### APPLICATION FOR A

CERTIFICATE OF CONVENIENCE AND NECESSITY

FOR A PROPOSED TRANSMISSION LINE WITHIN

HALE, FLOYD, MOTLEY, COTTLE, BRISCOE, HALL,

CHILDRESS, DONLEY, COLLINGSWORTH, AND

WHEELER COUNTIES, TEXAS

**DOCKET NO. 38877** 

Submit seven (7) copies of the application and all attachments to:

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

1. Applicant (Utility) Name: Southwestern Public Service Company (SPS)

Certificate Number: 30153

Street Address: 600 South Tyler Street

Amarillo, TX 79101

Mailing Address: P.O. Box 1261

Amarillo, TX 79105-1261

2. 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: Ronnie G. Walker

Title/Position: Project Manager

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Legal Counsel: Jerry F. Shackelford

Phone Number: 512-658-5781

Mailing Address: 816 Congress Avenue, Suite 1650

Austin, TX 78701

Email Address: Jerry.F.Shackelford@xcelenergy.com

#### 3. **Project Description:**

Name or Designation of Project

SOUTHWESTERN PUBLIC SERVICE COMPANY'S APPLICATION TO AMEND A CERTIFICATE OF CONVENIENCE AND NECESSITY FOR A PROPOSED 345 kV TRANSMISSION LINE WITHIN HALE, FLOYD, MOTLEY, COTTLE, BRISCOE, HALL, CHILDRESS, COLLINGSWORTH, AND WHEELER COUNTIES, TEXAS. THE PROJECT NAME IS TUCO TO TEXAS-OKLAHOMA INTERCONNECT.

Design Voltage Rating (kV):

345 kV

Operating Voltage Rating (kV):

345 kV

Normal Peak Operating Current Rating (A): 3,000 amps

Both SPS and Oklahoma Gas & Electric Co. (OG&E) have been directed to build portions of this 345 kV transmission line by the Southwest Power Pool (SPP), the regional transmission organization of which SPS is a member. SPS will construct the portion of the line from its TUCO Substation, located in Hale County, Texas, to a point of interconnection with OG&E, which is approximately three miles east of the Texas/Oklahoma state line and approximately three miles southeast of Texola, Oklahoma, in Beckham County, Oklahoma.

Refer to Appendix E of the Environmental Assessment (EA), Attachment 1, for the segment descriptions which comprise the 20 alternative routes.

#### 4. **Conductor and Structures:**

Conductor Size and Type:

Conductor will be 795 kcMIL, ACSS, 26/7 stranded, code name DRAKE/ACSS. Static wire will be one 3/8" EHS galvanized steel and one Optical Ground Wire.

Type of Structures:

This line will be built using primarily two-pole H-frame steel structures for tangents and light angles. Angle structures and dead end structures will be three-pole steel structures. Typical heights are shown on the attached drawings and are dependent upon the clearance requirements to be determined. Structure heights will be identified that will meet or exceed the minimum clearances required by the Texas Department of Transportation (TxDOT), Burlington Northern Santa Fe Railroad (BNSF), and the National Electric Safety Code (NESC).

Height of Typical Structures:

The typical height for these structures will be between 90 and 175 feet.

Explain why these structures were selected; include such factors as landowner preference, engineering considerations, and costs comparisons to alternate structures that were considered.

In its Notice to Construct (NTC) letter to SPS [as discussed further in section 13], SPP instructed SPS to use steel structures to construct the line. SPS plans to construct the line with tubular steel structures and will use direct burial structures on tangent structures and drilled pier foundations on all angle and corner structures. SPS also chose tubular steel structures over wood structures, in part, because of the low maintenance cost, strength of the line during adverse conditions, resistance to fire damage, and increased span lengths. Additionally, wood poles are not readily available in heights greater than 110 feet; whereas, steel poles are. A transmission line constructed with wood poles has an estimated maintenance cost of \$48,780 per 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). The primarily agricultural land use of the area in the southern portion of the line route was an additional factor in selecting this type of structure since with tubular steel structures, the impact to both farmers and landowners can be minimized. Additionally, because it allows for the use of longer spans, the impact to existing irrigation systems and current farming and ranching operations will be minimized. Furthermore self-supporting tubular steel structures eliminates the need for guy wires on the landowner's property, which results in a smaller footprint than a guyed structure. Also, since utilizing tubular steel poles results in using fewer structures, this makes it easier to span existing irrigation systems. During the public meeting held for this project, landowners had no opposition to the H-frame tubular steel design.

