be traversed by the route. Provide a description of the irrigated land and state how it will be affected by each route (number and type of structures etc.). Locate any such irrigated pasture or cropland on a routing map.

Each of the nine primary alternative routes cross pasture or cropland irrigated by traveling irrigation systems (rolling or pivot type). However, the alternative routes were developed to have a minimal impact on center-pivot mobile irrigation systems by locating the routes along field edges in order to span the traveling arc of the mobile systems, and thereby minimizing any

potential impact. All pasture or cropland irrigated by traveling irrigation systems (rolling or pivot type) that will be traversed by the primary alternative routes is shown on Figure 2-2, and the length of such land crossed by each route are listed in Table 6-1 of the EA/Routing Study (Attachment 1 to this Application).

25. Notice:

Notice is to be provided in accordance with P.U.C. PROC. R. 22.52.

A. Provide a copy of the written direct notice to owners of directly affected land. Attach a list of the names and addresses of the owners of directly affected land receiving notice.

Refer to Attachment 10 for: (1) a sample copy of the notice letter; (2) the segment descriptions with attached map; PUCT Landowner Brochure, Comments Form, and Intervenor Form, and Landowner Bill of Rights, all of which were included with each notice packet; and, (3) the list of landowners to whom notice was sent.

B. *Provide a copy of the written notice to utilities that are located within five miles of the routes.*

Refer to Attachment 11 for a copy of the notice letters. Also, refer to Attachment 10 for the segment descriptions and map included with each notice.

C. Provide a copy of the written notice to county and municipal authorities.

Refer to Attachment 12 for a copy of the notice letters sent to county and municipal authorities. Also, refer to Attachment 10, for the segment descriptions and map included with each notice.

D. Provide a copy of the notice that is to be published in newspapers of general circulation in the counties in which the facilities are to be constructed. Attach a list of the newspapers that will publish the notice for this application. After the notice is published, provide the publisher's affidavits and tear sheets.

Refer to Attachment 13 for a copy of the newspaper notice, segment descriptions, and newspaper that will publish the notice. Also, refer to Attachment 10, for a copy of the map used for the newspaper notice.

For a CREZ application, in addition to the requirements of P.U.C. Proc. R. 22.52 the applicant shall, not less than twenty-one (21) days before the filing of the application, submit to the Commission staff a "generic" copy of each type of alternative published and written notice for review. Staff's comments, if any, regarding the alternative notices will be provided to the applicant not later than seven days after receipt by Staff of the alternative notice. Applicant may take into consideration any comments made by Commission staff before the notices are published or sent by mail.

• Not applicable.

26. Parks and Recreation Areas:

For each route, list all parks and recreational areas owned by a governmental body or an organized group, club, or church and located within 1,000 feet of the center line of the route. Provide a general description of each area and its distance from the center line. Identify the

owner of the park or recreational area (public agency, church, club, etc.). List the sources used to identify the parks and recreational areas. Locate the listed sites on a routing map.

A review of the Texas Outdoor Recreation Plan, the City of Hereford, various federal, state, and local maps, and field reconnaissance was used to identify parks and recreation areas in the study area. The National Park Service indicates that no national parks, forests, grasslands, or wildlife refuges exist within the boundaries of the study area.

The number of parks and recreational areas owned by a governmental body or an organized group, club, or church and located within 1,000 feet of the center line of the primary alternative routes, which ranges from 1 to 2, is presented in Table 6-1 of the EA/Routing Study (Attachment 1 to this Application).

A general description of each listed park or recreational area and its distance from center line of the primary alternative routes is presented in Tables 6-3 through 6-11 of the EA/Routing Study (Attachment 1 to this Application).

27. Historical and Archeological Sites:

For each route, list all historical and archeological sites known to be within 1,000 feet of the center line of the route. Include a description of each site and its distance from the center line. List the sources (national, state or local commission or societies) used to identify the sites. Locate all historical sites on a routing map. For the protection of the sites, archeological sites need not be shown on maps.

As a part of the data gathering effort conducted by Burns & McDonnell for this project, research of available records and literature was conducted at the Texas Archeological Research Laboratory ("TARL"), J.J. Pickle Research Campus, The University of Texas at Austin with the purpose of determining the location of previously recorded archeological sites (sites issued a trinomial/record at TARL) within the proposed study area. The THC online Restricted Archeological Sites Atlas files were also used to identify listed and eligible NRHP properties and sites, NRHP districts, cemeteries (including Historic Texas Cemeteries), Official Texas Historical Markers (including Recorded Texas Historic Landmarks), State Antiquities Landmarks, as well as any other potential cultural resources such as National Historic Landmarks ("NHLs"), National Monuments, National Memorials, National Historic Sites, and National Historical Parks to ensure the completeness of the study. As a secondary source of NRHP-listed properties and NHLs, the National Park Service's NRHP GIS Spatial Data and database, as well as the NHL program, were consulted. Additionally, TxDOT's database of NRHP-listed and -eligible bridges was also reviewed.

The results of the reviews identified one known historical or archeological site, The Rest Lawn Cemetery, located within 1,000 feet of routes 2, 3, and 7. There are no known historical or archeological sites are located within 1,000 feet of routes 1, 4, 5, 6, 8, and 9.

The distance from the Rest Lawn Cemetery to the centerline of the proposed alternative routes are presented in Tables 6-3 through 6-11 of the EA/Routing Study (Attachment 1 to this Application). The location of the Rest Lawn Cemetery is shown on Figures 2-2 and 6-1 of the EA/Routing Study (Attachment 1 to this Application).

28. Coastal Management Program:

For each route, indicate whether the route is located, either in whole or in part, within the coastal

management program boundary as defined in 31 T.A.C. §503.1. If any route is, either in whole or in part, within the coastal management program boundary, indicate whether any part of the route is seaward of the Coastal Facilities Designation Line as defined in 31 T.A.C. §19.2(a)(21). Using the designations in 31 T.A.C. §501.3(b), identify the type(s) of Coastal Natural Resource Area(s) impacted by any part of the route and/or facilities.

AFFIDAVIT

STATE OF TEXAS

COUNTY OF POTTER

I, James M. Bagley, after first being duly sworn state the following: I am filing this application as Manager, Regulatory Administration for Southwestern Public Service Company. I am qualified and authorized to file and verify this application, and am personally familiar with the information supplied in this application; and to the best of my knowledge, all information provided, statements made, and matters set forth in this application and attachments are true and correct; and all requirements for the filing of this application have been satisfied. I further state that this application is made in good faith and that this application does not duplicate any filing presently before the commission.

AFFIANT

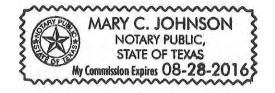
James M. Bagley

SUBSCRIBED AND SWORN TO BEFORE ME, a Notary Public in and for the state of Texas, this <u>22</u> day of September 2015.

SEAL

Notary Public

My Commission Expires: 8 - 28 - 16



Attachment 1

Environmental Assessment

Attachment 2

Oversized Structure Drawing

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Estimated Cost Table NE Hereford to La Plata CCN 115-kV Transmission Line

	Alternative Route 1		Alternative Route 2		Alternative Route 3		Alternative Route 4		Alternative Route 5	5
TX	Segments: A, C, D, E, K,	R, T	Segments: A, B, E, I, L, O, S, T		Segments: A, B, E, I, L, O, P, Q		Segments: A, C, D, E, K, N, O, P,		Segments: A, C, D, F, G, M, P, Q	0, F, G, M, P, Q
	Circuit Miles: 11.34		Circuit Miles: 11.27	27	Circuit Miles: 9.5		Q Circuit Miles: 9.58		Circuit Miles:7.53	
	Transmission Facilities	Substation Facilities	Transmission Facilities	Substation Facilities	Transmission Facilities	Substation Facilities	Transmission Facilities	Substation Facilities	Transmission Facilities	Substation Facilities
Right-of-way (Easements and Fees)	\$1,443,532	\$33,472	\$1,434,622	\$33,472	\$1,209,309	\$33,472	\$1,219,492	\$33,472	\$958,536	\$33,472
Material and Supplies	\$1,994,484	\$2,484,486	\$1,867,937	\$2,484,486	\$1,542,129	\$2,484,486	\$1,714,580	\$2,484,486	\$1,379,825	\$2,484,486
Labor and Transportation (Utility)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Labor and Transportation (Contract)	\$3,157,904	\$2,098,697	\$2,500,269	\$2,098,697	\$2,095,520	\$2,098,697	\$2,140,184	\$2,098,697	\$1,716,806	\$2,098,697
Stores	\$145,708	\$631,778	\$138,313	\$631,778	\$114,766	\$631,778	\$122,811	\$631,778	\$96,984	\$631,778
Engineering and Administration (Utility)	\$1,365,146	\$910,508	\$1,242,380	\$910,508	\$777,134	\$910,508	\$758,599	\$910,508	\$669,699	\$910,508
Engineering and Administration (Contract)	\$88,710	\$745,121	\$88,255	\$745,121	\$76,750	\$745,121	\$77,400	\$745,121	\$64,400	\$745,121
Estimated Total Cost*	\$8,195,484	\$6,904,062	\$7,271,776	\$6,904,062	\$5,815,608	\$6,904,062	\$6,033,066	\$6,904,062	\$4,886,250	\$6,904,062
GRAND TOTAL	\$15,099,546	9,546	\$14,175,838	5,838	\$12,719,670	9,670	\$12,937,128	7,128	\$11,790,312	0,312

XL	Alternative Route 6 Segments: A, B, F, G, M, P, Q		Alternative Route 7 Segments: A, B, F, H, L, O, P, Q		Alternative Route 8 Segments: A, B, F, G, J, Q		Alternative Route 9 Segments: A, B, F, G, M, S, T	9 , G, M, S, T
	Circuit Miles:7.50		Circuit Miles:7.49	_	Circuit Miles:7.48		Circuit Miles:9.27	
	Transmission Facilities	Substation Facilities	Transmission Facilities	Substation Facilities	Transmission Facilities	Substation Facilities	Transmission Facilities	Substation Facilities
Right-of-way (Easements and Fees)	\$954,717	\$33,472	\$953,444	\$33,472	\$952,171	\$33,472	\$1,180,030	\$33,472
Material and Supplies	\$1,392,876	\$2,484,486	\$1,433,761	\$2,484,486	\$1,955,690	\$2,484,486	\$1,620,895	\$2,484,486
Labor and Transportation (Utility)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Labor and Transportation (Contract)	\$1,722,680	\$2,098,697	\$1,806,644	\$2,098,697	\$1,902,018	\$2,098,697	\$2,043,334	\$2,098,697
Stores	\$97,171	\$631,778	\$103,215	\$631,778	\$128,627	\$631,778	\$116,927	\$631,778
Engineering and Administration (Utility)	\$667,234	\$910,508	\$694,457	\$910,508	\$713,092	\$910,508	\$740,153	\$910,508
Engineering and Administration (Contract)	\$64,250	\$745,121	\$63,750	\$745,121	\$63,650	\$745,121	\$75,450	\$745,121
Estimated Total Cost*	\$4,898,928	\$6,904,062	\$5,055,271	\$6,904,062	\$5,715,248	\$6,904,062	\$5,776,789	\$6,904,062
GRAND TOTAL	\$11,802,990	12,990	\$11,959,333	9,333	\$12,619,310	9,310	\$12,680,851	0,851

* Cost catagories for Substation Facilities include associated Distribution costs. The Estimated Total Cost of Substation Facilities includes associated Distribution costs of \$3,767,369.



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ITPNT

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2014 Integrated Transmission Plan Near-Term Assessment Report

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Approved: January 28, 2014

Engineering



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Revision History

Date	Author	Change Description
10/23/2013	SPP staff	Draft for TWG review
11/18/2013	SPP staff	2 nd Draft for TWG review
12/09/2013	SPP staff	3 rd Draft for TWG review
12/11/2013	SPP staff	4 th Draft for TWG meeting
12/18/2013	SPP staff	TWG Approval
1/15/2013	SPP staff	MOPC approval
1/28/2013	SPP staff	BOD Approval

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Executive Summary

The Integrated Transmission Planning (ITP) process is Southwest Power Pool's iterative three-year study process that includes 20-Year, 10-Year and Near Term Assessments. The 20-Year Assessment identifies transmission projects, generally above 300 kV, needed to provide a grid flexible enough to provide benefits to the region across multiple scenarios. The 10-Year Assessment



focuses on facilities 100 kV and above to meet system needs over a ten-year horizon. The Near Term Assessment is performed annually and assesses system upgrades, at all applicable voltage levels, required in the near term planning horizon to address reliability needs. Along with the Highway/Byway cost allocation methodology, the ITP process promotes transmission investment that will meet reliability, economic, and public policy needs¹ intended to create a cost-effective, flexible, and robust transmission network that will improve access to the region's diverse generating resources. This report documents the Near-Term Assessment that concludes in January 2014.

The 2014 ITPNT used two scenario models built across multiple years and seasons to evaluate power flows across the grid to account for various system conditions across the near-term horizon. The 2014 ITPNT draft project plan breakdown can be found in the tables below.

Voltage Class	New Line (miles)	Rebuild/Reconductor (miles)
345 kV	41	0
230 kV	40	27
161 kV	17	0
138 kV	28	37
115 kV	128	18
69 kV	3	92

Voltage Class	New XFMR	Modified XFMR
345/138	1	0
345/115	3	0
230/115	2	1
161/69	3	0
138/69	1	0
115/69	0	2

Voltage Conversion	Miles
69/138 kV	23
69/115 kV	13

Table 0.1: 2014 Project List Breakdown

¹ The Highway/Byway cost allocation approving order is *Sw. Power Pool, Inc.*, 131 FERC ¶ 61,252 (2010). The approving order for ITP is *Sw. Power Pool, Inc.*, 132 FERC ¶ 61,042 (2010).

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Southwest Power Pool, Inc.

The total cost of the 2014 ITPNT Project Plan is estimated to be \$696 million for upgrades that will receive an NTC, NTC-C, or NTC Modify. Of that total, \$486 million comes from new projects identified in the 2014 ITPNT Assessment. Upgrades recommended for an NTC Modify account for \$210 million of the total project plan cost. \$74 million of transmission upgrades are recommended for withdrawal.

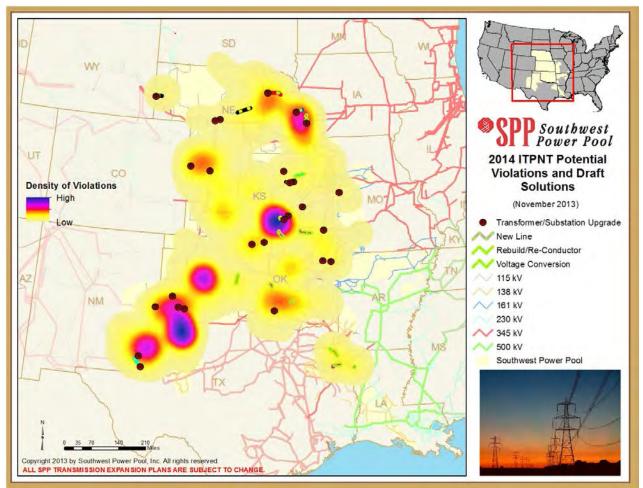


Figure 0.1: 2014 ITPNT Potential Violations and Solutions

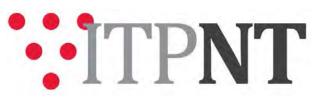
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PART I: STUDY PROCESS

Section 1: Introduction

<u>1.1: The ITP Near-Term</u>

The ITPNT is designed to evaluate the near-term reliability and robustness of the SPP transmission system, identifying needed upgrades through stakeholder collaboration. The ITPNT focuses primarily on solutions required to meet the reliability



criteria defined in OATT Attachment O Section III.6. The process coordinates the ITP20, ITP10, Aggregate Studies, and the Generation Interconnection transmission plans by communicating potential solutions between processes and using common solutions when appropriate. Unlike the ITP10 and ITP20, the ITPNT is not intended to focus on solutions based on a preferred voltage level, but to effectively solve all potential reliability needs in their entirety.

The 2014 ITPNT will create an effective near-term plan for the SPP footprint which identifies solutions to potential issues for system intact and single contingency (N-1) conditions using the following principles:

- Identifying potential reliability-based problems (NERC Reliability Standards TPL-001 and TPL-002, SPP and local criteria)
- Utilizing Transmission Operating Guides
- Developing additional mitigation plans including transmission upgrades to meet the region's needs and maintain SPP and local reliability/planning standards

Stability analysis is performed on the SPP system incorporating the proposed 100 kV and above 2014 ITPNT upgrades. This analysis determines if there are voltage stability issues within high load areas inside the SPP footprint. The areas studied this year are central Nebraska, south Oklahoma, south central Westar, northeast Westar, Oklahoma City, and Lincoln/Omaha.

The ITPNT process is open and transparent, allowing for stakeholder input throughout. Study results are coordinated with other entities, including embedded and Tier 1.

Goals

The goals of the ITPNT are to:

- Focus on local and regional needs
- Evaluate the response of the system on NERC TPL-001 and TPL-002 Standards
- Utilize a cost-effective approach to analyze six year out transmission system needs
- Identify 69 kV and above solutions stemming from such needs as:
 - o Resolving potential reliability criteria violations
 - Improving access to markets
 - Improving interconnections with SPP's neighbors
 - Meeting expected load growth demands

- Facilitating or responding to expected facility retirements
- Synergize the ITPNT with the GI process, ATSS process, and the ITP10 and ITP20 Assessments

The 2014 ITPNT is intended to provide solutions to ensure the reliability of the transmission system during the study horizon which includes modeling of the transmission system for six years (i.e. 2019). The specific near-term requirements of Attachment O are:

- The Transmission Provider shall perform the Near Term Assessment on an annual basis.
- The Near Term Assessment will be performed on a shorter planning horizon than the 10-Year Assessment and shall focus primarily on identifying solutions required to meet the reliability criteria defined in Section III.6.
- The assessment study scope shall specify the methodology, criteria, assumptions, and data to be used to develop the list of proposed near term upgrades.
- The Transmission Provider, in consultation with the stakeholder working groups, shall finalize the assessment study scope. The study scope shall take into consideration the input requirements described in Section III.6.
- The assessment study scope shall be posted on the SPP website and will be included in the published annual SPP Transmission Expansion Plan report.
- In accordance with the assessment study scope, the Transmission Provider shall analyze potential solutions, including those upgrades approved by the SPP Board of Directors from the most recent 20-Year Assessment and 10-Year Assessment, following the process set forth in Section III.8.

1.2: How to Read This Report

This report focuses on the years 2014-2019 and is divided into multiple sections.

- Part I addresses the concepts behind this study's approach, key procedural steps in development of the analysis, and overarching assumptions used in the study.
- Part II addresses the specific results, describes the projects that merit consideration, and contains recommendations and costs
- Part III contains detailed data and holds the report's appendix material.

SPP Footprint

Within this study, any reference to the SPP footprint refers to the set of Balancing Authorities and Transmission Owners (TO) whose transmission facilities are under the functional control of the SPP Regional Transmission Organization (RTO) unless otherwise noted.

Supporting Documents

The development of this study was guided by the supporting documents noted below. These documents provide structure for this assessment:

- SPP 2014 ITPNT Scope
- SPP ITP Manual

All referenced reports and documents contained in this report are available on SPP.org.

Confidentiality and Open Access

Proprietary information is frequently exchanged between SPP and its stakeholders in the course of any study and is extensively used during the ITP development process. This report does not contain confidential marketing data, pricing information, marketing strategies, or other data considered not

acceptable for release into the public domain. This report does disclose planning and operational matters, including the outcome of certain contingencies, operating transfer capabilities, and plans for new facilities that are considered non-sensitive data.

Section 2: Stakeholder Collaboration

Assumptions and procedures for the 2014 ITPNT analysis were developed through SPP stakeholder meetings that took place in 2012 and 2013. The assumptions were presented and discussed through a series of meetings with members, liaison-members, industry specialists, and consultants to facilitate a thorough evaluation. Groups involved in this development included the following:

- Transmission Working Group (TWG)
- Markets and Operations Policy Committee (MOPC)
- SPP Board of Directors

SPP Staff served as facilitators for these groups and worked closely with the chairs to ensure all views were

heard and that SPP's member-driven value proposition was followed.

The TWG provided technical guidance and review for inputs, assumptions, and findings. Policy level considerations were tendered to appropriate organizational groups including the MOPC. Stakeholder feedback was instrumental in the selection of the 2014 ITPNT projects.

• The TWG was responsible for technical oversight of the load forecasts, transmission topology inputs, constraint selection criteria, reliability assessments, transmission project designs, voltage studies, and the report.

Planning Summits

In addition to the standard working group meetings, two transmission planning summits were conducted to elicit further input and provide stakeholders with a chance to interact with staff on all related planning topics.

- Definition of a Reliability Need in a CBA Model was discussed at the planning summit on May 15, 2013².
- Recommended solutions for the 2014 ITPNT were discussed at the planning summit on November 20, 2013³.

Project Cost Overview

Project costs utilized in the 2014 ITPNT were developed in accordance with the guidelines of the Project Cost Working Group (PCWG). Conceptual Estimates were prepared by SPP staff based on historical cost information in an SPP database and updated information provided by the TO.



 $^{^2}$ SPP.org > Engineering > Transmission Planning > 2013 May Planning Summit

³ SPP.org > Engineering > Transmission Planning > 2013 November Planning Summit

Use of Transmission Operating Guides

TOGs are tools used to mitigate violations in the daily management of the transmission grid. TOGs may be used as alternatives to planned projects and are tested annually to determine effectiveness in mitigating potential violations. The 2014 ITPNT identifies all solutions where the use of a TOG is not effective.

Section 3: Study Drivers

3.1: Introduction

Drivers for the 2014 ITPNT were discussed and developed through the stakeholder process in accordance with the 2014 ITPNT Scope and involved stakeholders from several diverse groups. Stakeholder load, generation, and transmission were carefully considered in determining the need for, and design of, transmission solutions.

3.2: Load Outlook

Peak and Off-Peak Load

Future electricity usage was forecasted by utilities in the SPP footprint and collected and reviewed through the efforts of the MDWG. This assessment used both summer peak and light load scenarios to assess the performance of the grid in both peak and off-peak conditions.

Load Forecast

Load Serving Entities provided the load forecast used in the reliability analysis study models through the model building process. The 2014 loads are higher than previous forecasts. The figure below compares the current 2014 ITPNT load forecast with the previous STEP and ITPNT assessment forecasts.

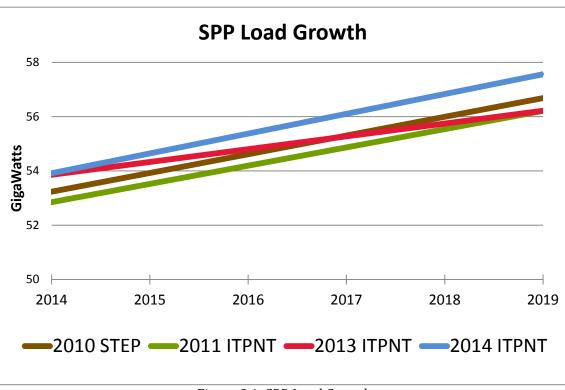


Figure 3.1: SPP Load Growth

3.3: Utilization of Different Voltage Levels

EHV Design Considerations

When considering the design of an EHV grid, many factors must be considered, such as contingency planning, typical line lengths, line loadability, capacity requirements, voltage, reliability, cost, asset life, and operational issues.

NERC N-1 Reliability Standards

SPP designs and operates its transmission system to be capable of withstanding the next transmission outage that may occur – this is called "N-1" planning and is in accordance with NERC planning standards. Due to N-1 planning, any EHV network must be looped so that if one element of the EHV grid is lost, a parallel path will exist to move that power across the grid and avoid overloading the underlying transmission lines.

Voltage Support

A transmission line can either support voltage (produce VARs) or require voltage support from other reactive devices (consume VARs), depending on its loading level. In either case, transmission system design should account for these factors. Under light-load conditions, system voltages may rise due to VARs being produced from long EHV lines.

Shunt reactors would be necessary to help mitigate the rise in voltage. Some lines may need additional support to allow more power to flow through them. Series capacitors may be added to increase the loadability of a transmission line. However, the addition of series compensation can complicate operations and may lead to stability concerns.

Construction Cost

Cost plays a factor in EHV grid design. Lower-voltage designs cost less to construct initially. Higher voltage lines have a larger initial investment but provide significantly higher capacity and more flexibility in bulk power transport. Lower voltage lines offer more flexibility to act as a collector system for wind generation. Along with the initial cost, the lifetime of the asset needs to be considered. Transmission lines are generally assumed to have a 40-year life.

Section 4: Analysis Methodology

4.1: Steady State Analysis

Facilities in the SPP footprint 69 kV and above were monitored for 95% thermal loading. All facilities in first-tier control areas were monitored at 100 kV and above. System intact (base case) and N-1 contingency analysis on SPP facilities 69 kV and above and 100 kV and above for Tier 1 control areas were performed on the 2014 ITPNT models.

After performing the reliability assessment identifying the bulk power problems, potential violations were presented and solutions requested to those transmission reliability problems from TOs and stakeholders. Utilizing stakeholders' feedback and current ATSS and GI, proposed regional solutions were developed and validated.

This process repeated for several iterations as solutions were refined. The solutions were then timed using linear interpolation based on line loading between available model years of 2014, 2015, and 2019. For example, to time a solution due to a 2019 potential overload, SPP interpolated line loadings between the 2015 and 2019 models to determine when the loading exceeded 100%. The need date was assigned based on this analysis. A similar process for timing potential voltage issues was used. Throughout the process, alternative solutions were proposed by stakeholders, which were analyzed in accordance with Section III.8 of Attachment O of the OATT.

SPP transmission system performance was assessed from different perspectives designed to identify transmission expansion projects necessary to accomplish the reliability objectives of the SPP Regional Transmission Organization (RTO).

- Avoid exposure to Category A and B NERC Transmission Planning (TPL) standard criteria violations during the operation of the system under high stresses
- Contribute to the voltage stability of the system
- Reduce congestion and increase opportunities for competition within the SPP Integrated Marketplace.

Utilization of Past Studies & Stakeholder Expertise for Solutions

SPP shared potential violations with the stakeholders and posted them on the SPP password protected TrueShare site⁴ for review. SPP Staff collected potential solutions from stakeholders throughout the footprint, as well as entities outside of the footprint. Additionally, solutions previously identified in the 2012 ITP10, 2013 ITP20, ATSS, and GI studies were also considered in this analysis. After assessment of the needs, SPP investigated mitigation of the overloads and congestion through individual projects by testing to ensure the project provided the expected result.

4.2: CBA Model Development

In order to account for the impacts of the Integrated Marketplace on the SPP footprint a CBA scenario model was developed as part of the 2014 ITPNT Assessment. The CBA scenario modeled SPP as a

⁴ Send an email to questions@spp.org for access to the TrueShare site.

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single BA and only modeled power transfers across the SPP seams. The CBA scenario utilized the SPP portion of the NERC Book of Flowgates updated with information from the 2013 Flowgate Assessment, 2014 ITPNT transmission topology, and 2013 ITP20 economic dispatch data. The goal was to attain a security-constrained unit commitment and economic dispatch (SCUC/SCED) for each year and season modeled in Scenario 0 and 5.

In order to simulate changes that will occur to the SPP portion of the NERC Book of Flowgates due to upgrades coming into service during the defined study period of the 2014 ITPNT Assessment, a constraint assessment was completed to determine if any system constraints should be added, removed, or modified before the SCUC/SCED was created. The constraint list was reviewed and approved by the TWG and other stakeholders before being applied to the models.

Making use of the economic data from the 2013 ITP20, an economic DC tool committed units, creating a dispatch to deliver the most economical power around the constraints approved by the TWG. This unit commitment and dispatch was the SCUC/SCED that was applied to the power flow model used to complete the N-1 contingency analysis described in Part A of the Analysis section. The security constrained economic dispatch in the CBA was applied to the SPP footprint only. The rest of the Eastern Interconnect remained unchanged.

4.3: Rate Impacts

The SPP Open Access Transmission Tariff (OATT) requires that a "Rate Impact Analysis" be performed for each Integrated Transmission Plan (ITP) per Attachment O: Transmission Planning Process, Section III: Integrated Transmission Planning Process, Sub-Section 8):

"8) Process to Analyze Transmission Alternatives for each Assessment:

The following shall be performed, at the appropriate time in the respective planning cycle, for the 20-Year Assessment, 10-Year Assessment and Near Term Assessment studies:...

e) The analysis described above shall take into consideration the following:

vi) The analysis shall assess the net impact of the transmission plan, developed in accordance with this Attachment O, on a typical residential customer within the SPP Region and on a \$/kWh basis."

The rate impact analysis process required to meet this 2014 ITPNT requirement was developed under the direction of the Regional State Committee in 2010-2011 by the Rate Impact Task Force (RITF). The RITF developed a methodology that allocated costs to specific rate classes in each SPP Pricing Zone (Zone).

The first step in this process is to estimate the zonal cost allocation of the Annual Transmission Revenue Requirement (ATRR). This cost allocated ATRR is calculated specifically for the ITPNT upgrades using the ATRR Forecast (Forecast). The Forecast allocated 2014 ITPNT upgrade costs to the Zones using the Highway/Byway ratemaking method. This method allocates costs to the individual Zones and to the Region based on the individual upgrade's voltage. Transformer costs were allocated based on the low side voltage. Regional ATRRs are summed and allocated to the Zones based on their individual Load Ratio Share percentages.

Highway Byway Ratemaking					
Voltage	Regional	Zonal			
300 kV and Above	100%	0%			
100 kV – 299 kV	33%	67%			
Below 100 kV	0%	100%			

Table 4.1: Highway Byway Ratemaking

The following inputs and assumptions were required to generate the Forecast:

- Initial investment of each upgrade
 - New 2014 ITPNT upgrade investments modeled were \$486 million unadjusted dollars
- Transmission Owner's estimated individual annual carrying charge %
- Voltage level of each upgrade
- In-service year of each upgrade
- 2.5% annual straight line rate base depreciation
- 2.5% construction price inflation applied to 2013 base year estimates
- Mid-year in-service convention

4.4: Stability Analysis

Section 4: Analysis Methodology

Voltage stability was analyzed for six significant load areas or 'pockets' as part of the 2014 ITPNT Assessment. Contingencies used for the stability analysis were first created by determining the single worst generator unit outage within the load area. This identified generator outage was paired with all transmission line outages within the load area. Pairing the largest generator outage with each transmission line outage causes the largest amount of voltage instability in the load pocket.

Methodology to test the load pockets for voltage collapse began by increasing the amount of load within the load pocket. Simultaneously, a power transfer sending power from adjacent areas to the load pocket was simulated. The load and power transfer increased until voltage collapse occurs within the load pocket. This simulation was tested under system intact conditions as well as the previously identified contingency conditions on the 2014 ITPNT 2019 summer peak models. The simulation was run with the 2014 ITPNT proposed upgrades included in the models to determine the security limit and load margin for each load pocket.

Stakeholder input was crucial in the load pockets suggested for analysis. These areas included: 1) central Nebraska, 2) south Oklahoma, 3) south central Westar, 4) northeast Westar, 5) Oklahoma City, and 6) Lincoln/Omaha.

