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Addendum StartPage: 0

APPLICATION OF SOUTHWESTERN PUBLIC SERVICE COMPANY TO § AMEND 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

SOAH DOCKET NO. 473-11-5978

DOCKET NO. 38877

FUBLIN HTM.

OF

ADMINISTRATIVE HEARINGS

REBUTTAL TESTIMONY **ANASTACIA SANTOS**

on behalf of SOUTHWESTERN PUBLIC SERVICE COMPANY

(Filename: SantosRebuttal.doc)

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GLOSSARY OF ACRONYMS AND DEFINED TERMS

Acronym/Defined Term	Meaning
Commission	Public Utility Commission of Texas
CTT	Cross Texas Transmission, LLC
EA	Environmental Assessment
ESA	Endangered Species Act
NRHP	National Register of Historic Places
Proposed Project	SPS's proposed 345 kV transmission line between the TUCO Substation and the Texas-Oklahoma Interconnect
ROW	Right-of-way
SPS	Southwestern Public Service Company
SWPPP	Stormwater Pollution Prevention Plan
THC	Texas Historical Commission
TPWD	Texas Parks and Wildlife Department
TDC	TDC F : 41C
TRC	TRC Environmental Corporation
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service

1		REBUTTAL TESTIMONY OF <u>ANASTACIA SANTOS</u>
2		I. WITNESS IDENTIFICATION AND QUALIFICATIONS
3	Q.	Please state your name and business address.
4	A.	My name is Anastacia Santos. My business address is 505 Huntland Drive, Suite
5		250, Austin, Texas.
6	Q.	By whom are you employed and in what position?
7	A.	I am employed by TRC Environmental Corporation ("TRC") as a Senior Project
8		Manager.
9	Q.	On whose behalf are you testifying in this proceeding?
10	A.	I am filing testimony on behalf of Southwestern Public Service Company ("SPS"), an
11		electric utility subsidiary of Xcel Energy Inc.
12	Q.	Are you the same Anastacia Santos who filed direct testimony on behalf of SPS
13		in this docket?
14	A.	Yes.
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1		II. <u>ASSIGNMENT</u>
2	Q.	What is your assignment for this rebuttal testimony?
3	A.	The purpose of my rebuttal testimony is to address some of the concerns raised by the
4		intervenors regarding the environmental aspects of SPS's proposed 345 kV
5		transmission line between the TUCO Substation and the Texas-Oklahoma
6		Interconnect ("Proposed Project"), including affects on:
7		• wetlands, playa lakes, and wildlife;
8		• Texas Parks and Wildlife Department's ("TPWD's") recommendations;
9		and
10		historical and archaeological features.
11		

Santos Rebuttal

I		III. <u>WETLANDS, PLAYA LAKES, AND WILDLIFE</u>
2	Q.	Has concern been expressed about wetlands within the project area?
3	A.	Yes. Several intervenors expressed a concern regarding routes near and or crossing
4		wetlands and playa lakes and how the transmission lines may affect the wildlife and
5		their habitat. However, most of the statements of concern were very general and
6		lacked any explanation of how a transmission line would adversely impact these
7		resources. Moreover, none of these witnesses has shown any deficiency in SPS's
8		plans for addressing these areas.
9	Q.	How has SPS minimized effects to wetlands and playa lakes and the wildlife that
10		inhabit them?
11	A.	First, in designing the various routes, open water, wetlands, and playa lakes were
12		avoided when it was feasible to do so. For example, Route 20 (SPS's Preferred
13		Route) crosses only 0.08 miles of open water despite its 182-mile length. Even the
14		worst route on this criterion (Route 10) crosses only 0.23 miles of open water.
15		Similarly, Route 20 crosses only 4.34 miles of actual or potential wetlands and the
16		worst route on this criterion (Route 6) crosses only 8.97 miles. In terms of playa
17		lakes, Route 20 crosses only 2.2 miles of such lakes and the worst route on this
18		criterion (Route 6) crosses only 6.1 miles. See Environmental Assessment ("EA"),
19		Table 5-1 (Revised November 2011). Thus, there is limited potential for any
20		significant impacts to water bodies, wetlands, and associated wildlife.
21		Second, as stated in the EA, section 5.4.1.1, the project will be designed to span
22		wetlands, playa lakes, and other water bodies wherever possible. Once the project is