The estimated installed cost for a wood H-frame tangent structure is approximately \$37,419. The installed cost for a direct burial H-frame, single circuit tubular steel tangent structure is approximately \$64,976. Estimated cost of the proposed H-frame, single circuit tubular steel tangent structures on drilled pier foundations is approximately \$81,107. The estimated cost for a line built using wood H-frame poles (with steel poles on foundations for the angle and corner structures) is approximately \$623,274 per mile which includes the cost for the extra wood tangent structures required but does not include maintenance costs. In contrast, if the line were to be built using H-frame tubular steel structures, the estimated cost is \$696,497 per mile. Although the estimated installed cost if the proposed line were to be constructed with wood H-frame poles is lower, SPS opted to use steel poles for all of the benefits previously mentioned in the preceding paragraph.

Provide dimensional drawings of the typical structures to be used in the project.

Typical 345 kV single circuit steel tangent structure is shown on SPS drawing T-0-519.

Typical 345 kV single circuit corner steel structure is shown on SPS drawing T-0-447.

Typical 345/69 kV double circuit structure is shown on SPS drawing EU-0-519.

Refer to Attachment 2.

### 5. Right-of-way:

Miles of Right-of-Way:

Approximately 180-200 miles, depending on route selected

Miles of Circuit:

Approximately 180-205 miles depending on route selected

Width of Right-of-Way:

150-260 feet

Percent of Right-of-Way Acquired:

0 feet

No right-of-way (ROW) has been acquired prior to filing this application.

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

The proposed project area is located in Hale, Floyd, Motley, Cottle, Briscoe, Hall, Childress, Donley, Collingsworth, and Wheeler Counties in the eastern and southern High Plains of the Texas Panhandle and in Beckham County, Oklahoma. The land use in the area range from dry-land farming, irrigated farming, Conservation (CRP) grassland, and open range land. This area has limited oil and gas production. The terrain can be characterized as flat to gently rolling plains on the southern portion of the project area transitioning to gradual breaks throughout the canyon areas from the southern edge of the caprock through the central and northeastern portion of the project area.

### 6. Substations or Switching Stations:

List the name of all existing substations or switching stations that will be associated with the proposed new transmission line.

- TUCO Substation
- Oklahoma Gas and Electric Co. (OG&E) Woodward District EHV Substation

List the name of all new substations or switching stations that will be associated with the proposed new transmission line.

At the existing TUCO Substation near Abernathy, Texas, SPS will construct a 345 kV breaker and a half bus, add a second 345/230 kV 560 MVA autotransformer, modify the existing 230 kV bus to accommodate the new transformer, add a 100 MVAr line reactor and install all necessary relaying, switches, control house upgrades, foundations, metering, supervisory devices, etc. required for this project. As a result of the construction of the new 345 kV bus structure at the TUCO Substation, a new 345 kV line reactor will be installed on the existing TUCO-Oklaunion 345 kV line at the TUCO Substation end of that line. The studies are ongoing, but this reactor is estimated to be a 75 MVAr 345 kV reactor.

The proposed project does not require a new substation to be built in Texas; however, an interconnection point, which is also the site of a future OG&E substation (substation being defined as a location that has a 345/138 kV transformer and breakers) that has no firm in-service date as of the date of this filing. At that location there will be two 345 kV shunt reactors. One shunt reactor, 50 MVAr, will be located on the portion of the line owned by SPS, and one reactor, 75 MVAr, will be located on the portion of the line owned by OG&E. This interconnection point was mutually agreed upon between SPS and OG&E and is

located approximately three miles east of the Texas/Oklahoma state line and approximately three miles southeast of Texola, Oklahoma. Specifically, this site is located approximately 600 feet west of the eastern intersection of E1250 Road and N1700 Road in Beckham County, Oklahoma (35° 12' 15.202" N, -99° 56' 36.075" W).

Refer to Attachment 3 for a letter of agreement between SPS & OG&E regarding this project.

#### 7. Estimated Schedule:

Estimated Date of:	Start	Completion
Right-of-way Acquisition	Following CCN approval	12 months following CCN approval
Construction of Facilities	As ROW is acquired	18 months following ROW acquisition
Energize Facilities		Within 30 days after completion of construction

#### 8. Counties:

List all counties in which preferred or alternate routes are proposed to be constructed.