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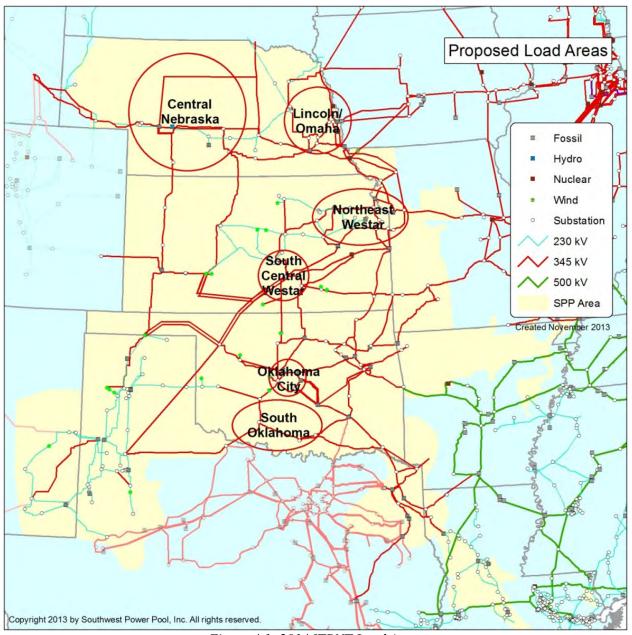


Figure 4.1: 2014 ITPNT Load Areas

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PART II: STUDY FINDINGS

Section 5:Project Summary

5.1: Model Analysis and Results

The base case (N-0) and contingency (N-1) analysis that was completed provided SPP with a list of potential thermal and voltage limit violations. This list was provided to stakeholders to begin working with SPP staff to come up with the most effective solution the potential reliability needs identified. Table 5.1 below summarizes the all the observed thermal loading violations sorted by year and % loading. Violations observed in the following graphs

Potential Therr	Potential Thermal Loading Violations				
% Overload	2014	2015	2019		
100-105%	17	8	21		
105-110%	6	13	16		
110-120%	16	5	8		
> 120%	9	8	8		
Subtotals	48	34	53		

Table 5.1: Potential Thermal Loading Violations

The table below shows all the observed voltage violations sorted by year and the per unit voltage value observed in the base case (N-0) and under contingency (N-1) conditions.

Potential Voltage Limit Violations				
Per Unit Voltage	2014	2015	2019	
>.90 p.u.	22	21	23	
.8890 p.u.	44	45	56	
.8588 p.u.	18	20	54	
< .85 p.u.	21	9	18	
Subtotals	105	95	151	

Table 5.2: Potential Voltage Limit Violations

5.2: Reliability Needs and Solution Development Summary

Based on the results of the contingency analysis, transmission upgrades were developed to mitigate potential reliability problems that were unable to be solved by mitigation plans or operating guides. A draft list of 100 kV + potential needs and draft solutions was presented to the Transmission Working Group at the August 14-15, 2013 meeting. A draft list of 69 kV+ was presented in September 2013. Below is the full list of projects in the ITPNT.

Reliability Project	Project Area(s)	Potential Violation	Miles Added/ Modified
XFR - Swisher 230/115 kV Transformer Ckt 1 Upgrade	SPS	Swisher 230/115 kV Transformer	0
Device - Vaughn Cap 115 kV	WR	Low voltage at East Eureka 115kV	0
Multi - Hoskins - Neligh 345 kV	NPPD	Overload of the Battle Creek - County Line 115 kV line	59.4
Multi - Geary County 345/115 kV and Geary - Chapman 115 kV	WR	Low voltages along the Abilene - Chapman 115 kV line	15.09
Multi - Stegall 345/115 kV and Stegall - Scottsbluff 115 kV	NPPD	Stegall 345/230 kV Transformer Ckt 2 and Stegall Tap 230 kV Ckt 2	23
XFR - Newhart 230/115 kV Ckt 2	SPS	Kress Interchange-Swisher County Interchange 115 kV Ckt 1 overload	0
Line - Welsh Reserve - Wilkes 138 kV reconductor	AEP	Line overload	23.74
Line - East Manhattan - JEC 230 kV	WR	East Manhattan - Jeffrey Energy Center 230kV line overload	27
SUB- Kerr - 412Sub 161kV Ckt 1	GRDA	Kerr to 412 Sub overload	0

Line - 412 Sub - Kansas Tap 161kV Ckt 1 Switch	GRDA	412 Sub to Kansas Tap Sub 161kV line overload	0
Multi-Bailey Co-Lamb County Conversion 115 KV	SPS	Lamb County 115/69 kV transformer overloads	38.6
Multi - Park Lane - Lula 69/138 kV voltage conversion	OGE	Park Lane - Ahloso Tap - Harden Tap,Valley View - Ada Industrial - Park Lane, and FRSCOTP – SOCPMT overloads and low voltages	22.8
Line - Wellington - Creswell 69 kV	WR	Creswell - Sumner County No.4 Rome 69 kV Ckt 1 facility overloads	18.5
Device - County Line 69 kV Cap	OGE	Mobil Oil 69 kV and Wildhorse 69 kV facilities voltage violations	0
XFR - Harrisonvile 161/69 kV	GMO	Harrisonville 161/69 kV Transformer Ckt 1 facility overloads	0
Line - Montgomery - Sedan 69kV	WR	Elk River 69 kV low voltages Fremont 115/69 kV transformer	28.5
Multi - Fremont 161/69 kV	OPPD	overloads; OPPD and NPPD area overloads;	20
Sub - Ruleton 115 kV	SEPC	Low voltages on multiple buses in Sunflower and Midwest	0
Multi-Broken Bow Wind-Ord 115 kV Ckt 1	NPPD	North loup 115 kV,Ord 115 kV and Spalding 115 kV low voltages	42
XFR - Knobhill 138/12.5 kV	OGE	ALVA,CZYCRVT2,HELENA TAP,KNOBHILL,SALINE low voltages	1.6
Line - Sub 907 - Sub 919	OPPD	Sub 907 - Sub 919 69 kV line overloads	3.3
Line - OXY Permian Sub - West Bender Sub 115 kV Ckt rebuild	SPS	OXY Permian Sub-West Bender Sub 115 kV Ckt 1 overload	.5
Sub - Butler - Weaver 138kV Terminal Equipment	WR	Butler - Weaver 138kV Ckt 1 overload	0
Quahada Switching Station 115 kV	SPS	Maljamr 115 kV system low voltage	.42
Sub - McDowell Creek Switching Station 115kV Terminal Upgrades	WR	Fort Junction Switching Station - McDowell Creek Switching Station 115kV Ckts 1 and 2 overload	0
XFR - Neosho 345/138kV	WR	Neosho 161/138/13.2kV Transformer Ckt 1 overload	.5
Line-Chapel Hill REC-Welsh Reserve 138 kV Ckt 1 rebuild	AEP	Chapel Hill Reserve - Welsh Reserve 138 kV Ckt1 overload	4.4
Line - Sumner County - Viola 138kV	WR	Creswell, Farber, Oxford, Sumner, Belle Plain, TC-Rock and Timber Junction low voltages	28
XFR - S1366 161/69kV	OPPD	Sub 1244 and S1366 voltage violations	0
Line - Elk City - Red Hills 138kV	WFEC	Elk City - Red Hills 138kV Ckt 1 base case overload	9
Sub - Sandy Corner 138kV	WFEC	Sand Ridge to Knob Hill138 kV low voltage	0
Sub - Keystone - Ogalala 115 kV Terminal Upgrades	NPPD	Keystone - Ogalala 115 kV line overloads	0

, ,			
Sub - Maxwell - North Platt 115 kV Terminal Upgrades	NPPD	Maxwell - North Platte 115 kV overloads	0
Sub - Clay Center Switching Station 115kV	WR	Clay Center area low voltages	0
Multi-Potash Junction Interchange - Road Runner 230 kV line and 230/115 kV XF	SPS	Potash Junction Interchange 230/115 kV transformer overloads	40
Line - Battle Creek - North Norfolk 115 kV Ckt 1 Reconductor	NPPD	Accommodate new line rating of 193 MVA	3.5
Curry County 115 kV	SPS	Curry County Interchange 116/69 kV transformer Ckt 2 overloads	0
Multi - convert Centre St load and Hereford load from 69 to 115 kV	SPS	Hereford 115/69 kV transformers Ckt 1 and Ckt 2 for the outage of the parallel transformer	7.8
Sub - Mingo 115 kV	SEPC	Mingo xfrm low voltages	0
Multi-Chavis-Price-CV Pines-Capitan 69 kV to 115 kV	SPS	Chaves County Interchange 115/69 kV transformer base case overloads	13
Ellerbe Road - Forbing T 69 kV Ckt 1	AEP	Ellerbe Road - Forbing Road 69 kV Ckt 1 overloads	2
Mustang - Sunshine Canyon 69 kV Ckt 1	WFEC	Mustang - Sunshine Canyon 69kV Ckt 1 overloads	9.9
Broadmoor - Fort Humbug 69 kV Rebuild Ckt 1	AEP	Broadmoor-Fort Humbug 69 kV overloads	1.7
Dangerfield - Jenkins REC T 69 kV Rebuild Ckt 1	AEP	Daingerfield-Jenkins T 69 kV overload	1.3
Hallsville - Longview Heights 69 kV Rebuild Ckt 1	AEP	Hallsville-Longview Heights Ckt 1 69 kV overload	6.6
Hallsville-Marshall 69 kV Rebuild Ckt 1	AEP	Hallsville-Marshall 69 kV Ckt 1 overload	11.2
City of Wellington - Sumner County No.4 Rome 69 kV Rebuild Ckt 1	WR	City Of Wellington - Sumner County No.4 Rome 69 kV Ckt 1 overload	9.06
Kenmar - Northeast 69 kV Rebuild Ckt 1	WR	Ken mar - Northeast 69 kV Ckt 1 overload	1.7
Crestview - Northeast 69 kV Ckt 1	WR	Crestview - Northeast 69 kV Ckt 1 overload	5.6
Elk Junction - Montgomery 69kV Ckt 1	WR	Elk River 69 kV low voltage	9.7
S906 - S924 69kV Rebuild Ckt 1	OPPD	SUB 906 SOUTH - SUB 924 69KV CKT 1 overload	1.34
S924 - S912 69 kV Terminal Upgrades	OPPD	SUB 912 - SUB 924 69KV CKT 1 overloads	0
Letorneau - Air Liquide Tap 69 kV Ckt 1	AEP	Letorneau - Letourneau Tap 69 kV overloads	.3

Table 5.3: 2014 ITPNT Projects

5.3: Project Plan Breakdown

The figure below shows a breakdown of the 2014 ITPNT Project Plan. There are 75 proposed upgrades in the project plan and 12 that are requested for withdrawal. Of the 75 proposed upgrades 64 will be issued a new Notice to Construct (NTC/NTC-C). Eleven upgrades have been identified as needing a modified NTC (NTC Modify).

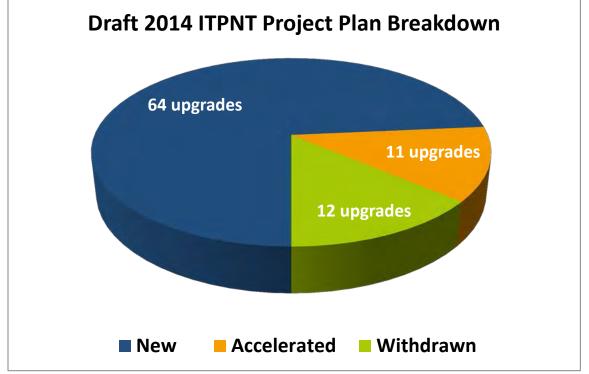


Figure 5.1: 2014 ITPNT Project Breakdown

The following figure illustrates the amount of new line needed based on each voltage class in the 2014 ITPNT Project Plan. There are 258 miles of new transmission line in the project plan.

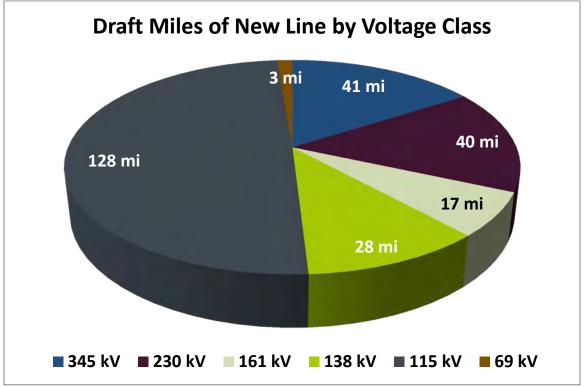


Figure 5.2: 2014 ITPNT New Line by Voltage Class

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The figure below illustrates how many miles of transmission line that will require a rebuild or reconductor. There are 174 miles of rebuild/reconductor and approximately 36 miles of voltage conversion in the draft 2014 ITPNT Project Plan.

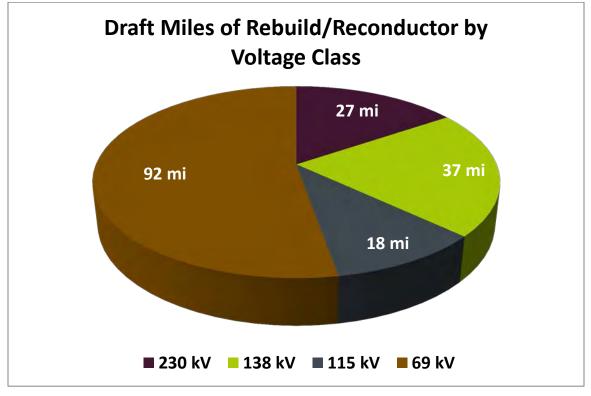


Figure 5.3: 2014 ITPNT Miles Rebuild by Voltage Class

Table 5.4 below shows the dollar amount of new, modified and withdrawn uprades of the 2014 ITPNT Appendix I identified in each state.

Section 5: Project Summary

State	New NTC	Modified NTC	Withdrawn NTC
Arkansas	\$0	\$0	\$0
Kansas	\$194M	\$65M	\$27M
Louisiana	\$6.7M	\$8.2M	\$0
Missouri	\$3.8M	\$0	\$0
Nebraska	\$77M	\$133M	\$0
New Mexico	\$63M	\$0	\$0
Oklahoma	\$36M	\$0	\$36M
Texas	\$107M	\$3.5M	\$11M
Subtotals	\$486M	\$210M	\$74M

Table 5.4: 2014 ITPNT Projects by State

Figure 5.4 is a representation of the 2014 ITPNT portfolio of new, modified, and withdrawn NTCs broken down by voltage level. For each column the cost of the new, modified, or withdrawn NTC is also displayed.

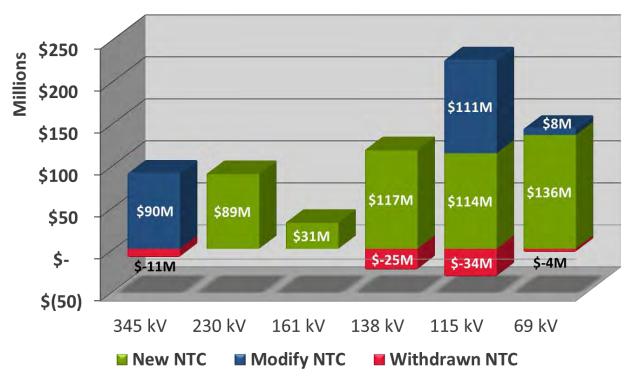


Figure 5.4: 2014 ITPNT Cost by Voltage Level

Figure 5.5 breaks down the mileage for new, rebuild/reconductor, or voltage conversion for the upgrades in the 2014 ITPNT by voltage level.

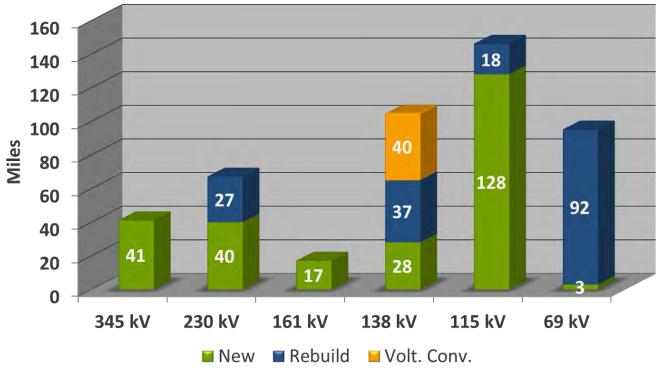


Figure 5.5: 2014 ITPNT Miles Rebuild by Voltage Level

The figure below shows the 2014 ITPNT projects broken down two ways. The green column represents the year that an upgrade is needed. The blue column represents the estimated in-service years of the upgrades and the dollars that will be invested to place the projects in service.

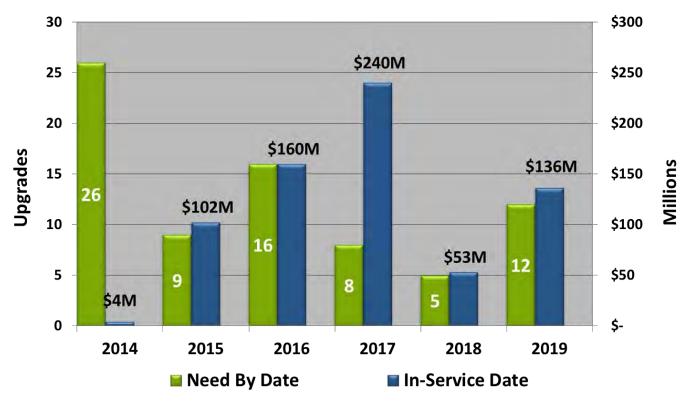


Figure 5.6: 2014 ITPNT Need Date by In-Serive Years and Dollars

Figure 5.7 below shows the allocation of upgrades with new NTCs, modified NTCs, and Withdrawn NTCs between upgrades needed for Regional Reliability and Zonal Reliability. As previously mentioned upgrades classified as Zonal Reliability are required to meet local planning criteria which is more stringent than SPP Criteria.

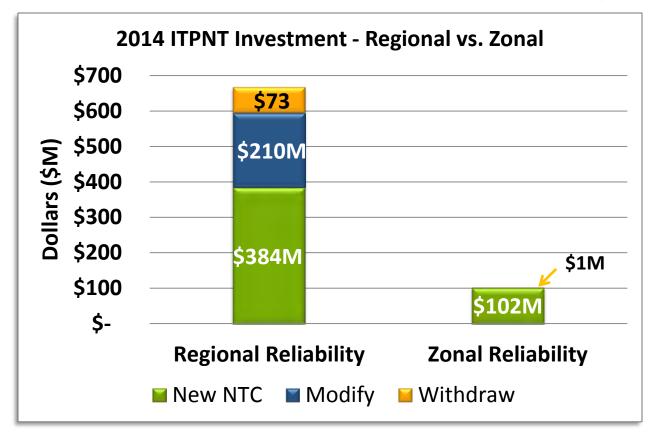


Figure 5.7: 2014 ITPNT Investment – Regional vs. Zonal

5.4: Project Details

This section details each of the major projects in the draft 2014 ITPNT Project Plan. Each of the projects discussed below have an SPP generated cost estimate greater than \$20 million and are needed for Regional Reliability.

East Nebraska

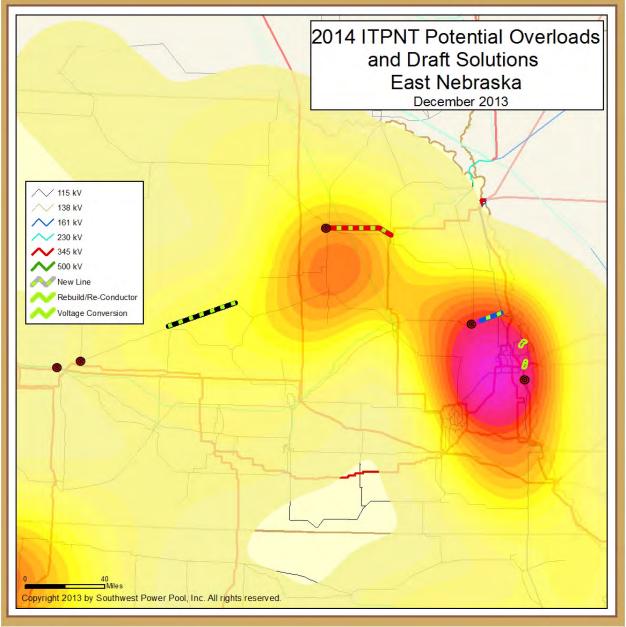


Figure 5.8: 2014 ITPNT East Nebraska

Hoskins – Neligh 345 kV

The Hoskins – Neligh 345 kV project was a previously approved Network Upgrade as part of the 2012 ITP10 Assessment. NTC's were issued by SPP with an identified need date of March of 2019. The results of the 2014 ITPNT Assessment support the acceleration of the need date for this previously approved project. This project includes a new 41 mile line from Hoskins to Neligh, and a new substation with 345/115 kV transformer. This project will addresses the overload of the Battle Creek - County Line 115 kV line for the outage of Albion - Petersburg 115 kV line. It also addresses overloads during contingencies in the Neligh area.

S1226 – S1301 161 kV and S6801 161/69 kV Transformer

Build 20 miles of 161 kV from S1226 to S1301 and five miles of 69 kV line from Fremont to new sub S6801. This project will address overloads in the OPPD and NPPD areas including Sub 902 - Sub 984 69 kV ckt 1 for the loss of Fremont Sub D - Sub 976 69 kV ckt 1.

East Kansas

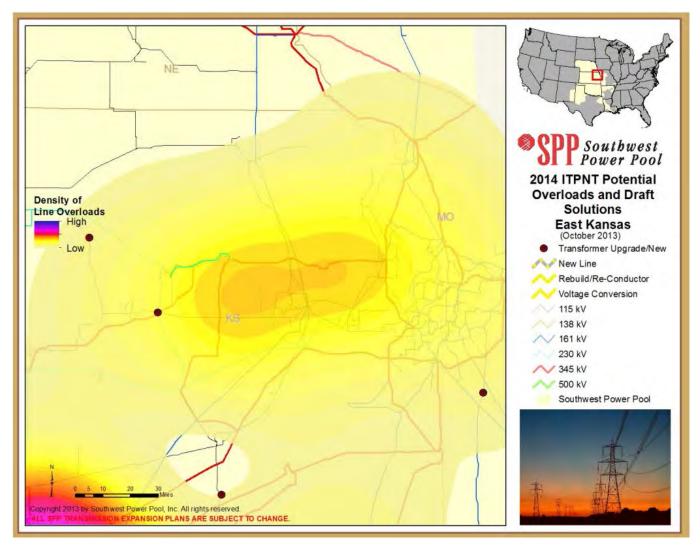


Figure 5.9: 2014 ITPNT East Kansas

Geary County 345/115 kV

This upgrade includes a new Geary County 345/115 kV substation and 345 kV ring bus south of Junction City where JEC - Summit 345 kV and McDowell Creek - Junction City #2 115 kV circuits separate.

Geary - Chapman 115 kV

Build a new 15.1-mile 115kV line between the new Geary County substation and Chapman Tap with 10.4 miles being built as a 2nd circuit to the existing Summit - McDowell Creek 345 kV line.

Geary County 345/115 kV and Geary – Chapman 115 kV address low voltages along the Abilene - Chapman 115 kV line for outages including:

- Abilene Northview 115 kV Ckt 1 and Ckt 2
- East Manhattan Jeffrey Energy Center 230 kV Ckt 1
- McDowell Creek Morris County 230 kV Ckt 1
- McDowell Creek 230/115 kV transformer Ckt 1

East Manhattan - JEC 230 kV

Rebuild existing line to 345 kV standards and upgrade terminal equipment at JEC and East Manhattan. However, this line will still be operated at 230 kV. This will address the overload of the East Manhattan - Jeffrey Energy Center 230kV line for outage of Geary - Jeffrey Energy Center 345kV Ckt 1.

<u>West Nebraska</u>

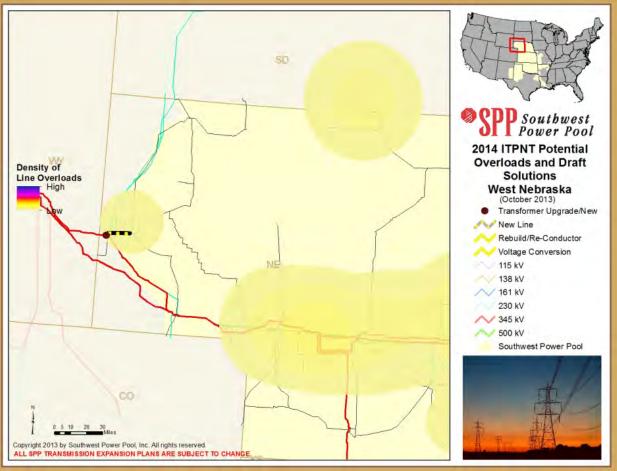


Figure 5.10: 2014 ITPNT West Nebraska

Stegall 345/115 kV

Install a new 345/115 kV 400 MVA transformer at Stegall substation and necessary terminal equipment at the 115 kV and 345 kV buses.

Stegall - Scottsbluff 115 kV

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Install new 22-mile 115 kV line from Stegall to Scottsbluff and install any necessary terminal equipment.

These upgrades are needed to address low voltage at Victory Hill for the loss of Stegall 345/230 kV Transformer Ckt 1. The Stegall 345/115 kV Transformer and Stegall 115 kV Line project was a previously approved Network Upgrade as part of the 2013 ITPNT Assessment. NTC's were issued by SPP with an identified need date of June of 2015. The results of the 2014 ITPNT Assessment support the acceleration of the need date for this previously approved project.

East Texas

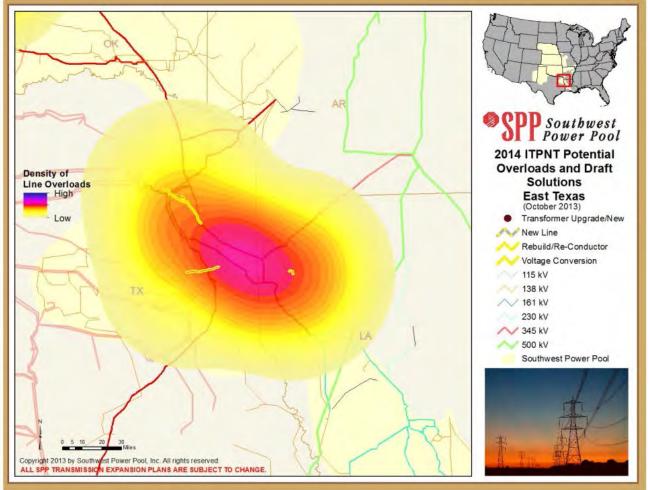


Figure 5.11: 2014 ITPNT East Texas

Welsh Reserve - Wilkes 138 kV Reconductor

Rebuild 23.7 miles of 138 kV line from Welsh REC – Wilkes and upgrade switches at both ends and wave traps, jumpers, CT ratios, and relay settings at Wilkes. This will address the overload of the line for the outage of Lone Star South-Pittsburg 138 kV line.

<u>Texas</u>

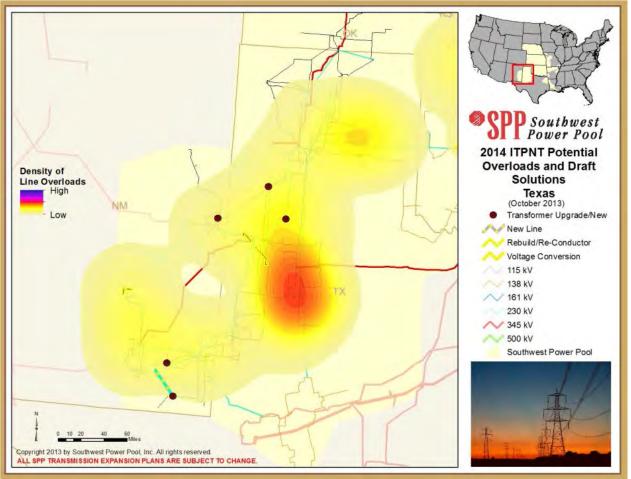


Figure 5.12: 2014 ITPNT Texas

Potash Junction Interchange - Road Runner 230 kV line and 230/115 kV XF

Build a new 40 mile 230 kV line from Potash Junction Interchange to a new 230/115 kV Road Runner Substation. Install the necessary 230 kV terminal equipment at Potash Junction and Road Runner substation with a 230/115 kV 250 Mva transformer and 115 kV terminal equipment. This will address the overload of Potash Junction Interchange 230/115 kV transformer for outages including:

- Pecos Interchange-Potash Junction 230 kV Ckt 1
- Monument Sub-West Hobbs Switching station Ckt. 1
- Maddox Station-Sanger Switching station
- Oxy Permian Sub-Sanger Switching Station

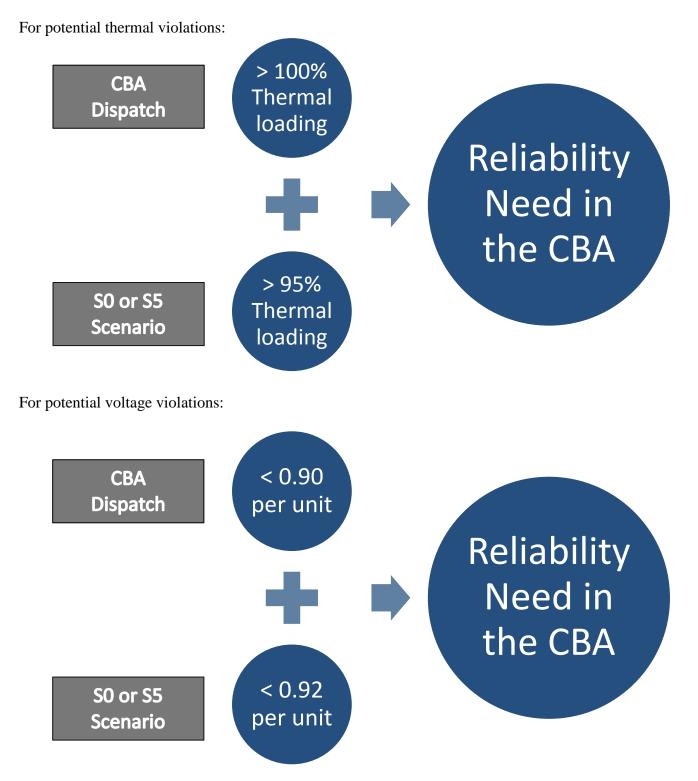
This project also will mitigate low voltage at I.M.C. #1 Sub 115 kV bus for the outage of IMC # TP 1 115-Intepdw-TP3 115 kV.

5.5: Reliability Upgrades from the CBA Model

This section details potential reliability issues from the CBA N-1 contingency analysis in the 2014 ITPNT. At the May 14, 2013 meeting the TWG approved the process by which a potential additional

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reliability issue would be identified. The methodology for determining reliability needs in the CBA scenario is found below.



Based on these criteria no upgrades were identified as potential advancement.

In addition, 24 facilities were identified in CBA as overloaded that were not overloaded in S0/S5. All were loaded below 95% in the S0/S5. These are documented in the table below.

Season	Facility	CBA % Loading	Near Term S0/S5 % Loading
14L	CANYON EAST SUB - OSAGE SWITCHING STATION 115KV CKT 1	102.2	46.9
14L	EAST LIBERAL - TEXAS COUNTY INTERCHANGE PHASE SHIFT TFMR 115KV CKT 1	106	8.5
14L	AMOCO SWITCHING STATION - SUNDOWN INTERCHANGE 230KV CKT 1	111.7	80.7
14L	MOUNDRIDGE (MOUND10X) 138/115/13.8KV TRANSFORMER CKT 1	112.2	19.9
14SP	AFTON (AFTAUTO1) 161/69/13.8KV TRANSFORMER CKT 1	100.1	92.4
14SP	HUMBOLDT (S975 T4) 161/69/13.8KV TRANSFORMER CKT 1	102.6	86.7
14SP	MILL STREET 2 - MUNCIE 2 69KV CKT 1	104.8	38.9
14SP	KAW 2 - SPEAKER 2 69KV CKT 1	106.7	33.4
14SP	COL PAL2 - KAW 2 69KV CKT 1	108.8	14.2
14SP	BARBER 2 - KAW 2 69KV CKT 1	116	21.7
14SP	AFTON - CLEORA TAP 69KV CKT 1	125.1	75.4
14SP	COL PAL2 - MUNCIE 2 69KV CKT 1	125.8	10.5
15SP	CIMARRON RIVER PLANT - SEWARD-3 115KV CKT 1	100.4	71.7
15SP	CROSSTOWN - NORTHEAST 161KV CKT 1	101.5	90.3
15SP	OMHUFFYT - OMPA-PONCA CITY 69KV CKT 1	103.1	13.3
15SP	AFTON - FAIRLAND EDE TAP 69KV CKT 1	104.7	51.1
15SP	FAIRLAND EDE TAP - FAIRLAND NEO 69KV CKT 1	106	52.9
15SP	HASKELL - SEWARD-3 115KV CKT 1	106	77.2
15SP	BROOKLINE (BRKLTX1) 345/161/13.2KV TRANSFORMER CKT 1	107.1	91.3
15SP	CLEORA TAP - PENSACOLA 69KV CKT 1	108.5	66.1
19SP	SUB 3456 (S3456 T4) 345/161/13.8KV TRANSFORMER CKT 1	100.7	79.7
19SP	SUB 1211 - SUB 1220 161KV CKT 1	102.3	83.9
19SP	WEST POINT 115/34.5KV TRANSFORMER CKT 1	104	70.7
19SP	PLATTESMOUTH - SUB 985 69KV CKT 1	107.5	94.4

Table 5.5: CBA Overloads not in S0/S5

One bus was identified in a CBA model with voltage below criteria that was not in the S0/S5 model. The Victory Hill 230 kV bus was identified with a 0.89666 p.u. voltage in the 14 Light Load case. A previously approved project is identified as the solution.

