

**APPLICATION TO AMEND A CERTIFICATE OF  
CONVENIENCE AND NECESSITY FOR A PROPOSED  
115-KV TRANSMISSION LINE WITHIN BAILEY AND  
PARMER COUNTIES (BAILEY TO CURRY)**

**DOCKET NO. 41921**

*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**

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Transmission Line**

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1. **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  
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**Alternate Contact:** Donnie TeBeest  
Title/Position: Project Manager, Transmission  
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**Legal Counsel:** Jerry F. Shackelford  
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Austin, TX 78701  
Email Address: Jerry.Shackelford@xcelenergy.com

**Legal Counsel:** Andrea Moore Stover  
Graves Dougherty Hearon & Moody, PC  
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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 BAILEY AND PARMER COUNTIES, TEXAS. THE PROJECT NAME IS BAILEY COUNTY SUBSTATION TO CURRY COUNTY SUBSTATION.

*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 Bailey County Substation located in Bailey County, Texas and the existing Curry County Substation located in Curry County, New Mexico. This application addresses the project area from Bailey County Substation in Bailey County Texas, to the Texas/New Mexico state line. Proposed routes are in both Bailey and Parmer Counties. The proposed transmission line was identified by the Southwest Power Pool (SPP) as needed for reliability to address low voltage violations at Bailey County Substation during system intact conditions. The design and operating voltage rating for the proposed transmission line is 115 kV.

All routes described below begin at the existing Bailey County Substation located in Bailey County, Texas, approximately 0.2 miles south of Muleshoe, Texas on County Road 214. The Bailey County Substation will be expanded to include the new 115-kV bus upgrade. Up to five acres of property may be purchased to accommodate the expansion. The routes addressed in this application all end at various points along the Texas/New Mexico border, as described in the Routing Analysis and Environmental Assessment (EA). The proposed transmission line will cross the Texas/New Mexico state line and end at the existing Curry County Substation located in Curry County, New Mexico, approximately 430 feet north of East Brady Avenue and approximately 460 feet east of Mary Street in Clovis, New Mexico.

The Texas segments that comprise each route are as follows:

Route Number	Segments	Route Length
1	JM, JK, JL, CE, CB, FS, HI, BV, FQ, DT, DS, BS, BQ, DR, BJ, BH, GM, BE, KH, GB, DQ, HJ, AP, AM, AL, FL, DN, GC	28.1
2	JM, JK, JL, CE, CB, FS, DU, KM, BX, BW, BO, BK, KI, DM, KL, DJ, AH	23.1
3	JM, JK, JL, CE, CB, FS, HI, BV, FQ, DT, BT, BP, BM, BI, BF, GM, BE, KH, GB, BA, AX, KJ, AU, AS, AG	24.0
4	JM, JK, JL, CE, CB, FS, DU, KM, BU, FQ, BN, GI, DV, AO, FM, AN, KF, AJ, AI, AD, Y	26.2

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5	JM, CD, CA, FR, DX, BW, BO, BJ, BG, BC, GK, AZ, AW, AR, AQ, AM, AK, AI, AD, Y	25.7
6	JM, JK, JL, CE, CB, FS, DU, KM, BU, FQ, BN, GI, DL, DK, KL, DJ, AH	23.0
7	JM, JK, HH, BV, FQ, BN, GI, DL, FM, AH	27.0
8	JM, JK, JL, CE, CB, FS, DU, KM, BU, BN, GI, DV, JO, JP, GB, BA, AX, KJ, AU, AS, AG	24.0

An existing 230-kV transmission line is located south of the existing Bailey County Substation. The transmission line does not connect with the substation; it provides a connection between the Tolk Plant in Texas and the Roosevelt County Interchange in New Mexico. Because of the proposed transmission line and substation expansion, SPS must re-route approximately one-half mile of the 230-kV transmission line from its existing alignment to accommodate the southern expansion of the Bailey County Substation. The re-route avoids a heavily congested area to the north of the Bailey County Substation where there are several other existing transmission lines. The costs to reroute the 230-kV transmission line are included within the estimated costs provided with this application. The cost of the project also includes rerouting and reterminations of existing circuits into the new bus design at Bailey County substation. These costs are listed on the estimated cost table, Attachment No. 3. The length of the proposed transmission line in New Mexico, is approximately 10 to 14.5 miles, and the estimated cost of the project in New Mexico is approximately \$17.5 to \$20.5 million dollars depending on the route selected:

**Refer to Figure 2-3 of the EA, Attachment 1, for the route map, which shows all segments that make up the eight routes and the reroute of the 230-kV transmission line.**

**Refer to Section 2.4.3.1 of the EA, Attachment 1, and Attachment 9 of the application for the segment descriptions.**

*Design Voltage Rating (kV): 115 kV*

*Operating Voltage Rating (kV): 115 kV*

*Normal Peak Operating Current Rating (A): 1,382 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.

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**5. Conductor and Structures:**

*Conductor Size and Type:*

Conductor will be 477 kCMIL, aluminum conductor steel supported (ACSS), 26/7 stranded, code name HAWK. Static wire will be one Optical Ground Wire.

*Number of conductors per phase:* 1 (one)

*Continuous Summer Static Current Rating (A):* 1,382 Amps

*Continuous Summer Static Line Capacity at Operating Voltage (MVA):* 275 MVA

*Continuous Summer Static Line Capacity at Design Voltage (MVA):* 275 MVA

*Type and composition of Structures:*

SPS proposes to use primarily single-circuit, single-pole, self-supporting steel structures; however, depending on which route is approved, it is possible that some H-frame structures also will be utilized. The proposed transmission line structures will consist of a combination of direct burial for in-line structures and drilled pier foundations for corner and angle structures. 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 (NESC).

*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 110 feet. Transmission lines constructed with wood poles have an estimated maintenance cost of \$49,000/mile for the expected life of the line; whereas, there is no expected maintenance 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. (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 110 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 Commission's concerns 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) eliminating the space required for an H-frame structure and typically eliminating the need for guy wires, both of which result in a smaller

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footprint and (2) resulting in the use of fewer structures, making it easier to span existing irrigation systems.

**Refer to Attachment 2 for the following structure drawings:**

Typical 115-kV single-circuit steel tangent structure is shown on SPS drawing SD-T0-551.  
Typical 115-kV single-circuit steel 3-10° Angle structure is shown on SPS drawing SD-T0-550.  
Typical 115-kV single-circuit steel 10-30° Angle structure is shown on SPS drawing SD-T0-552.  
Typical 115-kV single-circuit steel corner structure is shown on SPS drawing SD-T0-506.

*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:**

<i>Miles of Right-of-Way:</i>	Approximately 23 to 28 miles
<i>Miles of Circuit:</i>	Approximately 23 to 28 miles
<i>Width of Right-of-Way:</i>	70 feet; wider in exceptional circumstances
<i>Percent of Right-of-Way Acquired:</i>	0%

*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 proposed transmission line study area is located within the High Plains geographic subdivision, which consists of about 20 million acres of a relatively level high plateau. Elevation ranges from 3,000 to 4,500 feet, sloping gently toward the southeast. Playa lakes are scattered throughout the project study area. Two drainages cross the study area from northwest to southeast. The majority of the project study area consists of cultivated crops, including both irrigated and non-irrigated cropland, livestock operations (dairy and beef cattle), and rangeland. The study area also has a high density of pivot irrigation systems and irrigation wells. The agricultural industry is the primary industry in this portion of the Texas Panhandle. Rural residences associated with agricultural and ranch operations are scattered throughout the project area. There are some scattered commercial and industrial land uses associated with agriculture throughout the project area.

**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.*

- Curry County Substation
- Bailey County Substation

These substations are 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.

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*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.*

Not applicable.

**8. Estimated Schedule:**

<u>Estimated Dates of:</u>	<u>Start</u>	<u>Completion</u>
Right-of-way and Land Acquisition	Following CCN approval	6 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	6 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 Parmer and Bailey counties, 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.*

- Bailey County Electric Cooperative, Inc. (BCEC)
- Golden Spread Electric Cooperative, Inc. (GSEC)
- Deaf Smith Electric Cooperative, Inc. (DSEC)
- Lamb County Electric Cooperative, Inc. (LCEC)

*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 a second 115-kV source to the Bailey County Substation will increase system reliability and capacity and will benefit BCEC, GSEC, DSEC, and LCEC in their service area.