Hale, Floyd, Motley, Cottle, Briscoe, Hall, Childress, Donley, Collingsworth, and Wheeler Counties, Texas and Beckham County, Oklahoma

### 9. Municipalities:

List all municipalities in which preferred or alternate routes are proposed to be constructed.

None.

Attach a copy of the franchise, permit or other evidence of the city's consent held by the utility. 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.

Not applicable.

### 10. Affected Utilities:

Identify any other electric utility served by or connected to facilities proposed in this application. Include any utilities sharing proposed facilities (double circuit structures, substation equipment) or right-of-way.

#### In Texas:

- Golden Spread Electric Cooperative, Inc.
- Greenbelt Electric Cooperative, Inc.
- Lighthouse Electric Cooperative, Inc.
- Swisher Electric Cooperative, Inc.
- South Plains Electric Cooperative, Inc.

- American Electric Power Texas North Company
- Sharyland Utilities, L.P.
- Cross Texas Transmission, LLC

### In Oklahoma:

- OG&E
- Harmon Electric Association
- Northfork Electric Cooperative, Inc.

Describe how any other electric utility will be affected and the extent of the other utilities' involvement in the construction of this project.

There are several CREZ transmission lines in the proximate area that have been filed and/or approved but not yet built. SPS and/or its contractors will construct the portion of the proposed TUCO to Texas-Oklahoma Interconnect transmission line to be built in Texas and the first few miles in Oklahoma and will coordinate construction with the electric utilities, listed above. OG&E will build the portion of the line in Oklahoma after the point of interconnection with SPS and will coordinate construction with Harmon Electric Association and Northfork Electric Cooperative, Inc. SPS will coordinate construction with OG&E at the interconnection point.

#### 11. Financing:

Describe the method of financing this project. If the applicant is to be reimbursed for this project, or a portion of this project, identify the source and the amount of the contribution in aid of construction.

The proposed project will be financed through internally-generated funds.

#### 12. Estimated Costs:

Refer to Attachment 4.

#### 13. Need for the Proposed Project:

Describe the need for the proposed construction. Describe the existing transmission system and conditions addressed by this application. Provide historical load data and load projections for at least five years to justify projects planned to accommodate load growth. State how the proposed facilities will meet the projected demand and provide a written description of the steady state load flow analysis that justifies the project. Provide any documentation of the review and recommendation of a PURA §39.151 organization. Provide any documentation showing the proposed facilities are needed to provide service to a new transmission service customer.

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) Section 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 OG&E Woodward District EHV Substation in Woodward, Oklahoma to SPS's TUCO Substation in Hale County, Texas. The proposed transmission line is intended to reduce congestion on the SPP transmission system resulting in economic benefit to the SPP customers. The proposed transmission line is a result of the Balanced Portfolio Process of the SPP Tariff.

#### **Existing Transmission System**

The existing transmission in the vicinity of the TUCO Substation consists of 162 miles of 345 kV line, which connects to Public Service Company of Oklahoma Oklaunion Substation, 151 miles of 230 kV lines, 89 miles of 115 kV lines, and 136 miles of 69 kV lines, with combined generation capacity of 1,566 MW between Jones and Tolk generating plants.

SPP developed and analyzed four economic project groups in a strategic initiative study called the Balanced Portfolio Report. The purpose of the study was to evaluate 345 kV transmission projects within the SPP region to reduce transmission congestion caused by trapped generation (generation that cannot get power out of the host zone due to transmission constraints). The report stated that the reduction of transmission congestion will result in lower generation production costs and may benefit the power grid and reduce environmental impacts due to more efficient use of its generation resources. Adjusted Production Cost was the only benefit metric used in this report. This report stated that the four economic projects analyzed will provide customers with potential savings that exceed project costs. The Balanced Portfolio Report endorsed a project group called "Portfolio 3E, Adjusted" where the proposed project provides significant benefit vs. cost to the SPP customers.

Refer to Attachment 5 for the SPP Balanced Portfolio Report with latest revision date: June 23, 2009.

