# APPLICATION TO AMEND A CERTIFICATE OF CONVENIENCE AND NECESSITY FOR A PROPOSED 115 KV TRANSMISSION LINE WITHIN LAMB, CASTRO, AND HALE COUNTIES

# **DOCKET NO. 40193**

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

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

Amarillo, TX 79105-1261

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Alternate Contact: Ronnie G. Walker
Title/Position: Project Manager
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Graves Dougherty Hearon & Moody, PC

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# 4. Project Description:

Name or Designation of Project:

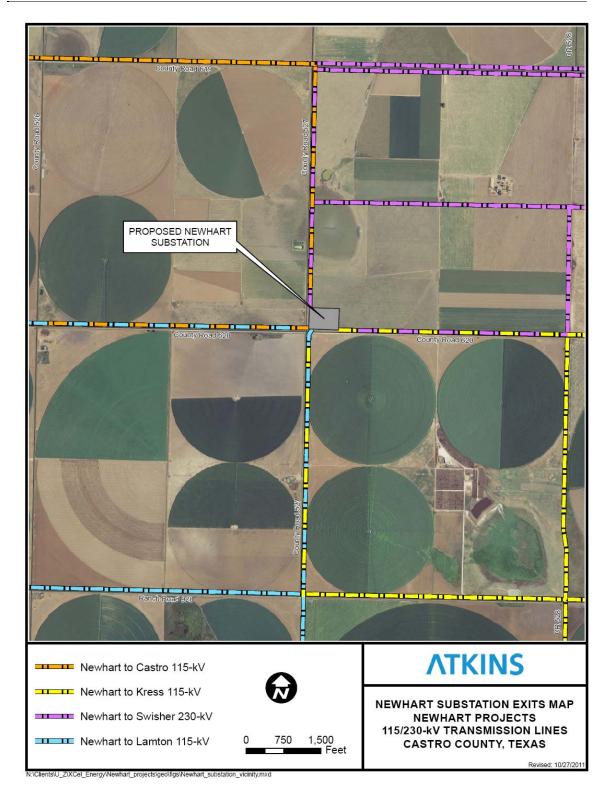
SOUTHWESTERN PUBLIC SERVICE COMPANY'S APPLICATION TO AMEND A CERTIFICATE OF CONVENIENCE AND NECESSITY FOR A PROPOSED 115 kV TRANSMISSION LINE WITHIN LAMB, CASTRO, AND HALE COUNTIES, TEXAS. THE PROJECT NAME IS NEWHART SUBSTATION TO LAMTON SUBSTATION.

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.

The proposed Newhart Substation to Lamton Substation project will consist of a new substation (Newhart Substation), located in Castro County, and a new 115 kV transmission line that will extend from the Newhart Substation to the existing Hart Industrial and Lamton substations, located in Castro and Lamb counties, respectively. The proposed 230/115 kV – 252 MVA Newhart Substation will be served by tapping the existing SPS 230 kV Circuit K-41, which is a north/south 230 kV line that extends from the Potter County Substation near Amarillo, Texas to Plant X near Earth, Texas. The Newhart Substation will consist of a 230 kV four-terminal ring bus configuration expandable to a breaker and a half and a 115 kV four-terminal ring bus configuration expandable to a breaker and a half. The existing 115/69 kV Lamton Substation consists of a three-breaker 115 kV straight bus configuration and will be converted to a four-terminal ring bus configuration expandable to a breaker and a half for future terminals.

• The proposed Newhart Substation to Lamton Substation project is one of four projects associated with the Newhart Substation that will require a CCN filing. Three of those, the Newhart Substation to Kress Substation CCN (Docket No. 39798), the Newhart to Castro County Substation CCN (Docket No. 39873, for which a Notice of Approval was issued on January 30, 2012), and the Newhart to Swisher County Substation (Docket No. 39982), have already been filed. These four projects will upgrade, strengthen, and relieve high transmission loadings on the central portion of the SPS transmission system in Castro, Parmer, Swisher, Bailey, Lamb, and Hale counties. These projects are included in the 2009 Southwest Power Pool (SPP) Transmission Expansion Plan (STEP), and SPS has been issued a Notification to Construct (NTC) for these facilities.