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BCEC, GSEC, DSEC, and LCEC 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 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 Bailey County Substation in Bailey County, Texas to the existing Curry County Substation in Curry County, New Mexico. This application only covers the transmission line from the Bailey County Substation to the Texas-New Mexico border in Bailey and Parmer Counties, Texas. The proposed transmission line was identified by SPP as needed for reliability to address low voltage violations at the Bailey County Substation during system intact conditions. In the 2012 SPP Transmission Expansion Plan (STEP) report, which is part of the annual Regional Transmission Organization Reliability Assessment, SPP studied and analyzed reliability issues in the region and identified the proposed transmission line as a needed regional reliability upgrade. Please refer to Attachment 4 for a copy of the 2012 STEP Report.



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Based on the need analysis SPP performed for the 2012 STEP report, SPP issued a Notification to Construct (NTC) letter to SPS. The SPP NTC letter sent to SPS under Project ID 461 and Network Upgrade ID number 10597, directs SPS to build a 115-kV transmission line from the Bailey County Substation to the Curry County Substation. Please refer to Attachment 5 for a copy of the NTC Letter. Please refer to Attachment 6 for a copy of SPS's letter accepting the SPP NTC.

Attachment 7 to this application is SPS's Summer Peak Load Forecast from 2013 to 2024 for the transmission system in Bailey, Castro, Deaf Smith, and Parmer counties in Texas and Curry, Roosevelt, and Quay counties in New Mexico (the SPS Clovis-Hereford Service Area). This report, which is based on information previously provided to SPP, shows a mild upward trend in load growth. Even this mild additional upward pressure at the Bailey County Substation 115-kV bus could create reliability issues for the SPS Clovis-Hereford Service Area that will be addressed by the construction of the proposed project.

### **Existing Transmission System**

The existing transmission system in the SPS Clovis-Hereford Service Area consists of 28 miles of 345-kV lines, 269 miles of 230-kV lines, 413 miles of 115-kV lines, and 151 miles of 69-kV lines. The SPS Clovis-Hereford Service Area is fed from the north by the coal-fired SPS Harrington Plant by a 230-kV and 115kV transmission line. The SPS Clovis-Hereford Service Area is also fed from the SPS Central Plains Service Area to the south by the coal-fired SPS Tolk Plant and gas-fired SPS Plant X by three different transmission lines at the 230-kV level and one transmission lines at the 115-kV level. The total generating capacity of Harrington Plant, Tolk Plant, and Plant X Generating Stations is approximately 2526 MW.

Outside of the Clovis-Hereford Service Area, the 345/230/115-kV Eddy County Substation is fed by Tolk Plant at 345-kV level. The 345/230/115-kV Eddy County Substation is connected to the 230/115-kV Chaves Substation, which feeds the 230/115-kV Oasis Substation and the 230/115-kV Roosevelt Substation in the Clovis-Hereford Service Area at 230-kV level. The 230/115-kV Deaf Smith Substation is fed by Harrington Plant from the north by a 230-kV transmission line and also fed from the south by Plant X by a 230-kV transmission line. The 230/115-kV Roosevelt Substation is fed from the Tolk Plant by two transmission lines at 230-kV level. The 115/69-kV Bailey County Substation and the 115/69-kV Castro County Substation are fed from Plant X by two different 115-kV transmission lines. The 115/69-kV Castro County Substation, 230/115-kV Deaf Smith Substation, 115/69-kV Hereford Substation, 115/69-kV North East Hereford Substation, 115/69-kV Curry County Substation and 230/115-kV Roosevelt Substation are interconnected at 115-kV level. The 115/69-kV Bailey County Substation, the 115/69-kV Curry County Substation, and the 230/115/69-kV Lamb County Substation are connected at 69-kV level. The BCEC 69-kV loads, LCEC Beck and Sandhill distribution loads are fed from the 115/69-kV Bailey County Substation at the 69-kV level.