As a result of the SPP Balanced Portfolio Report, SPP has determined that there is a need for the proposed transmission line and has issued two NTC letters – one to SPS and one to OG&E. The SPP NTC letter sent to SPS is under Project ID 704 and Network Upgrade ID numbers 10936 and 10937. Under the Network Upgrade ID 10936, SPS is directed to build a 345 kV line from TUCO Substation that would terminate at OG&E's interception of 345 kV from Woodward District EHV. Under the upgrade ID 10937, SPS is directed to expand its TUCO Substation to include a 560 MVA, 345/230 kV auto transformer with a 345 kV ring bus configuration and building a mid-point reactor station along the TUCO-Woodward District EHV 345 kV line. The OG&E NTC requires line construction from Woodward District EHV Substation to or near the Texas-Oklahoma state line.

Refer to Attachment 6 for: (1) the SPP NTC letter (SPP-NTC-20043, Project ID: 704, Upgrade ID: 10936 and 10937) and (2) SPS's reply to the SPP NTC letter.

### 14. Alternatives to Proposed Project:

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 proposed project. Explain how the proposed project overcomes the insufficiencies of the other options that were considered.

The SPP Balanced Portfolio Report (refer to Attachment 5) evaluated twenty 345 kV transmission projects and then narrowed its consideration to four main alternatives. The report identified the most effective group where individual projects would compliment each other to achieve the most economic benefits to SPP customers.

SPP screened twenty viable projects and analyzed them starting with the March 1, 2012 spring power flow models. Each project was evaluated and ranked from highest to lowest according to their annualized benefits to project cost ratio (B/C Ratio).

Alternative 1 is labeled as Portfolio 1 by SPP in which every 345 kV project that has a B/C Ratio close to 1.0 is listed. Alternative 2 is a subset of Portfolio 1 and is labeled as Portfolio 2 where projects with similar benefits were narrowed down by removing projects that would not provide additional benefits. Alternative 3 is labeled as Portfolio 3 by SPP where they insured that each zone in the SPP region received a project which is the most beneficial to their zone. Alternative 4 is labeled as Portfolio 4 by SPP where the projects would be mutually beneficial and raised the overall benefit of the entire SPP. SPP selected Alternative 3 (Portfolio 3) and further modified and renamed it as "Portfolio 3E, Adjusted" to yield the maximum benefit. The proposed line is included in Alternative 3 or "Portfolio 3E, Adjusted" projects.

There were no alternative options provided to SPS when SPP issued an NTC to SPS to construct the proposed 345 kV line from TUCO to OG&E interception of 345 kV from Woodward District EHV.

#### 15. Schematic or Diagram:

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

#### Refer to Attachment 7.

### 16. 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

preferred and alternate routes. Provide a copy of the complete routing study conducted by the utility or consultant.

The route selection was conducted in accordance with Public Utility Regulatory Act (PURA) § 37.056(c)(4)(A)-(D), and considers various aspects of the natural and human environment including community values, recreational and park areas, historical and aesthetic values, and environmental integrity.

The Project Team identified a Study Area encompassing the defined endpoints of the TUCO Substation and the point of interception, approximately three miles southeast of Texola, Oklahoma. During initial planning stages the Study Area was to be defined as a 20-mile-wide area centered between the TUCO Substation and the defined point of interception. The Study Area was expanded to allow for additional potential routes that would minimize and/or avoid potentially impacting the Caprock Canyons State Park and Trailway as well as provide additional opportunities to cross the numerous creeks and rivers in the area.

The Project Team gathered data from various federal, state, and local officials and agencies; conducted literature, file, and record reviews; reviewed a variety of maps; and collected GIS data. Publicly available data sources were utilized to the extent feasible. As part of the data collection effort, SPS captured new high resolution aerial photography of the Study Area in May 2010. This photography was used to verify and supplement the available satellite imagery and information contained in the publicly available databases. The Project Team also used the photography to identify existing land uses, identify potential habitable structures, and locate existing electric transmission lines and other natural or human environmental features considered during the analysis and mapping of opportunities and constraints. This information was verified during later field reconnaissance. Routing opportunities and constraints include existing infrastructure, property/tract lines, habitable structures, electronic installations, airstrips, agricultural land, parks and recreations 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 recent aerial photography and other data collected into 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.

On July 16 - 24, 2010, the Project Team conducted a helicopter reconnaissance augmented by on-the-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 600 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 or 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 Alternative Route Segments were then presented to the public in a series of open house meetings.

The Public Involvement Program to review the Preliminary Alternative Route Segments resulted in many verbal and written comments. All comments received at the public open houses 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 adjustments were made to the Preliminary Alternative Route Segments in an effort to address the comments. The resulting segments were the Alternative Route Segments.