The Newhart Substation will be designed and constructed to meet the requirements for these four projects by accepting six line terminations: four lines connecting it to other substations; and two lines connecting it to SPS's 230 kV Circuit K-41 which will serve as the primary feeder for the substation. For this reason, the route maps only show two exit routes from the Newhart Substation for this project. The map below depicts the exit line proposals for the proposed Newhart Substation for all four projects involving this substation. Given the locations of all the substations that need to be connected, SPS believes that exiting the Newhart Substation to the south is the best option for this project. However, a western exit segment is also feasible and is provided as an alternative.



The Newhart Substation is approximately one mile from SPS's Circuit K-41 because the substation will be fed primarily from this 230 kV circuit. The proposed substation site is at the intersection of two county roads and is on land not presently being irrigated, which is somewhat

unusual in this area and decreases the impact to the area. It is also feasible to construct new transmission lines from this location to the existing Kress, Swisher County, Castro County, and Lamton Substations. The Kress and Swisher County Substations are approximately 14 and 16 miles, respectively, east of the Newhart Substation site. The Castro County Substation is approximately 21 miles west of the site, and the Lamton Substation is approximately 18 miles southwest of the Newhart Substation site.

The proposed transmission line is presented with 15 alternate routes consisting of a combined 72 segments and is estimated to be approximately 23 to 30 miles in length depending on which route is chosen. All routes shown below begin at the proposed Newhart Substation, located about five miles northeast of Hart, Texas, northeast of the intersection of County Roads (CR) 620 and 527 in Castro County. All routes connect to the Hart Industrial Substation located southwest of Hart, Texas in the northeast corner of the intersection of CR 524 and Farm to Market Road 145. All routes end at SPS's existing Lamton Substation, which is located approximately one mile northeast of Olton, at the southwest corner of the intersection of CR 321 and CR 104, in Lamb County, Texas.

The segments that comprise each route are as follows:

Alternative	<i>a</i> .
Route	Segments
1	L1 – L81a – L80 – L6b – L79 – L78 – L4b – L14 – L28* – L27* – L26* – L32* – L33a* – L29 – L47 – L53 – L55 – L60 – L71 – L77
2	L1 – L81a – L80 – L6c – L18 – L32* – L33a* – L26 – L27 – L30 – L47 – L53 – L55 – L60 – L71 – L77
3	L1 – L81a – L80 – L6c – L18 – L32 – L33a – L33b – L39 – L46 – L49 – L52 – L56 – L58 – L61 – L62 – L69 – L72 – L77
4	L1 – L81a – L80 – L6c – L18 – L32 – L33a – L33b – L38b – L38a – L41 – L42 – L45 – L51 – L64 – L67 – L73 – L76
5	L8a - L8b - L9 - L10 - L19 - L24 - L32* - L33a* - L26 - L27 - L30 - L47 - L53 - L55 - L60 - L70 - L69 - L72 - L77
6	L8a – L8b – L9 – L10 – L11 – L18 – L32 – L33a – L33b – L39 – L46 – L49 – L52 – L56 – L58 – L61 – L62 – L69 – L72 – L77
7	L8a – L81b – L81a – L80 – L6c – L12 – L13 – L14 – L28* – L27* – L26* – L32* – L33a* – L29 – L47 – L48 – L49 – L52 – L56 – L58 – L61 – L62 – L69 – L72 – L77
8	L8a – L8b – L21 – L22 – L34a – L34b – L33b* – L39 – L46 – L49 – L52 – L56 – L58 – L61 – L62 – L69 – L72 – L77
9	L8a – L8b – L21 – L35 – L37 – L38a* – L38b* – L33b* – L41 – L42 – L45 – L51 – L64 – L67 – L73 – L76
10	L8a – L8b – L9 – L20 – L34a – L34c – L38b – L33b* – L39 – L46 – L49 – L50 – L51 – L64 – L67 – L73 – L76
11	L8a – L8b – L21 – L35 – L37* – L38a* – L38b* – L33b* – L36 – L44 – L65 – L67 – L68 – L72 – L77
12	L8a - L8b - L21 - L35 - L37* - L38a*- L38b* - L33b* - L36 - L44 - L66 - L74 - L76
13	L8a - L8b - L21 - L35 - L37* - L38a* - L38b* - L33b* - L36 - L44 - L66 - L75
14	L8a – L81b – L81a – L80 – L6b – L79 – L78 – L4b – L14 – L28* – L27* – L26* – L32* – L33a* – L29 – L47 – L53 – L55 – L60 – L71 – L77
15	L8a - L8b - L9 - L10 - L11 - L18 - L32 - L33a - L33b - L38b - L38a - L37 - L36 - L44 - L66 - L74 - L76

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\* This segment will be a radial feed to the Hart Industrial Substation.