issued a CCN, SPS will conduct on-the-ground surveys of the certificated
transmission line route to determine pole placement to mitigate impacts to wetlands,
playas, and other water bodies. For example, whenever possible poles will not be
located in wetlands, playa lakes, or other water bodies. Further, additional temporary
workspace outside of wetland areas will be used as needed to avoid impacts. SPS
will consult with the U.S. Army Corps of Engineers ("USACE") to determine any
permit requirements in these sensitive areas prior to construction. Furthermore,
following the recommendations of TPWD regarding transmission lines built near
playa lakes, SPS will install bird flight diverters to reduce avian mortality and injury
due to potential collisions with the transmission line.

construction.

Q.

A.

Yes, wetlands and playa lakes could be temporarily affected by land disturbance within and adjacent to these areas. To decrease these impacts, work within wetlands will be minimized to the extent practicable. Conservation measures to control erosion and sedimentation will be included in the Proposed Project's Stormwater Pollution Prevention Plan ("SWPPP"), which will be designed and implemented to minimize impacts to water quality in wetlands and surface waters during

Some temporary impacts to wetlands also may result from the alteration of wetland habitat due to vegetation clearing. Vegetation within emergent and scrubshrub wetlands is expected to recover quickly following construction and restoration of any disturbed work areas. If the Proposed Project crosses any forested wetland

Witnesses raising this issue include Mr. Westfall, Mr. Doucette, Mr. Allred, J.J. Henard and Ms. Baccus.

I		areas, which is unlikely, some permanent modification of the wetland habitat may
2		result, since large trees will not be allowed to re-grow within the maintained right-of-
3		way ("ROW"). Further discussion can be found in sections 5.3 and 5.4 of the EA.
4	Q.	Mr. Westfall, a witness for J&B Ranch, is particularly concerned about a lake
5		and wetlands area that he believes would be crossed by Segment DX. Can this
6		lake be spanned and the wetlands protected in the manner you describe above?
7	A.	If the lake exists along Segment DX, I have no reason to doubt that it can be spanned
8		and the wetlands protected. Mr. Westfall provides no quantitative data on the sizes
9		of the lake and the wetland areas in question, and I have not personally seen these
10		areas. However, neither the aerial photographs dated May 2010 nor the U.S.G.S.
11		topographic maps included in the EA show a large lake or large wetland areas along
12		the northern portion of Segment DX. There are three lakes to the east of the northern
13		half of Segment DX, but the closest is approximately 1.6 miles away and the other
14		two are 2.25 miles away. Due to their distance from Segment DX, construction along
15		Segment DX would have no impact on these lakes or wetlands.

- 16 Q. Have you reviewed the direct testimony of Mr. Van Zandt in regards to Segment
 17 AR and a bird rookery along the Prairie Dog Town Fork of the Red River as
 18 well as documented habitat of the federally-listed Interior Least Tern and
 19 Snowy Plover and the effects a transmission line could have on them?
- 20 A. Yes. At the location where Segment AR would cross the Prairie Dog Town Fork of 21 the Red River, there is an existing bridge for U.S. Highways 62/83. When originally

documented, a bird rookery was located east of this highway bridge.² Located immediately west of the highway bridge is an existing 138 kV transmission line. Slightly to the west of the 138 kV line, Cross Texas Transmission, LLC ("CTT") has been authorized to build a 345 kV transmission line.³ SPS's Proposed Project would be just west of the CTT line. It is unlikely that adding SPS's transmission line at a location that would be the farthest from the rookery is going to have any significant impact. Moreover, since the rookery's existence did not preclude certification of CTT's transmission line approximately 16 months ago in a location closer to the rookery than the Proposed Project, the rookery should not preclude certification of a route using Segment AR. Once the Public Utility Commission of Texas ("Commission") has certificated a route for the Proposed Project, SPS will survey the route in accordance with state and federal protocols for threatened and endangered species, suitable nesting/burrow habitat, leks, and other suitable habitats for the threatened and endangered species with the potential to occur in the Study Area.