The Project Team reviewed the complete set of Alternative Route Segments and identified 20 complete Alternative Routes (including a Preferred Route) that would connect the TUCO Substation with the interconnection point selected in Oklahoma. The analysis of each Alternative Route Segment included quantifying and comparing the opportunities and the constraints along each route. The length (miles) or quantity (number) of the opportunities and environmental and land use constraints potentially impacted by each Alternative Route was quantified using GIS data, aerial photography, and field data. 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 usually already been disturbed by the existing ROW, a linear land use is already in place, and impacts associated with the existing linear use have often been previously mitigated. This provides an opportunity to minimize new impacts by paralleling and abutting existing ROWs. The Preferred Route was identified by following routing opportunities (particularly existing ROWs) containing few constraints.

### 17. 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 Procedural Rule §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. Provide a description of the method of notice, a copy of any notices, and the number of notices that were mailed and/or published.

There were four open house meetings for the project as noted in the table below.

Open House Locations				
City	Location	Date	Time	
Floydada, TX	Massie Activity Center	Monday, September 13, 2010	5:30 - 7:30 PM	
Memphis, TX	Memphis Convention Center	Tuesday, September 14, 2010	5:30 - 7:30 PM	
Quitaque, TX	The Hope Center	Wednesday, September 15, 2010	5:30 - 7:30 PM	
Shamrock, TX	Shamrock Community Center	Thursday, September 16, 2010	5:30 - 7:30 PM	

SPS mailed 1,316 individual written notices of the meetings to all owners of property within 600 feet of the centerline along the preliminary alternative route segments as such were delineated at the time of the public open house meetings. Additionally, local officials were mailed or delivered individual written notice of the meeting.

Refer to Appendix D of the EA, Attachment 1, for a sample copy of the notice letters sent to landowners regarding the open house meetings.

Notices were published in newspapers circulated within all counties as noted in the table below, and on the project website, announcing the location, time, and purpose of the meetings.

Publication of Open House Notice					
Newspaper/Journal	Dates Published	Counties of Circulation			
Elk City Daily News Inc	9/5/2010, 9/8/2010 & 9/12/2010	Beckham			
Briscoe County News	9/8/2010	Briscoe/Hall			
The Childress Index	9/7/2010	Childress			
Wellington Leader	9/9/2010	Collingsworth			
Paducah Post	9/7/2010	Cottle			
The Clarendon Enterprise	9/9/2010	Donley			
Floyd County Hesperian-Beacon	9/9/2010	Floyd			
Plainview Daily Herald	9/5/2010 & 9/12/2010	Hale			
The Hall County Herald	9/8/2010	Hall			
Motley County Tribune	9/9/2010	Motley			
County Star News	9/9/2010	Wheeler			
Amarillo Globe News	9/05/2010 & 9/12/2010	Region			
La Voz Hispana	9/8/2010 & 9/15/2010	Spanish - Amarillo Region			

A total of 347 people signed in at the open house meetings (157 attended in Floydada, 58 attended in Memphis, 55 in Quitaque, and 77 attended in Shamrock). 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 provided in Appendix D of the EA, Attachment 1.

Please refer to pages 2-8 through 2-9 of the EA, Attachment 1, for a summary of the questionnaire responses.

### 18. Routing Maps:

Base maps should be a full scale (one inch = one mile) highway map of the county or counties involved, or a U.S.G.S. 7-minute topographical map, or other map of comparable scale with sufficient cultural and natural features to permit location of the proposed route in the field. Provide a map (or maps) that shows the study area, routing constraints, and all routes or line segments that were considered prior to the selection of the preferred and alternate routes. Identify the preferred and alternate routes and any existing facilities to be interconnected or coordinated with the proposed project. Locate 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 location of the habitable structures, radio transmitters and other electronic installations, airstrips, irrigated pasture or cropland, parks and recreational areas, historical and archeological sites, and any environmentally sensitive areas.

Refer to Figure 2-2, sheets 1 through 7, in Appendix C of the EA, Attachment 1, for maps depicting the preliminary routes.

Refer to Figure 2-1, Sheets 1 through 7, in Appendix B of the EA, Attachment 1, for the preferred and alternate routes proposed in this project.

#### 19. Permits:

List any permits or approvals required by other governmental agencies for the construction of the proposed project. Indicate whether or not permits have been obtained.