Refer to Figure 2-2 of the Environmental Assessment (EA), Attachment 1, for the route map, which shows all 15 routes.

#### Refer to Section 2.3.4 of the EA, Attachment 1, for segment descriptions.

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

Design Voltage Rating (kV): 115 kV Operating Voltage Rating (kV): 115 kV

Normal Peak Operating Current Rating (A): 803 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.).

Southwestern Public Service Company owns 100 percent of the project.

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

Not applicable.

#### 5. Conductor and Structures:

Conductor Size and Type:

Conductor will be 397.5 kcMIL, ACSR, 26/7 stranded, code name IBIS. Static wire will be one 3/8" EHS galvanized steel and one Optical Ground Wire.

Number of conductors per phase: 1 (one)

Continuous Summer Static Current Rating (A): 803 amps

Continuous Summer Static Line Capacity at Operating Voltage (MVA): 160 MVA

Continuous Summer Static Line Capacity at Design Voltage (MVA): 160 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.

Height of Typical Structures:

The typical height for these structures will be 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.

This line will be built using primarily single-pole steel structures; however, 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 attached drawings and actual heights are dependent on the clearance requirements to be determined. Highway crossings will utilize structures whose heights are greater than the minimum heights required by the Texas Department of Transportation (TxDOT) and/or the National Electric Safety Code (NESC).

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 "IBIS" 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. This solution is not only expected to decrease costs but it also addresses 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 since a single-pole steel line minimizes the impact to both farmers and landowners because it eliminates the space required by an H-frame structure as well as the need for guy wires on the landowner's property, which results in a smaller footprint than a guyed structure. Also, since utilizing steel poles results in using fewer structures, it is easier to span existing irrigation systems. During the public meetings held for this project, landowners had no opposition to the single-pole steel design.

## Refer to Attachment 2 for the following:

Typical 115 kV single-circuit steel tangent structure is shown on SPS drawing T-0-427.

Typical 115 kV single-circuit steel angle structure is shown on SPS drawing T-0-468.

Typical 115 kV single-circuit steel corner structure is shown on SPS drawing SD-T0-426.

Typical 115 kV double-circuit steel tangent structure is shown on SPS drawing T-0-410.

Typical 115 kV double-circuit steel corner structure is shown on SPS drawing T-0-412.

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

Not applicable.

## 6. Right-of-way:

Miles of Right-of-Way: Approximately 23 to 30 miles.

Miles of Circuit: Approximately 23 to 30 miles.

Width of Right-of-Way: 70 feet; wider in exceptional circumstances

Percent of Right-of-Way Acquired: 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 is located in Lamb, Castro, and Hale counties in the Texas Panhandle. The land use in this area is predominantly agricultural, consisting primarily of irrigated cropland and cattle operations, including large feedlots. There are also scattered rural residential, commercial, and industrial developments. The terrain can be characterized as flat to gently sloping with numerous playa lakes interspersed.

## 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.

- Lamton Substation
- Hart Industrial Substation

The 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.

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.

Newhart Substation

This substation will be owned by SPS.

#### 8. Estimated Schedule:

Estimated Dates of:	Start	Completion
Right-of-way and Land Acquisition	Following CCN approval	12 months following CCN approval
Engineering and Design	Ongoing	8 weeks before construction
Material and Equipment Procurement	Following CCN approval	6 weeks before construction
Construction of Facilities	As ROW is acquired	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 Lamb, Castro, and Hale counties, Texas.

## 10. Municipalities:

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

Route 5 would pass through the city limits of Hart, Texas. None of the other alternative routes are located within the boundaries of any 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.

**Please refer to Attachment 3 for the franchise agreement with the City of Hart.** SPS plans to purchase an easement for the transmission line proposed in this application.

#### 11. Affected Utilities:

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

- Lamb County Electric Cooperative, Inc.
- Swisher Electric Cooperative, Inc.
- Golden Spread 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. 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.

SPS and/or its contractors will handle the construction of this project and will coordinate as needed with affected utilities.

# 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 4 for the estimated cost table. Note that all costs for the Newhart Substation were included in the Newhart Substation to Kress Substation CCN filing (Docket No. 39798) and are not included in estimated costs for this project.