5.6: Rate Impacts on Transmission Customers

The 2014 ITPNT upgrades were run in the SPP Cost Allocation Forecast, the peak ATRR impact year was shown to be 2020.

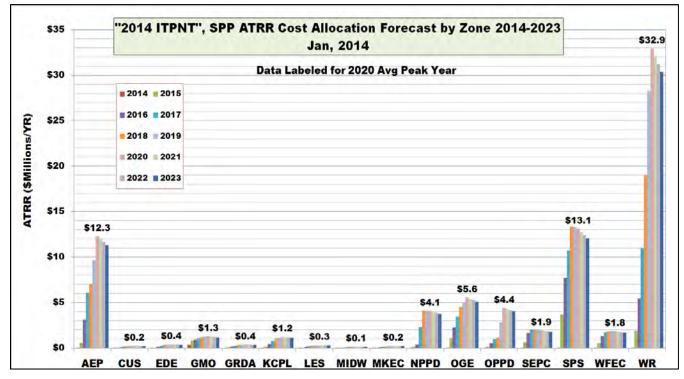


Figure 5.13: ATRR Cost Allocation Forecast by Zone of the 2014 ITPNT

As shown in the following chart, the majority of the 2014 ITPNT projects will be cost allocated to the Pricing Zone hosting the upgrade and a smaller amount will be cost allocated to the SPP region through the regional rate.

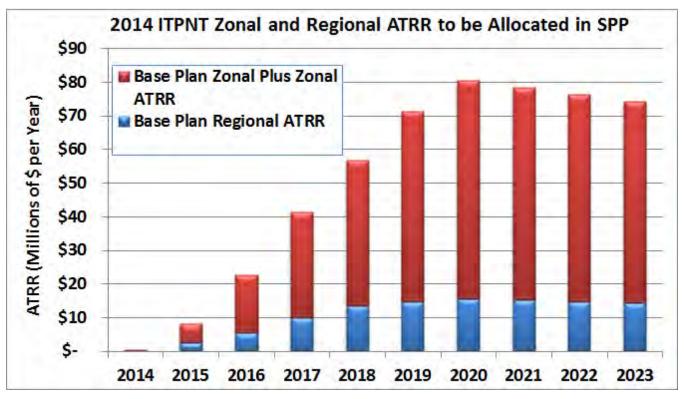


Figure 5.14: Zonal and Regional ATRR allocated in SPP

For additional information on estimating ATRR by Zone please see:

http://www.spp.org/publications/UPDATED%20July%2010%202012%20TEN%20YEARS%20ONLY.zip

The peak year ATRR is converted into a monthly impact on a typical 1000 kWh per month Retail Residential ratepayer. This conversion considers the individual Zone's ATRR allocation percentage by customer class and sales forecast in the peak year. This rate is then multiplied by a common SPP monthly Retail Residential consumption of 1000 kWh per month. The result is the monthly Rate Impact.

For additional information on how rate impacts are estimated please see:

 $\underline{http://www.spp.org/publications/RITF\%\,20Output\%\,20 for\%\,20 RSC\%\,20 Jan\%\,2024\%\,202011\%\,20 REV\%\,204.ppt$

The SPP RSC has tasked the RITF to update key Zonal data such as allocation factors, sales forecasts, average monthly consumption by customer type, etc. Figure 5.15 below was calculated using 2013 Zonal data as reported by each Pricing Zone.

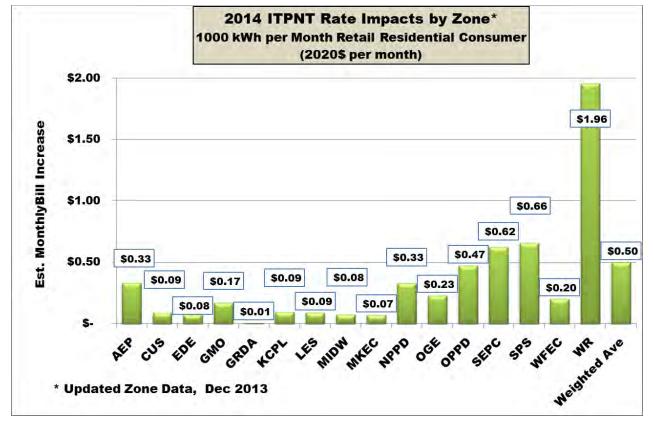


Figure 5.15: 2014 ITPNT Monthly Bill Impact 1000 kWh/Month Retail Residential

Zones providing information on more than one state were combined using a weighted average based on sales projections in each state in the peak ATRR year of 2020.

5.7: Summary of Potential Stability Violations

Based on the projected 2019 load levels, no voltage instability in the six load pockets was identified for the 2014 ITPNT upgrades. Results of the voltage stability analysis for the six load pockets can be found in Table 5.6.

	Central Nebraska	South Oklahoma	South Central Westar	Northeast Westar	Oklahoma City	Lincoln/Omaha
Initial Load (MW):	477	1712	2103	1507	3463	3728
Voltage Collapse Load (MW):	597	2473	4003	2707	5913	6168
Security Limit (MW):	587	2463	3993	2697	5903	6163
Load Margin (MW/%):	110/23%	751/44%	1890/90%	1190/80%	2440/70%	2435/65%

Table 5.6: Summary of Potential Stability Violations

*In the 2011 ITP Load Pocket analysis, the Central Nebraska load area was defined as area 640, NPPD. For this analysis, the Central Nebraska load area is defined as 29 selected buses provided by NPPD.

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PART III: APPENDICES

Section 6:Glossary of Terms

Acronym	Description	Acronym	Description
ATRR	Annual Transmission Revenue Requirements	MVA	Mega Volt Ampere (10 ⁶ Volt Ampere)
ATSS	Aggregate Transmission Service Studies	MW	Megawatt (10 ⁶ Watts)
СВА	Consolidated Balancing Authority	NERC	North American Electric Reliability Corporation
BOD	SPP Board of Directors	NTC	Notification to Construct
EHV	Extra High Voltage	NTC-C	Notification to Construct with Conditions
FERC	Federal Energy Regulatory Commission	OATT	Open Access Transmission Tariff
GI	Generation Interconnection	RITF	Rate Impact Task Force
GW	Gigawatt (10 ⁹ Watts)	SPP	Southwest Power Pool, Inc.
ITPNT	Integrated Transmission Plan Near- Term Assessment	STEP	SPP Transmission Expansion Plan
ITP10	Integrated Transmission Plan 10-Year Assessment	TPL	Transmission Planning NERC Standards
ITP20	Integrated Transmission Plan 20-Year Assessment	то	Transmission Owner
MDWG	Model Development Working Group	TOGs	Transmission Operating Guides
MISO	Midcontinent Independent System Operator, Inc.	TWG	Transmission Working Group
МОРС	Markets and Operations Policy Committee		

The following terms are referred to throughout the report.

Table 6.1: 2014 ITPNT Glossary of Terms

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Section 8: Appendix II

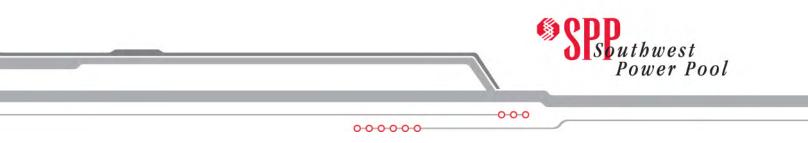
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2014 ITPNT Scope

0-0-0

December 19, 2012 TWG Approved Engineering



Revision History

Date	Author	Change Description
12/7/2012	Staff	Initial Draft
12/19/2012	Staff	TWG Approval
1/16/2013	Staff	MOPC Approval
5/28/2013	Staff	Updated based on feedback from MOPC and TWG
6/26/2013	TWG	Approved previous revisions and added Westar waivers and clarified language about NTCs from CBA model

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<u>Overview</u>

This document presents the scope and schedule of work for the 2014 Integrated Transmission Planning (ITP) Near-Term (NT) Assessment. This document was reviewed by the Transmission Working Group (TWG) in December 2012.

<u>Objective</u>

The third phase of the ITP process is the Near-Term Assessment (ITPNT). The main objectives of 2014 ITPNT are to evaluate the reliability of the SPP transmission system in the near-term planning horizon, collaborate on the development of improvements with stakeholders, and identify necessary upgrades for approval and construction. The 2014 ITPNT's primary focus is identifying solutions required to meet the reliability criteria defined in OATT Attachment O Section III.6. The process will also include coordination of transmission plans with the ITP20, ITP10, Aggregate Study, and Generation Interconnection processes.

The 2014 ITPNT will create an effective near-term plan for the SPP footprint which identifies solutions to potential issues for system intact and (N-1) conditions using the following principles:

- Identifying potential reliability-based problems (NERC Reliability Standards TPL-001 and TPL-002, SPP and local criteria)
- Utilizing Transmission Operating Guides
- Developing additional mitigation plans including transmission upgrades to meet the region's needs and maintain SPP and local reliability/planning standards

The 2014 ITPNT study horizon will include modeling of the transmission system for six years (i.e. 2019). This will provide enough lead time requirements such that NTC letters can be issued and project owners can begin work in a timely fashion to enable the completion of more complex projects by the identified need date.

The process is open and transparent, allowing for stakeholder input. Study results are coordinated with other entities and regions responsible for transmission assessment and planning. TWG will review and vet components of the 2014 ITPNT process, which includes but is not limited to the following items: model development, reliability analysis, stability analysis, transmission plan development, seams impacts, and 2014 ITPNT Report.

Data inputs

SPP will consider power flow models with individual Balancing Authorities (BA) as well as models with a Consolidated Balancing Authority (CBA Scenario). SPP will use 2014, 2015, and 2019 models in the 2014 ITPNT for the following seasons: 2014 light load, 2014 summer peak, 2015 summer peak, 2019 light load, and 2019 summer peak. Thus, 15 model scenarios will be analyzed as part of the 2014 ITPNT Assessment. The modeling assumptions are detailed in sections below.

A. <u>Load</u>

The load density and distribution for the steady state analysis will be provided through the MDWG model building process¹. The load will represent each individual BA's coincident conditions per season (i.e. non-coincident conditions for the SPP region). Resource obligations will be determined for the footprint taking into consideration what load is industrial, non-scalable type loads and which load grows over time.

B. <u>Generation Resources</u>

Existing generating resources will be represented in the power flow models taking into account planned retirements and retirements. New generating resources included in the power flow models will be limited to resources with a FERC filed Interconnection Agreement not on suspension or resources with an executed Service Agreement. Exceptions to these qualifications are addressed in the ITP Manual.

Mid-Kansas Electric Company requested a waiver for its Rubart generation station to be included in the 2014 ITPNT models through the process outlined in the ITP Manual and MDWG manual. That request was approved by the TWG in May 2013. Golden Spread Electric Cooperative requested a waiver for its Antelope Station generation to be included in the 2014 ITPNT models. That request was approved by the TWG in June 2013.

Westar Energy, Inc. requested a waiver for Post Rock wind generation to be included in the 2014 ITPNT models. That request was approved by the TWG in June 2013. Westar Energy, Inc. also requested a waiver for Flat Ridge wind generation to be included in the 2014 ITPNT models. In June 2013, TWG approved 300 MW of the request be included in the models.

All generation with waivers was placed in the necessary models based on the estimated in-service dates.

C. <u>Model Topology</u>

The topology used to account for the transmission system excluding generation will be the current transmission system and the following transmission upgrades: SPP approved for construction upgrades, SPP Transmission Owners' planned (zonal sponsored) upgrades, and first tier entities' planned upgrades (AECI, Entergy, MEC, and WAPA). The model development processes for SPP

¹ <u>SPP MDWG Powerflow Procedure Manual</u>

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MDWG and SERC account for long-term transmission line outages as forecasted by each process's member transmission owners.

D. <u>Transmission Service</u>

To account for the confirmed long-term transmission service SPP will create two scenario models representing individual BAs. The first scenario (S0) contains projected transmission transfers between individual BA's and generation dispatch on the system. The second scenario (S5) contains all confirmed long-term firm transmission service with its necessary generation dispatch.

E. <u>Consolidated Balancing Authority</u>

In order to account for the impacts of the Integrated Marketplace on the SPP footprint a Consolidated Balancing Authority (CBA) scenario model will be developed as part of the 2014 ITPNT Assessment. The CBA scenario will model SPP as a single Balancing Authority and will only model transmission transfers across the SPP seams. The CBA scenario will utilize the SPP portion of the NERC Book of Flowgates updated with information from the 2013 Flowgate Assessment, 2014 ITPNT transmission topology, and 2013 ITP20 economic dispatch data. The goal will be to attain a security-constrained unit commitment and economic dispatch (SCUC/SCED) for each year and season identified as part of the 2014 ITPNT Assessment. In order to simulate changes that will occur to the SPP portion of the NERC Book of Flowgates due to upgrades coming into service during the defined study period of the 2014 ITPNT Assessment, a constraint assessment will be completed to determine if any constraints should be added, removed, or modified before the SCUC/SCED have been created. The constraint list will be reviewed and approved by the TWG before being applied to the models. Making use of the economic data from the 2013 ITP20, an economic DC tool will commit units and create a dispatch to deliver the most economical power around the constraints approved by the TWG. This unit commitment and dispatch will be the SCUC/SCED that will be applied to the power flow model which will be used to complete the N-1 contingency analysis described in Part A of the Analysis section. The security constrained economic dispatch in the CBA will be applied to the SPP footprint only. The rest of the Eastern Interconnect remained unchanged.

F. <u>Demand Response</u>

Demand response will be incorporated into the models through lower load and capacity forecasts, which is developed in Subsection A above.

Analysis

A. Steady state assessment

The steady state assessment will use the following models: 2014 light load and summer peak, 2015 summer peak, 2019 summer peak and light load using individual BA dispatch. Staff will also use consolidated Balancing Authority models of these same seasons. An N-1 contingency analysis will be conducted for the peak and off-peak cases for facilities 60 kV and above in SPP and facilities 100 kV above in first-tier. All facilities 60 kV and above in SPP and 100 kV and above in first-tier will be monitored for this analysis in consideration of 60 kV and above solutions to the problems identified.

B. Solution development

SPP will use a pool of possible solutions to evaluate upgrades used to create the 2014 ITPNT plan. This pool of solutions will come from SPP transmission service studies, generation interconnection studies, previous ITP studies, local reliability planning studies by TOs, Attachment AQ studies, stakeholder input and staff evaluation.

C. Shunt reactive requirements assessment

If any 300 kV and above upgrades are identified as solutions and presented in the 2014 ITPNT Project Plan, line-end reactive requirements analysis will be performed for the new transmission lines greater than 300 kV system. This analysis will be performed on the 2019 light load models by opening each end of the new line to identify preliminary shunt reactive needs. The analysis will provide the amount of MVAR needed to maintain both 1.05 and 1.1 p.u. voltage at both ends of each new line identified. After performing the light load analysis, the reactor will be studied under steady state summer peak conditions to determine if switched capability is needed. This analysis will provide an indicative amount of reactor needs before design level studies are completed. This analysis will be completed with the entire 2014 ITPNT Project Plan included in the model.

D. Load pocket analysis

SPP will perform voltage stability analysis for 6 load pockets as part of the 2014 ITPNT Assessment. These areas include: Central Nebraska, South Oklahoma, South Central Westar, Northeast Westar, Oklahoma City, and Lincoln/Omaha.

Contingencies used for the stability analysis will be developed by determining the single worst generator unit outage within the load area. This identified generator outage will paired with all transmission line outages within the load area. By pairing the largest generator outage with each transmission line outage, the largest amount of voltage instability will occur in the load pocket.

Methodology to test the load pockets for voltage collapse will begin by increasing the amount of load within the load pocket. Simultaneously, a power transfer sending power from adjacent areas to the load pocket will be simulated. The load and power transfer will increase until voltage collapse occurs within the load pocket. This simulation will be tested under system intact conditions as well as the previously identified contingency conditions on the 2014 ITPNT 2019 summer peak models. The simulation will be run with the 2014 ITPNT proposed upgrades included in the models to determine voltage stability of each load pocket with the 2014 ITPNT portfolio.

E. Final reliability assessment

After all upgrades have been identified and incorporated into the power flow models, a steady state N-1 contingency analysis will be conducted to identify any new issues.

<u>Seams</u>

In the development of 2014 ITPNT, Staff will review expansion plans of neighboring utilities and Regional Transmission Organizations (RTOs) and include first-tier party's planned projects in the 2014 ITPNT models. Based upon that review, Staff may take into account other external plans. The models used in the 2014 ITPNT incorporate the latest data from the neighboring utilities and RTOs through the MMWG model development process.

Potential impacts of the 2014 ITPNT on neighboring systems will be considered. Coordination is done in accordance with existing Seams agreements. For those without an explicit agreement, those neighbors will be contacted in order to discuss the potential impacts of the ITP on their systems.

Study Process

- 1. The resource additions and retirements, load profiles, and transmission service inclusion processes will be developed through stakeholder reviews.
- 2. The TWG/MDWG will oversee the development of the models that incorporate the assumptions developed in step #1 above, including review of data and results. A model review will be conducted by MDWG to verify the models before analysis proceeds.
- 3. An initial steady state analysis will be performed using applicable planning standards on power flow models that represent the applicable load profiles and generation dispatch per year and season. The assessment will be for the horizon years 1-6. Within SPP all facilities 60 kV and above in the models will be monitored and within the first-tier for all facilities 100 kV and above will be monitored in this analysis as a means to determine 60 kV and above solutions in the SPP footprint.
- 4. With input from stakeholders, 60 kV and above solutions will be developed to mitigate potential criteria violations. Solutions will be coordinated with the Aggregate (AG) and Generation Interconnection (GI) Study processes for the SPP transmission system footprint. An NTC will not be automatically issued for a potential violation identified in the CBA scenario models.
 - a. Since Transmission Operating Guides (TOG) are tools used to mitigate violations in the daily management of the transmission grid, TOGs may be used as alternatives to planned projects and are tested annually to determine effectiveness in mitigating violations. For the purpose of this study, the 2014 ITPNT will identify all solutions where the use of TOGs is deemed not effective.
 - b. A check will be performed to determine if projects identified in the ITP20 or ITP10 assessments will eliminate or defer any projects identified in the 2014 ITPNT.
- 5. A follow-up analysis will be performed repeating the steps above on the identified solutions to validate the solutions and check for potential violations that may have been created.
- 6. Load pocket analysis will be performed on the final portfolio of upgrades for the specified load pockets.
- 7. Stability analysis will be performed on the final portfolio of upgrades.

Timeline

The study will begin in January 2013 with final results complete by January 2014. The estimated study timeline is as follows:

	Group to review/endorse	Start Date	Completion Date
Scoping	TWG	November 2012	January 2013
Model Development (S0, S5)	TWG	February 2013	May 2013
Model Development (CBA)*	TWG	April 2013	August 2013
Reliability Assessment (S0, S5)	TWG	June	2013
Reliability Assessment (CBA)	TWG	Septem	ber 2013
Solution Development	TWG	June 2013	December 2013
Load Pocket Assessment	TWG	August 2013	December 2013
Stability Assessment	TWG	August 2013	December 2013
Final Reliability Assessment	TWG	Decem	ber 2013
Review report	TWG	November 2013	November 2013
Final report with recommended	TWG	December2013	January2014
plan	MOPC/BOD	Januar	ry 2014

*Note: Model Development for the CBA Scenario includes TWG review of constraints to be used in the models

Staff plans to hold stakeholder planning summits at least twice during the 2013 calendar but may hold more as appropriate.

Deliverables

The results from the 2014 ITPNT, which define a set of transmission upgrades needed to meet the near-term needs of the system, will be compiled into a report detailing the findings and recommendations of SPP Staff.

Changes in Process and Assumptions

In order to protect against changes in process and assumptions that could present a significant risk to the completion of the ITPNT, any such changes must be vetted. If TWG votes on any process steps or assumptions to be used in the study, those assumptions will be used for the 2014 ITPNT. Changes to process or assumptions recommended by stakeholders must be approved by the TWG. This process will allow for changes if they are deemed necessary and critical to the ITP, while also ensuring that changes, and the risks and benefits of those changes, will be fully vetted and discussed.

Section 9: Appendix III

Section 9: Appendix III

Appendix III: Generation Details

Appendix III exhibits the details of new generation that was captured in the ITPNT models along with the existing generation used to help serve a Balancing Authorities load if lacking sufficient generation.

Table 1 shows new generation in SPP that was included in the ITPNT models. This generation has both executed Generation Interconnection and transmission service agreements.

Generation Capacity with an Executed Transmission Service Agreement

Model Area	Plant Name	Net Capacity (MW)	In-Service Date
Southwestern Public Service Company	Buffalo Dunes 2 Wind	101	1/1/2014
Southwestern Public Service Company	DeWind Little Pringle I	10	In-Service
Southwestern Public Service Company	DeWind Little Pringle II	10	In-Service
Southwestern Public Service Company	Channing Wind	4.2	In-Service
Southwestern Public Service Company	High Majestic II Wind	79.5	In-Service
Southwestern Public Service Company	GSEC Mustang Unit #6	165	In-Service
Southwestern Public Service Company	Wildcat Wind	27.3	In-Service
Sunflower Electric Power Corporation	Rubart	108	In-Service
Sunflower Electric Power Corporation	Greenburg WF	21.9	6/1/2014

Table 1

In the ITPNT models additional generation was included and dispatched that has an executed FERCfiled Generation Interconnection Agreement not on suspension even though it does not have an executed transmission service agreement. This is shown in Table 2.

Generation Capacity without an Executed Transmission Service Agreement

Model Area	Plant Name	Net Summer Capacity (MW)	In-Service Date
Southwestern Public Service Company	Antelope CT	180	6/1/2012
Southwestern Public Service Company	Jones #4	180	6/1/2013
Westar Energy	Flat Ridge II Wind	300	6/1/2013
Midwest	Post Rock Wind	201	6/1/2013

To address the generation deficiencies, existing IPP generation was also modeled and dispatched to serve load as represented in Table 3.

IPP Generation Capacity Used to Meet Shortfall of Generation and Interchange		
Units used for shortfall	MW available for Shortfall*	
Oneta Energy Center	310	
Eastman Cogeneration Facility	485	
Harrison County Power Project	262	
Dogwood	430	
	Units used for shortfallOneta Energy CenterEastman Cogeneration FacilityHarrison County Power Project	

Table 3

*Based on available capacity less confirmed long-term firm transmission service.

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Southwest Power Pool, Inc.

Section 10: Appendix IV

Section 10: Appendix IV

ITPNT

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2014 Integrated Transmission Plan Near-Term Stability Analysis

December 18, 2013

SPP Engineering



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Revision History

Date	Author	Change Description	
12/10/2013	SPP Staff	Initial Draft	
12/18/2013	SPP Staff	TWG Approval	

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Section 1: **Overview**

1.1: Introduction

ITPNT solutions will be assessed for reliability by examining thermal and voltage performance. Thermal and voltage performance are normally assessed through the tools of steady state contingency analysis; however, this analysis does not



determine the distance to and location of voltage collapse or voltage instability. This must be determined by examining voltage performance during power transfer into a load area or across an interface. This document provides the methods of study as well as the results of these assessments for the ITPNT upgrade case.

1.2: Background

Voltage stability is defined as a power system's ability to control voltages following a large disturbance such as a fault or contingency. Voltage stability requires that system voltage characteristics be maintained during periods of high load, large power transfers, or sudden disturbances such as a loss of a generator and/or transmission line.

Voltage stability analysis was performed using Voltage Security Assessment Tool (VSAT). This tool is part of Powertech Labs, Inc.'s Dynamic Security Assessment (DSA) Tools.

1.3: Objective

The objective of the ITP Near-Term Stability Analysis is to determine voltage stability limitations and reactive reserve within high load areas in the SPP footprint. This analysis will be assessed using the ITPNT Upgrade 2019 Summer Peak Cases.

1.4: Load Area Analysis

A total of six load areas, or "pockets" were selected and prioritized for the ITPNT voltage stability analysis. These load areas are listed below. Analysis was performed by increasing load within the load pocket while increasing transfer to the load area from adjacent areas. The transfer was increased while under contingency until voltage collapse occurred on the transmission system inside the load area. This provides a load area increase limit as well as the amount of reactive reserve available at the collapse point.

Load Area
Central Nebraska
Lincoln/Omaha
South Oklahoma
Oklahoma City
South Central Westar
North East Westar
-

Table 1.1: Prioritized Load Areas

Southwest Power Pool, Inc.

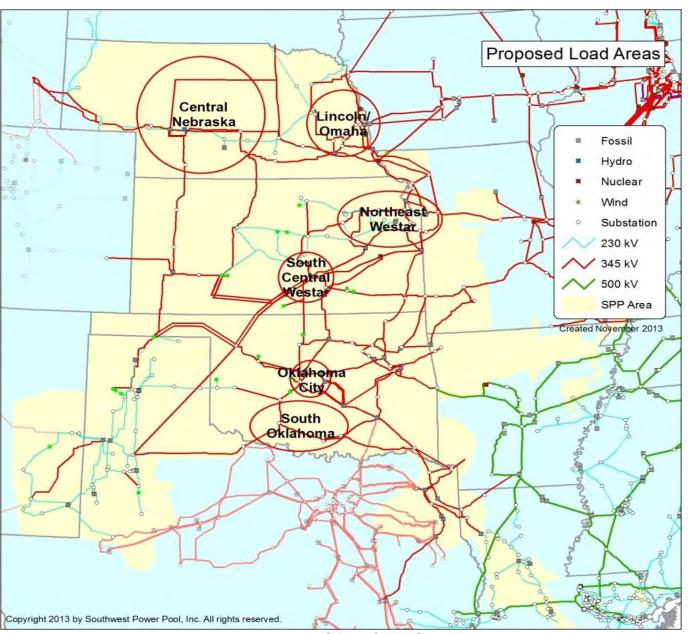


Figure 1.1: Load Areas for Analysis

The contingencies consist of a selected single generation outage (G-1) with all branch outages (T-1), or one generator and one transmission branch within the load area removed from service. More specifically:

The selected G-1 outage is the generator within the load area that, when compared to others within the load area, causes the highest degree of voltage instability stress during the transfer. This generator was paired with all T-1 contingencies, which consisted of all branches greater than 100 kV within the load area.

Section 2: South Oklahoma

2.1: Load Area

The South Oklahoma load area under this study is defined by the following zones:

Area	Zone
520 AEPW	533 WTU
SZU AEP W	549 PSO Western
	589 AEP CS
525 WFEC	590 АЕР КР
JZJ WFEC	591 FLA
	592 AEP IM-I

Table 2.1: South Oklahoma Load Area

2.2: Summary

Load area analysis was performed by importing generation into the South Oklahoma load area and increasing both real and reactive load in proportion to the initial MW output of each source generator for the Upgrade Case. The 69 kV loads were equivalenced to the 138 kV system buses in the load zones.

Table 2.2 provides the simulation results. These results indicate that voltage instability occurs on the 138kV transmission system subsequent to a load increase of 761 MW.

Case Used	2019S ITPNT Upgrade Case		
Generation Source	Areas 351,502,503,523,526,531, 534,541,542,640,645,650,652		
Initial Source (MW)	47278		
Load Area	Zones 533,549,589,590,591,592		
Initial Load Area (MW)	1,712		
Load at Voltage Collapse (MW)	2,473		
	<u>A101:</u>		
Limiting Contingency	<u>G-1:</u> SWS3 24.0 1 out		
	<u>T-1:</u> Anadarko -Georgia 138 out		
	Zone PSO: 58 MVar		
MVar Reserve at Voltage Collapse	Zone FLA: 206 MVar		
	Zone AEP-CS: 141 MVar		

Table 2.2: South Oklahoma Load Area Results

2.3: Voltage Instability

The table and figure below show the 138kV buses that have the highest participation in the collapse.

	2019 NT Upgrade Case			
	Bus No.	Bus Name	kV	Zone
1	520923	GEORGIA4	138	525
2	520912	FLETCH-4	138	525
3	520900	EMPIRE-4	138	525
4	520864	COMANCH4	138	525

Table 2.3: South Oklahoma Load Area Buses Experiencing Voltage Collapse

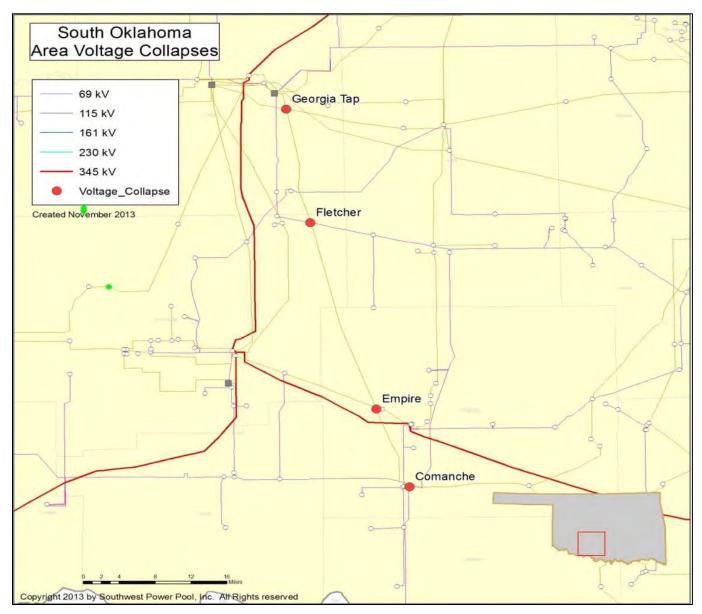


Figure 2.1: South Oklahoma Load Area Buses Experiencing Voltage Collapse

The P-V curves below are provided for the 138kV buses in table 2.3 above for the limiting contingency shown in table 2.2. These curves indicate that when the load is proportionally increased in the South Oklahoma area, voltage collapses occur. The last point shown is the point of voltage collapse.