All routes would require highway-crossing permits for State Highways and county roads. Depending on which route is selected, SPS will need to obtain permits from TxDOT and those counties that require permits. Additionally, permits for railroad-crossing will need to be obtained from BNSF for all routes. A regional permit will be required from the Army Corps of Engineers. The appropriate permits will be obtained after the CCN is approved and prior to construction.

#### 20. Habitable structures:

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 of a transmission project of 230kV or less, or within 500 feet of the centerline of a transmission project greater than 230kV. Provide a general description of each habitable structure and its distance from the centerline of the proposed project. 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 to the closest habitable structure in the group. Locate all listed habitable structures or groups of structures on the routing map.

Table 5-1 in the EA (Attachment 1) identifies the total number of habitable structures located within 500 feet of the center line of each Alternative Route. Appendix G of the EA, Attachment 1, lists the habitable structures located within 500 feet of each Alternative Route Segment. There are 33 habitable structures located within 500 feet of the proposed centerline of the Preferred Route (Route 20). The habitable structures are detailed on the routing map (Figure 2-1, Sheets 1 through 7, in Appendix B of the EA, Attachment 1).

#### 21. Electronic Installations:

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

There are no commercial AM radio transmitters located within 10,000 feet of the center line of any of the Alternative Routes, nor are any FM radio transmitters located within 2,000 feet of the center line of any of the Alternative Routes. There are ten cellular towers, four television towers, and three microwave relay towers that are located within 2,000 feet of the center line of Alternative Route Segments. Table 5-3 in the EA (Attachment 1) provides the distances of these towers.

Refer to Figure 2-1, Sheets 1 through 7, in Appendix B of the EA, Attachment 1.

### 22. Airstrips:

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 the proposed project. 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 the proposed project. 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 the proposed project. 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 private airstrip, registered airport, and registered heliport; and state the distance of each from the center line of the proposed transmission line. Locate all airstrips, airports, and heliports on a routing map.

There are no FAA-registered airports with runways less than 3,200 feet in length located within 10,000 feet of the center line of the proposed Project. There are no private airstrips within 10,000 feet of the center line of the proposed Project. There are no heliports located within 5,000 feet of the center line of the proposed Project. All Alternative Routes (including the Preferred Route) are located within 20,000 feet of at least one FAA-registered airport with at least one runway longer than 3,200 feet. In accordance with Federal Aviation Regulations (FAR), the FAA uses a 100:1 horizontal slope criteria for evaluating potential obstructions at airports with runways longer than 3,200 feet in length that are available for public use and are located within 20,000 feet of a proposed structure. After the PUC certificates a route for the Project and engineering and pole placement along the route are finalized, the Project Team will provide the FAA Notice of Proposed Construction or Alteration (FAA Form 7560-1) for all pole structures proposed to be located within 20,000 feet of any of the airports listed in Table 5-2 in the EA, Attachment 1.

### Refer to Figure 2-1, Sheets 1 through 7, in Appendix B of the EA, Attachment 1 for airstrip locations.

### 23. Irrigation Systems:

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

The Project Team identified croplands and pastures in the Study Area that are irrigated by mechanical irrigation systems (rolling or pivot type irrigation). Table 5-1 of the EA (Attachment 1) provides the total length of each Alternative Route that crosses irrigated agricultural land. Impacts to these areas will be minimized by siting the transmission structures outside of the zone of irrigation system movement to the extent possible (*i.e.*, along roadways, property lines, or areas not irrigated).

#### Refer to Figure 2-1 of Attachment 1.

#### 24. Notice:

Notice is to be provided in accordance with Procedural Rule §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 8 for: (1) a sample copy of the notice letter, (2) the segment descriptions; PUCT Landowner Brochure, Comments Form, and Intervenor Form;

landowner bill of rights; and maps, 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 proposed transmission line.

Refer to Attachment 9 for a sample copy of the notice letter and the list of utilities to whom notice was sent. Refer to Attachment 11 for a copy of the newspaper notice and segment descriptions that were included with each notice packet. Also, refer to Attachment 8 (landowner notice) for the maps included with notice, as the same maps were used for notice to utilities.

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

Refer to Attachment 10 for a sample copy of the notice letters and the list of city and county officials to whom notice was sent. Refer to Attachment 11 for a copy of the newspaper notice and segment descriptions that were included with each notice packet. Also, refer to Attachment 8 (landowner notice) for the maps included with notice, as the same maps were used for notice to counties and municipalities.