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) 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 proposed Newhart Substation in Castro County to the existing Lamton Substation in Lamb County. The proposed transmission line was identified by SPP as needed for reliability to address an overload of the Happy Substation to Palo Duro Substation 115 kV transmission line which could occur during an outage of either the Kress Substation to Swisher County Substation 115 kV line or the Swisher County Substation 230/115 kV transformer. The proposed transmission line is the result of the 2009 STEP study of the SPP Open Access Transmission Tariff which is part of the Ten-Year Regional Transmission Organization Regional Reliability Assessment (2010-2019).

## **Existing Transmission System**

The existing transmission system in Castro, Parmer, Swisher, Bailey, Lamb, and Hale counties, referred to herein as SPS Central Service Area, consists of 319 miles of 345 kV lines, 851 miles of 230 kV lines, 460 miles of 115 kV lines, and 436 miles of 69 kV lines. The SPS Central Service Area is fed from two different transmission lines at the 230 kV level coming from the coal-fired Tolk Generating Station and five different transmission lines at the 115 kV level coming from the gas-fired Plant X Generating Station. The total nameplate generating capacity of Tolk and Plant X Generating Stations is 1395 MW.

The SPS Central Service Area is supported from the north and south of the SPS system at the 230 kV level. The Swisher 230/115 kV substation is fed by the Amarillo South Substation from the north while the TUCO 345/230/115/69 kV Substation is fed by the Tolk Generating Station and Jones Generating Station from the south. The Swisher County and TUCO Substations are connected by a 230 kV transmission line. The TUCO Substation is also fed at the 345 kV level from AEP's Oklaunion Substation to the east. The Lamb County 230/115 kV Substation is fed from the Tolk Generating Station at 230 kV level and is also fed from the Plant X Generating Station at 115 kV level.

The proposed Newhart 230/115 kV Substation will connect to the existing 230 kV line between Potter County Substation from the northern part of SPS's service area and Plant X Generating Station to the south. The Lamton Substation is connected to Plant X Generating Station at the 115 kV level and connected to Hale County Substation at 69 and 115 kV levels.

SPP studied and analyzed reliability issues in the region and identified the proposed transmission line as one of the regional reliability upgrades listed in Appendix B of the 2009 STEP study. Based on the STEP study, SPP has determined there is a need for the proposed transmission line and has issued an NTC letter to SPS. The SPP NTC letter sent to SPS is under Project ID 791 and Network Upgrade ID numbers 11044 and 11045 which directs SPS to build a 115 kV line from the proposed Newhart Substation to the existing Lamton Substation.

Refer to Attachment 5 for the "SPP NTC" letter (SPP-NTC-20084, Project ID: 791, Upgrade ID: 11044 and 11045).

Refer to Attachment 6 for the SPS Acceptance Letter to the NTC Letter (SPP-NTC-20084).

Refer to Attachment 7 for an excerpt from the "2009 STEP" study addressing the need for this project.

## 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.

There were no analyses of distribution alternatives, upgrading voltage or bundling of conductors of existing facilities, adding transformers, or distributed generation alternative options provided to SPS when SPP issued an NTC to SPS to construct the proposed 115 kV line from the Newhart Substation to the Lamton Substation. None of these alternatives would satisfy the STEP study reliability requirements to address overloads and low voltage violations during contingency outages in the SPS Central Service Area.

#### 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 EA and alternative routing analysis for this project was produced by Atkins North America (Atkins), the environmental firm contracted by SPS, with input from SPS Siting and Land Rights personnel and is included as Attachment 1 to the Application.

The first step in the selection of alternative routes was to select a study area. This area needed to encompass both project termination points, which are the existing Lamton Substation and the proposed Newhart Substation, and the Hart Industrial Substation. It also needed to include a large enough area within which an adequate number of alternative routes could be located. The study area for the proposed 115 kV transmission line is approximately 12.0 miles east to west and 22.4 miles north to south, and is located in Lamb, Castro, and Hale counties, Texas.

The data used by Atkins and SPS in the delineation of alternative routes included published literature (documents, reports, maps, aerial photography, etc.) and information obtained from local, state, and federal agencies including information obtained from county appraisal district maps and records. Aerial photography acquired from the National Agriculture Imagery Program dated 2010, U.S. Geological Survey (USGS) topographic maps, TxDOT county maps, and ground reconnaissance surveys were used throughout the selection and evaluation of alternative routes. Ground reconnaissance of the study area and computer-based evaluation of digital aerial imagery were utilized for both refinement and evaluation of alternative routes.