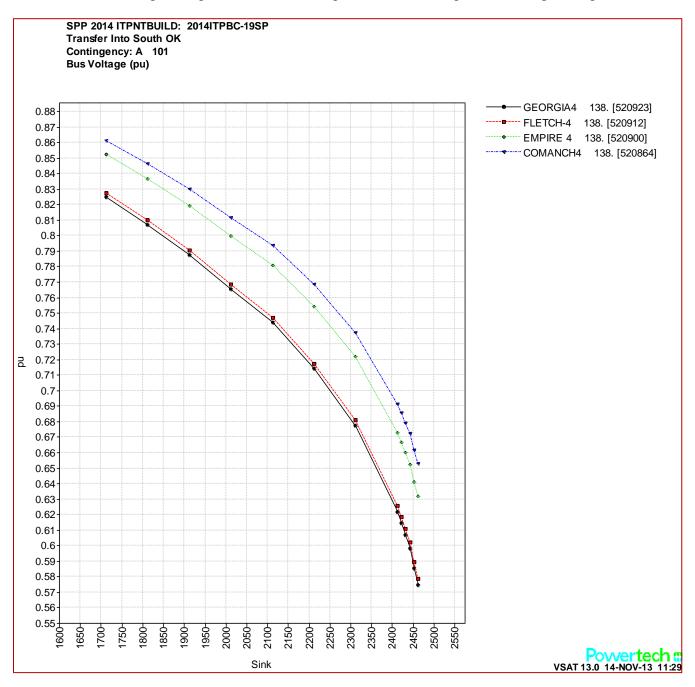
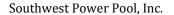


Figure 2.2: South Oklahoma Load Area PV Curves for Upgrade Case

2.4: MVar Reserve

The figure below shows the MVar reserve remaining in each zone of the load pocket at the collapse point for the limiting contingency for the Upgrade Case. The remaining three zones have no generation.



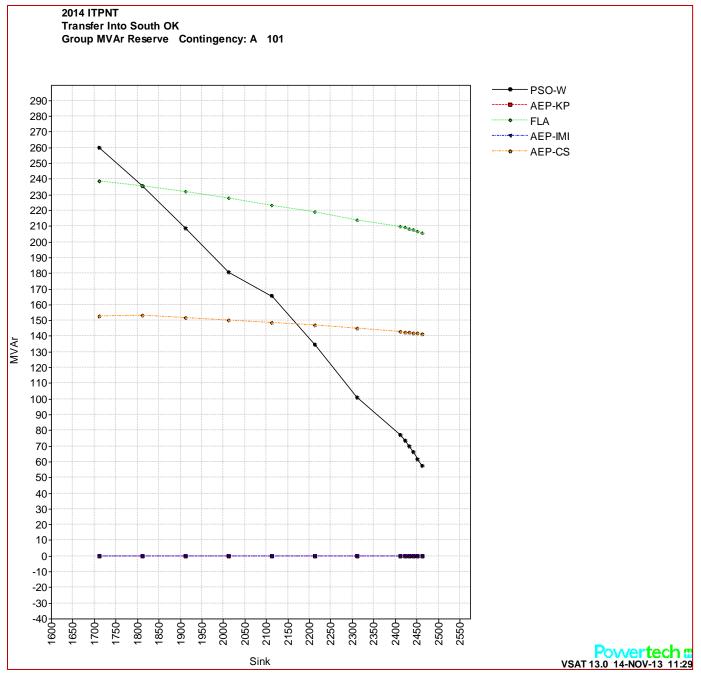


Figure 2.3: South Oklahoma Load Area MVar Reserve

Section 3: Oklahoma City

3.1: Load Area

The Oklahoma City, OK load area under this study is defined by the following zones:

Area	Zone
	569
524 OKGE	572

Table 3.1: Oklahoma City Load Area

3.2: Summary

Load area analysis was performed by importing generation into Oklahoma City in OKGE while increasing both real and reactive load in proportion to the initial MW output of each source generator for the Upgrade Case. The 69 kV load in zones 569 and 572 were equivalenced to the 138 kV system buses.

Table 3.2 provides the simulation results. These results indicate that voltage instability occurs on the 138kV transmission system subsequent to a load increase of 2,450 MW.

Case Used	2019 ITPNT Upgrade Case	
Generation Source	536, 541, 635, 640 (exclude Wolf Creek)	
Initial Source (MW)	/) 19,271	
Load Area	Zone 569, and 572	
Initial Reduced Load Area (MW)	3,463	
Load at Voltage Collapse (MW)	5,913	
	A 6:	
Limiting Contingencies	<u>G-1:</u> HSL 8G	
	<u>T-1:</u> NORTWST7 - SPRNGCK7 Ckt. 1, 345 kV	
MVar Reserve at Voltage Collapse	Zone 569: 434 MVar	
wival Reserve at voltage collapse	Area 524: 74 MVar	

Load Margin: 2,440 MW

Table 3.2: Oklahoma City Load Area Results

3.3: Voltage Instability

The table and figure below show the 138kV buses that have the highest participation in the collapse.

	2019 NT Upgrade Case			
	Bus No.	Bus Name	kV	Area
1	514871	PARKPL 4	138	524
2	515156	WASHPRK4	138	524
3	514875	OUMED 4	138	524
4	514870	STNWAL 4	138	524

	2019 NT Upgrade Case			
5	514874	REMNGPK4	138	524
6	514872	REMPKTP4	138	524
7	514869	WESTERN4	138	524
8	514844	BELISLE4	138	524

Table 3.3: Oklahoma City Load Area Buses Experiencing Voltage Collapse

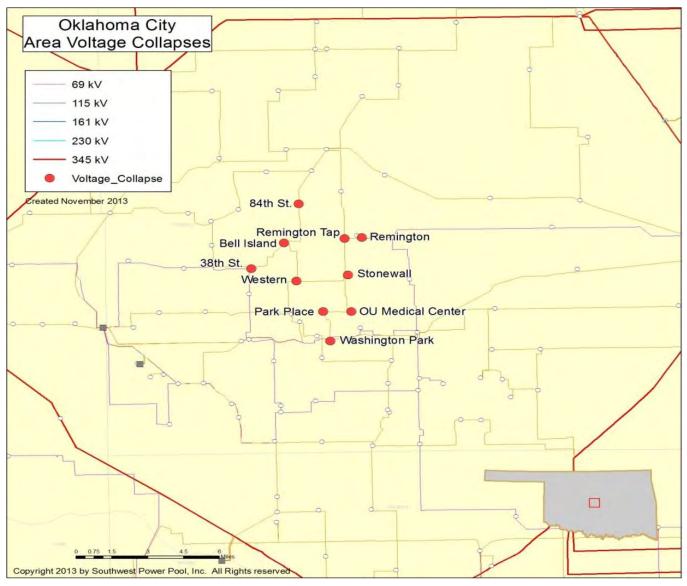
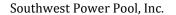


Figure 3.1: Oklahoma City Load Area Buses Experiencing Voltage Collapse

The P-V curves below are provided for the 138kV buses in table 3.3 above for the limiting contingency shown in table 3.2. These curves indicate that when the load is proportionally increased in the Oklahoma City area, voltage collapses occur. The last point shown is the point of the voltage collapse.



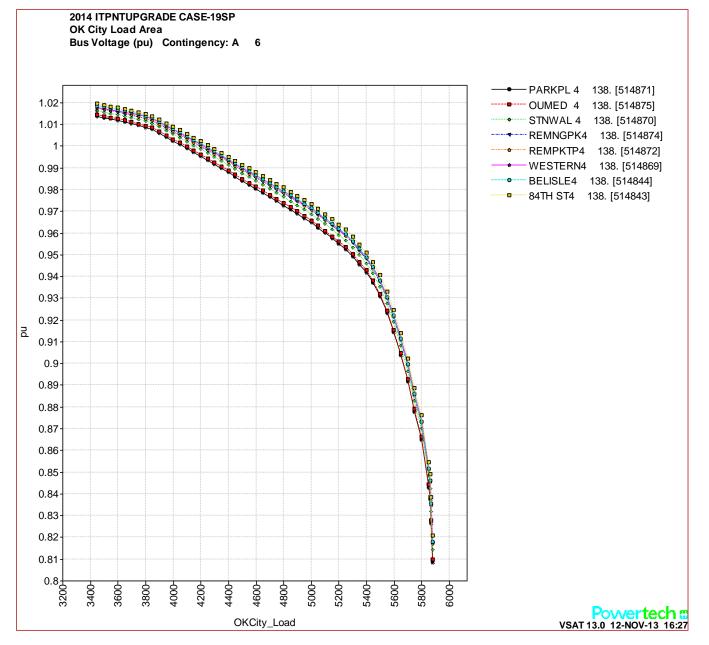


Figure 3.2: Oklahoma City Load Area PV Curves for Upgrade Case

3.4: MVar Reserve

The figure below shows the MVar reserve remaining in the load pocket at the collapse point for the limiting contingency in the Upgrade Case.



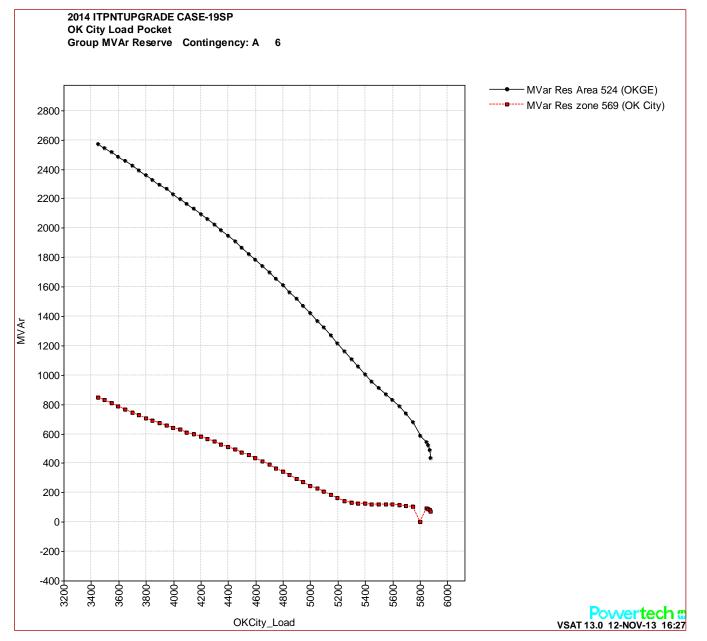


Figure 3.3: Oklahoma City Load Area MVar Reserve Upgrade Case

Section 4: South Central Westar

4.1: Load Area

The South Central Westar Wichita, KS load area under this study is defined by the following zone:

Area	Zone
536 WERE	1537 South Central

Table 4.1: Wichita Load Area

4.2: Summary

Load area analysis was performed by importing generation into the Wichita area in South Central Westar while increasing both real and reactive load in proportion to the initial MW output of each source generator in the Upgrade Case.

Table 4.2 provides the simulation results. The 69 kV load in zone 1537 is equivalenced to the 138 kV system buses. These results indicate that voltage instability occurs on the 138kV transmission system subsequent to a load increase of 1,900 MW.

Case Used	2019 ITPNT Upgrade Case
Generation Source	524, 534, 536, 541 (Excluding Zone 1537 and Wolf Creek)
Initial Source (MW)	17,341
Load Area	Zone 1537 (Wichita)
Initial Reduced Load Area (MW)	2,103
Load at Voltage Collapse (MW)	4003
	B1:
Limiting Contingoncios	G-1: Gordon Evans U2 (367 MW)
Limiting Contingencies	T-2: Rose Hill – Wolf Creek 345 kV
	Benton – Wolf Creek 345 kV
MVar Reserve at Voltage Collapse for Zone 1537	0 MVar

Load Margin: 1,890 MW

Table 4.2: Wichita Load Area Results

4.3: Voltage Instability

The table and figure below show the 138kV buses that have the highest participation in the collapse.

2019 ITPNT Upgrade Case				
	Bus No.	Bus Name	kV	Zone
1	533069	TCBURNS4	138	1537
2	533031	BURNSTP4	138	1537
3	533048	HARRY 4	138	1537

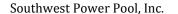
	2019 ITPNT Upgrade Case			
4	533027	BEECH 4	138	1537
5	533028	BEECHTP4	138	1537
6	533066	64TH 4	138	1537
7	533030	BOEING 4	138	1537
8	532987	BUTLER 4	138	1537
9	533067	SPRNGDL4	138	1537

Table 4.3: Wichita Load Area Buses Experiencing Voltage Collapse



Figure 4.1: Wichita Load Area Buses Experiencing Voltage Collapse

The P-V curves are provided for the 138kV buses in table 4.3 above for the limiting contingency shown in table 4.2. These curves indicate that when the load is proportionally increased in the Wichita area, voltage collapses occur. The last point shown is the point of the voltage collapse.



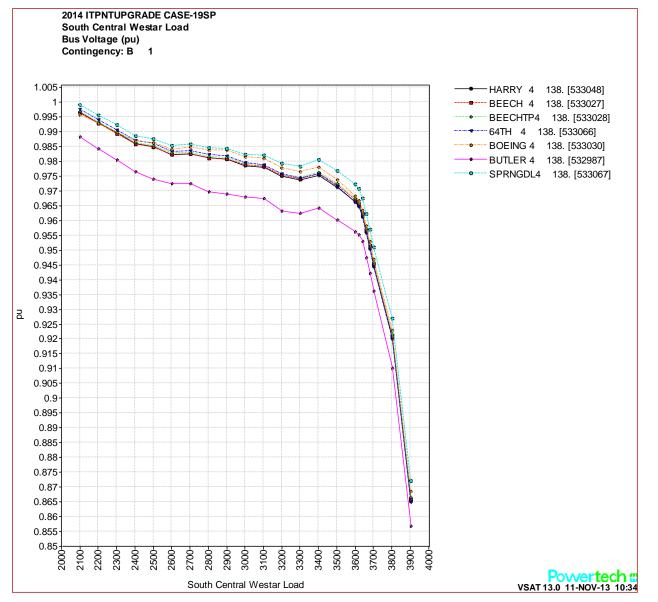


Figure 4.2: Wichita Load Area PV Curves for Upgrade Case

4.4: MVar Reserve

The figure below shows the MVar reserve remaining in the load pocket at the collapse point for the limiting contingency in the Upgrade Case.

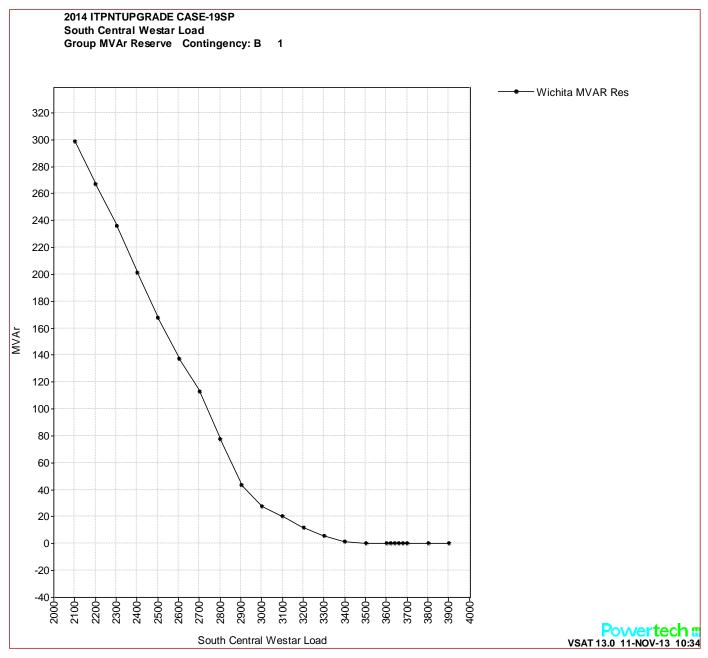


Figure 4.3: Wichita Load Area MVar Reserve

Section 5: North East Westar

5.1: Load Area

The North East Westar Topeka, KS load area under this study is defined by the following zone:

Area	Zone
536 WERE	1533 Topeka

Table 5.1: Topeka Load Area

5.2: Summary

Load area analysis was performed by importing generation into the into North East Westar area in Topeka, KS while increasing both real and reactive load in proportion to the initial MW output of each source generator for the Upgrade Case. The 69 kV load in zone 1533 is equivalenced to the 115 kV system buses. The 69 kV load from Rock Creek to Wathena is not scaled in this analysis.

Table 5.2 provides the simulation results. These results indicate that voltage instability occurs on the 115 kV transmission system subsequent to a load increase of 1,200 MW.

Case Used	2019 ITPNT Upgrade Case
Generation Source	524, 534, 536, 541 (Excluding Zone 1533 and Wolf
	Creek)
Initial Source (MW)	15,553
Load Area	Zone 1533 (Topeka)
Initial Reduced Load Area (MW)	1,507
Load at Voltage Collapse (MW)	2,707
	A7:
Limiting Contingencies	<u>G-1:</u> 1 LEC U5
	T-1: HOYT 7/3 Transformer 345 kV
MVar Reserve at Voltage Collapse for Zone 1533	0 MVar

Load Margin: 1,190 MW

Table 5.2: Topeka Load Area Results

5.3: Voltage Instability

The table and figure below show the buses that have the highest participation in the collapse.

	2019 ITPNT Upgrade Case			
	Bus No.	Bus Name	kV	Zone
1	533159	4VANBUR3	115	1533
2	533175	17&FAIR3	115	1533
3	533166	INDIANH3	115	1533
4	533196	EDUCATE3	115	1533

	2019 ITPNT Upgrade Case			
5	533174	2MADISN3	115	1533
6	533168	N TYLER3	115	1533
7	533184	12&CLAY3	115	1533
8	533186	29 GAGE3	115	1533
9	533185	29EVENG3	115	1533
10	533172	QUINTON3	115	1533

Table 5.3: Topeka Load Area Buses Experiencing Voltage Collapse

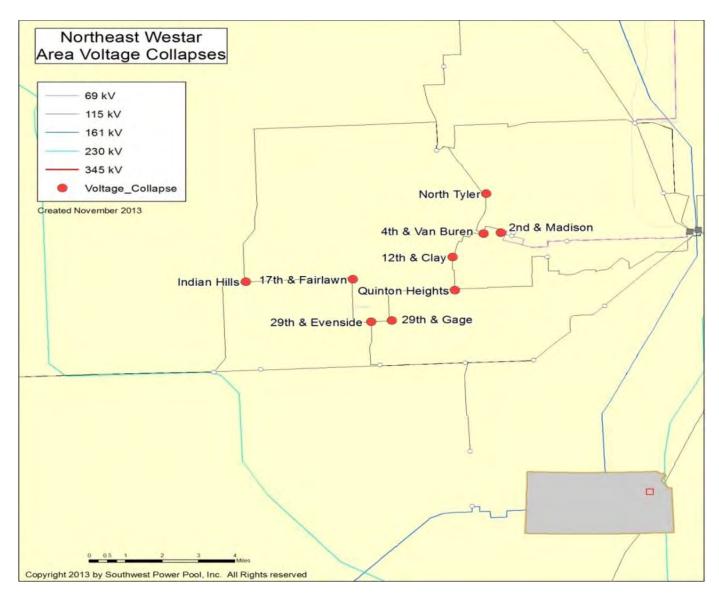


Figure 5.1: Topeka Load Area Buses Experiencing Voltage Collapse

The P-V curves are provided for the 115kV and 69kV buses in table 5.3 above for the limiting contingency shown in table 5.2. These curves indicate that when the load is proportionally increased in the Topeka area, voltage collapses occur. The last point shown is the point of the voltage collapse.

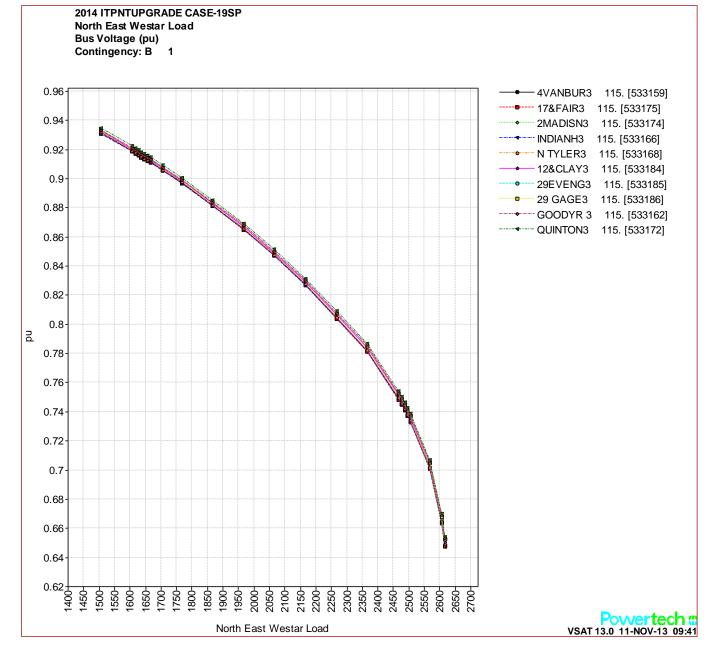


Figure 5.2: Topeka Load Area PV Curves for Upgrade Cases

5.4: MVar Reserve

The figure below shows the MVar reserve remaining in the load pocket at the collapse point for the limiting contingency for the Upgrade Case.

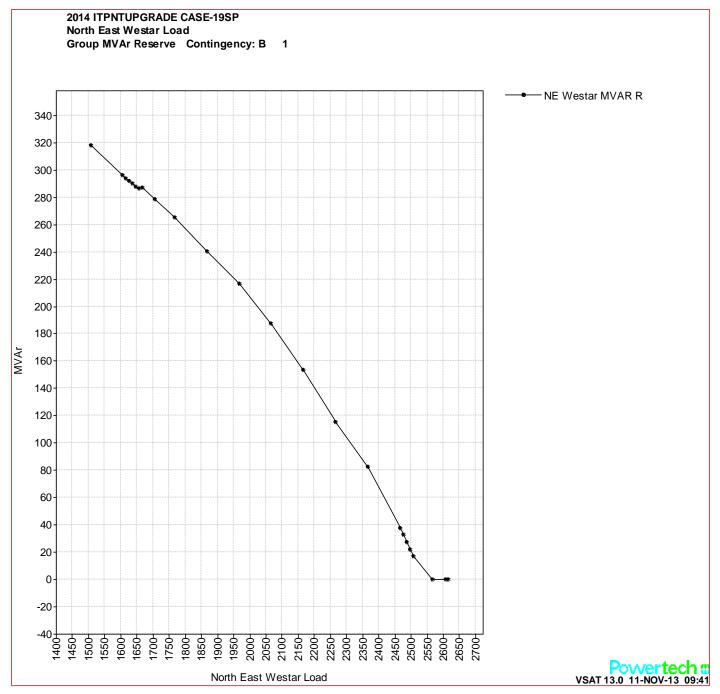


Figure 5.3: Topeka Load Area MVar Reserve

Section 6: Lincoln/Omaha Nebraska

6.1: Load Area

The Lincoln/Omaha, NE load area under this study is defined by the following zones:

645 OPPD A	All
650 LES A	All

Table 6.1: Lincoln/Omaha, NE Load Area

6.2: Summary

Load area analysis was performed by importing generation into the Lincoln/Omaha, NE while increasing both real and reactive load in this load area for the Upgrade Case. The initial 2019 Summer Peak Lincoln/Omaha, NE area load is 3,728 MW. The load buses below 100 kV in areas 645 and 650 were equivalenced to the 115 kV and 161 kV system buses.

Table 6.2 provides the simulation results. These results indicate that voltage instability occurs on the 161 kV transmission system subsequent to a load pocket increase of 2,435 MW.

Load Margin: 2,435

Case Used	2019 ITPNT Upgrade Case	
Generation Source	524, 534, 536, 541	
Initial Source (MW)	19,187	
Load Area	645 (OPPD), 650 (LES)	
Initial Reduced Load Area (MW)	3,728	
Load at Voltage Collapse (MW)	6168	
	A841:	
Limiting Contingencies	<u>G-1:</u> FT CAL1G	
	<u>T-1:</u> S1281 5 161kV – S1287 5 161kV	
MVar Reserve at Voltage Collapse for Lincoln/Omaha	18 MVar	

Table 6.2: Lincoln/Omaha, NE Load Area Results

6.3: Voltage Instability

The table and figure below show the 115 kV and 161 kV that have the highest participation in the collapse for the upgrade case.

	2019 ITPNT Upgrade Case			
	Bus No.	Area		
1	646287	S1287 5	161	645

	2019 ITPNT Upgrade Case			
2	646214	S1214 5	161	645
3	650169	70&BLUFF 5	161	650
4	650269	70&BLUFF 7	115	650
5	650284	84FLETCHER	115	650
6	650275	84&BLUFF 7	115	650

Table 6.3: Lincoln/Omaha, NE Load Buses Experiencing Voltage Collapse

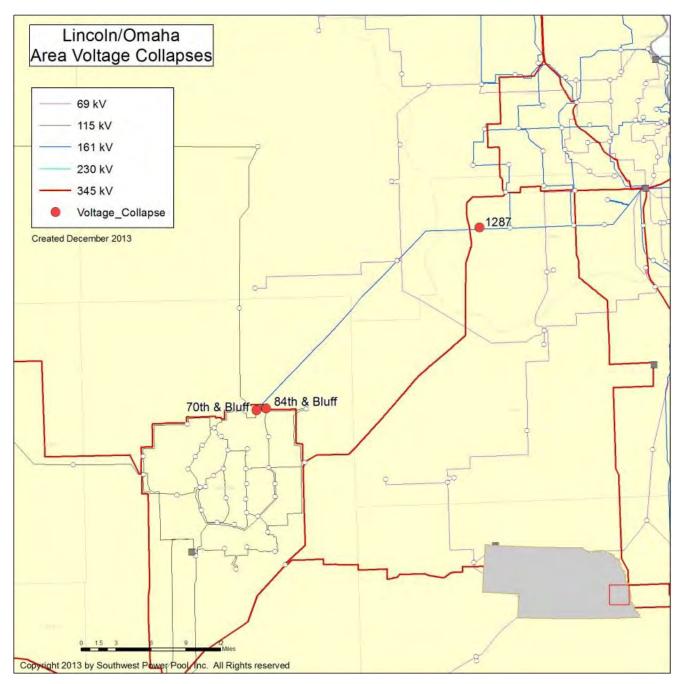


Figure 6.1: Lincoln/Omaha Load Area Buses Experiencing Voltage Collapse

Southwest Power Pool, Inc.

The P-V curves below are provided for the 161kV & 115kV buses in table 6.3 above for the limiting contingency shown in table 6.2. These curves indicate that when the load is proportionally increased in the Lincoln – Omaha Nebraska area, voltage collapses occur. The last point shown is the point of voltage collapse.

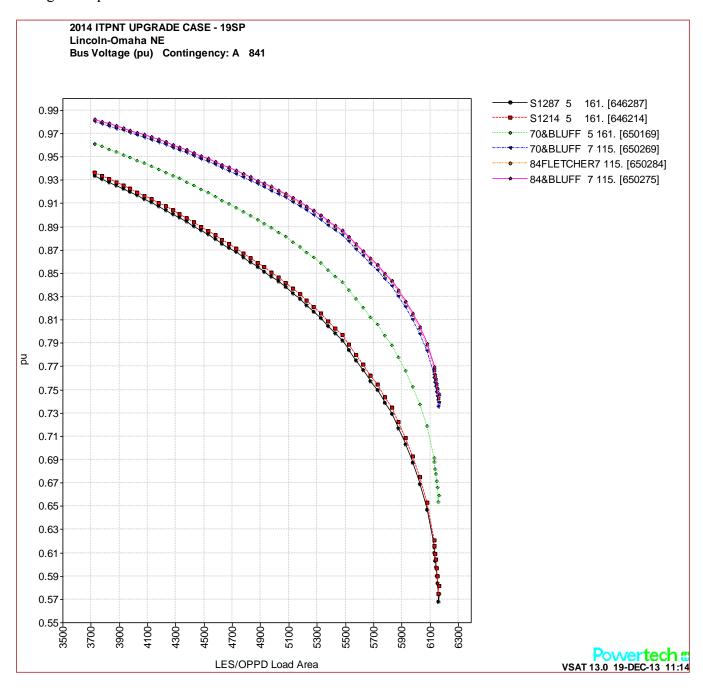


Figure 6.2: Lincoln-Omaha Load Area PV Curves for Upgrade Case (*G-1, T-1 Contingency: Ft. Calhoun 1G and S1281 to S1287 161 kV*)

6.4: MVar Reserve

The figure below shows the MVar reserve remaining in each zone of the load pocket at the collapse point for the limiting contingency for the Upgrade Case.

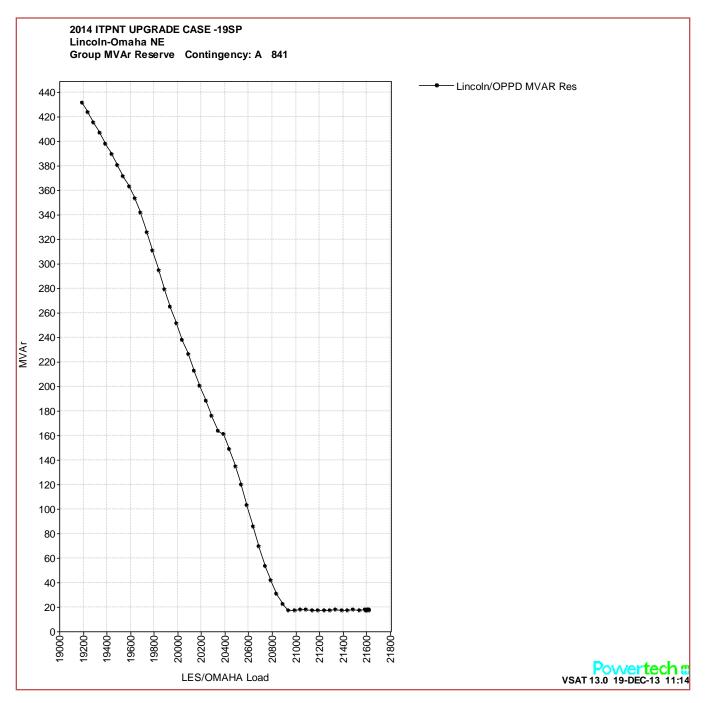


Figure 6.3: Lincoln-Omaha Load Area MVar Reserve

Section 7: Central Nebraska

7.1: Load Area

The Central Nebraska load area under this study is defined by the following zones:

Area	Selected Buses
640 NPPD	640052,640053,640055,640058,640073,640085,640090,640096,640099,
	640113,640115,640150,640165,640177,640182,640260,640285,640294,
	640295,640306,640309,640319,640348,640350,640356,640367,640382,
	640393,640395,640050,640051,640054,640355,640392,640381,640349,
	640318,640305,640284,640259,640181,640176

Table 7.1: Central Nebraska Load Area

7.2: Summary

Load area analysis was performed by importing generation into the Central Nebraska area while increasing both real and reactive load in this load area for both the Upgrade Case. The initial 2019 Summer Peak Central Nebraska area load is 477 MW. Voltage instability occurs on the 115kV transmission system subsequent to a load pocket increase of 120 MW.

Case Used	2019 ITPNT Upgrade Case		
Generation Source	534,536,541,635,645,650,652		
Initial Source (MW)	27,041		
Load Area	640052, 640053, 640055, 640058, 640073, 640085, 640090, 640096, 640099, 640113, 640115, 640150, 640165, 640177, 640182, 640260, 640285, 640294, 640295, 640306, 640309, 640319, 640348, 640350, 640356, 640367, 640382, 640393, 640395, 640050, 640051, 640054, 640355, 640392, 640381, 640349, 640318, 640305, 640284, 640259, 640181, 640176		
Initial Reduced Load Area (MW)	477		
Load at Voltage Collapse (MW)	597		
Limiting Contingencies	A234: s <u>G-1:</u> GENTLM1G <u>T-1:</u> Fort Randall – Spencer 115 kV		
MVar Reserve at Voltage Collapse for Select Buses in Area 640	r 0 MVar		

Load Margin: 110 MW

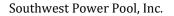
Table 7.2: Central Nebraska Load Area Results

7.3: Voltage Instability

The table and figure below shows the 115kV buses that have the highest participation in the collapse.