**Refer to Attachment 4 for the "2012 STEP" report addressing the need for this project.**

**Refer to Attachment 5 for the "SPP NTC" letter (SPP-NTC-200166, Project ID: 461, Upgrade ID: 10597).**

**Refer to Attachment 6 for SPS's Acceptance Letter to SPP.**

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**Refer to Attachment 7 for the SPS Summer Load Forecast for the SPS Clovis-Hereford Service Area.**

**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 the analysis, SPP determines what projects will be included in NTCs issued to utilities. SPS and other Load Serving Entities provided SPP with load forecast information for use in the 2012 STEP study. SPS also provided suggestions and comments to SPP on proposed system improvements that would alleviate the problems SPP had found in its analysis. SPP reviewed and modified those solutions based on its analysis. The result of the studies concluded that the proposed project was needed for reliability purposes and to mitigate voltage issues at Bailey County Substation during system intact conditions. The studies that were performed are discussed in the executive summary and Section 8.0 of the 2012 STEP report. See pages 4-8 and 41-48 of Attachment 4 to SPS's Application. Because an in-depth analysis was conducted by both SPP and SPS, it was not necessary for additional analysis of alternatives to be conducted. None of the alternatives listed in the question would satisfy the STEP study reliability requirements to mitigate low voltage issues at the Bailey County Substation during system intact conditions.

**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 8.**

**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 routing analysis and selection of alternative routes was conducted in accordance with PURA § 37.056 (c)(4)(A)-(D), and considered various aspects of the natural and human environment including community values, recreation and park areas, historical and aesthetic values, and environmental integrity.

A route analysis was performed by TRC Environmental Corporation (TRC) to identify viable transmission line route alternatives between the existing Curry County Substation in Clovis, New Mexico and the existing Bailey County Substation near Muleshoe, Texas. The alternative route

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analysis for this application focuses on the Texas portion of the project in Bailey and Parmer Counties. The alternative route analysis is included in the EA, Attachment 1 to the Application.

SPS and TRC identified a Project Study Area encompassing the endpoints of the Curry County Substation and the Bailey County Substation. During the initial planning stages the overall Study Area was to be defined as a 25 mile by 14 mile area between Clovis, New Mexico and Muleshoe, Texas. The Texas portion of the project study area is 18 miles by 14 miles.

The Project Team gathered data from various federal, state, and local officials and agencies; conducted literature, file, and records reviews; reviewed a variety of maps; and collected Geographic Information System (GIS) data. Publicly available data sources were utilized to the extent feasible and included data regarding surface waters, wetlands designated on the National Wetlands Inventory (NWI), areas with known sensitive wildlife species, and cultural resources. Surface waters, including streams and playas, were identified and mapped within the project Study Area, along with NWI-designated wetlands and Texas Natural Diversity Database and Texas Parks and Wildlife Department known wildlife areas. The Project Team used color photography to identify existing land uses, identify potential habitable structures, and locate existing transmission lines and other natural or human environmental features considered during the analysis and mapping of opportunities and constraints. This information was verified during field reconnaissance sessions conducted by the Project Team. Routing opportunities and constraints include existing infrastructure property/tract lines, habitable structures, electronic installations, airstrips, agricultural land, park and recreation areas, special land uses, historic and archaeological sites, and environmentally sensitive areas.

To help analyze opportunities and constraints for siting the Project, the Project Team incorporated the color aerial photography and other data collected in GIS data layers which enabled the Project Team to create "overlays" of information that enhanced alternative route comparison. The GIS data layers were used to evaluate numerous combinations of opportunities and constraints. The primary objective of this effort was to maximize use of opportunities and to avoid and/or minimize impacts to constraints.

The Project Team identified preliminary route segments to be analyzed during field reconnaissance work. The preliminary route segments predominantly followed linear features such as existing roads and distribution lines, while minimizing conflicts with potential land use constraints listed in the routing criteria. Crossing through pivot irrigated cropland was avoided.