The next step in the process was to identify routing constraints within the study area. These consisted of habitable structures, out buildings and barns, irrigation wells, center-pivot irrigation systems, cemeteries, historic sites, wetlands, parks, churches, schools, endangered or threatened species habitat, electrical distribution lines, as well as underground utilities and above-ground communication towers. Additionally, where possible, existing compatible ROW, property lines, and roadways were utilized or paralleled.

After preliminary routes were identified, modifications were made based on the results of field evaluation and review of high-resolution aerial photography. In order to solicit public opinion about the project, these preliminary routes were presented at two public open-house meetings at the Hart Golden Group Building in Hart, Texas on June 7 and 9, 2011 between the hours of 5:30 p.m. and 7:30 p.m.

After careful consideration and study of numerous possible routes within the approximately 269 square mile area, along with possible constraints and landowner input, Atkins and SPS Siting and Land Rights personnel developed 15 alternative routes for this project. The potential routes were evaluated comparing all routes from a strictly environmental viewpoint, based upon the measurement of 38 separate environmental criteria and the consensus opinion of Atkins' group of evaluators.

Atkins determined that Route 8 represents the best balance between land use, environmental, and cultural resource factors. Route 8 was the top ranked route because it:

- is the shortest route;
- has the second fewest number of habitable structures;
- parallels the highest percentage of other compatible ROW (64.2% of its total length);
- crosses the least amount of land with a high probability of containing cultural resource sites;
- does not cross any wetlands; and
- has the second fewest number of playa lake crossings.

SPS subsequently selected Route 8 as the route it believed best addresses the requirements of PURA and P.U.C. Substantive Rules, based on a review of potential environmental impacts, land use, community values, estimated costs, and landowner input. SPS did not find any engineering constraints, maintenance or construction concerns, or any system operating conditions that would alter its selection of Route 8. Although SPS recommends Route 8, it can construct and operate any of the routes proposed in this application.

Refer to Table 6-1 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.

Two open-house meetings were held for this project. These meetings took place on June 7 and 9, 2011 at the Hart Golden Group Building in Hart, Texas between the hours of 5:30 p.m. and 7:30 p.m. Attendees were able to fill out and submit questionnaires related to this project at either meeting.

SPS mailed individual written notices of the meeting to all owners of property within 300 feet of the centerline along the preliminary alternative route segments as delineated at the time of the public open house meeting. Additionally, agencies and other organizations were mailed written notice of the meeting.

Refer to Appendix A of the EA, Attachment 1, for a list of federal, state, and local agencies that received notice of the project, and Appendix B for a sample copy of the notice letters sent to landowners regarding the open house meeting.

A total of 54 meeting attendees signed in at the open house meeting on June 7, and 25 people signed in at the June 9 meeting. The three other proposed Newhart Substation projects were also presented at the same meetings; therefore, some attendees may not be affected by this project. 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 total of eight questionnaires were completed and returned for the Newhart Substation to Lamton Substation Project.

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

Refer to Section 5.2 of the EA, Attachment 1, for a summary of the Newhart Substation to Lamton Substation questionnaire responses.

## 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.

Refer to Figure 2-3 of the EA, Attachment 1, for a map depicting the preliminary routes.

Refer to Figure 2-2 of the EA, Attachment 1, for a map depicting the primary alternative routes proposed for this project. Also, refer to Tables 6-3 through 6-17 in the EA for the habitable structures list (by route and distance) and Appendix C 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 6-1 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.

- The Texas Commission on Environmental Quality (TCEQ) will require a Storm Water Pollution Prevention Plan (SWPPP). SPS or its contractor will submit a Notice of Intent at least 48 hours prior to the beginning of construction and will have the SWPPP on site at the initiation of clearing and construction activities (not yet obtained).
- Permits will be obtained from TxDOT for crossing state-maintained roads/highways or using TxDOT ROW to access the project (not yet obtained). State-maintained highways or roads crossed by at least one of the alternative routes are: Farm to Market (FM) 168, FM 928, State Highway 194, FM 145, FM 1842, FM 2881, and US 70.
- Depending on the location of the transmission line structures, floodplain development permits and road crossing permits might be required by the counties in which the approved route is located (not yet obtained).
- If necessary, cultural resource clearance will be obtained from the Texas Historical Commission (THC) for the proposed project (not yet obtained).
- If the approved route triggers FAA criteria regarding proximity to airports, SPS will file a Notice of Construction form with the FAA (not yet obtained).
- SPS will submit an application for Wire Line Crossing or Longitudinal Communication or Electric to the Burlington Northern Santa Fe (BNSF) railroad. No construction will occur at the crossing until a permit is obtained from BNSF.