	2019 ITPNT Upgrade Cas			
	Bus No.	Bus Name	kV	Area
1	640466	EMMETE.P22	115	640
2	640058	ATKINSN7	115	640
3	640165	EMMET 7	115	640
4	640465	EMMETE.TAP 7	115	640
5	640367	STUART 7	115	640
6	640349	SPENCER7	115	640
7	640305	ONEILL 7	115	640
8	640051	AINSWRT7	115	640
9	640050	AINSWND7	115	640
10	640117	CODY 7	115	640

Table 7.3: Central Nebraska Load Area Buses Experiencing Voltage Collapse



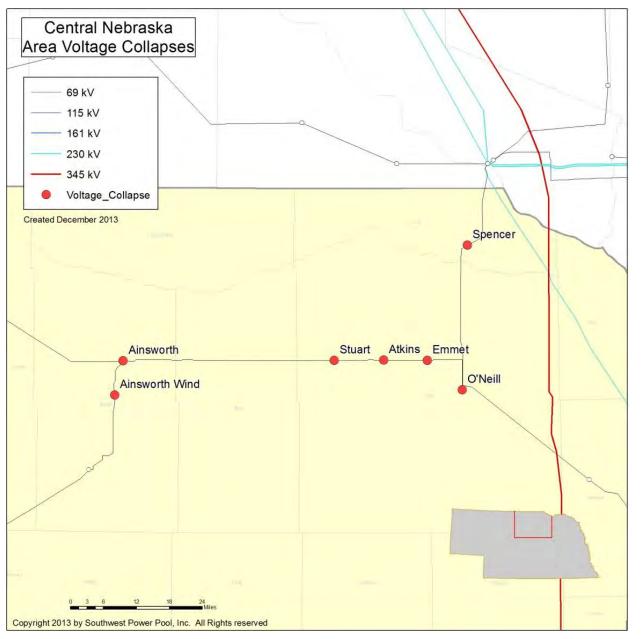


Figure 7.1: Central Nebraska Load Area Buses Experiencing Voltage Collapse

The P-V curves shown below are provided for the 115kV buses in table 7.3 above for the limiting contingency shown in table 7.2. These curves indicate that when the load is proportionally increased in the Central Nebraska area, voltage collapses occur. The last point shown is the point of the voltage collapse.

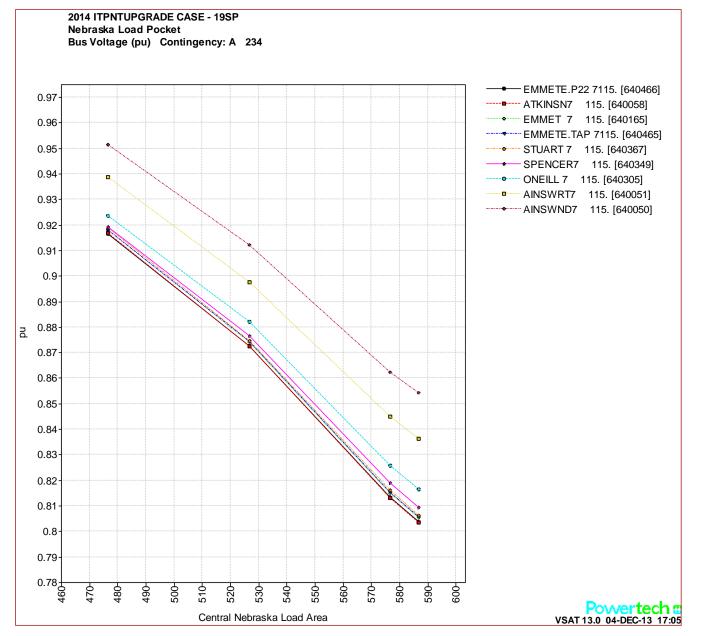


Figure 7.2: Central Nebraska Load Area PV Curves Upgrade Case (G-1, T-1 Contingency: Gentleman 1 and Spencer to Fort Randall 115 kV)

7.4: MVar Reserve

The figure below shows the MVar reserve remaining in the load pocket at the collapse point for the limiting contingency in the Upgrade Case.

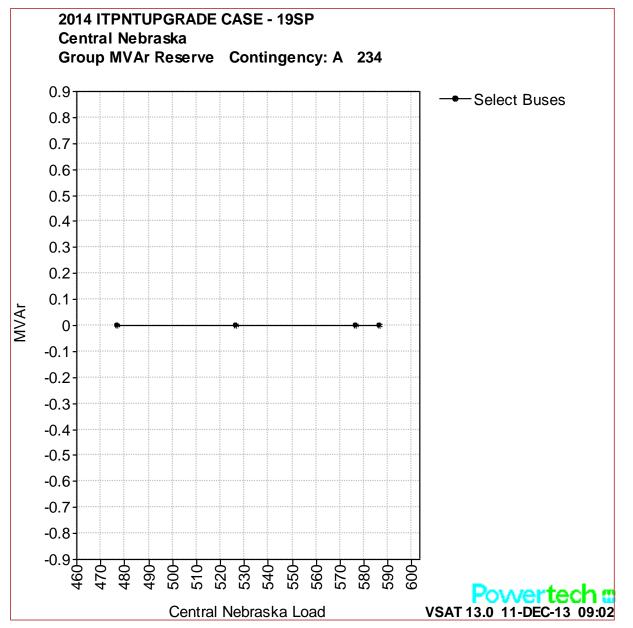


Figure 7.3: Central Nebraska Load Area MVar Reserve

Section 8: Summary of Results

8.1: Load Area Voltage Stability Analysis Summary

Load Area	Vicinity of Voltage Instability Upgrade	Load Increase at Voltage Stability Limit Upgrade	Reactive Reserve at Voltage Stability Limit Upgrade	Limiting Contingency Upgrade
		(MW)	(MVar)	CINICO 24
South Oklahoma	Georgia 138kV	751	275	SWS3 24 Anadarko – Georgia 138kV
Oklahoma City	PARKPL 4 138kV	2440	508	HSL 8G and Northwest – Spring Creek 345kV
South Central Westar	TCBURNS4 138kV	1890	0	Gordon Evans U2 Rose Hill – Wolf Creek 345kV Benton – Wolf Creek 345 kV
North East Westar	4VANBUR3 115kV	1190	0	1 LEC U5 HOYT 7/3 Transformer 345kV
Lincoln/Omaha Nebraska	S1287 5 161kV	2520	18	S1281 – S1287 161kV
Central Nebraska	EMMETE.P22 7 115kV	110	0 (for the select buses)	Spencer – Ft. Randall 7 115kV
Oklahoma City	PARKPL 4 138 kV	2440	508	HSL 8G and Northwest – Spring Creek 345kV

Table 8.1: Summary of Results

Summary

Voltage instability due to transfers into load areas within SPP has been studied and results are provided in this report. Reactive reserve for these load areas are shown at the transfer levels that cause instability.



SPP-NTC-200256

SPP Notification to Construct

February 19, 2014

Mr. John Fulton Southwestern Public Service Company P.O. Box 1261 Amarillo, TX 79105

RE: Notification to Construct Approved Reliability Network Upgrades

Dear Mr. Fulton,

Pursuant to Section 3.3 of the Southwest Power Pool, Inc. ("SPP") Membership Agreement and Attachment O, Section VI, of the SPP Open Access Transmission Tariff ("OATT"), SPP provides this Notification to Construct ("NTC") directing Southwestern Public Service Company ("SPS"), as the Designated Transmission Owner, to construct the Network Upgrade(s).

On January 28, 2014, the SPP Board of Directors approved the Network Upgrade(s) listed below to be constructed as part of the 2014 Integrated Transmission Planning ("ITP") Near-Term Assessment.

New Network Upgrades

Project ID: 766 **Project Name:** XFR - Newhart 230/115 kV Ckt 2 **Need Date for Project:** 6/1/2015 **Estimated Cost for Project:** \$6,386,196

> Network Upgrade ID: 11010 Network Upgrade Name: Newhart 230/115 kV Ckt 2 Transformer Network Upgrade Description: Add second 230/115 kV 250 MVA transformer at Newhart substation. Network Upgrade Owner: SPS MOPC Representative(s): William Grant TWG Representative: John Fulton Categorization: Regional reliability Network Upgrade Specification: All elements and conductor must have at least an emergency rating of 250 MVA. Network Upgrade Justification: To address the overload of Kress Interchange -

> > 1



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Swisher County Interchange 115 kV Ckt 1 for the outage of Newhart 230/115 kV Ckt 1 Transformer. Estimated Cost for Network Upgrade (current day dollars): \$6,386,196 Cost Allocation of the Network Upgrade: Full Base Plan Funded Estimated Cost Source: SPS Date of Estimated Cost: 11/22/2013

Project ID: 856 Project Name: Multi - Centre St. - Hereford NE 115 kV Ckt 1 and Centre St. and Hereford 115 kV Load Conversion Need Date for Project: 6/1/2014 Estimated Cost for Project: \$9,847,388

Network Upgrade ID: 11127 Network Upgrade Name: Centre St. - Hereford NE 115 kV Ckt 1 Network Upgrade Description: Build new 5.1-mile 115 kV line from Centre St. to Hereford NE. Convert distribution transformer high side at Centre St. from 69 kV to 115 kV. Install any necessary terminal equipment at Hereford NE. **Network Upgrade Owner: SPS MOPC Representative(s):** William Grant **TWG Representative:** John Fulton **Categorization:** Regional reliability Network Upgrade Specification: All elements and conductor must have at least an emergency rating of 275 MVA. Network Upgrade Justification: To address the overload of Hereford 115/69 kV transformers Ckt 1 and Ckt 2 for the outage of the parallel transformer. Estimated Cost for Network Upgrade (current day dollars): \$9,754,258 Cost Allocation of the Network Upgrade: Base Plan **Estimated Cost Source: SPS** Date of Estimated Cost: 11/25/2013

Network Upgrade ID: 50754 Network Upgrade Name: Hereford 115 kV Load Conversion Network Upgrade Description: Convert distribution transformer high side at Hereford from 69 kV to 115 kV. Network Upgrade Owner: SPS MOPC Representative(s): William Grant TWG Representative: John Fulton Categorization: Regional reliability Network Upgrade Specification: Convert distribution load from 69 kV to 115 kV. Network Upgrade Justification: To address the overload of Hereford 115/69 kV



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transformer Ckt 1 and Ckt 2 for the outage of the parallel transformer. Estimated Cost for Network Upgrade (current day dollars): \$93,130 Cost Allocation of the Network Upgrade: Base Plan Estimated Cost Source: SPS Date of Estimated Cost: 11/25/2013

Project ID: 30552 Project Name: Line - Oxy Permian Sub - West Bender Sub 115 kV Ckt 1 Need Date for Project: 6/1/2018 Estimated Cost for Project: \$973,674

Network Upgrade ID: 50690 Network Upgrade Name: Oxy Permian Sub - West Bender Sub 115 kV Ckt 1 Rebuild Network Upgrade Description: Rebuild 0.5-mile 115 kV line from Oxy Permian Sub to West Bender Sub. **Network Upgrade Owner: SPS MOPC Representative(s):** William Grant **TWG Representative:** John Fulton **Categorization:** Regional reliability Network Upgrade Specification: All elements and conductor must have at least an emergency rating of 303 MVA. Network Upgrade Justification: To address the overload of Oxy Permian Sub - West Bender Sub 115 kV Ckt 1 for the outage of Maddox Station - Monument Sub 115 kV Ckt 1. Estimated Cost for Network Upgrade (current day dollars): \$973,674 Cost Allocation of the Network Upgrade: Base Plan **Estimated Cost Source: SPS** Date of Estimated Cost: 11/21/2013

Project ID: 30555 **Project Name:** Quahada Switching Station 115 kV **Need Date for Project:** 6/1/2015 **Estimated Cost for Project:** \$2,593,936

> Network Upgrade ID: 50693 Network Upgrade Name: Quahada Switching Station 115 kV Network Upgrade Description: Install 4-breaker ring bus at Quahada to connect the 115 kV lines from Cunningham to PCA Interchange and Lea National to Maljamar. Network Upgrade Owner: SPS MOPC Representative(s): William Grant TWG Representative: John Fulton Categorization: Regional reliability



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Network Upgrade Specification: Install 4-breaker ring bus. Network Upgrade Justification: To address low voltage issues at 115 kV system around Maljamar under normal conditions (no outages). Estimated Cost for Network Upgrade (current day dollars): \$2,593,936 Cost Allocation of the Network Upgrade: Base Plan Estimated Cost Source: SPS Date of Estimated Cost: 11/21/2013

Project ID: 30577 Project Name: Line - Chavis - Price - CV Pines - Capitan 115 kV Ckt 1 Need Date for Project: 6/1/2017 Estimated Cost for Project: \$14,275,000

> Network Upgrade ID: 50722 Network Upgrade Name: Chaves - Price 115 kV Ckt 1 Rebuild Network Upgrade Description: Rebuild 5-mile 69 kV line from Chaves to Price converting to 115 kV. Install any necessary terminal equipment at Chaves. Network Upgrade Owner: SPS MOPC Representative(s): William Grant TWG Representative: John Fulton Categorization: Regional reliability Network Upgrade Specification: All elements and conductor must have at least an emergency rating of 250 MVA. Network Upgrade Justification: To address the overload of the Chaves County Interchange 115/69 kV transformer under normal conditions (no outages). Estimated Cost for Network Upgrade (current day dollars): \$4,701,279 Cost Allocation of the Network Upgrade: Base Plan **Estimated Cost Source: SPS** Date of Estimated Cost: 11/22/2013

> Network Upgrade ID: 50723 Network Upgrade Name: CV Pines - Price 115 kV Ckt 1 Rebuild Network Upgrade Description: Rebuild 3-mile 69 kV line from CV Pines to Price converting to 115 kV. Network Upgrade Owner: SPS MOPC Representative(s): William Grant TWG Representative: John Fulton Categorization: Regional reliability Network Upgrade Specification: All elements and conductor must have at least an emergency rating of 245 MVA. Network Upgrade Justification: To address the overload of the Chaves County



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Interchange 115/69 kV transformer under normal conditions (no outages). Estimated Cost for Network Upgrade (current day dollars): \$4,158,668 Cost Allocation of the Network Upgrade: Base Plan Estimated Cost Source: SPS Date of Estimated Cost: 11/25/2013

Network Upgrade ID: 50724 Network Upgrade Name: Capitan - CV Pines 115 kV Ckt 1 Rebuild Network Upgrade Description: Rebuild 5-mile 69 kV line from Capitan to CV Pines converting to 115 kV. **Network Upgrade Owner: SPS MOPC Representative(s):** William Grant TWG Representative: John Fulton Categorization: Regional reliability Network Upgrade Specification: All elements and conductor must have at least an emergency rating of 265 MVA. Network Upgrade Justification: To address the overload of the Chaves County Interchange 115/69 kV transformer under normal conditions (no outages). Estimated Cost for Network Upgrade (current day dollars): \$5,415,053 Cost Allocation of the Network Upgrade: Base Plan **Estimated Cost Source: SPS** Date of Estimated Cost: 11/22/2013

Project ID: 30616 Project Name: Sub - Curry County 115 kV Need Date for Project: 6/1/2018 Estimated Cost for Project: \$813,381

> Network Upgrade ID: 50794 Network Upgrade Name: Curry County Interchange 115 kV Network Upgrade Description: Install two 115 kV breakers at Curry County Interchange to convert the high side of the Curry County distribution transformer to 115 kV. Network Upgrade Owner: SPS MOPC Representative(s): William Grant TWG Representative: John Fulton Categorization: Regional reliability Network Upgrade Specification: Install two 115 kV breakers at Curry County Interchange. Network Upgrade Justification: To address the overload of Curry County Interchange 115/69 kV Transformer Ckt 2 for the outage of Curry County Interchange 115/69 kV



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Transformer Ckt 1. Estimated Cost for Network Upgrade (current day dollars): \$813,381 Cost Allocation of the Network Upgrade: Base Plan Estimated Cost Source: SPS Date of Estimated Cost: 12/13/2013

Upgrades with Modifications

Previous NTC Number: 20130 Previous NTC Issue Date: 2/14/2011 Project ID: 1004 Project Name: XFR - Swisher 230/115 kV Ckt 1 Need Date for Project: 6/1/2014 Estimated Cost for Project: \$3,496,698

> Network Upgrade ID: 11318 Network Upgrade Name: Swisher County Interchange 230/115 kV Ckt 1 Transformer Network Upgrade Description: Upgrade existing 230/115 kV transformer at Swisher to 250 MVA. **Network Upgrade Owner: SPS MOPC Representative(s):** William Grant TWG Representative: John Fulton Reason for Change: The 2014 ITP Near-Term Assessment accelerated the Need Date from 6/1/2016 to 6/1/2014. Categorization: Regional reliability Network Upgrade Specification: All elements and conductor must have at least an emergency rating of 250 MVA. Network Upgrade Justification: To address the overload of the Swisher 230/115 kV transformer for the outage of the New Hart 230/115 kV transformer, Happy Interchange -Palo Duro 115 kV Ckt 1, or Randall - Palo Duro 115 kV Ckt 1 and Happy - Palo Duro 115 kV Ckt 1 (SPP-SWPS-Ta66). Estimated Cost for Network Upgrade (current day dollars): \$3,496,698 Cost Allocation of the Network Upgrade: Base Plan **Estimated Cost Source: SPS** Date of Estimated Cost: 5/16/2013

Withdrawal of Upgrades

Previous NTC Number: 200214 Previous NTC Issue Date: 2/20/2013



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Project ID: 1139 **Project Name:** Line - Allen Sub - Lubbock South Interchange 115 kV Ckt 1

Network Upgrade ID: 11501

Network Upgrade Name: Allen Substation - Lubbock South Interchange 115 kV Ckt 1 **Network Upgrade Description:** Rebuild 6 miles of 115 kV line from Lubbock South Interchange to Allen Substation.

Reason for Change: Identified in 2014 ITP Near-Term Assessment that the upgrade is no longer required.

Withdrawal of Network Upgrade

SPS has been made aware of all Network Upgrades withdrawn through the expansion plan process. This letter is the formal notification to stop any further work on this Network Upgrade(s) and submit any cost information associated with the Network Upgrade(s) to SPP.

Commitment to Construct

Please provide to SPP a written commitment to construct the Network Upgrade(s) within 90 days of the date of this NTC, pursuant to Attachment O, Section VI.6 of the SPP OATT, in addition to providing a construction schedule and an updated $\pm 20\%$ cost estimate, NTC Project Estimate, in the Standardized Cost Estimate Reporting Template for the Network Upgrade(s). Failure to provide a sufficient written commitment to construct as required by Attachment O could result in the Network Upgrade(s) being assigned to another entity.

Mitigation Plan

The Need Date represents the timing required for the Network Upgrade(s) to address the identified need. Your prompt attention is required for formulation and approval of any necessary mitigation plans for the Network Upgrade(s) included in the Network Upgrade(s) if the Need Date is not feasible. Additionally, if it is anticipated that the completion of any Network Upgrade will be delayed past the Need Date, SPP requires a mitigation plan be filed within 60 days of the determination of expected delays.

Notification of Commercial Operation

Please submit a notification of commercial operation for each listed Network Upgrade to SPP as soon as the Network Upgrade is complete and in-service. Please provide SPP with the actual costs of these Network Upgrades as soon as possible after completion of construction. This will facilitate the timely billing by SPP based on actual costs.

Notification of Progress

On an ongoing basis, please keep SPP advised of any inability on SPS's part to complete the approved Network Upgrade(s). For project tracking, SPP requires SPS to submit status updates of the Network Upgrade(s) quarterly in conjunction with the SPP Board of Directors meetings.



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However, SPS shall also advise SPP of any inability to comply with the Project Schedule as soon as the inability becomes apparent.

All terms and conditions of the SPP OATT and the SPP Membership Agreement shall apply to this Project, and nothing in this NTC shall vary such terms and conditions.

Don't hesitate to contact me if you have questions or comments regarding these instructions. Thank you for the important role that you play in maintaining the reliability of our electric grid.

Sincerely,

Jan Michael

Lanny Nickell Vice President, Engineering Phone: (501) 614-3232 • Fax: (501) 482-2022 • Inickell@spp.org

Carl Monroe - SPP cc: Katherine Prewitt - SPP William Grant - SPS

Attachment 6 Page 1 of 3



David Hudson SPS President Southwestern Public Service Company

600 S. Tyler Street Amarillo, TX 79101 David.hudson@xcelenergy.com Phone: 806.378.2824

May 6, 2014

Mr. Lanny Nickell, Vice President Southwest Power Pool 201 Worthen Drive Little Rock, AR 72223-4936

RE: SPP-NTC-200256, dated February 19, 2014

Dear Mr. Nickell:

Southwestern Public Service Company ("SPS") hereby responds to the Southwest Power Pool ("SPP") Notification to Construct ("NTC") dated February 19, 2014, referred to as SPP-NTC-200256. The NTC seeks a commitment from SPS to construct 6 projects and 9 upgrades that have been assigned to SPS. As detailed below, this response will constitute SPS's commitment, under Attachment O, Section VI of the SPP Open Access Transmission Tariff, to construct the projects identified in SPP-NTC-200256.

The SCERT estimate forms will be provided separately by the date required in the NTC.

As SPS completes its detailed design and engineering and internal capital budgeting processes for the upgrade, updated project scheduling information will be provided to the SPP through the Quarterly Tracking reports.

As with any Transmission Owner receiving an SPP NTC for new transmission projects, SPS's commitment to construct the SPP-NTC-200256 project listed below also includes its intent to work with SPP to review the scope and configuration of any project should the subsequent development of a future contingency or change in circumstance affect the design, scope, or need for a project as currently planned. Such contingencies could include, but would not be limited to, SPS's obtaining all necessary local, state, and federal governmental approvals, the necessary corporate governance approvals within Xcel Energy for the related capital expenditures, adequate regulatory treatment that ensure cost recovery, or the option to assign the construction of a project(s) to an SPS affiliate, with SPP's approval. Also, wholesale customers on the SPS system are changing their system resource and operation plans, which may drive additional SPS work with SPP to address any relevant changes in circumstance which may affect certain associated projects.

The projects identified in SPP-NTC-200256 are:

Network Upgrades

Upgrade ID: 11010

Upgrade Description: Add second 230/115 kV 250 MVACkt 2 Transformer at Newhart Substation.

Upgrade ID: 11127

Upgrade Description: Build new 5.1 mile 115 kV line from Centre St. to Hereford NE. Convert distribution transformer high side at Centre St. from 69 kV to 115 kV. Install any necessary terminal equipment at Hereford NE.

Upgrade ID: 50754

Upgrade Description: Convert distribution transformer high side at Hereford from 69 kV to 115 kV.

Upgrade ID: 50690 Upgrade Description: Rebuild 0.5-mile 115 kV line from Oxy Permian Sub to West Bender Sub.

Upgrade ID: 50693 Upgrade Description: Install 4-breaker ring bus at Quahada to connect the 115 kV lines from Cunningham to PCA Interchange and Lea National to Maljamar.

Upgrade ID: 50722 Upgrade Description: Rebuild 5-mile 69 kV line from Chaves to Price converting to 115 kV. Install any necessary terminal equipment at Chaves.

Upgrade ID: 50723 Upgrade Description: Rebuild 3-mile 69 kV line from CV Pines to Price converting to 115 kV.

Upgrade ID: 50724 Upgrade Description: Rebuild 5-mile 69 kV line from Capitan to CV Pines converting to 115 kV.

Upgrade ID: 50794 Upgrade Description: Install two 115 kV breakers at Curry County Interchange to Convert the high side of the Curry County distribution transformer to 115 kV.

Upgrades with Modifications

Upgrade ID: 11318

Upgrade Description: Upgrade existing 230/115 kV transformer at Swisher to 250 MVA.

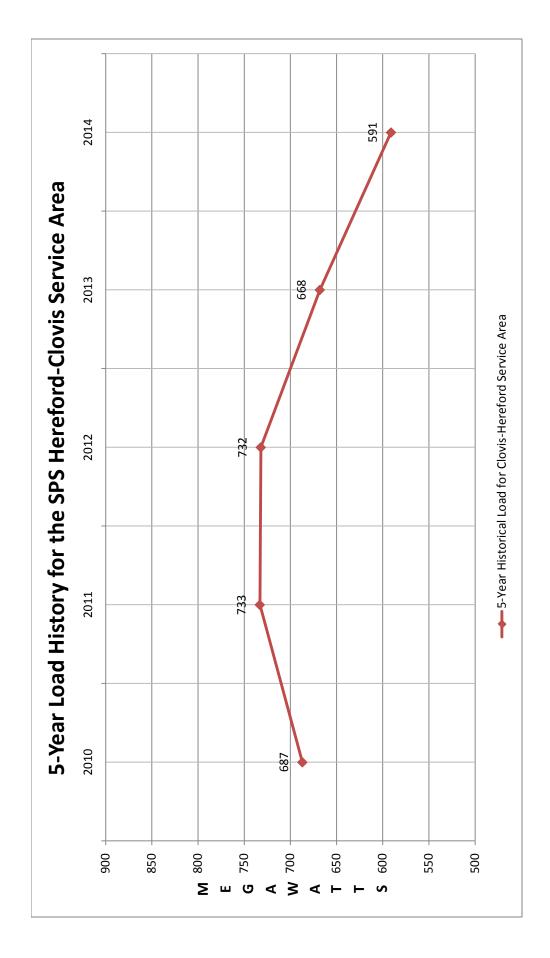
Finally, SPS would note that, to the extent that any significant changes in future loads or load forecasts occur that may affect the planned configurations or need for new upgrade project numbers 11010, 11127, 50754, 50690, 50693, 50722, 50723, 50724 and 50794, SPS will work with SPP to re-evaluate these projects. Additionally, for any project where SPS shows an inservice date beyond the desired Need Date reflected in the NTC, SPS will provide mitigations within 60 days of the date of this letter.

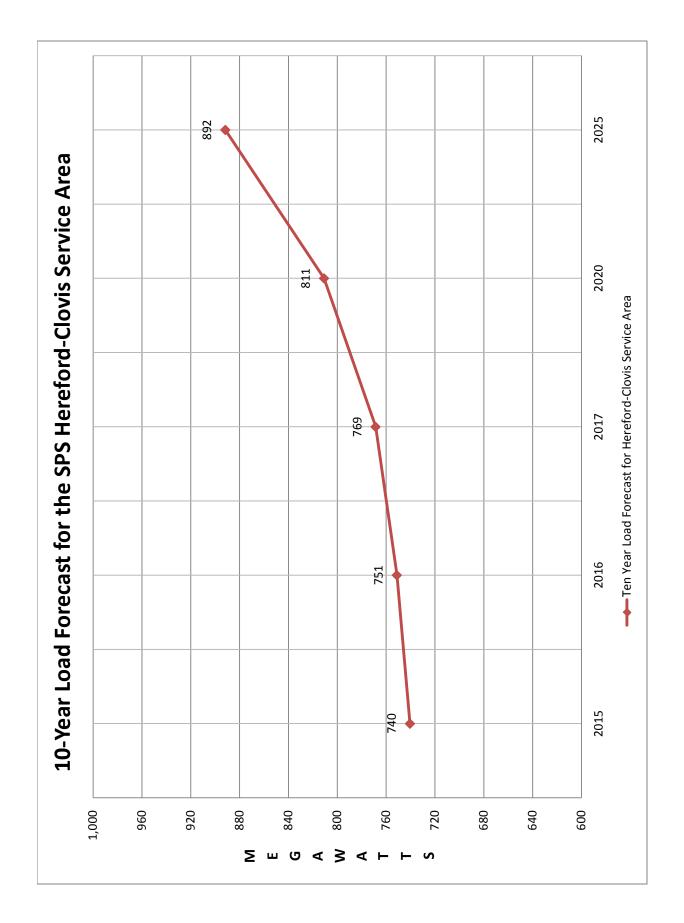
Should there be any questions, please feel free to contact Mr. John Fulton of SPS.

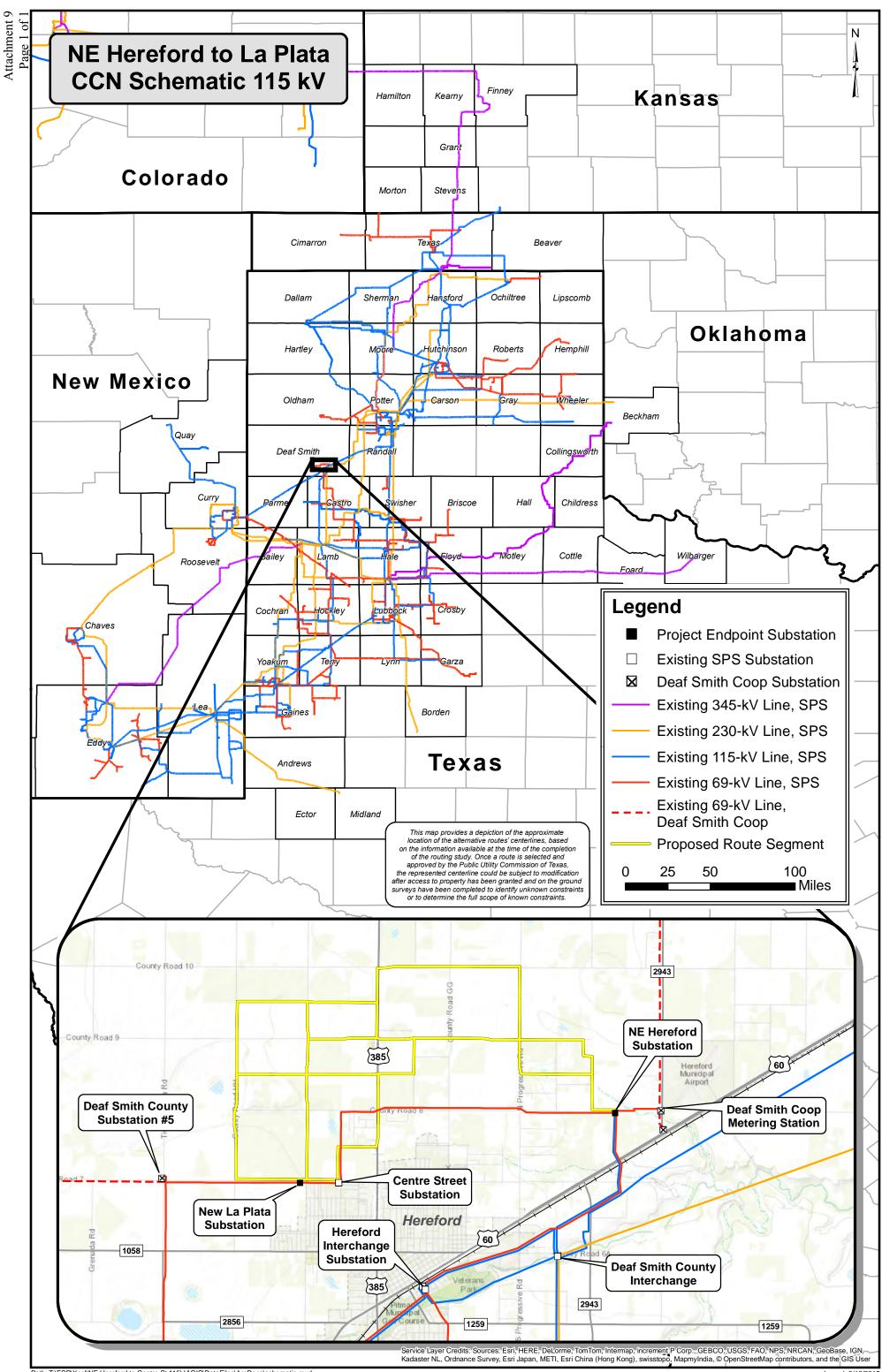
Sincerely,

David Hudson SPS President

Cc: Bob Lux, Jody Holland – SPP Teresa Mogensen, Ian Benson, Bruce Cude, Bill Grant, Gerald Deaver, Tony Jandro, Evan Evans – Xcel Energy









Siting and Land Rights

P.O. Box 1261 Amarillo, TX 79105-1261 Telephone: **806-378-2436** Facsimile: 806-378-2724

September 25, 2015

VIA FIRST CLASS MAIL

«First_Name» «Address_1» «City», «State» «Zip»

Dear Landowner:

Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 115-kV Transmission Line Within Deaf Smith County, Texas

PUBLIC UTILITY COMMISSION OF TEXAS DOCKET NO. 45158

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy Inc., is providing notice of its application to amend its Certificate of Convenience and Necessity (CCN) in order to construct and operate a new single circuit, 115-kilovolt (kV) electric transmission line between the existing NE Hereford Substation and the new La Plata Substation, both located in Deaf Smith County, Texas. SPS has filed an application with the Public Utility Commission of Texas (Commission or PUC) (Docket No. 45158 - Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 115-kV Transmission Line Within Deaf Smith County, Texas) and is requesting the approval of the Commission for this project. This project is needed for reliability.