On December 11 - 14, 2012, April 16 - 20 2013, and June 11 - 12, 2013, October 9 - 10, 2013 TRC conducted ground field reconnaissance of the potential route segments to confirm the location of opportunities and constraints, the constructability of the potential route segments, the type and location of habitable structures within 300 feet of the potential route segments, the location (side) of the potential route segment relative to the feature is appropriate and accurate, and the location of airports/airfields and electronic installations. As a result of the field reconnaissance, the Project Team incorporated appropriate modifications to the potential route segments and added additional segments. These Preliminary Route Segments were then presented to the public at two open house meetings. Refer to Figure 2-1 in the EA (Attachment 1) for the preliminary map.

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The Public Involvement Program to review the Preliminary Alternative Route Segments resulted in many verbal and written comments. Section 5.3 of the EA (Attachment 1) describes the public involvement program. Open house meetings were held in Clovis, New Mexico and Muleshoe, Texas where eleven project questionnaires and five comment forms were collected from Texas landowners and stakeholders. All comments received at the public open house meetings and subsequently through emails, letters, questionnaires, and phone calls were collected and reviewed with information received from federal, state, and local agencies and other non-governmental organizations. All comments received on individual route segments were considered, and some adjustments were made to Preliminary Alternative Route Segments in an effort to address comments. The resulting segments were the Alternative Route Segments.

The Project Team reviewed the engineering, land use, and environmental constraints data for each of the segments and identified eight complete Alternative Routes that would connect the Curry County Substation with the Bailey County Substation. The analysis of each Alternative Route Segment included quantifying and comparing the opportunities and constraints along each route. A list of routing criteria, which included elements identified by P.U.C. Substantive Rules, PURA, and the PUC CCN Application, as well as other commonly-used transmission line siting criteria, including habitable structures, center-pivot irrigation systems, playa lakes and communications towers, engineering constraints and opportunities, environmental constraints, and land use constraints was applied to a GIS-based opportunities and constraints modeling tool. Refer to Section 2.4.2 in the EA (Attachment 1) for the full list of criteria used in this analysis. The GIS modeling tool identified the length (miles) or quantity (number) of the environmental and land use constraints potentially impacted by each Alternative Route. The relative strength of the various routing opportunities was also considered. For example, existing linear features that follow existing ROWs are generally considered stronger routing opportunities because the affected properties have already been disturbed by the existing ROW, a linear land use such as a road is already in place, and impacts associated with existing linear use have often been previously mitigated. This provided an opportunity to minimize new impacts by paralleling and abutting existing ROWs.

After combining the results of the initial routing phase and quantification of PUC criteria with the results of the environmental assessment, TRC recommends Alternative Routes 6 and 8 as the two routes that best address the needs of SPS and the requirements of PURA, and P.U.C. Substantive Rules.

### Route 6

- Approximately 85% of Route 6 parallels other linear ROW, including roads, transmission lines, and distribution lines.
- The route has the third fewest number of habitable structures (35) within 300 feet of the centerline.
- It has one of the least impacts to farming and agricultural operations, impacting 26 center-pivot irrigation systems.
- The route has a low number of road crossings (40), has short spans across open water (0.02 miles), would avoid crossing the center of playas and would span drainages.
- It is the shortest route (23.08 miles).

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- No airports, schools, cemeteries, hospitals, parks or known threatened and endangered species habitat would be affected by the route.
- It has the lowest estimated construction costs.
- The route does not cross the 230kV transmission line and has only one crossing of an existing 69kV transmission line.

**Route 8**

- Approximately 81% of Route 8 parallels other linear ROW, including roads, transmission lines, and distribution lines.
- The route is the third shortest (24.01 miles).
- It has one of the lowest numbers of center-pivot irrigation system crossings (25).
- The route does not cross the 230kV transmission line and has only one crossing of an existing 69kV transmission line.
- It has the second lowest estimated construction costs.
- It minimizes impacts to mechanically irrigated pasture and cropland, non-irrigated cropland, and does not cross 100-year floodplains.
- Alternative Route 8 does have the largest number of habitable structures (45), however of those structures only 23 are residences and 13 are workbarns. The remaining 9 are commercial or abandoned structures.