- Q. Have intervenors expressed concerns about the impact of the Proposed Project on wildlife such as quail, deer, turkey, mammals, lizards, reptiles, etc.?
- 17 A. Yes, numerous intervenors expressed a very general concern about wildlife impacts,
 18 often nothing more than a sentence or two.⁴ None of these witnesses presented any

² Unless and until field surveys are done, it won't be known if this rookery still exists.

Application on of Cross Texas Transmission, LLC for a Certificate of Convenience and Necessity for the Gray to Tesla 345 kV CREZ Transmission Line (Formerly Panhandle BB to Tesla) in Gray, Wheeler, Donley, Collingsworth, Hall, and/or Childress Counties, Docket No. 37956 (September 15, 2010).

⁴ Witnesses expressing this concern include Ms. Killian, Mr. Ducette, Mr. Shannon, Ms. Baccus, J.J. Henard, Mr. Henderson, Mr. Hammers (Plains Baptist Assembly), Ms. Kjellstrom (Price Estate Farm, LLC), Mr. Allred, Mr. Yeary, and Mr. Wilson.

evidence	of transmission	lines	having	a	significant	and	long-lasting	impact	on
wildlife.									

Temporary and permanent impacts to wildlife from the construction and operation of the Proposed Project are not expected to be significant. Temporary wildlife impacts are those associated with the disturbance and disruption to habitats during the construction period (e.g., noise and vegetation clearing). Permanent impacts are those associated with the conversion of small areas of existing habitat to early successional habitats due to the periodic maintenance of the permanent ROW. The clearing of ROW vegetation would reduce cover, nesting, and foraging habitat for some wildlife, but may also benefit other wildlife. During construction, some wildlife would be displaced from the ROW and surrounding areas to similar habitats nearby. It is expected that most temporarily displaced wildlife would return to the ROW and adjacent, undisturbed habitats soon after completion of construction.

Routine maintenance activities on the permanent ROW are so infrequent that it is doubtful they would have any effect on wildlife. SPS personnel might inspect the area once a year and actual maintenance would be even less often. ROW maintenance, for example, is expected to be necessary only once every 4 to 5 years. Given the short duration of the disturbance and abundance of similar habitat coupled with the existing land uses in the Proposed Project's vicinity, impacts to wildlife species are not expected to be significant.

Finally, the ROW will not be fenced or have any other obstructions that would create habitat fragmentation or interfere with wildlife ingress and egress. Mr.

Higgins has more experience with the impacts of transmission line on hunting and addresses this concern in his rebuttal testimony.

1		IV. TPWD RECOMMENDATIONS
2	Q.	Has TPWD expressed any concern regarding the effect of the Proposed Project
3		on the natural environment in their testimony?
4	A.	Yes. TPWD submitted testimony on September 30, 2011 which identified potential
5		effects from the Proposed Project and provided recommendations to mitigate those
6		effects. In particular, TPWD recommended the following:
7		• that the Commission select a route that would minimize the impacts
8		to natural resources and recreational areas, which TPWD believes is
9		Route 10 instead of Route 20;
10		• installing bird flight diverters on Segment AD if avoidance of the
11		segment is not possible;
12		• that SPS consider potential impacts to suitable Whooping Crane
13		stopover habitat when siting;
14		• that a biological monitor be present during construction to try and
15		relocate Texas horned lizards, Texas kangaroo rats, and Palo Duro
16		mice if found;
17		 disturbed areas within suitable habitat for the Texas horned lizards,
18		Texas kangaroo rats, and Palo Duro mice should be re-vegetated with
19		site-specific, native, patchy vegetation rather than sod-forming
20		grasses;
21		• that SPS monitor the listing status of the Texas kangaroo rat
22		throughout project planning and construction;
23		 that SPS survey the selected route for caves and other bat roosts; and

•	that SPS take precautions to avoid transmitting White-Nose
2	Syndrome to bats in the project area including following the
3	decontamination procedures listed in the U.S. Fish and Wildlife
1	Service ("USFWS") White-Nose Syndrome Decontamination
5	Protocol (v.3) Draft July 2010.

Q. What is your response to TPWD's belief that Route 10 better minimizes adverse impacts to recreational areas and natural resources than Route 20?