The proposed project will involve the construction of a new 115-kV transmission line which will originate at the existing NE Hereford Substation, located 3.5 miles northeast of Hereford, Texas in Deaf Smith County, and terminate at the new La Plata Substation, a half mile west of the existing Centre Street Substation, south of County Road 7, near the western portion of the City of Hereford. The Southwest Power Pool has identified the proposed transmission line as a needed regional reliability upgrade and has issued a Notification to Construct letter to SPS to construct the line to address overload issues at the NE Hereford Substation.

The proposed 115-kV single circuit transmission line will be constructed utilizing primarily single-pole steel structures, which require a smaller surface area than H-frame structures and eliminate the need for guy wires for corner structures. The proposed transmission line will be constructed entirely on new right-of-way with a proposed easement width of 70 feet. In some circumstances, a wider easement may be necessary, but these locations and easement widths cannot be determined until the selected route is surveyed.

The proposed 115-kV single-circuit transmission line is presented with 9 alternative routes consisting of a combined 20 segments and is estimated to be approximately 7.5 to 11.3 miles depending on which route is selected.

Depending on the route chosen, the total cost of the project, including the transmission line and substation costs, is estimated to be between approximately \$11.8 million and \$15.1 million.

Your land may be directly affected by the outcome of this docket. If one of SPS's alternative routes is approved by the Public Utility Commission of Texas (Commission or PUC), SPS will have the right to build a facility, which may directly affect your land. This docket will not determine the value of your land or the value of an easement if one is needed by SPS to build the facility. If you have questions about the transmission line you may contact Tyler Lucero at 806-378-2312 or James Bagley at 806-378-2868. A map of SPS's proposed routes is included with this letter, along with a written description of the segments that comprise the proposed routes. Larger, more detailed routing maps may be viewed at SPS's offices at Chase Tower, 600 S. Tyler Street, Suite 1800, Amarillo, Texas, 79101. Information about the proposed project is also accessible on Xcel Energy's website *Power for the Plains* at http://www.powerfortheplains.com.

All routes and route segments included in this notice are available for selection and approval by the *Public Utility Commission of Texas.*

The PUC has a brochure entitled "Landowners and Transmission Line Cases at the PUC" that provides basic information about how you may participate in this docket, and how you may contact the PUC. Please read this brochure carefully. The brochure includes sample forms for making comments and for making a request to intervene as a party in this docket. Copies of the brochure are enclosed and are also available from Tyler Lucero at 806-378-2312 or may be downloaded from the PUC's website at http://www.puc.texas.gov/. The only way to fully participate in the PUC's decision on where to locate the transmission line is to intervene in the docket. It is important for an affected person to intervene because the utility is not obligated to keep affected persons informed of the PUC's proceedings and cannot predict which route may or may not be approved by the PUC.

In addition to the contacts listed in the brochure, you may call the PUC's Customer Assistance Hotline at 888-782-8477. Hearing- and speech-impaired individuals with text telephones (TTY) may contact the PUC's Customer Assistance Hotline at 512-936-7136 or toll free at 800-735-2989. If you wish to participate in this proceeding by becoming an intervener, the deadline for intervention in the proceeding is, November 9, 2015 and the PUC should receive a letter from you requesting intervention by that date. Mail the request for intervention and 10 copies of the request to:

Public Utility Commission of Texas Central Records Attn: Filing Clerk 1701 N. Congress Ave. P.O. Box 13326 Austin, Texas 78711-3326

Persons who wish to intervene in the docket must also mail a copy of their request for intervention to all parties in the docket and all persons that have pending motions to intervene, at or before the time the request for intervention is mailed to the PUC. In addition to the intervention deadline, other important deadlines may already exist that affect your participation in this docket. You should review the orders and other filings already made in the docket. The enclosed brochure explains how you can access these filings.

Attachment 10 Page 3 of 25

Sincerely,

Sea L. Judin Josen

Sean L. Frederiksen, Manager Siting and Land Rights Enclosures

SEGMENT DESCRIPTIONS NE Hereford to La Plata 115-kV Transmission Line Project

Route	Composition	Length (miles)
1	A-C-D-E-K-R-T	11.34
2	A-B-E-I-L-O-S-T	11.27
3	A-B-E-I-L-O-P-Q	9.50
4	A-C-D-E-K-N-O-P-Q	9.58
5	A-C-D-F-G-M-P-Q	7.53
6	A-B-F-G-M-P-Q	7.50
7	A-B-F-H-L-O-P-Q	7.49
8	A-B-F-G-J-Q	7.48
9	A-B-F-G-M-S-T	9.27

Segment A

Segment A originates at the northeast corner of the existing NE Hereford Substation located in the northwest portion of Section 38 in Deaf Smith County. Segment A exits the substation to the north, and immediately crosses an existing transmission line and a pipeline as it enters Section 37 and turns west. The segment then extends west approximately 0.3 mile, paralleling the north side of a pipeline along the southern boundary of Section 37. It turns north at the southwest corner of Section 37 and extends north along the east side of the western boundary of Section 37 for approximately 0.5 mile and terminates at its intersection with Segments B and C, on the western boundary of Section 37, approximately 0.1 mile north of County Road (CR) 8a.

Segment B

Segment B originates on the east side of the western boundary of Section 37 at its intersection with Segments A and C, approximately 0.1 mile north of CR 8a. It extends west across the center of Section 44 for approximately 1.0 mile to the east side of a pipeline on the west side of Section 44 east of CR G (Progressive Road). From here the segment extends northwest approximately 0.1 mile as it crosses the pipeline, CR G (Progressive Road), and crosses the eastern boundary of Section 57. At this point, the segment angles and extends north approximately 0.4 mile, paralleling the west side of CR G (Progressive Road) along the eastern boundary of Section 57 where it terminates at its intersection with Segments D, E, and F, southwest of the CR 9 and CR G (Progressive Road) intersection, in the northeast corner of Section 57.

Segment C

Segment C originates on the east side of the western boundary of Section 37 at its intersection with Segments A and B, approximately 0.1 mile north of CR 8a. The segment extends north paralleling the western boundary of Section 37 for approximately 0.3 mile. It then turns and extends west for approximately 0.1 mile, where it turns and extends north for approximately 0.2 mile. The segment terminates at its intersection with Segment D, south of CR 9, on the northern boundary of Section 44, approximately 0.9 mile east of the CR 9 and CR G (Progressive Road) intersection.

Segment D

Segment D originates at its intersection with Segment C, south of CR 9 on the northern boundary of Section 44, approximately 0.9 mile east of the CR 9 and CR G (Progressive Road) intersection. The segment extends west approximately 0.9 mile, paralleling the south side of CR 9 along the northern boundary of Section 44, where it crosses an existing pipeline, CR G (Progressive Road), and enters Section 57. The segment terminates at its intersection with Segments B, E, and F, southwest of the CR 9 and CR G (Progressive Road) intersection in the northeast corner of Section 57.

Segment E

Segment E originates at its intersection with Segments B, D, and F, southwest of the CR 9 and CR G (Progressive Road) intersection in the northeast corner of Section 57. The segment extends north, immediately crossing into the southeast corner of Section 56 and parallels the west side of CR G (Progressive Road) along the eastern boundary of Section 56 approximately 0.5 mile and crosses a pipeline. The segment then continues to parallel the west side of CR G (Progressive Road) east of a pipeline along the eastern boundary of Section 56 for approximately 0.5 mile, where it crosses a pipeline, CR 10, and enters into the southeast corner of Section 55. From here, the segment turns west and parallels the north side of CR 10 along the southern boundary of Section 55 approximately 1.0 mile, and crosses CR GG into the southeast corner of Section 66. The segment then parallels the north side of CR 10 along the southern boundary of Section 66 approximately 0.8 mile where it angles and extends southwest for approximately 0.1 mile, crosses CR 10 and enters the northwestern portion of Section 65. From here, the segment then angles and extends west and parallels the south side of CR 10 along the northern boundary of Section 65 an additional 0.1 mile as it crosses U.S. Highway (US) 385, and enters the northeast corner of Section 76. At this point the segment turns south and parallels the west side of US 385 along the eastern boundary of Section 76 for approximately 0.5 mile where it terminates at its intersection with Segments I and K (on the west side of US 385 on the eastern boundary of Section 76, approximately 0.5 mile south of the US 385 and CR 10 intersection).

Segment F

Segment F originates at its intersection with Segments B, D, and E, southwest of the CR 9 and CR G (Progressive Road) intersection in the northeast corner of Section 57. The segment travels west, paralleling the northern boundary of Section 57 approximately 0.4 mile, where it angles and extends northwest approximately 0.1 mile as it crosses into the southern portion of Section 56 and then angles back to the west. From here, the segment travels west paralleling the southern boundary of Section 56 for approximately 0.5 mile, and crosses CR GG into the southeast corner of Section 65. From this point, it continues west, paralleling the southern boundary of Section 65 approximately 0.5 mile, where it terminates at its intersection with Segments G and H, on the north side of the southern boundary of Section 65, approximately 0.5 mile east of the CR 9 and US 385 intersection.

Segment G

Segment G originates at its intersection with Segments F and H, on the north side of the southern boundary of Section 65, approximately 0.5 mile east of the CR 9 and US 385 intersection. The segment extends south for approximately 0.5 mile, then turns and extends west approximately 0.5 mile where it terminates at its intersection with Segments J and M east of US 385 on the western boundary of Section 64, approximately 0.5 mile south of the CR 9 and US 385 intersection.

Segment H

Segment H originates at its intersection with Segments F and G, north of the southern boundary of Section 65, approximately 0.5 mile east of the CR 9 and US 385 intersection. The segment extends to the southwest for approximately 0.1 mile, crossing into Section 64. It then angles and extends to the west, parallels the northern boundary of Section 64 for approximately 0.3 mile, and then angles northwest. The segment then extends northwest an additional 0.1 mile as it crosses the southwest corner of Section 65, US 385, and enters the southeast corner of Section 76. It terminates at its intersection with Segments I and L, northwest of the US 385 and CR 9 intersection in the southeast corner of Section 76.

Segment I

Segment I originates at its intersection with Segments E and K, on the west side of US 385 on the eastern boundary of Section 76 approximately 0.5 mile south of the US 385 and CR 10 intersection. The segment extends south, paralleling the west side of US 385 along the eastern boundary of Section 76 for approximately 0.5 mile and terminates at its intersection with Segments H and L, northwest of the US 385 and CR 9 intersection, in the southeast corner of Section 76.

Segment J

Segment J originates at its intersection with Segments G and M east of US 385 on the western boundary of Section 64, approximately 0.5 mile south of the CR 9 and US 385 intersection. It extends south and parallels the east side of US 385 along the western boundary of Section 64 for approximately 0.5 mile to the southwest corner of Section 64. Here it angles slightly to the southeast and extends approximately 0.1 mile as it crosses CR 8, enters the northwest corner of Section 63, crosses an existing transmission line, and then crosses two pipelines. From here, the segment then angles slightly south and extends south paralleling the east side of US 385 along the western boundary of Section 63 for approximately 0.2 mile. The segment then angles slightly southwest and extends southwest for approximately 0.1 mile. It then angles and extends south for approximately 0.2 mile. The segment then angles and extends southwest for approximately 0.1 mile as it crosses US 385 and enters the eastern portion of Section 78. It angles and extends west for approximately 0.5 mile where it crosses an existing transmission line. Here, it turns and extends south, and parallels the west side of the existing transmission line for approximately 0.5 mile to the north side of the southern boundary of Section 78, north of a pipeline located north of CR 7. From here the segment turns west and parallels the north side of the pipeline along the southern boundary of Section 78 for approximately 0.4 mile and terminates at its intersection with Segments P and Q, in the southwest corner of Section 78 on the north side of a pipeline, north of CR 7.

Segment K

Segment K originates at its intersection with Segments E and I on the west side of US 385 on the eastern boundary of Section 76, approximately 0.5 mile north of the CR 9 and US 385 intersection. It extends west for approximately 0.9 mile, where it angles slightly to the northwest and extends northwest for approximately 0.1 mile as it crosses Road H and enters Section 85. It terminates at its intersection with Segments N and R, on the eastern boundary of Section 85 on the west side of Road H, approximately 0.5 mile south of the CR 10 and Road H intersection.

Segment L

Segment L originates at its intersection with Segments H and I, northwest of the US 385 and CR 9 intersection, in the southeast corner of Section 76. It extends west and parallels the north side of CR 9 along the southern boundary of Section 76 for approximately 0.4 mile where it angles to the southwest, extends approximately 0.1 mile as it crosses CR 9 and enters Section 77. From here the segment angles back to the west and extends west paralleling the south side of CR 9 along the northern boundary of Section 77 for 0.5 mile where it terminates at its intersection with Segments N and O, southeast of the CR 9 and Road H intersection, in the northwest corner of Section 77.

Segment M

Segment M originates at its intersection with Segments G and J, east of US 385 on the western boundary of Section 64, approximately 0.5 mile south of the CR 9 and US 385 intersection. As the segment extends to the southwest for approximately 0.1 mile, it immediately crosses US 385, and enters Section 77. It angles west and extends for approximately 0.9 mile where it crosses the eastern boundary of Section 84, and terminates at its intersection with Segments O, P, and S, approximately 0.5 mile south of the CR 9 and Road H intersection on the west side of the eastern boundary of Section 84.

Segment N

Segment N originates at its intersection with Segments K and R on the eastern boundary of Section 85 on the west side of Road H, approximately 0.5 mile south of the CR 10 and Road H intersection. The segment extends south and parallels the west side of Road H along the eastern boundary of Section 85 for approximately 0.4 mile, where it angles and extends southeast and crosses Road H as it extends 0.1 mile and enters the southwestern portion of Section 76. From here the segment angles and extends south, and parallels the east side of Road H along the western boundary of Section 76 approximately 0.1 mile, and crosses CR 9 into the northwest corner of Section 77. Segment N terminates at its intersection with Segments L and O, southeast of the CR 9 and Road H intersection in the northwest corner of Section 77.

Segment O

Segment O originates at its intersection with Segments L and N, southeast of the CR 9 and Road H intersection, in the northwest corner of Section 77. The segment extends south approximately 0.3 mile, paralleling the western boundary of Section 77, then angles and extends southwest approximately 0.1 mile as it crosses the eastern boundary of Section 84. From here the segment angles and extends south and parallels the eastern boundary of Section 84 approximately 0.1 mile, where it terminates at its intersection with Segments M, P, and S, approximately 0.5 mile south of the CR 9 and Road H intersection on the west side of the eastern boundary of Section 84.

Segment P

Segment P originates at its intersection with Segments M, O, and S on the west side of the eastern boundary of Section 84, approximately 0.5 mile south of the CR 9 and Road H intersection. It extends south and parallels the eastern boundary of Section 84 approximately 0.3 mile. The segment then angles and extends southeast approximately 0.1 mile as it enters the southwest portion of Section 77. Here, the segment angles and extends south and parallels the western boundary of Section 77 approximately 0.1 mile as it crosses two pipelines and then CR 8, and enters the northwest corner of Section 78. It then extends south and parallels the western

boundary of Section 78 approximately 1.0 mile, and terminates at the intersection of Segments J and Q, on the north side of a pipeline, north of CR 7 in the southwest corner of Section 78.

Segment Q

Segment Q originates at its intersection with Segments J and P in the southwest corner of Section 78 on the north side of a pipeline, north of CR 7. It extends to the west paralleling a pipeline located north of CR 7 along the southern boundary of Section 78, and immediately enters the southeast corner of Section 83 and crosses an existing pipeline. It then extends west and parallels the north side of CR 7 along the southern boundary of Section 83 approximately 0.1 mile, and then angles to the south. Here it extends south and crosses CR 7, crosses an existing transmission line, and terminates on the north side of the new La Plata Substation in the northeastern corner of Section 82.

Segment R

Segment R originates at intersection with Segments K and N on the eastern boundary of Section 85 on the west side of Road H, approximately 0.5 mile south of the CR 10 and Road H intersection. It extends west across Section 85 for approximately 1.0 mile to the east side of CR HH. It turns south and parallels the east side of CR HH along the western boundary of Section 85 for approximately 0.5 mile and crosses CR 9, where it enters the northwest corner of Section 84. The segment then continues south and parallels the east side of CR HH along the western boundary of Section 84 approximately 0.5 mile where terminates at its intersection with Segments S and T, on the east side of CR HH on the western boundary of Section 84, approximately 0.5 mile south of the CR 9 and CR HH intersection.

Segment S

Segment S originates at its intersection with Segments M, O, and P, on the west side of the eastern boundary of Section 84, approximately 0.5 mile south of the CR 9 and Road H intersection. It extends west across the center of Section 84 approximately 1.0 mile, and terminates at its intersection with Segments R and T, on the east side of CR HH on the western boundary of Section 84, approximately 0.5 mile south of the CR 9 and CR HH intersection.

Segment T

Segment T originates at its intersection with Segments R and S, on the east side of CR HH on the western boundary of Section 84 approximately 0.5 mile south of the CR 9 and CR HH intersection. It extends south and parallels the east side of CR HH along the western boundary of Section 84 approximately 0.4 mile, and then angles to the southwest. It extends southwest approximately 0.1 mile as it crosses a pipeline, CR HH, clips the southeastern corner of Section 97, enters the northeast corner of Section 98, and angles to the south. From here, it extends south and parallels the west side of a pipeline located west of CR HH, along the eastern boundary of Section 98 for approximately 0.2 mile, then angles to the southeast. It extends southeast approximately 0.1 mile as it crosses the pipeline, CR HH, enters Section 83, and angles to the south. Here the segment extends south and parallels the east side of CR HH along the western boundary of Section 98 for approximately 0.2 mile, then angles to the southwest corner of Section 83. It then turns east and extends south and parallels the east side of CR 7 along the southern boundary of Section 83 for approximately 0.9 mile where it turns to the south. The segment extends south approximately 280 feet as it crosses CR 7, crosses an existing transmission line, and terminates on the north side of the new La Plata Substation in the northeastern corner of Section 82.

Landowners and Transmission Line Cases at the PUC

Public Utility Commission of Texas



1701 N. Congress Avenue P.O. Box 13326 Austin, Texas 78711-3326 (512) 936-7261 <u>www.puc.state.tx.us</u>

Effective: June 1, 2011

Purpose of This Brochure

This brochure is intended to provide landowners with information about proposed new transmission lines and the Public Utility Commission's ("PUC" or "Commission") process for evaluating these proposals. At the end of the brochure is a list of sources for additional information.

The following topics are covered in this brochure:

- How the PUC evaluates whether a new transmission line should be built,
- How you can participate in the PUC's evaluation of a line, and
- How utilities acquire the right to build a transmission line on private property.

You are receiving the enclosed formal notice because one or more of the routes for a proposed transmission line may require an easement or other property interest across your property, or the centerline of the proposed project may come within 300 feet of a house or other habitable structure on your property. This distance is expanded to 500 feet if the proposed line is greater than 230 kilovolts (kV). For this reason, your property is considered **directly affected land.** This brochure is being included as part of the formal notice process.

If you have questions about the proposed routes for a transmission line, you may contact the applicant. The applicant also has a more detailed map of the proposed routes for the transmission line and nearby habitable structures. The applicant may help you understand the routing of the project and the application approval process in a transmission line case but cannot provide legal advice or represent you. The applicant cannot predict which route may or may not be approved by the PUC. The PUC decides which route to use for the transmission line, and the applicant is not obligated to keep you informed of the PUC's proceedings. The only way to fully participate in the PUC's decision on where to locate the transmission line is to intervene, which is discussed below.

The PUC is sensitive to the impact that transmission lines have on private property. At the same time, transmission lines deliver electricity to millions of homes and businesses in Texas, and new lines are sometimes needed so that customers can obtain reliable, economical power.

The PUC's job is to decide whether a transmission line application should be approved and on which route the line should be constructed. The PUC values input from landowners and encourages you to participate in this process by intervening in the docket.

PUC Transmission Line Case

Texas law provides that most utilities must file an application with the PUC to obtain or amend a Certificate of Convenience and Necessity (CCN) in order to build a new transmission line in Texas. The law requires the PUC to consider a number of factors in deciding whether to approve a proposed new transmission line.

The PUC may approve an application to obtain or amend a CCN for a transmission line after considering the following factors:

- Adequacy of existing service;
- Need for additional service;
- The effect of approving the application on the applicant and any utility serving the proximate area;
- Whether the route utilizes existing compatible rights-of-way, including the use of vacant positions on existing multiple-circuit transmission lines;
- Whether the route parallels existing compatible rights-of-way;
- Whether the route parallels property lines or other natural or cultural features;
- Whether the route conforms with the policy of prudent avoidance (which is defined as the limiting of exposures to electric and magnetic fields that can be avoided with reasonable investments of money and effort); and
- Other factors such as community values, recreational and park areas, historical and aesthetic values, environmental integrity, and the probable improvement of service or lowering of cost to consumers in the area.

If the PUC decides an application should be approved, it will grant to the applicant a CCN or CCN amendment to allow for the construction and operation of the new transmission line.

Application to Obtain or Amend a CCN:

An application to obtain or amend a CCN describes the proposed line and includes a statement from the applicant describing the need for the line and the impact of building it. In addition to the routes proposed by the applicant in its application, the possibility exists that additional routes may be developed, during the course of a CCN case, that could affect property in a different manner than the original routes proposed by the applicant.

The PUC conducts a case to evaluate the impact of the proposed line and to decide which route should be approved. Landowners who would be affected by a new line can:

- informally file a protest, or
- formally participate in the case as an intervenor.

Filing a Protest (informal comments):

If you do not wish to intervene and participate in a hearing in a CCN case, you may file **comments.** An individual or business or a group who files only comments for or against any aspect of the transmission line application is considered a "protestor."

Protestors make a written or verbal statement in support of or in opposition to the utility's application and give information to the PUC staff that they believe supports their position.

Protestors are not parties to the case, however, and do not have the right to:

- Obtain facts about the case from other parties;
- Receive notice of a hearing, or copies of testimony and other documents that are filed in the case;
- Receive notice of the time and place for negotiations;
- File testimony and/or cross-examine witnesses;
- Submit evidence at the hearing; or
- Appeal P.U.C. decisions to the courts.

If you want to make comments, you may either send written comments stating your position, or you may make a statement on the first day of the hearing. If you have not intervened, however, you will not be able to participate as a party in the hearing. Only parties may submit evidence and *the PUC must base its decision on the evidence*.

Intervening in a Case:

To become an intervenor, you must file a statement with the PUC, no later than the date specified in the notice letter sent to you with this brochure, requesting intervenor status (also referred to as a party). This statement should describe how the proposed transmission line would affect your property. Typically, intervention is granted only to directly affected landowners. However, any landowner may request to intervene and obtain a ruling on his or her specific fact situation and concerns. A sample form for intervention and the filing address are attached to this brochure, and may be used to make your filing. A letter requesting intervention may also be used in lieu of the sample form for intervention.

If you decide to intervene and become a party in a case, you will be required to follow certain procedural rules:

- You are required to timely respond to requests for information from other parties who seek information.
- If you file testimony, you must appear at a hearing to be cross-examined.
- If you file testimony or any letters or other documents in the case, you must send copies of the documents to every party in the case and you must file multiple copies with the PUC.
- If you intend to participate at the hearing and you do not file testimony, you must at least file a statement of position, which is a document that describes your position in the case.
- Failure to comply with these procedural rules may serve as grounds for you to be dismissed as an intervenor in the case.
- If you wish to participate in the proceedings it is very important to attend any prehearing conferences.

Intervenors may represent themselves or have an attorney to represent them in a CCN case. If you intervene in a case, you may want an attorney to help you understand the PUC's procedures and the laws and rules that the PUC applies in deciding whether to approve a transmission line. The PUC encourages landowners to intervene and become parties.

If there are persons who intervene in the case and oppose the approval of the line, the PUC may refer the case to an administrative law judge (ALJ) at the State Office of Administrative Hearings (SOAH) to conduct a hearing, or the Commission may elect to conduct a hearing itself. The hearing is a formal proceeding, much like a trial, in which testimony is presented. In the event the case is referred to SOAH, the ALJ makes a recommendation to the PUC on whether the application should be approved and where and how the line should be routed.

There are several stages of a CCN case:

- The ALJ holds a prehearing conference (usually in Austin) to set a schedule for the case.
- Parties to the case have the opportunity to conduct discovery; that is, obtain facts about the case from other parties.
- A hearing is held (usually in Austin), and parties have an opportunity to cross-examine the witnesses.
- Parties file written testimony before the date of the hearing. Parties that do not file written testimony or statements of position by the deadline established by the ALJ may not be allowed to participate in the hearing on the merits.
- Parties may file written briefs concerning the evidence presented at the hearing, but are not required to do so.
- In deciding where to locate the transmission line and other issues presented by the application, the ALJ and Commission rely on factual information submitted as evidence at the hearing by the parties in the case. In order to submit factual information as evidence (other than through cross-examination of other parties' witnesses), a party must have intervened in the docket and filed written testimony on or before the deadline set by the ALJ.
- The ALJ makes a recommendation, called a **proposal for decision**, to the Commission regarding the case. Parties who disagree with the ALJ's recommendation may file exceptions.
- The Commissioners discuss the case and decide whether to approve the application. The Commission may approve the ALJ's recommendation, approve it with specified changes, send the case back to the ALJ for further consideration, or deny the application. The written decision rendered by the Commission is called a **final order**. Parties who believe that the Commission's decision is in error may file motions for rehearing, asking the Commission to reconsider the decision.
- After the Commission rule on the motion for rehearing, parties have the right to appeal the decision to district court in Travis County.
- •

Right to Use Private Property

The Commission is responsible for deciding whether to approve a CCN application for a proposed transmission line. If a transmission line route is approved that impacts your property, the electric utility must obtain the right from you to enter your property and to build, operate, and maintain the transmission line. This right is typically called an easement.

Utilities may buy easements through a negotiated agreement, but they also have the power of eminent domain (condemnation) under Texas law. Local courts, not the PUC, decide issues concerning easements for rights-of-way. The PUC does not determine the value of property.

The PUC final order in a transmission case normally requires a utility to take certain steps to minimize the impact of the new transmission line on landowners' property and on the environment. For example, the order normally requires steps to minimize the possibility of erosion during construction and maintenance activities.

HOW TO OBTAIN MORE INFORMATION

The PUC's online filings interchange on the PUC website provides free access to documents that are filed with the Commission in Central Records. The docket number, also called a control number on the PUC website, of a case is a key piece of information used in locating documents in the case. You may access the Interchange by visiting the PUC's website home page at www.puc.state.tx.us and navigate the website as follows:

- Select "Filings."
- Select "Filings Search."
- Select "Filings Search."
- Enter 5-digit Control (Docket) Number. No other information is necessary.
- Select "Search." All of the filings in the docket will appear in order of date filed.
- Scroll down to select desired filing.
- Click on a blue "Item" number at left.
- Click on a "Download" icon at left.

Documents may also be purchased from and filed in Central Records. For more information on how to purchase or file documents, call Central Records at the PUC at 512-936-7180.

PUC Substantive Rule 25.101, Certification Criteria, addresses transmission line CCNs and is available on the PUC's website, or you may obtain copies of PUC rules from Central Records.

Always include the docket number on all filings with the PUC. You can find the docket number on the enclosed formal notice. Send documents to the PUC at the following address.

Public Utility Commission of Texas Central Records Attn: Filing Clerk 1701 N. Congress Avenue P.O. Box 13326 Austin, TX 78711-3326

The information contained within this brochure is not intended to provide a comprehensive guide to landowner rights and responsibilities in transmission line cases at the PUC. This brochure should neither be regarded as legal advice nor should it be a substitute for the PUC's rules. However, if you have questions about the process in transmission line cases, you may call the PUC's Legal Division at 512-936-7261. The PUC's Legal Division may help you understand the process in a transmission line case but cannot provide legal advice or represent you in a case. You may choose to hire an attorney to decide whether to intervene in a transmission line case, and an attorney may represent you if you choose to intervene.

Communicating with Decision-Makers

Do not contact the ALJ or the Commissioners by telephone or email. They are not allowed to discuss pending cases with you. They may make their recommendations and decisions only by relying on the evidence, written pleadings, and arguments that are presented in the case.

Request to Intervene in PUC Docket No.

The following information must be submitted by the person requesting to intervene in this proceeding. This completed form will be provided to all parties in this docket. <u>If you DO NOT want to be an intervenor, but still want to file comments, please complete the "Comments" page.</u>

Mail this completed form and 10 copies to:

Public Utility Commission of Texas Central Records Attn: Filing Clerk 1701 N. Congress Ave. P.O. Box 13326 Austin, TX 78711-3326

First Name:	Last Name:
Phone Number:	Fax Number:
Address City State:	

I am requesting to intervene in this proceeding. As an INTERVENOR, I understand the following:

- I am a party to the case;
- I am required to respond to all discovery requests from other parties in the case;
- If I file testimony, I may be cross-examined in the hearing;
- If I file any documents in the case, I will have to provide a copy of that document to every other party in the case; and
- I acknowledge that I am bound by the Procedural Rules of the Public Utility Commission of Texas (PUC) and the State Office of Administrative Hearings (SOAH).

Please check one of the following:

- ☐ I own property with a habitable structure located near one or more of the utility's proposed routes for a transmission line.
- \Box One or more of the utility's proposed routes would cross my property.
- Other. Please describe and provide comments. You may attach a separate page, if necessary.

Signature of person requesting intervention:

Comments in Docket No. _____

<u>If you want to be a PROTESTOR only, please complete this form.</u> Although public comments are not treated as evidence, they help inform the PUC and its staff of the public concerns and identify issues to be explored. The PUC welcomes such participation in its proceedings.

Mail this completed form and 10 copies to:

Public Utility Commission of Texas Central Records Attn: Filing Clerk 1701 N. Congress Ave. P.O. Box 13326 Austin, TX 78711-3326

First Name:	Last Name:
Phone Number:	Fax Number:
Address, City, State:	

I am NOT requesting to intervene in this proceeding. As a PROTESTOR, I understand the following:

- I am NOT a party to this case;
- My comments are not considered evidence in this case; and
- I have no further obligation to participate in the proceeding.

Please check one of the following:

- □ I own property with a habitable structure located near one or more of the utility's proposed routes for a transmission line.
- One or more of the utility's proposed routes would cross my property.
- Other. Please describe and provide comments. You may attach a separate page, if necessary.

Signature of person submitting comments:

OFFICE OF THE ATTORNEY GENERAL OF TEXAS



PREPARED BY THE

THE STATE OF TEXAS LANDOWNER'S BILL OF RIGHTS





Attachment 10 Page 16 of 25



STATE OF TEXAS LANDOWNER'S BILL OF RIGHTS

This Landowner's Bill of Rights applies to any attempt by the government or a private entity to take your property. The contents of this Bill of Rights are prescribed by the Texas Legislature in Texas Government Code Sec. 402.031 and Chapter 21 of the Texas Property Code.

- 1. You are entitled to receive adequate compensation if your property is taken for a public use.
- 2. Your property can only be taken for a public use.
- 3. Your property can only be taken by a governmental entity or private entity authorized by law to do so.
- 4. The entity that wants to take your property must notify you that it wants to take your property.
- 5. The entity proposing to take your property must provide you with a written appraisal from a certified appraiser detailing the adequate compensation you are owed for your property.
- 6. The entity proposing to take your property must make a bona fide offer to buy the property before it files a lawsuit to condemn the property – which means the condemning entity must make a good faith offer that conforms with Chapter 21 of the Texas Property Code.
- 7. You may hire an appraiser or other professional to

determine the value of your property or to assist you in any condemnation proceeding.