After balancing the information provided in the EA against the project need, engineering and transmission planning considerations, maintenance and construction considerations, public input, estimated costs, and community values, SPS recommends Alternative Routes 6 and 8 as the two routes that best address the requirements of PURA, PUC Substantive Rules and the PUC CCN Application. Although SPS recommends Alternative Routes 6 and 8, it can construct and operate the proposed transmission line over any of the routes proposed in this application. While SPS can construct any of the proposed routes, Routes 1 and 3 will cross under an existing 230-kV transmission line and cross over a 69-kV transmission line at two locations (parallel 230/69kV circuits) (See Table 6-1 of the EA), and Route 7 crosses two different 230-kV circuits at three locations and then crosses the parallel 230/69kV circuits at one location. Refer to the EA in Attachment 1 for the detailed routing and environmental analysis. Therefore, those three routes would be the most difficult and costly to construct.

**Refer to Table 2-1 and 2-2 in the EA, Attachment 1.**

**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.*

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Two open house meetings were held for the project on March 27 and 28, 2013 at the Clovis High School and BCEC offices in Muleshoe, Texas, respectively, between the hours of 5:00 PM and 7:30 PM. Manning Land, LLC, consultant to SPS, mailed 679 individual written notices of the meeting to all landowners located within 300 feet of the centerline along the preliminary alternative route segments, as delineated at the time of the public open house meetings.

The mailed notification also included a map of the preliminary route segments, a Landowner Questionnaire, a Texas Landowner Bill of Rights, Landowners and Transmission Line Cases at the PUC, and a Survey Permission Form. Refer to Figure 2-1 and Appendix C of the EA (Attachment 1) for the Preliminary Route Segments map distributed to the public in the notice letter and presented at the public open house meetings. Additionally, TRC mailed notice letters to 31 agencies, county judges, and other stakeholder organizations. Refer to Appendices B of the EA (Attachment 1) for the mailing lists and a copy of the letters, and Appendix C for the information packet and map that were mailed to landowners and agencies/organizations. Four notices were published in newspapers circulated within all counties in the project area.

<b>Newspaper/Journal</b>	<b>Date Published</b>	<b>Counties of Circulation</b>
Amarillo Globe News	March 19, 2013	Bailey and Parmer Counties
Lubbock Avalanche-Journal	March 20, 2013	Bailey and Parmer Counties
Muleshoe Journal	March 21, 2013	Bailey and Parmer Counties
Clovis News Journal	March 19, 2013	Bailey and Parmer Counties in Texas; Curry and Roosevelt Counties in New Mexico

The open house meetings were held for the purpose of promoting a better understanding of the alternative transmission line routes, the purpose and need of the project, the potential benefits and impacts, and to obtain input from the public to help SPS in its routing analysis.

The meetings were held in an open house format, allowing attendees to move from station to station to look at maps and talk with representatives from the Project team. Large display boards that depicted the proposed segments, aerial photograph-based oversized sheet maps, and Project information handouts were presented, identifying the preliminary route segment locations, substations, existing parcel boundaries, and key project characteristics (range of transmission pole types and heights, ROW requirements, engineering information, etc.). The Welcome Station included a sign-in sheet and the handouts mentioned above. Refer to Appendix F of the EA for a copy of the handouts provided at the public open house meetings. Appendix E contains copies of the sign-in sheets for both meetings.

A total of 160 people signed in at the open house meetings. All of the participants were encouraged to fill out a questionnaire and return it at the meeting or by mail at a later date. A copy of the questionnaire is included in Appendix D of the EA. A total of twenty four questionnaires were completed: eleven questionnaires at the meetings and another thirteen questionnaires were either emailed or mailed to SPS subsequent to the public open house meetings. Of the twenty four questionnaires, eleven were from Texas landowners. In addition, SPS received two phone calls prior to the public open house meetings. Appendix E of the EA contains a copy of returned questionnaires and a composite table summarizing concerns from the questionnaires and the phone calls.