#### 21. Habitable structures:

For each route list all single-family and multi-family dwellings and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business structures,

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

Table 6-1 in the EA (Attachment 1) identifies, by route, the total number of habitable structures located within 300 feet of the centerline of each alternative route. Tables 6-3 through 6-17 of the EA, Attachment 1, list the specific habitable structures located within 300 feet of each proposed route. The habitable structures are also shown on Figure 6-1 of the EA, Attachment 1.

#### 22. Electronic Installations:

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

There are no AM radio transmitters located within 10,000 feet of any of the alternative routes. There are three FM, cellular, or other similar electronic installations located within 2,000 feet of some of the routes, as detailed in Tables 6-3 through 6-17 of the EA, Attachment 1. These electronic installations are also shown on Figure 6-1 of the EA, Attachment 1.

#### 23. Airstrips:

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

Tables 6-3 through 6-17 of the EA, Attachment 1, list the four private airstrips located within 10,000 feet of a proposed route. These airstrips are also shown on Figure 6-1 of the EA, Attachment 1.

There are no FAA-registered airports located within 10,000 or 20,000 feet of any of the routes.

There are no heliports located within 5,000 feet of any of the routes.

## 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.

All pasture or cropland irrigated by traveling irrigation systems (rolling or pivot type) that will be traversed by any of the alternative routes is shown on Figure 2-2, and the miles of such land crossed by each route is listed in Table 6-1 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 Intervenor Form; and landowner bill of rights, all of which were included with each notice packet, (3) the list of landowners to whom notice was sent, and (4) a copy of the Landowner Notification Map. Also, refer to Figure 6-1 in the EA, Attachment 1, for the map that was 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. Refer to Attachment 9 for a copy of the segment descriptions that were included with each notice packet. Also, refer to Figure 6-1 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. Refer to Attachment 9 for a copy of the segment descriptions that were included with each notice packet. Also, refer to Figure 6-1 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 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 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 or recreational areas either crossed by, or within 1,000 feet of, any of the alternative routes. Atkins conducted a review of the Texas Parks and Wildlife Department's (TPWD) Texas Outdoor Recreation Inventory and Texas Outdoor Recreation Plan, as well as federal, state, and local maps, and also field reconnaissance, to identify parks and recreation facilities within the study area.

#### 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.

SPS contracted with Atkins to identify any possible historical or archeological sites within 1,000 feet of the centerline of the proposed project. Atkins determined that there are no historical or archeological sites crossed by any of the alternative routes. There is one recorded historical site (Hart Cemetery) within 1,000 feet of Routes 1, 2, 5, 7, and 14. Tables 6-3, 6-4, 6-7, 6-9, and 6-16 in the EA, Attachment 1, detail the distance and direction of this cemetery from these routes.

To identify potential sites, Atkins researched the available records and literature at the Texas Archeological Research Laboratory, J.J. Pickle Research Campus, at the University of Texas at Austin. In addition, the Texas Historical Commission's Archeological Sites Atlas files were used to identify listed and eligible National Register of Historic Places (NRHP) properties and sites, NRHP districts, Official Texas Historical Landmarks, State Archeological Landmarks, and any other potential cultural resources such as National Historic Landmarks, National Monuments, National Memorials, National Historic Sites, and National Historic Parks, to ensure the completeness of the study.

#### 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 for the Newhart Substation to Lamton Substation 115 kV Transmission Line Project, labeled as Attachment 1.

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 6-1 was sent to OPUC on the day of the filing of this application. Refer to Attachment 14 for a copy of the transmittal letter.

## **AFFIDAVIT**

STATE OF TEX	$\Delta$	LEXAS
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#### 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		
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SUBSCRIBED day of March 20		O BEFORE MI	E, a Notary Public in	and for the state of Texas, this	_
·					
	CEAL				
	SEAL				
	Notary Public				
	My Commission	Expires:			