- 8. You may hire an attorney to negotiate with the condemning entity and to represent you in any legal proceedings involving the condemnation.
- 9. Before your property is condemned, you are entitled to a hearing before a court appointed panel that includes three special commissioners. The special commissioners must determine the amount of compensation the condemning entity owes for the taking of your property. The commissioners must also determine what compensation, if any, you are entitled to receive for any reduction in value of your remaining property.
- 10. If you are unsatisfied with the compensation awarded by the special commissioners, or if you question whether the taking of your property was proper, you have the right to a trial by a judge or jury. If you are dissatisfied with the trial court's judgment, you may appeal that decision.

CONDEMNATION PROCEDURE

Eminent domain is the legal authority that certain entities are granted that allows those entities to take private property for a public use. Private property can include land and certain improvements that are on that property.

Private property may only be taken by a governmental entity or private entity that is authorized by law to do so. Your property may be taken only for a public purpose. That means it can only be taken for a purpose or use that serves the general public. Texas law prohibits condemnation authorities from taking your property to enhance tax revenues or foster economic development.

Your property cannot be taken without adequate compensation. Adequate compensation includes the market value of the property being taken. It may also include certain damages if your remaining property's market value is diminished by the acquisition itself or by the way the condemning entity will use the property.

HOW THE TAKING PROCESS BEGINS

The taking of private property by eminent domain must follow certain procedures. First, the entity that wants to condemn your property must provide you a copy of this Landowner's Bill of Rights before - or at the same time - the entity first represents to you that it possesses eminent domain authority.

Second, if it has not been previously provided, the condemning entity must send this Landowner's Bill of Rights to the last known address of the person who is listed as the property owner on the most recent tax roll. This requirement stipulates that the Landowner's Bill of Rights must be provided to the property owner at least seven days before the entity makes a final offer to acquire the property.

Third, the condemning entity must make a bona fide offer to purchase the property. The requirements for a bona fide offer are contained in Chapter 21 of the Texas Property Code. At the time a purchase offer is made, the condemning entity must disclose any appraisal reports it produced or acquired that relate specifically to the property and were prepared in the ten years preceding the date of the purchase offer. You have the right to discuss the offer with others and to either accept or reject the offer made by the condemning entity.

CONDEMNATION PROCEEDINGS

If you and the condemning entity do not agree on the value of your property, the entity may begin condemnation proceedings. Condemnation is the legal process that eligible entities utilize to take private property. It begins with a condemning entity filing a claim for your property in court. If you live in a county where part of the property being condemned is located, the claim must be filed in that county. Otherwise, the condemnation claim can be filed in any county where at least part of the property being condemned is located. The claim must describe the property being condemned, state with specificity the public use, state the name of the landowner, state that the landowner and the condemning entity were unable to agree on the value of the property, state that the condemning entity provided the landowner with the Landowner's Bill of Rights, and state that the condemning entity made a bona fide offer to acquire the property from the property owner voluntarily.

SPECIAL COMMISSIONERS' HEARING

After the condemning entity files a condemnation claim in court, the judge will appoint three local landowners to serve as special commissioners. The judge will give you a reasonable period to strike one of the special commissioners. If a commissioner is struck, the judge will appoint a replacement. These special commissioners must live in the county where the condemnation proceeding is filed, and they must take an oath to assess the amount of adequate compensation fairly, impartially, and according to the law. The special commissioners are not legally authorized to decide whether the condemnation is necessary or if the public use is proper. Their role is limited to assessing adequate compensation for you. After being appointed, the special commissioners must schedule a hearing at the earliest practical time and place. The special commissioners are also required to give you written notice of the condemnation hearing.

You are required to provide the condemning entity any appraisal reports that were used to determine your claim about adequate compensation for the condemned property. Under a new law enacted in 2011, landowners' appraisal reports must be provided to the condemning entity either ten days after the landowner receives the report or three business days before the special commissioners' hearing - whichever is earlier. You may hire an appraiser or real estate professional to help you determine the value of your private property. Additionally, you can hire an attorney to represent you during condemnation proceedings.

At the condemnation hearing, the special commissioners will consider your evidence on the value of your condemned property, the damages to remaining property, any value added to the remaining property as a result of the condemnation, and the condemning entity's proposed use of your condemned property.

SPECIAL COMMISSIONERS' AWARD

After hearing evidence from all interested parties, the special commissioners will determine the amount of money that you should be awarded to adequately compensate you for your property. The special commissioners' decision is significant to you not only because it determines the amount that qualifies as adequate compensation, but also because it impacts who pays for the cost of the condemnation proceedings. Under the Texas Property Code, if the special commissioners' award is less than or equal to the amount the condemning entity offered to pay before the proceedings began, then you may be financially responsible for the cost of the condemnation proceedings. However, if the special commissioners' award is more than the condemning entity offered to pay before the proceedings began, then you be responsible for the costs associated with the proceedings.

The special commissioners are required to provide the court that appointed them a written decision. That decision is called the "Award." The Award must be filed with the court and the court must send written notice of the Award to all parties. After the Award is filed, the condemning entity may take possession of the property being condemned, even if either party appeals the Award of the special commissioners. To take possession of the property, the condemning entity must either pay the amount of the Award or deposit the amount of the Award into the court's registry. You have the right to withdraw funds that are deposited into the registry of the court.

OBJECTION TO THE SPECIAL COMMISSIONERS' AWARD

If either the landowner or the condemning entity is dissatisfied with the amount of the Award, either party can formally object to the Award. In order to successfully make this valuation objection, it must be filed in writing with the court. If neither party timely objects to the special commissioners' Award, the court will adopt the Award as the final judgment of the court.

If a party timely objects to the special commissioners' Award, the court will hear the case in the same manner that other civil cases are heard. Landowners who object to the Award and ask the court to hear the matter have the right to a trial and can elect whether to have the case decided by a judge or jury. The allocation of any trial costs is decided in the same manner that costs are allocated with the special commissioners' Award. After trial, either party may appeal any judgment entered by the court.

DISMISSAL OF THE CONDEMNATION ACTION

A condemning entity may file a motion to dismiss the condemnation proceeding if it decides it no longer needs your condemned property. If the court grants the motion to dismiss, the case is over and you are entitled to recover reasonable and necessary fees for attorneys, appraisers, photographers, and for other expenses incurred to the date of the hearing on the motion to dismiss.

If you wish to challenge the condemning entity's authority to take your property, you can lodge that challenge by filing a motion to dismiss the condemnation proceeding. Such a motion to dismiss would allege that the condemning entity did not have the right to condemn your property. For example, a landowner could challenge the condemning entity's claim that it seeks to take the property for a public use. If the court grants the landowner's motion, the court may award the landowner reasonable and necessary fees for attorneys, appraisers, photographers, and for other expenses incurred to the date of the hearing or judgment.

RELOCATION COSTS

If you are displaced from your residence or place of business, you may be entitled to reimbursement for reasonable expenses incurred while moving personal property from the residence or relocating the business to a new site. However, during condemnation proceedings, reimbursement for relocation costs may not be available if those costs are separately recoverable under another law. Texas law limits the total amount of available relocation costs to the market value of the property being moved. Further, the law provides that moving costs are limited to the amount that a move would cost if it were within 50 miles.

RECLAMATION OPTIONS

If private property was condemned by a governmental entity, and the public use for which the property was acquired is canceled before that property is used for that public purpose, no actual progress is made toward the public use within ten years or the property becomes unnecessary for public use within ten years, landowners may have the right to repurchase the property for the price paid to the owner by the entity at the time the entity acquired the property through eminent domain.

DISCLAIMER

The information in this statement is intended to be a summary of the applicable portions of Texas state law as required by HB 1495, enacted by the 80th Texas Legislature, Regular Session. This statement is not legal advice and is not a substitute for legal counsel.

ADDITIONAL RESOURCES

Further information regarding the procedures, timelines and requirements outlined in this document can be found in Chapter 21 of the Texas Property Code.

List	
Landowners	

Segment	Habitable Structure #	Tract #	Portion	Section	Block	Survey	COUNTI APPAISAL PROPERTY ID	Landowner	Landowner (2)	Address	City	State	Zip
А		1	BLOCK K-3 SECTION 38 7.50 AC IN NW/CORNER A-1193	38	K-3	SK&K	920166	SOUTHWESTERN PUBLIC SERVICE CO	TAX SERVICES DEPT	PO BOX 1979	DENVER	co	80201
A		2	BLOCK K-3 SECTION 37 S/2 320 AC A-286	37	K-3	SK&K	5579	FEED YARDS INC		2209 SW 7TH AVE	AMARILLO	TX	79106
А	1 & 2	4	BLOCK K-3 SECTION 44 TR F E329.6 N664.6 OF SE4 5.03 AC A-1435	44	K-3	SK&K	10538	FELICIANO CANO		PO BOX 494	HEREFORD	TX	79045
A,B,C		ŝ	BLOCK K-3 SECTION 37 NW/4 160 AC A-286	37	K-3	SK&K	5578	LAWRENCE BRORMAN		4050 CR 10	HEREFORD	ΤX	79045
В	3 & 3a	5	BLOCK K-3 SECTION 44 TR K 5.03 AC A-1435	44	K-3	SK&K	5736	DOMINGO MEDRANO		4009 CO RD 8A	HEREFORD	ΤX	79045
В	54	76	BLOCK K-3 SECTION 44 4.07 AC IN THE NW/COR OF SE4 TR L (A DURYEE, C MEDRANO, D MENDIOLA, F MEDRANO, V MEDRANO)	44	K-3	SK&K	25852	AMELIA NORWOOD ET AL		1307 W 6TH ST	FRIONA	XL	79035
В	4	6	BLOCK K-3 SECTION 44 S/2 OF S/2 OF NW/4 EXC 3 AC 36.42 AC A-1383	44	K-3	SK&K	20432	CHAVEZ FARMS		3951 US Highway 385	HEREFORD	TX	79045
В	Ń	10	BLOCK K-3 SECTION 44 S490' OF N1814.88' OF E235' OF W263.09' OF NW/4 2.65 AC A-1383	4	K-3	SK&K	5741	JOSE & MARIA ROCHA		3960 N PROGRESSIVE RD	HEREFORD	TX	79045
B,D		9	BLOCK K-3 SECTION 44 N/2 EXC FOR 60 AC 259.94 AC	44	K-3	SK&K	11222	CHAVEZ FARMS		3951 US HIGHWAY 385	HEREFORD	TX	79045
B,D,E,F		12	BLOCK K-3 SECTION 57 640.18 AC A-356	57	K-3	WW&S	5778	CITY OF HEREFORD		PO BOX 2277	HEREFORD	XT	79045
C,D		7	BLOCK K-3 SECTION 44 & PT OF 45 N1380' OF E677' 20.40 AC	44	K-3	SK&K	918371	MATTHEW J HASCHKE		PO BOX 602	HEREFORD	XL	79045
D	6&7	8	BLOCK K-3 SECTION 45 SE/4 160 AC A-290	45	K-3	SK&K	5745	LAWRENCE BRORMAN		4050 CR 10	HEREFORD	XL	79045
D,E	8	11	BLOCK K-3 SECTION 45 S410.35' OF W414' 3.90 AC	45	K-3	SK&K	27498	ROXANNE VILLARREAL	& BILLY J GARCIA	1121 S AVE K	HEREFORD	TX	79045
Е		14	BLOCK K-3 SECTION 55 SE/PT 40 AC	55	K-3	WW&S	5772	LEWIS A FETSCH		4050 CO RD GG	HEREFORD	TX	79045
Е		16	BLOCK K-3 SECTION 55 SW/4 161.5 AC A-355	55	K-3	WW&S	5770	NATHAN E BETZEN		3651 CO RD 9	HEREFORD	TX	79045
Е		17	BLOCK K-3 SECTION 66 E/2 323 AC A-1046	66	K-3	WW&S	6173	JAMES W HUND JR		4151 CR GG	HEREFORD	ΧT	79045
ц		18	BLOCK K-3 SECTION 66 SW/4 EXC 12.33 AC & .656 AC IN HWY A-1046 147.68 AC	66	K-3	WW&S	6172	STEVE KNOLL		4020 US HWY 385	HEREFORD	XT	79045
Е	6	19	BLOCK K-3 SECTION 66 SW COR OF SW/4 12.32 AC A- 1046	66	K-3	8%WW	6171	DENNIS ARTHO		BOX 1584	HEREFORD	TX	79045
ш		21	BLOCK K-3 SECTION 65 PT W/2 297.48 AC A-360	65	K-3	S-\$AWW	6163	FRIENDSHIP DAIRIES	c/o PATRICK VANADRICHEM & JACOB VANDERWEG	PO BOX 1556	HEREFORD	TX	79045

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List
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City State Zip		HEREFORD TX 79045	H HEREFORD TX HEREFORD TX	HEREFORD TX HEREFORD TX HEREFORD TX	HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX	HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX	HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX	HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX	HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX HEREFORD TX	HEREFORD TX HEREFORD TX	HEREFORD TX HEREFORD TX	HEREFORD TX	HEREFORD TX HEREFORD TX	HEREFORD TX HEREFORD TX	HEREFORD TX HEREFORD TX	HEREFORD TX HEREFORD TX	HEREFORD TX NORTH CA HILLS NORTH NORTH CA	HEREFORD TX NORTH TX HEREFORD TX NORTH TX HEREFORD TX HEREFORD TX HEREFORD TX NORTH CA HILLS CA HILLS CA HEREFORD TX	HEREFORD TX HEREFORD
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List
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Zip	79045	79045	79045	79045	79045	79045	79045	79045	79045	79464	79109	79045	79045	79045	79045	79045	86304	79045	79045	79045
State	TX	ΤX	TX	ΤX	TX	TX	TX	ΤX	ΤX	ΤX	TX	TX	ΤX	ΤX	ΤX	ΤX	AZ	TX	ΤX	ΤX
City	HEREFORD	HEREFORD	HEREFORD	HEREFORD	HEREFORD	HEREFORD	HEREFORD	HEREFORD	HEREFORD	LUBBOCK	AMARILLO	HEREFORD	HEREFORD	HEREFORD	HEREFORD	HEREFORD	PRESCOTT	HEREFORD	HEREFORD	HEREFORD
Address	PO BOX 233	PO BOX 7	122 REDWOOD	211 S 25 MILE AVE	540 W 15TH	PO BOX 2277	540 W 15TH	145 HICKORY	437 CENTRE	PO BOX 64189	2201 S WASHINGTON	1201 W 15TH	446 HICKORY	442 HICKORY	440 HICKORY	447 HICKORY	PO BOX 11226	3951 US HIGHWAY 385	320 CHEROKEE	3951 US HIGHWAY 385
Landowner (2)		TXDOT																		
Landowner	MATTHEW J COLLIER	STATE OF TEXAS	MICHAEL D FRANKS	TEXAS HILLCREST PROPERTIES INC	DEAF SMITH COUNTY HOSPITAL	CITY OF HEREFORD	DEAF SMITH COUNTY HOSPITAL	WENDELL E BURDINE	JENIFER SMITH	HEREFORD SKY CAPITAL LLC	AMARILLO JUNIOR COLLEGE DISTRICT	ISRAEL & ROSENDA OLIVO	JOSE A & MARIA CABALLERO	JOSEPH R & CASEY BURNS	RICHARD JR & AMY RODRIGUEZ	AMELIA R BALDERRAMA	ROBERSON REVOCABLE TRUST	CHAVEZ FARMS	GUSTAVO MONTANO	CHAVEZ FARMS
COUNTY APPAISAL PROPERTY ID	5	10938	6446	6449	918862	920020	918640	2559	3319	3325	920000	3333	3293	25752	25701	25063	6438	6607	919727	6435
Survey	AB&M	AB&M	AB &M	AB &M	AB &M	AB&M	AB &M	AB&M	AB&M	AB&M	AB&M	AB&M	AB&M	AB&M	AB&M	AB&M	AB&M	AB&M	AB&M	AB&M
Block	K-3	K-3	K-3	K-3	K-3	K-3	K-3	K-3	K-3	K-3	K-3	K-3	K-3	K-3	K-3	K-3	K-3	K-3	K-3	K-3
Section	78	78	78	78	78	78	78	79	62	79	79	79	79	62	79	79	78	85	77	77
Portion	BLOCK K-3 SECTION 78 OUT OF NE4 (TR B25) 11.056 AC A-1501	BLOCK K-3 SECTION 78 NE/4 (TR B26) 6.01 AC A-1501	BLOCK K-3 SECTION 78 (TR 27)S314 OF E1360'9.791 AC A-1501	BLOCK K-3 SECTION 78 N269' OF S583' OF E1453.75' OF NE4 TR B27 8.363 AC (S OF HWY DEPT)	BLOCK K-3 SECTION 78 30Y2061' ON THE NORTH END OF BLK 1 WALMART (TR c2) A-863	BLOCK K-3 SECTION 78 58.64 AC IN SE/4 NORTH OF HOS TR & WAL-MART A-863	BLOCK K-3 SECTION 78 S1532 OF E750 OF W3163.81' 26.385 AC A-1501	WELSH NORTH HEIGHTS BLK 1 LOT 1 & W19' LOT 2	WELSH LA PLATA BLK 1 LOT 1 (53) & N69'LOT 2	WELSH BLOCK 27 E230 OF N 257 EXC ALLEY 1.31 AC	WELSH BLOCK 27 WEST 537.56' 10 AC	WELSH CHAPARRAL ESTATES BLOCK 1 LOT 1	WELCH CHAPARRAL ESTATES BLK II LOT 1	WELSH CHAPARRAL ESTATES BLK II LOT 2	WELSH CHAPARRAL ESTATES BLK II LOT 3	WELSH CHAPARRAL ESTATES BLK II LOT 36	BLOCK K-3 SECTION 78 SW/4 (TR D1) 144.3 AC A-1490	BLOCK K-3 SECTION 85 N/2 320 AC A-36	BLOCK K-3 SECTION 77 NW/4 2 AC A-40	BLOCK K-3 SECTION 77 NE4 EXC 25.65 AC 129.35 AC A-40
Tract #	57	58	59	60	61	62	63	65	99	67	68	69	70	71	72	73	2	30	36	38
Habitable Structure #	18 - 19	20	21 - 22 - 23 - 24	25			27 - 28	29	30	31	32	33	34	35	36	37			39	
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State Zip	TX 79045	TX 79045	TX 79045	TX 79045														
City	HEREFORD	HEREFORD	HEREFORD	HEREFORD		TAMARILLO												
Address	PO BOX 1992	3951 US HIGHWAY 385	3951 US HIGHWAY 385	3555 CR 8		5305 SOUTHWEST 53RD AVE	5305 SOUTHWEST 53RD AVE 4115 US HWY 385	5305 SOUTHWES' 53RD AVE 4115 US HWY 385 3597 CO RD 9	5305 SOUTHWES' 53RD AVE 4115 US HWY 385 3597 CO RD 9 315 DOUGLAS	5305 SOUTHWES' 53RD AVE 4115 US HWY 385 3597 CO RD 9 315 DOUGLAS 437 N TEXAS	5305 SOUTHWES' 5305 SOUTHWES' 53RD AVE 4115 US HWY 385 3597 CO RD 9 315 DOUGLAS 315 DOUGLAS 437 N TEXAS PO BOX 710	5305 SOUTHWES' 53RD AVE 4115 US HWY 385 3597 CO RD 9 315 DOUGLAS 437 N TEXAS PO BOX 710 PO BOX 2277	5305 SOUTHWES' 53RD AVE 53RD AVE 4115 US HWY 385 315 DOUGLAS 315 DOUGLAS 437 N TEXAS PO BOX 710 PO BOX 2277 PO BOX 2277 PO BOX 2277 BLVD	5305 SOUTHWES' 5305 SOUTHWES' 53RD AVE 6305 SOUTHWES' 53RD AVE 4115 US HWY 385 3597 CO RD 9 315 DOUGLAS 315 DOUGLAS 437 N TEXAS 437 N TEXAS PO BOX 710	5305 SOUTHWES' 53RD AVE 53RD AVE 4115 US HWY 385 315 DOUGLAS 315 DOUGLAS 437 N TEXAS PO BOX 710 PO BOX 2277	5305 SOUTHWES' 538D AVE 53RD AVE 4115 US HWY 385 315 DOUGLAS 315 DOUGLAS 315 DOUGLAS 437 N TEXAS 437 N TEXAS PO BOX 710 PO BOX 2277 PO BOX 210 PO BOX 2277 3355 CR B L VD 3476 CO RD H 3555 CR 8	5305 SOUTHWES' 5305 SOUTHWES' 53RD AVE 4115 US HWY 385 315 DOUGLAS 315 DOUGLAS 315 DOUGLAS 97 N TEXAS PO BOX 710 315 FOUGLAS 315 FOUGLAS 315 FOUGLAS 315 FOUGLAS 315 FOUGLAS 315 FOUGLAS 305 FOUGLAS 305 FOUGLAS 3376 CO RD 9 3476 CO RD 9 3476 CO RD 9	5305 SOUTHWEST 538D AVE 53RD AVE 538D AVE 4115 US HWY 385 315 DOUGLAS 315 DOUGLAS 315 DOUGLAS 437 N TEXAS 437 N TEXAS PO BOX 710 PO BOX 2277 PO BOX 2277 PO BOX 2277 3355 CR B LVD 3476 CO RD 9
Landowner (2)																		
Landowner	MICHAEL BEREND	GREGORIO T CHAVEZ	GREGORIO T CHAVEZ	JOE & BRANDAL YN RICHARDS		RALPH D HILL	RALPH D HILL THOMAS SCHLABS ETAL	RALPH D HILL THOMAS SCHLABS ETAL JIMMY CURTIS	RALPH D HILL THOMAS SCHLABS ETAL JIMMY CURTIS RAYMOND W SCHLABS JR	RALPH D HILL THOMAS SCHLABS ETAL JIMMY CURTIS RAYMOND W SCHLABS JR JUAN PEREZ	RALPH D HILL THOMAS SCHLABS ETAL JIMMY CURTIS RAYMOND W SCHLABS JR JUAN PEREZ CALVIN GOODIN ET UX	RALPH D HILL THOMAS SCHLABS ETAL JIMMY CURTIS JIMMY CURTIS RAYMOND W SCHLABS JR JUAN PEREZ JUAN PEREZ CALVIN GOODIN ET UX CTTY OF HEREFORD	RALPH D HILL THOMAS SCHLABS ETAL JIMMY CURTIS IMMY CURTIS IMMY CURTIS SCHLABS JR SCHLABS JR SCHLABS JR SCHLABS JR CHAVIN GOODIN ET UX CTTY OF HEREFORD CTTY OF HEREFORD CTTY OF HEREFORD	RALPH D HILL THOMAS SCHLABS ETAL JIMMY CURTIS ARYMOND W SCHLABS JR SCHLABS JR JUAN PEREZ JUAN PEREZ JUAN PEREZ CALVIN GOODIN ET UX CTTY OF HEREFORD CTTY OF HEREFORD STEPHEN HOFFMAN	RALPH D HILL THOMAS SCHLABS ETAL JIMMY CURTIS FTAL JIMMY CURTIS RAYMOND W SCHLABS JR JUAN PEREZ JUAN PEREZ JUAN PEREZ JUAN PEREZ CALVIN GOODIN ET UX CTTY OF HEREFORD CTTY OF HEREFORD EDWARD C BARRETT STEPHEN HOFFMAN BEEF TECH CATTLE FEEDERS INC	RALPH D HILL THOMAS SCHLABS ETAL JIMMY CURTIS FRAYMOND W SCHLABS JR JUAN PEREZ JUAN PEREZ CALVIN GOODIN ET UX CTTY OF HEREFORD CTTY OF HEREFORD CTTY OF HEREFORD CTTY OF HEREFORD CTTY OF HEREFORD STEPHEN HOFFMAN BEEF TECH CATTLE FEEDERS INC JOE & BRANDALYN RICHARDS	RALPH D HILL THOMAS SCHLABS ETAL JIMMY CURTIS FTAL JIMMY CURTIS RAYMOND W SCHLABS JR JUAN PEREZ JUAN PEREZ JUAN PEREZ JUAN PEREZ JUAN PEREZ CALVIN GOODIN ET UX CALVIN GOODIN ET UX CTTY OF HEREFORD CTTY OF HEREFORD CTTY OF HEREFORD STEPHEN HOFFMAN BEEF TECH CATTLE FEEDERS INC JOE & BRANDALYN RICHARDS BEEF TECH CATTLE FEEDERS INC	RALPH D HILL THOMAS SCHLABS ETAL JIMMY CURTIS FTAL JUAN PEREZ JUAN PEREZ JUAN PEREZ JUAN PEREZ CALVIN GOODIN ET UX CTY OF HEREFORD CTY OF HEREFORD CTY OF HEREFORD CTY OF HEREFORD STEPHEN HOFFMAN BEEF TECH CATTLE FEEDERS INC JOE & BRANDALYN RICHARDS JOE & BRANDALYN RICHARDS JOE & BRANDALYN RICHARDS JOE & BRANDALYN RICHARDS JOE & BRANDALYN RICHARDS JOE & BRANDALYN RICHARDS STEPHEN HOFFMAN RICHARDS JOE & BRANDALYN RICHARDS JOE & BRANDALYN RICHARDS JOE & BRANDALYN RICHARDS JOE & BRANDALYN RICHARDS JOE & CARLSON
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Attachment 10 Page 24 of 25

Attachment 10

OVERSIZED MAP

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Siting and Land Rights

P.O. Box 1261 Amarillo, TX 79105-1261 Telephone: **806-378-2436** Facsimile: 806-378-2724

September 25, 2015

Mr. Mike Veazey, General Manager Deaf Smith Electric Cooperative, Inc. PO Box 753 Hereford, TX 79045

Dear Mr. Veazey:

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy Inc., is providing notice of its application to amend its Certificate of Convenience and Necessity (CCN) in order to construct and operate a new single circuit, 115-kilovolt (kV) electric transmission line between the existing NE Hereford Substation and the new La Plata Substation, both located in Deaf Smith County, Texas. SPS has filed an application with the Public Utility Commission of Texas (Commission or PUC) (Docket No. 45158 - Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 115-kV Transmission Line Within Deaf Smith County, Texas) and is requesting the approval of the Commission for this project. This project is needed for reliability.

The proposed project will involve the construction of a new 115-kV transmission line which will originate at the existing NE Hereford Substation, located 3.5 miles northeast of Hereford, Texas in Deaf Smith County, and terminate at the new La Plata Substation, a half mile west of the existing Centre Street Substation, south of County Road 7, near the western portion of the City of Hereford. The Southwest Power Pool has identified the proposed transmission line as a needed regional reliability upgrade and has issued a Notification to Construct letter to SPS to construct the line to address overload issues at the NE Hereford Substation.

The proposed 115-kV single circuit transmission line will be constructed utilizing primarily single-pole steel structures, which require a smaller surface area than H-frame structures and eliminate the need for guy wires for corner structures. The proposed transmission line will be constructed entirely on new right-of-way with a proposed easement width of 70 feet. In some circumstances, a wider easement may be necessary, but these locations and easement widths cannot be determined until the selected route is surveyed.

The proposed 115-kV single-circuit transmission line is presented with 9 alternative routes consisting of a combined 20 segments and is estimated to be approximately 7.5 to 11.3 miles depending on which route is selected.

Depending on the route chosen, the total cost of the project, including the transmission line and substation costs, is estimated to be between approximately \$11.8 million and \$15.1 million.

Enclosed are a copy of a written description of the segments to be used for the alternative routes and a map of the proposed project. <u>All routes and route segments included in this notice are available for selection and approval by the Public Utility Commission of Texas</u>. A copy of the complete application, which includes larger, more detailed maps, is available for review at SPS's offices at Chase Tower, 600 S. Tyler Street, Suite 1800, Amarillo, Texas, 79101. The complete application is also available for review on the PUC's website at <u>www.puc.state.tx.us</u> by using the PUC's filing retrieval system and the Docket No. assigned to the application. Information about the proposed project is also accessible on Xcel Energy's website *Power for the Plains* at <u>http://www.powerfortheplains.com</u>.

Persons who wish to intervene in the docket or comment on the application should mail the original and 10 copies of their requests to intervene or comments to:

Public Utility Commission of Texas Central Records Attn: Filing Clerk 1701 N. Congress Avenue P. O. Box 13326 Austin, Texas 78711-3326

The deadline for intervention in the proceeding is November 9, 2015, and a letter requesting intervention should be received by the Commission by that date.

The PUC has a brochure titled "Landowners and Transmission Line Cases at the PUC." Copies of the brochure are available from Tyler Lucero at 806-378-2312 or James Bagley at 806-378-2868 or may be downloaded from the PUC's website at <u>www.puc.state.tx.us</u>. To obtain additional information about this docket, you may contact the PUC's Customer Assistance Hotline at 512-936-7120 or 888-782-8477. Hearing- and speech-impaired individuals with text telephones (TTY) may contact the PUC's Customer Assistance Hotline at 512-936-7136 or toll free at 800-735-2989. In addition to the intervention deadline, other important deadlines may already exist that affect your participation in this docket. You should review the orders and other filings already made in the docket.

If you have any questions or need additional information, please call Tyler Lucero or James Bagley.

Sincerely,

Sean L. Juden Josen

Sean L. Frederiksen, Supervisor Siting and Land Rights

Enclosures



Siting and Land Rights

P.O. Box 1261 Amarillo, TX 79105-1261 Telephone: **806-378-2436** Facsimile: 806-378-2724

September 25, 2015

Mr. Mark W. Schwirtz, President and General Manager Golden Spread Electric Cooperative, Inc. PO Box 9898 Amarillo, TX 79105

Dear Mr. Schwirtz:

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy Inc., is providing notice of its application to amend its Certificate of Convenience and Necessity (CCN) in order to construct and operate a new single circuit, 115-kilovolt (kV) electric transmission line between the existing NE Hereford Substation and the new La Plata Substation, both located in Deaf Smith County, Texas. SPS has filed an application with the Public Utility Commission of Texas (Commission or PUC) (Docket No. 45158 - Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 115-kV Transmission Line Within Deaf Smith County, Texas) and is requesting the approval of the Commission for this project. This project is needed for reliability.

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The proposed 115-kV single-circuit transmission line is presented with 9 alternative routes consisting of a combined 20 segments and is estimated to be approximately 7.5 to 11.3 miles depending on which route is selected.

Depending on the route chosen, the total cost of the project, including the transmission line and substation costs, is estimated to be between approximately \$11.8 million and \$15.1 million.

Enclosed are a copy of a written description of the segments to be used for the alternative routes and a map of the proposed project. <u>All routes and route segments included in this notice are available for selection and approval by the Public Utility Commission of Texas</u>. A copy of the complete application, which includes larger, more detailed maps, is available for review at SPS's offices at Chase Tower, 600 S. Tyler Street, Suite 1800, Amarillo, Texas, 79101. The complete application is also available for review on the PUC's website at <u>www.puc.state.tx.us</u> by using the PUC's filing retrieval system and the Docket No. assigned to the application. Information about the proposed project is also accessible on Xcel Energy's website *Power for the Plains* at <u>http://www.powerfortheplains.com</u>.

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If you have any questions or need additional information, please call Tyler Lucero or James Bagley.

Sincerely,

Sean L. Juden Josen

Sean L. Frederiksen, Supervisor Siting and Land Rights

Enclosures



Siting and Land Rights

P.O. Box 1261 Amarillo, TX 79105-1261 Telephone: **806-378-2436** Facsimile: 806-378-2724

September 25, 2015

The Honorable Tom Simons Deaf Smith County Judge 235 East 3rd Street #100 Hereford, TX 79045

Dear Judge Simons:

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy Inc., is providing notice of its application to amend its Certificate of Convenience and Necessity (CCN) in order to construct and operate a new single circuit, 115-kilovolt (kV) electric transmission line between the existing NE Hereford Substation and the new La Plata Substation, both located in Deaf Smith County, Texas. SPS has filed an application with the Public Utility Commission of Texas (Commission or PUC) (Docket No. 45158 - Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 115-kV Transmission Line Within Deaf Smith County, Texas) and is requesting the approval of the Commission for this project. This project is needed for reliability.