D. Provide a copy of the notice that is to be published in newspapers of general circulation in the counties in which the proposed 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 11 for a copy of the newspaper notice and a list of newspapers that will publish the notice.

\* A copy of the application, including the EA, Attachment 1, was sent to Texas Parks & Wildlife Department on the day of the filing of this application. Refer to Attachment 12 for a copy of the letter.

### 25. Parks and Recreation Areas:

List all parks and recreational areas owned by a governmental body or an organized group, club, or church located within 1,000 feet of the center line of the project. 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 or club). List the sources used to identify the parks and recreational areas. Locate the listed sites on a routing map.

Only one park or recreation area would be affected by the proposed Project. Segment AM of the Preferred Route (Alternative Route 20) and Segment WW of Alternative Route 19 would cross the Caprock Canyons Trailway in Hall County (see Figure 2-1, Sheet 4, in Appendix B of the EA, Attachment 1). This is a 15,000-acre multi-use park operated by the Texas Parks and Wildlife Department (TPWD) with a trail that extends for approximately 64 miles through three counties along a former railway. Approximately 150 feet of the trailway would be traversed by either of these alternatives. The main park area of the Caprock Canyons park would not be affected by any of the Alternative Routes.

Segment AM would cross the trailway just north of Highway 86 and County Road 21 (approximately 8.5 miles west of the intersection of Highway 86 and U.S. 287). The topography in this area is generally flat. Adjacent to the trailway on the south and north, the land is cultivated and in active agriculture. An existing electric distribution line is adjacent to County Road 21 and currently crosses the trailway in a north-south direction at this location. The proposed transmission line would be located adjacent to the existing distribution line, along the east side of County Road 21.

Segment WW would cross the trailway 0.5-mile north of Highway 86 (approximately 7.5 miles northeast of the intersection of Highway 86 and Highway 70). The topography in this area is generally flat, and there are fields in active cultivation within a 0.5-mile east and west of the crossing.

The Project Team has initiated consultation with TPWD for guidance and approval to cross the Caprock Canyons Trailway. SPS does not anticipate that construction or operation of the Project will interfere with long-term use of the Caprock Canyons Trailway or any other park or recreation area.

#### 26. Historical and Archeological Sites:

List all historical and archeological sites known to be within 1,000 feet of the center line of the proposed project. Include a description of the site and its distance to the center line of the project. 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.

The Project Team consulted the Texas Historical Commission's (THC) Archaeological Sites Atlas, the Oklahoma Archaeological Survey, and other relevant sources to determine whether prehistoric The Project Team has identified 18 locations of previously recorded archaeological sites along the proposed Alternative Routes; these locations are summarized in Table 4-9 of the EA (Attachment 1). Seven of these locations may be eligible for the National Register of Historic Places (NRHP). All of the remaining locations identified with the exception of site 41CI11 are considered to have unknown potential for NRHP eligibility given the lack of sufficient data to make this determination. Site 41CI11 is not considered eligible as the THC Atlas states that it was destroyed during the construction of Baylor Lake.

### 27. Coastal Management Program:

Indicate whether the proposed project is located, either in whole or in part, within the coastal management program boundary as defined in 31 T.A.C. §503.1. If the project is, either in whole or in part, in the coastal management program, indicate whether if any part of the proposed facilities are seaward of the Coastal Facilities Designation Line as defined in 31 T.A.C. §19.2(a)(21). Identify the type(s) of Coastal Natural Resource Area(s) using the designations in 31 T.A.C. §501.3(b) impacted by any part of the proposed facilities.

None of the routes are located within the coastal management program boundary as defined in 31 T.A.C. 503.l.e.

### 28. Environmental Impact:

Provide copies of any environmental impact studies 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 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 insure preservation of the areas or species.

Refer to the Alternative Routing Study and Environmental Assessment for the TUCO to Texas/Oklahoma Interconnect 345 kV Transmission Line Project labeled as Attachment 1.

### **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 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** 

Applicant's Authorized Representative

SUBSCRIBED AND SWORN TO BEFORE ME, a Notary Public in and for the state of Texas, this 29th day of March 2011.

6/17/2012

SEAL

DONNA M. ANDERSON
NOTARY PUBLIC,
STATE OF TEXAS
My Commission Expires 06-17-2012

Notary Public

My Commission Expires:

19.