The landowner questionnaire is designed to identify issues and key concerns that the public may have in order to consider these issues in the route selection process. The majority of the questionnaire responses indicated that the landowner would like to: 1) move the proposed

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segments away from rural residential property; 2) move the proposed segments away from existing livestock operations; and 3) ensure that the proposed segments do not interfere with pivot irrigation operation. A summary of the key concerns are listed below and references to proposed segments are to the original segment labels, as seen on the Preliminary Route Segments Map, Figure 2-1 in the EA (Attachment 1):

- Segment BW is adjacent to a TriGlobal wind farm lease;
- Some segments are adjacent to lands within the Conservation Reserve Program (Segments BQ, BR, and BW);
- There was concern over the location of the transmission line and negative impacts on property value;
- There were several requests that the poles be placed on the opposite side of the road from a rural residence;
- There was concern over operation of agriculture fields associated with the constraints the poles have on pivot irrigation operations; and,
- If Segment CA follows FM 1760, there was a concern that stray voltage would affect the health of the elderly residents.

The BCEC would prefer that the transmission line be within one mile of the BCEC Lariat Substation. The BCEC would be able to off load the 69-kV transmission line contingent on using the Progress Substation 1005. At present, the BCEC can put 8 MW on the system at the Progress Substation.

**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).*

*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.*

*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.*

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Refer to Figure 2-1 of the EA, Attachment 1, for a map depicting the preliminary routes presented at the Public Open House Meetings.

Refer to Figure 2-3 of the EA, Attachment 1, for the Alternative Route Map depicting the eight alternative routes proposed for the project. Refer to Table 4-4 in the EA for the habitable structures list (by segment and distance) and Appendix G of the EA, Attachment 1, for a list of the landowner names and addresses cross-referenced to the transmission line route that affects each structure and property, with property boundaries shown in Figure 2-2 in the EA.

**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.*

Below is a list of permits that may be required for construction of the transmission line project depending on which route is selected:

- 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).
- Depending on the location of structures, floodplain development permits and road crossing permits might be required by the counties in which the approved route is located (not yet obtained).
- A Storm Water Pollution Prevention Plan (SWPPP) 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).
- If the approved route triggers Federal Aviation Administration (FAA) criteria regarding proximity to airports, SPS will file a Notice of Construction form with the FAA (not yet obtained).
- 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).
- 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).

**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*



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*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 4-4 in the EA (Attachment 1) identifies, by route, the number, type, distance, and direction of all habitable structures located within 300 feet of the centerline of the proposed routes. Figure 2-2 of the EA, Attachment 1, depicts the location of the habitable structures.

**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.*

Four AM radio transmitters were identified within 10,000 feet of the alternative routes and 11 FM radio transmitters were identified within 2,000 feet of the alternative routes. Table 3-8 in the EA (Attachment 1) lists all AM and FM radio transmitters, microwave relay stations, and other electronic installations identified within the 10,000 and 2,000 foot distance. Figures 2-2 and 3-6 of the EA depict the location of the electronic installations.

**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 100:1 horizontal 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 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 closest landing and takeoff area of the heliport. Provide a general description of each listed private airstrip, registered airport, and heliport; and state the distance of each from the center line of each route. Locate and identify all listed airstrips, airports, and heliports on a routing map.*

There are no public, FAA registered airports within 10,000 feet of the center line of any route. There are no heliports within 5,000 feet of the centerline of any route.

The Locker Brothers Airstrip (1TEO) is the only FAA-registered airport with a runway more than 3,200 feet that is located within 20,000 feet of the center line of any route. The Locker Brothers Airstrip is a private airport north of Muleshoe and the Project Area. Runway 9/18 is listed having a gravel surface and is 4,000 feet in length. The end of the runway is 14,710 feet from the Project Area and 14,930 feet from the nearest segment (Segment CA, Route 5). Using the calculation of 100:1 (length in horizontal distance: height in vertical distance), the maximum height a structure on the CA segment could be is 147.1 feet. Since the typical transmission structure height is a maximum of 140 feet, then the project's structure would not exceed the 100:1 slope limitation.