The proposed project will involve the construction of a new 115-kV transmission line which will originate at the existing NE Hereford Substation, located 3.5 miles northeast of Hereford, Texas in Deaf Smith County, and terminate at the new La Plata Substation, a half mile west of the existing Centre Street Substation, south of County Road 7, near the western portion of the City of Hereford. The Southwest Power Pool has identified the proposed transmission line as a needed regional reliability upgrade and has issued a Notification to Construct letter to SPS to construct the line to address overload issues at the NE Hereford Substation.

The proposed 115-kV single circuit transmission line will be constructed utilizing primarily single-pole steel structures, which require a smaller surface area than H-frame structures and eliminate the need for guy wires for corner structures. The proposed transmission line will be constructed entirely on new right-of-way with a proposed easement width of 70 feet. In some circumstances, a wider easement may be necessary, but these locations and easement widths cannot be determined until the selected route is surveyed.

The proposed 115-kV single-circuit transmission line is presented with 9 alternative routes consisting of a combined 20 segments and is estimated to be approximately 7.5 to 11.3 miles depending on which route is selected.

Depending on the route chosen, the total cost of the project, including the transmission line and substation costs, is estimated to be between approximately \$11.8 million and \$15.1 million.

Enclosed are a copy of a written description of the segments to be used for the alternative routes and a map of the proposed project. <u>All routes and route segments included in this notice are available for selection and approval by the Public Utility Commission of Texas.</u> A copy of the complete application, which includes larger, more detailed maps, is available for review at SPS's offices at Chase Tower, 600 S. Tyler Street, Suite 1800, Amarillo, Texas, 79101. The complete application is also available for review on the PUC's website at <u>www.puc.state.tx.us</u> by using the PUC's filing retrieval system and the Docket No. assigned to the application. Information about the proposed project is also accessible on Xcel Energy's website *Power for the Plains* at <u>http://www.powerfortheplains.com</u>.

Persons who wish to intervene in the docket or comment on the application should mail the original and 10 copies of their requests to intervene or comments to:

Public Utility Commission of Texas Central Records Attn: Filing Clerk 1701 N. Congress Avenue P. O. Box 13326 Austin, Texas 78711-3326

The deadline for intervention in the proceeding is November 9, 2015, and a letter requesting intervention should be received by the Commission by that date.

The PUC has a brochure titled "Landowners and Transmission Line Cases at the PUC." Copies of the brochure are available from Tyler Lucero at 806-378-2312 or James Bagley at 806-378-2868 or may be downloaded from the PUC's website at <u>www.puc.state.tx.us</u>. To obtain additional information about this docket, you may contact the PUC's Customer Assistance Hotline at 512-936-7120 or 888-782-8477. Hearing- and speech-impaired individuals with text telephones (TTY) may contact the PUC's Customer Assistance Hotline at 512-936-7136 or toll free at 800-735-2989. In addition to the intervention deadline, other important deadlines may already exist that affect your participation in this docket. You should review the orders and other filings already made in the docket.

If you have any questions or need additional information, please call Tyler Lucero or James Bagley.

Sincerely,

Sean L. Anden Josen

Sean L. Frederiksen, Supervisor Siting and Land Rights

Enclosures



Siting and Land Rights

P.O. Box 1261 Amarillo, TX 79105-1261 Telephone: **806-378-2436** Facsimile: 806-378-2724

September 25, 2015

Mr. Robert D. Josserand, Mayor City of Hereford 224 Lee Avenue Hereford, TX 79045

Dear Mayor Josserand:

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy Inc., is providing notice of its application to amend its Certificate of Convenience and Necessity (CCN) in order to construct and operate a new single circuit, 115-kilovolt (kV) electric transmission line between the existing NE Hereford Substation and the new La Plata Substation, both located in Deaf Smith County, Texas. SPS has filed an application with the Public Utility Commission of Texas (Commission or PUC) (Docket No. 45158 - Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 115-kV Transmission Line Within Deaf Smith County, Texas) and is requesting the approval of the Commission for this project. This project is needed for reliability.

The proposed project will involve the construction of a new 115-kV transmission line which will originate at the existing NE Hereford Substation, located 3.5 miles northeast of Hereford, Texas in Deaf Smith County, and terminate at the new La Plata Substation, a half mile west of the existing Centre Street Substation, south of County Road 7, near the western portion of the City of Hereford. The Southwest Power Pool has identified the proposed transmission line as a needed regional reliability upgrade and has issued a Notification to Construct letter to SPS to construct the line to address overload issues at the NE Hereford Substation.

The proposed 115-kV single circuit transmission line will be constructed utilizing primarily single-pole steel structures, which require a smaller surface area than H-frame structures and eliminate the need for guy wires for corner structures. The proposed transmission line will be constructed entirely on new right-of-way with a proposed easement width of 70 feet. In some circumstances, a wider easement may be necessary, but these locations and easement widths cannot be determined until the selected route is surveyed.

The proposed 115-kV single-circuit transmission line is presented with 9 alternative routes consisting of a combined 20 segments and is estimated to be approximately 7.5 to 11.3 miles depending on which route is selected.

Depending on the route chosen, the total cost of the project, including the transmission line and substation costs, is estimated to be between approximately \$11.8 million and \$15.1 million.

Enclosed are a copy of a written description of the segments to be used for the alternative routes and a map of the proposed project. <u>All routes and route segments included in this notice are available for selection and approval by the Public Utility Commission of Texas.</u> A copy of the complete application, which includes larger, more detailed maps, is available for review at SPS's offices at Chase Tower, 600 S. Tyler Street, Suite 1800, Amarillo, Texas, 79101. The complete application is also available for review on the PUC's website at <u>www.puc.state.tx.us</u> by using the PUC's filing retrieval system and the Docket No. assigned to the application. Information about the proposed project is also accessible on Xcel Energy's website *Power for the Plains* at <u>http://www.powerfortheplains.com</u>.

Persons who wish to intervene in the docket or comment on the application should mail the original and 10 copies of their requests to intervene or comments to:

Public Utility Commission of Texas Central Records Attn: Filing Clerk 1701 N. Congress Avenue P. O. Box 13326 Austin, Texas 78711-3326

The deadline for intervention in the proceeding is November 9, 2015, and a letter requesting intervention should be received by the Commission by that date.

The PUC has a brochure titled "Landowners and Transmission Line Cases at the PUC." Copies of the brochure are available from Tyler Lucero at 806-378-2312 or James Bagley at 806-378-2868 or may be downloaded from the PUC's website at <u>www.puc.state.tx.us</u>. To obtain additional information about this docket, you may contact the PUC's Customer Assistance Hotline at 512-936-7120 or 888-782-8477. Hearing- and speech-impaired individuals with text telephones (TTY) may contact the PUC's Customer Assistance Hotline at 512-936-7136 or toll free at 800-735-2989. In addition to the intervention deadline, other important deadlines may already exist that affect your participation in this docket. You should review the orders and other filings already made in the docket.

If you have any questions or need additional information, please call Tyler Lucero or James Bagley.

Sincerely,

Sean L. Andenjosen

Sean L. Frederiksen, Supervisor Siting and Land Rights

Enclosures

Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 115-kV Transmission Line Within Deaf Smith County, Texas

PUBLIC UTILITY COMMISSION OF TEXAS DOCKET NO. 45158

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy Inc., is providing notice of its application to amend its Certificate of Convenience and Necessity (CCN) in order to construct and operate a new single circuit, 115-kilovolt (kV) electric transmission line between the existing NE Hereford Substation and the new La Plata Substation, both located in Deaf Smith County, Texas. SPS has filed an application with the Public Utility Commission of Texas (Commission or PUC) (Docket No. 45158 - Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 115-kV Transmission Line Within Deaf Smith County, Texas) and is requesting the approval of the Commission for this project. This project is needed for reliability.

The proposed project will involve the construction of a new 115-kV transmission line which will originate at the existing NE Hereford Substation, located 3.5 miles northeast of Hereford, Texas in Deaf Smith County, and terminate at the new La Plata Substation, a half mile west of the existing Centre Street Substation, south of County Road 7, near the western portion of the City of Hereford. The Southwest Power Pool has identified the proposed transmission line as a needed regional reliability upgrade and has issued a Notification to Construct letter to SPS to construct the line to address overload issues at the NE Hereford Substation.

The proposed 115-kV single circuit transmission line will be constructed utilizing primarily single-pole steel structures, which require a smaller surface area than H-frame structures and eliminate the need for guy wires for corner structures. The proposed transmission line will be constructed entirely on new right-of-way with a proposed easement width of 70 feet. In some circumstances, a wider easement may be necessary, but these locations and easement widths cannot be determined until the selected route is surveyed.

The proposed 115-kV single-circuit transmission line is presented with 9 alternative routes consisting of a combined 20 segments and is estimated to be approximately 7.5 to 11.3 miles depending on which route is selected.

Depending on the route chosen, the total cost of the project, including the transmission line and substation costs, is estimated to be between approximately \$11.8 million and \$15.1 million.

Persons with questions about the transmission line may contact SPS's representatives Tyler Lucero at 806-378-2312 or James Bagley at 806-378-2868. Included in this notice are a copy of a written description of the segments to be used for the alternative routes and a map of the proposed project. Larger, more detailed routing maps may be viewed at SPS's offices at Chase Tower, 600 S. Tyler Street, Suite 1800, Amarillo, Texas, 79101. Information about the proposed project is also accessible on Xcel Energy's website *Power for the Plains* at http://www.powerfortheplains.com.

<u>All routes and route segments included in this notice are available for selection and approval by the</u> <u>Commission.</u>

Persons who are affected by the proposed transmission line and wish to intervene in the docket or comment on the applicant's application should mail the original and 10 copies of their request to intervene or their comments to:

Public Utility Commission of Texas

Central Records Attn: Filing Clerk 1701 N. Congress Ave. P.O. Box 13326 Austin, Texas 78711-3326

Persons who wish to intervene in the docket must also mail a copy of their request for intervention to all parties in the docket and all persons that have pending motions to intervene, at or before the time the request for intervention is mailed to the PUC. The only way to fully participate in the PUC's decision on where to locate the transmission line is to intervene in the docket. It is important for an affected person to intervene because the utility is not obligated to keep affected persons informed of the PUC's proceedings and cannot predict which route may or may not be approved by the PUC.

The deadline for intervention in the proceeding is November 9, 2015, and the PUC should receive a letter from anyone requesting intervention by that date.

The PUC has a brochure titled "Landowners and Transmission Line Cases at the PUC." Copies of the brochure are available from Tyler Lucero 806-378-2312 or may be downloaded from the PUC's website at <u>www.puc.state.tx.us</u>. To obtain additional information about this docket, you may contact the PUC's Customer Assistance Hotline at 512-936-7120 or 888-782-8477. Hearing-and speech-impaired individuals with text telephones (TTY) may contact the PUC's Customer Assistance Hotline at 512-936-7136 or toll free at 800-735-2989. In addition to the intervention deadline, other important deadlines may already exist that affect your participation in this docket. You should review the orders and other filings already made in the docket.

Route	Composition	Length (miles)
1	A-C-D-E-K-R-T	11.34
2	A-B-E-I-L-O-S-T	11.27
3	A-B-E-I-L-O-P-Q	9.50
4	A-C-D-E-K-N-O-P-Q	9.58
5	A-C-D-F-G-M-P-Q	7.53
6	A-B-F-G-M-P-Q	7.50
7	A-B-F-H-L-O-P-Q	7.49
8	A-B-F-G-J-Q	7.48
9	A-B-F-G-M-S-T	9.27

Segment Descriptions

Southwestern Public Service Company (SPS) a subsidiary of Xcel Energy Inc. has filed an application with the Public Utility Commission of Texas (PUC) to amend its Certificate of Convenience and Necessity (CCN) to construct the proposed NE Hereford to La Plata Substation 115-kV transmission line. Various combinations of transmission line segments form routing options for the project. The segments forming those routing options are described below.

Segment A

Segment A originates at the northeast corner of the existing NE Hereford Substation located in the northwest portion of Section 38 in Deaf Smith County. Segment A exits the substation to the north, and immediately crosses an existing transmission line and a pipeline as it enters Section 37 and turns west. The segment then extends west approximately 0.3 mile, paralleling the north side of a pipeline along the southern boundary of Section 37. It turns north at the southwest corner of Section 37 and extends north

along the east side of the western boundary of Section 37 for approximately 0.5 mile and terminates at its intersection with Segments B and C, on the western boundary of Section 37, approximately 0.1 mile north of County Road (CR) 8a.

Segment B

Segment B originates on the east side of the western boundary of Section 37 at its intersection with Segments A and C, approximately 0.1 mile north of CR 8a. It extends west across the center of Section 44 for approximately 1.0 mile to the east side of a pipeline on the west side of Section 44 east of CR G (Progressive Road). From here the segment extends northwest approximately 0.1 mile as it crosses the pipeline, CR G (Progressive Road), and crosses the eastern boundary of Section 57. At this point, the segment angles and extends north approximately 0.4 mile, paralleling the west side of CR G (Progressive Road) along the eastern boundary of Section 57 where it terminates at its intersection with Segments D, E, and F, southwest of the CR 9 and CR G (Progressive Road) intersection, in the northeast corner of Section 57.

Segment C

Segment C originates on the east side of the western boundary of Section 37 at its intersection with Segments A and B, approximately 0.1 mile north of CR 8a. The segment extends north paralleling the western boundary of Section 37 for approximately 0.3 mile. It then turns and extends west for approximately 0.1 mile, where it turns and extends north for approximately 0.2 mile. The segment terminates at its intersection with Segment D, south of CR 9, on the northern boundary of Section 44, approximately 0.9 mile east of the CR 9 and CR G (Progressive Road) intersection.

Segment D

Segment D originates at its intersection with Segment C, south of CR 9 on the northern boundary of Section 44, approximately 0.9 mile east of the CR 9 and CR G (Progressive Road) intersection. The segment extends west approximately 0.9 mile, paralleling the south side of CR 9 along the northern boundary of Section 44, where it crosses an existing pipeline, CR G (Progressive Road), and enters Section 57. The segment terminates at its intersection with Segments B, E, and F, southwest of the CR 9 and CR G (Progressive Road) intersection in the northeast corner of Section 57.

Segment E

Segment E originates at its intersection with Segments B, D, and F, southwest of the CR 9 and CR G (Progressive Road) intersection in the northeast corner of Section 57. The segment extends north, immediately crossing into the southeast corner of Section 56 and parallels the west side of CR G (Progressive Road) along the eastern boundary of Section 56 approximately 0.5 mile and crosses a pipeline. The segment then continues to parallel the west side of CR G (Progressive Road) east of a pipeline along the eastern boundary of Section 56 for approximately 0.5 mile, where it crosses a pipeline, CR 10, and enters into the southeast corner of Section 55. From here, the segment turns west and parallels the north side of CR 10 along the southern boundary of Section 55 approximately 1.0 mile, and crosses CR GG into the southeast corner of Section 66. The segment then parallels the north side of CR 10 along the southern boundary of Section 66 approximately 0.8 mile where it angles and extends southwest for approximately 0.1 mile, crosses CR 10 and enters the northwestern portion of Section 65. From here, the segment then angles and extends west and parallels the south side of CR 10 along the northern boundary of Section 65 an additional 0.1 mile as it crosses U.S. Highway (US) 385, and enters the northeast corner of Section 76. At this point the segment turns south and parallels the west side of US 385 along the eastern boundary of Section 76 for approximately 0.5 mile where it terminates at its intersection with Segments I and K (on the west side of US 385 on the eastern boundary of Section 76, approximately 0.5 mile south of the US 385 and CR 10 intersection).

Segment F

Segment F originates at its intersection with Segments B, D, and E, southwest of the CR 9 and CR G (Progressive Road) intersection in the northeast corner of Section 57. The segment travels west, paralleling the northern boundary of Section 57 approximately 0.4 mile, where it angles and extends northwest approximately 0.1 mile as it crosses into the southern portion of Section 56 and then angles back to the west. From here, the segment travels west paralleling the southern boundary of Section 56 for approximately 0.5 mile, and crosses CR GG into the southeast corner of Section 65. From this point, it continues west, paralleling the southern boundary of Section 65 approximately 0.5 mile, where it terminates at its intersection with Segments G and H, on the north side of the southern boundary of Section 65, approximately 0.5 mile east of the CR 9 and US 385 intersection.

Segment G

Segment G originates at its intersection with Segments F and H, on the north side of the southern boundary of Section 65, approximately 0.5 mile east of the CR 9 and US 385 intersection. The segment extends south for approximately 0.5 mile, then turns and extends west approximately 0.5 mile where it terminates at its intersection with Segments J and M east of US 385 on the western boundary of Section 64, approximately 0.5 mile south of the CR 9 and US 385 intersection.

Segment H

Segment H originates at its intersection with Segments F and G, north of the southern boundary of Section 65, approximately 0.5 mile east of the CR 9 and US 385 intersection. The segment extends to the southwest for approximately 0.1 mile, crossing into Section 64. It then angles and extends to the west, parallels the northern boundary of Section 64 for approximately 0.3 mile, and then angles northwest. The segment then extends northwest an additional 0.1 mile as it crosses the southwest corner of Section 65, US 385, and enters the southeast corner of Section 76. It terminates at its intersection with Segments I and L, northwest of the US 385 and CR 9 intersection in the southeast corner of Section 76.

Segment I

Segment I originates at its intersection with Segments E and K, on the west side of US 385 on the eastern boundary of Section 76 approximately 0.5 mile south of the US 385 and CR 10 intersection. The segment extends south, paralleling the west side of US 385 along the eastern boundary of Section 76 for approximately 0.5 mile and terminates at its intersection with Segments H and L, northwest of the US 385 and CR 9 intersection, in the southeast corner of Section 76.

Segment J

Segment J originates at its intersection with Segments G and M east of US 385 on the western boundary of Section 64, approximately 0.5 mile south of the CR 9 and US 385 intersection. It extends south and parallels the east side of US 385 along the western boundary of Section 64 for approximately 0.5 mile to the southwest corner of Section 64. Here it angles slightly to the southeast and extends approximately 0.1 mile as it crosses CR 8, enters the northwest corner of Section 63, crosses an existing transmission line, and then crosses two pipelines. From here, the segment then angles slightly south and extends south paralleling the east side of US 385 along the western boundary of Section 63 for approximately 0.2 mile. The segment then angles slightly southwest and extends southwest for approximately 0.1 mile. It then angles and extends south for approximately 0.2 mile. The segment then angles and extends southwest for approximately 0.1 mile as it crosses US 385 and enters the eastern portion of Section 78. It angles and extends west for approximately 0.5 mile where it crosses an existing transmission line. Here, it turns and extends south, and parallels the west side of the existing transmission line for approximately 0.5 mile to the north side of the southern boundary of Section 78, north of a pipeline located north of CR 7. From here the segment turns west and parallels the north side of the pipeline along the southern boundary of Section 78 for approximately 0.4 mile and terminates at its intersection with Segments P and Q, in the southwest corner of Section 78 on the north side of a pipeline, north of CR 7.

Segment K

Segment K originates at its intersection with Segments E and I on the west side of US 385 on the eastern boundary of Section 76, approximately 0.5 mile north of the CR 9 and US 385 intersection. It extends west for approximately 0.9 mile, where it angles slightly to the northwest and extends northwest for approximately 0.1 mile as it crosses Road H and enters Section 85. It terminates at its intersection with Segments N and R, on the eastern boundary of Section 85 on the west side of Road H, approximately 0.5 mile south of the CR 10 and Road H intersection.

Segment L

Segment L originates at its intersection with Segments H and I, northwest of the US 385 and CR 9 intersection, in the southeast corner of Section 76. It extends west and parallels the north side of CR 9 along the southern boundary of Section 76 for approximately 0.4 mile where it angles to the southwest, extends approximately 0.1 mile as it crosses CR 9 and enters Section 77. From here the segment angles back to the west and extends west paralleling the south side of CR 9 along the northern boundary of Section 77 for 0.5 mile where it terminates at its intersection with Segments N and O, southeast of the CR 9 and Road H intersection, in the northwest corner of Section 77.

Segment M

Segment M originates at its intersection with Segments G and J, east of US 385 on the western boundary of Section 64, approximately 0.5 mile south of the CR 9 and US 385 intersection. As the segment extends to the southwest for approximately 0.1 mile, it immediately crosses US 385, and enters Section 77. It angles west and extends for approximately 0.9 mile where it crosses the eastern boundary of Section 84, and terminates at its intersection with Segments O, P, and S, approximately 0.5 mile south of the CR 9 and Road H intersection on the west side of the eastern boundary of Section 84.

Segment N

Segment N originates at its intersection with Segments K and R on the eastern boundary of Section 85 on the west side of Road H, approximately 0.5 mile south of the CR 10 and Road H intersection. The segment extends south and parallels the west side of Road H along the eastern boundary of Section 85 for approximately 0.4 mile, where it angles and extends southeast and crosses Road H as it extends 0.1 mile and enters the southwestern portion of Section 76. From here the segment angles and extends south, and parallels the east side of Road H along the western boundary of Section 76 approximately 0.1 mile, and crosses CR 9 into the northwest corner of Section 77. Segment N terminates at its intersection with Segments L and O, southeast of the CR 9 and Road H intersection in the northwest corner of Section 77.

Segment O

Segment O originates at its intersection with Segments L and N, southeast of the CR 9 and Road H intersection, in the northwest corner of Section 77. The segment extends south approximately 0.3 mile, paralleling the western boundary of Section 77, then angles and extends southwest approximately 0.1 mile as it crosses the eastern boundary of Section 84. From here the segment angles and extends south and parallels the eastern boundary of Section 84 approximately 0.1 mile, where it terminates at its intersection with Segments M, P, and S, approximately 0.5 mile south of the CR 9 and Road H intersection on the west side of the eastern boundary of Section 84.

Segment P

Segment P originates at its intersection with Segments M, O, and S on the west side of the eastern boundary of Section 84, approximately 0.5 mile south of the CR 9 and Road H intersection. It extends south and parallels the eastern boundary of Section 84 approximately 0.3 mile. The segment then angles and extends southeast approximately 0.1 mile as it enters the southwest portion of Section 77. Here, the segment angles and extends south and parallels the western boundary of Section 77 approximately 0.1 mile as it crosses two pipelines and then CR 8, and enters the northwest corner of Section 78. It then extends south and parallels the western boundary of Section 78 approximately 1.0 mile, and terminates at

the intersection of Segments J and Q, on the north side of a pipeline, north of CR 7 in the southwest corner of Section 78.

Segment Q

Segment Q originates at its intersection with Segments J and P in the southwest corner of Section 78 on the north side of a pipeline, north of CR 7. It extends to the west paralleling a pipeline located north of CR 7 along the southern boundary of Section 78, and immediately enters the southeast corner of Section 83 and crosses an existing pipeline. It then extends west and parallels the north side of CR 7 along the southern boundary of Section 83 approximately 0.1 mile, and then angles to the south. Here it extends south and crosses CR 7, crosses an existing transmission line, and terminates on the north side of the new La Plata Substation in the northeastern corner of Section 82.

Segment R

Segment R originates at intersection with Segments K and N on the eastern boundary of Section 85 on the west side of Road H, approximately 0.5 mile south of the CR 10 and Road H intersection. It extends west across Section 85 for approximately 1.0 mile to the east side of CR HH. It turns south and parallels the east side of CR HH along the western boundary of Section 85 for approximately 0.5 mile and crosses CR 9, where it enters the northwest corner of Section 84. The segment then continues south and parallels the east side of CR HH along the western boundary of Section 84 approximately 0.5 mile where terminates at its intersection with Segments S and T, on the east side of CR HH on the western boundary of Section 84, approximately 0.5 mile south of the CR 9 and CR HH intersection.

Segment S

Segment S originates at its intersection with Segments M, O, and P, on the west side of the eastern boundary of Section 84, approximately 0.5 mile south of the CR 9 and Road H intersection. It extends west across the center of Section 84 approximately 1.0 mile, and terminates at its intersection with Segments R and T, on the east side of CR HH on the western boundary of Section 84, approximately 0.5 mile south of the CR 9 and CR HH intersection.

Segment T

Segment T originates at its intersection with Segments R and S, on the east side of CR HH on the western boundary of Section 84 approximately 0.5 mile south of the CR 9 and CR HH intersection. It extends south and parallels the east side of CR HH along the western boundary of Section 84 approximately 0.4 mile, and then angles to the southwest. It extends southwest approximately 0.1 mile as it crosses a pipeline, CR HH, clips the southeastern corner of Section 97, enters the northeast corner of Section 98, and angles to the south. From here, it extends south and parallels the west side of a pipeline located west of CR HH, along the eastern boundary of Section 98 for approximately 0.2 mile, then angles to the southeast approximately 0.1 mile as it crosses the pipeline, CR HH, enters Section 83, and angles to the south. Here the segment extends south and parallels the east side of CR HH along the western boundary of Section 83 for approximately 0.6 mile to the southwest corner of Section 83. It then turns east and extends east, paralleling the north side of CR 7 along the southern boundary of Section 83 for approximately 0.8 mile south approximately 280 feet as it crosses CR 7, crosses an existing transmission line, and terminates on the north side of the new La Plata Substation in the northeastern corner of Section 82.

Attachment 13 Page 7 of 7

List of Newspapers

Hereford Brand 313 N. Lee P.O. Box 673 Hereford, TX 79045 806-364-2030



Siting and Land Rights

P.O. Box 1261 Amarillo, TX 79105-1261 Telephone: **806-378-2436** Facsimile: 806-378-2724

September 25, 2015

Julie Wicker Wildlife Habitat Assessment Program Wildlife Division Texas Parks and Wildlife Department 4200 Smith School Road Austin, Texas 78744

Dear Ms. Wicker:

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy Inc., is providing notice of its application to amend its Certificate of Convenience and Necessity (CCN) in order to construct and operate a new single circuit, 115-kilovolt (kV) electric transmission line between the existing NE Hereford Substation and the new La Plata Substation, both located in Deaf Smith County, Texas. SPS has filed an application with the Public Utility Commission of Texas (Commission or PUC) (Docket No. 45158 - Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 115-kV Transmission Line Within Deaf Smith County, Texas) and is requesting the approval of the Commission for this project. This project is needed for reliability.

The proposed project will involve the construction of a new 115-kV transmission line which will originate at the existing NE Hereford Substation, located 3.5 miles northeast of Hereford, Texas in Deaf Smith County, and terminate at the new La Plata Substation, a half mile West of the existing Centre Street Substation, south of County Road 7, near the western portion of the City of Hereford. The Southwest Power Pool has identified the proposed transmission line as a needed regional reliability upgrade and has issued a Notification to Construct letter to SPS to construct the line to address overload issues at the NE Hereford Substation.

The proposed 115-kV single circuit transmission line will be constructed utilizing primarily single-pole steel structures, which require a smaller surface area than H-frame structures and eliminate the need for guy wires for corner structures. The proposed transmission line will be constructed entirely on new right-of-way with a proposed easement width of 70 feet. In some circumstances, a wider easement may be necessary, but these locations and easement widths cannot be determined until the selected route is surveyed.

The proposed 115-kV single-circuit transmission line is presented with 9 alternative routes consisting of a combined 20 segments and is estimated to be approximately 7.5 to 11.3 miles depending on which route is selected.

Depending on the route chosen, the total cost of the project, including the transmission line and substation costs, is estimated to be between approximately \$11.8 million and \$15.1 million.

Enclosed for your review is a copy of the application, which includes the Environmental Assessment of the proposed project.

If you have any questions or need additional information, please call Tyler Lucero or James Bagley.

Sincerely,

Sean L. Juden Josen

Sean L. Frederiksen, Supervisor Siting and Land Rights

Enclosures



Siting and Land Rights

P.O. Box 1261 Amarillo, TX 79105-1261 Telephone: **806-378-2436** Facsimile: 806-378-2724

September 25, 2015

Michele Gregg Office of Public Utility Counsel P.O. Box 12397 Austin, TX 78711-2397

Dear Ms. Gregg:

Southwestern Public Service Company (SPS), a subsidiary of Xcel Energy Inc., is providing notice of its application to amend its Certificate of Convenience and Necessity (CCN) in order to construct and operate a new single circuit, 115-kilovolt (kV) electric transmission line between the existing NE Hereford Substation and the new La Plata Substation, both located in Deaf Smith County, Texas. SPS has filed an application with the Public Utility Commission of Texas (Commission or PUC) (Docket No. 45158 - Application of Southwestern Public Service Company to Amend a Certificate of Convenience and Necessity for a Proposed 115-kV Transmission Line Within Deaf Smith County, Texas) and is requesting the approval of the Commission for this project. This project is needed for reliability.

The proposed project will involve the construction of a new 115-kV transmission line which will originate at the existing NE Hereford Substation, located 3.5 miles northeast of Hereford, Texas in Deaf Smith County, and terminate at the new La Plata Substation, a half mile West of the existing Centre Street Substation, south of County Road 7, near the western portion of the City of Hereford. The Southwest Power Pool has identified the proposed transmission line as a needed regional reliability upgrade and has issued a Notification to Construct letter to SPS to construct the line to address overload issues at the NE Hereford Substation.

The proposed 115-kV single circuit transmission line will be constructed utilizing primarily single-pole steel structures, which require a smaller surface area than H-frame structures and eliminate the need for guy wires for corner structures. The proposed transmission line will be constructed entirely on new right-of-way with a proposed easement width of 70 feet. In some circumstances, a wider easement may be necessary, but these locations and easement widths cannot be determined until the selected route is surveyed.

The proposed 115-kV single-circuit transmission line is presented with 9 alternative routes consisting of a combined 20 segments and is estimated to be approximately 7.5 to 11.3 miles depending on which route is selected.

Depending on the route chosen, the total cost of the project, including the transmission line and substation costs, is estimated to be between approximately \$11.8 million and \$15.1 million.

Enclosed are a copy of a written description of the segments to be used for the alternative routes and a map of the proposed project. <u>All routes and route segments included in this notice are available for selection and approval by the Public Utility Commission of Texas</u>. A copy of the complete application, which includes larger, more detailed maps, is available for review at SPS's offices at Chase Tower, 600 S. Tyler Street, Suite 1800, Amarillo, Texas, 79101. The complete application is also available for review on the PUC's website at <u>www.puc.state.tx.us</u> by using the PUC's filing retrieval system and the Docket No. assigned to the application. Information about the proposed project is also accessible on Xcel Energy's website *Power for the Plains* at <u>http://www.powerfortheplains.com</u>.

Persons who wish to intervene in the docket or comment on the application should mail the original and 10 copies of their requests to intervene or comments to:

Public Utility Commission of Texas Central Records Attn: Filing Clerk 1701 N. Congress Avenue P. O. Box 13326 Austin, Texas 78711-3326

The deadline for intervention in the proceeding is November 9, 2015, and a letter requesting intervention should be received by the Commission by that date.

The PUC has a brochure titled "Landowners and Transmission Line Cases at the PUC." Copies of the brochure are available from Tyler Lucero at 806-378-2312 or James Bagley at 806-378-2868 or may be downloaded from the PUC's website at <u>www.puc.state.tx.us</u>. To obtain additional information about this docket, you may contact the PUC's Customer Assistance Hotline at 512-936-7120 or 888-782-8477. Hearing- and speech-impaired individuals with text telephones (TTY) may contact the PUC's Customer Assistance Hotline at 512-936-7136 or toll free at 800-735-2989. In addition to the intervention deadline, other important deadlines may already exist that affect your participation in this docket. You should review the orders and other filings already made in the docket.

If you have any questions or need additional information, please call Tyler Lucero or James Bagley.

Sincerely,

Sean L. Juden Josen

Sean L. Frederiksen, Supervisor Siting and Land Rights

Enclosures