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Although Route 20's impact on recreational areas is minimal, Route 10 would have a lesser impact because it would not cross the Caprock Canyons Trailway. Route 10 also crosses fewer rivers and less upland woodlands and brushlands than Route 20 and, thus, has less impact on those natural resources. However, Route 10 has more impact on the human environment and some other natural resources. Specifically, compared to Route 20, Route 10 requires greater distances across cropland (both irrigated and non-irrigated) and pastures or cropland with mobile irrigation systems. Furthermore, Route 10 would require a greater distance across playa lakes, bottomland/riparian woodland (where ROW clearing has the most impact), potential wetlands, open water, and more stream crossings. Finally, Route 10 would require more crossings of farm-to-market and rural route roads and have a greater length of visibility within the foreground visual zone of U.S. and state highways. Although SPS believes that Route 20 has less of an impact than Route 10 on both the human and natural environments, any of the routes are acceptable from an environmental perspective.

1	Q.	What is your response to TPWD's recommendations regarding the impacts to
2		Whooping Cranes, Texas horned lizards, Texas kangaroo rats, Palo Duro mice,
3		and other affected species' habitats?
4	A.	SPS will work with TPWD during construction to make sure the appropriate
5		mitigation measures are followed. Specifically, following certification of a route,
5		SPS will have one or more qualified biologists survey the line for switchle believe C

or more qualified biologists survey the line for suitable habitat for Whooping Cranes, Texas horned lizards, Texas kangaroo rats, Palo Duro mice, and other affected sensitive species. In addition, SPS will survey the selected route for caves and other bat roosts. As part of this effort, the biologist(s) will identify and delineate potential stopover habitat for the Whooping Crane and coordinate closely with TPWD as to suitable measures to minimize impacts to this species, such as bird flight diverters in the relevant area. As per the Endangered Species Act ("ESA"), SPS has, and will continue to consult with the USFWS as appropriate on this matter. Furthermore, where suitable habitat is present, SPS will provide a biological monitor during construction to relocate Texas horned lizards, Texas kangaroo rats, and Palo Duro mice, if found, to nearby areas with similar habitat. Finally, SPS will revegetate areas with suitable habitat for the Texas horned lizards, Texas kangaroo rats, and Palo Duro mice that may be disturbed by the project construction with sitespecific native, patchy vegetation rather than sod-forming grasses.

SPS has asked TRC to monitor the listing status of the Texas kangaroo rat throughout the project planning and construction process. Should this species become listed under the ESA, SPS will perform the required consultation, permitting, and mitigation with the USFWS.

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1		V. <u>HISTORICAL AND ARCHAEOLOGICAL FEATURES</u>
2	Q.	Has concern been expressed about historical or archaeological features within
3		the project area?
4	A.	Yes. Specifically, concerns have been raised regarding:
5		• 21 archaeological sites identified in relationship to Segments H and J in the
6		Blanco Canyon; and
7		• two prehistoric archeological sites in relationship to J.J. Henard's property
8		and the potential for others in the vicinity, specifically along Segments CH
9		and EP.
10	Q.	What is your response to the 21 archaeological sites in relationship to Segments
11		H and J in the Blanco Canyon?
12	A.	Of the 21 sites identified in Mr. Musser's testimony for the Nickels family and Plains
13		Baptist Assembly, only 11 are within 1,000 feet of the centerline of Segments H and
14		J. Of the 10 located within 1,000 feet, three are listed in archaeological site files at
15		the Texas Historic Commission ("THC") and/or the University of Texas at Austin
16		(sites 41FL29, 41FL10, 41FL9). The remaining seven are various areas documented
17		in county abstracts that could have potential archaeological significance. These seven
18		sites have not been registered with the THC or the University of Texas at Austin due
19		to lack of information and archeological study. These sites were in the area at one
20		point in time, sometimes over a hundred years ago. However, the exact locations and
21		extent of what is remaining in those sites today has yet to be determined. As noted in
22		Mr. Frederiksen's rebuttal testimony, a Class III (100% pedestrian) archaeological
23		survey of the approved route will be conducted to determine the exact location of any