A private airstrip associated with an agricultural spraying service is located near Farwell, Texas. Segment Z is located at the south end of the airstrip. Segment DN of Route 1 is located 5,300 feet from the south end of the airstrip. However, at present the airstrip is not being used for aircraft operations and agricultural equipment is stored on the airstrip and taxiway.

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**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.*

As the project Study Area is primarily agricultural, many center-pivot irrigation systems exist within the project Study Area and in proximity to all of the alternative routes. Figure 2-2 of the EA depicts the location of these irrigation systems in relation to each alternative route. All of the alternative routes would cross through an active irrigation system along the edge and the route ROW may encroach into the outer limits of the spray area. Based on an average span width of 600-900 feet, the outer limit of the irrigation system would be avoided by strategically placing transmission line poles and spanning the systems at their closest point to the transmission line ROW. Section 4.6.1 of the EA, Attachment 1, describes the center-pivots near these routes. The center-pivot irrigation systems are visible on Figure 2-2 of the EA, Attachment 1.

**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 9 for: (1) a sample copy of the notice letter, (2) the segment descriptions; PUCT Landowner Brochure, Comments Form, and Intervener 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. Also, refer to Figure 2-2 in the EA, Attachment 1, for the map included with each notice packet.

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

Refer to Attachment 10 for a copy of the notice letters. Also, refer to Figure 2-2 in the EA, Attachment 1, for the map included with notice.

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

Refer to Attachment 11 for a copy of the notice letters sent to county and municipal authorities. Also, refer to Figure 2-2 in the EA, Attachment 1, for the 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 12 for a copy of the newspaper notice (including map) and the list denoting the newspaper that will publish the 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*

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*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.*

There are no parks and recreation areas within 1,000 feet of any route.

**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.*

Section 3.9 of the EA (Attachment 1) identifies the historical and archaeological sites identified through a Class I database search and known to be within 1,000 feet of the center line of an alternative route segment.

**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.*

None of the routes are located within the coastal management program boundary as defined in 31 T.A.C. § 503.1.

**29. Environmental Impact:**

*Provide copies of any and all environmental impact studies and/or assessments of the project. If no formal study was conducted for this project, explain how the routing and construction of this project will impact the environment. List the sources used to identify the existence or absence of sensitive environmental areas. Locate any environmentally sensitive areas on a routing map. In some instances, the location of the environmentally sensitive areas or the location of protected or endangered species should not be included on maps to ensure preservation of the areas or species.*

Refer to the *Environmental Assessment and Alternative Route Analysis Report for the Proposed Bailey to Curry 115-kV Transmission Line Project in Bailey and Parmer Counties, Texas*, labeled as Attachment 1.

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*Within seven days after filing the application for the project, provide a copy of each environmental impact study and/or assessment to the Texas Parks and Wildlife Department (TPWD) for its review at the address below. Include with this application a copy of the letter of transmittal with which the studies/assessments were or will be sent to the TPWD.*

*Wildlife Habitat Assessment Program*

*Wildlife Division*

*Texas Parks and Wildlife Department*

*4200 Smith School Road*

*Austin, Texas 78744*

*The applicant shall file an affidavit confirming that the letter of transmittal and studies/assessments were sent to TPWD.*

A copy of the application, including the EA, Attachment 1, was sent to TPWD on the day of the filing of this application. Refer to Attachment 13 for a copy of the transmittal letter.

At the request of the Office of Public Utility Counsel (OPUC), only a copy of the segment descriptions and Figure 2-2 was sent to OPUC on the day of the filing of this application. Refer to Attachment 14 for a copy of the transmittal letter.

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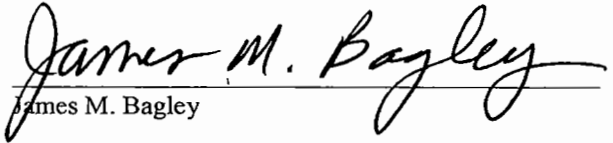
AFFIDAVIT

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. 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 11  
day of December 2013.

SEAL

  
Notary Public

My Commission Expires: 7-22-2017