1		listed and unlisted sites within the area. As discussed below, if sites are located near
2		the ROW, SPS will take appropriate actions.
3	Q.	What is your response to Dr. Katz's testimony regarding the two prehistoric
4		sites on J.J. Henard's property in relation to Segment EP?
5	A.	During the routing process, TRC conducted a review of the archaeological site files
6		at the THC and the University of Texas at Austin. This review identified the location
7		and previous work conducted at Site 41CG5. TRC and SPS's initial assessment was
8		that the transmission line could be constructed without impacting the site because of
9		its distance from the centerline. Although TRC and SPS still believe that SPS can
10		avoid impacts to the site, after reviewing Dr. Katz testimony and the new information
11		recently provided by THC, SPS and TRC agree that Segment EP is not as desirable as
12		previously considered and support using a route that does not include Segment EP.
13	Q.	What will occur if unlisted archeological sites are found during the Class III
14		survey of the approved route?
15	A.	SPS will coordinate closely with the THC regarding the findings of this survey prior
16		to construction. Any cultural resource sites found during this survey and determined
17		to be potentially eligible for listing in either the NRHP or the Texas Historic Site

Q. Will known and unknown archaeological features be affected by the Proposed

Atlas would either be avoided, or the Proposed Project's effects would be mitigated

using measures determined in consultation with the THC prior to construction.

21 **Project?**

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Because of the limited physical disturbance associated with construction of a transmission line project and the ability to span areas where significant resources could occur, potential impacts to archaeological and cultural resources that would result from the Proposed Project are expected to be minimal.

Q. How could archaeological features be impacted by the Proposed Project?

A.

Construction activities associated with any transmission line project have the potential to directly and adversely impact cultural resources through changes in the quality of the archaeological, historical, or cultural characteristics that qualify a property to meet the criteria of eligibility to the NRHP. These impacts occur when the construction of a project alters the integrity of locations, design, setting, materials, construction, or association that contribute to a resource's significance in accordance with the NRHP criteria. If any unanticipated cultural resource discoveries are made during construction, all construction and excavation activities are suspended in that area. Notification is then made to SPS, who would in turn contact the project archaeologist to investigate. Archaeologists would coordinate directly with the THC regarding the significance of the discoveries and would implement any measures required to mitigate the project effects. Following this process should result in the Proposed Project having no adverse effect on significant cultural resources.

In addition, there can be indirect impacts, which include those caused by construction that occur later in time or are further removed but are foreseeable. These indirect impacts may include changes in land use patterns, population density, or accelerated growth rates. However, these indirect impacts are unlikely except in the relatively small areas near already existing population centers.

Q. Can the direct and indirect impacts be mitigated?

Avoidance is the preferred form of mitigation for direct or indirect impacts to cultural resources. An alternative form of mitigation of direct impacts can be developed for archaeological and historical sites with the implementation of a program of detailed data retrieval. ROW and line maintenance activities could be designed in coordination with THC to minimize impacts to any areas that were deemed inappropriate for detailed data retrieval by THC. Also, relocation may be possible for some historic structures. Careful design considerations, such as pole placement, height, and structure type, can reduce indirect impacts to historical properties.

VI. <u>CONCLUSION</u>

- 2 Q. Does this conclude your pre-filed rebuttal testimony?
- 3 A. Yes.

AFFIDAVIT

STATE OF TEXAS)
)
COUNTY OF TRAVIS)

ANASTACIA SANTOS, first being sworn on her oath, states:

I am the witness identified in the preceding testimony. I have read the testimony and am familiar with its contents. Based upon my personal knowledge, the facts stated in the testimony are true. In addition, in my judgment and based upon my professional experience, the opinions and conclusions stated in the testimony are true, valid, and accurate.

ANASTACIA SANTOS

Subscribed and sworn to before me this 2011 by ANASTACIA SANTOS.

MOLLY A. HENDERSON NOTARY PUBLIC State of Texas Comm. Exp. 05-24-2014

Notary Public State of Texas

My Commission Expires: 5-24-2

CERTIFICATE OF SERVICE

I certify that on December 2, 2011, this document was filed with the Public Utility Commission of Texas. Pursuant to SOAH Order No. 2, this document will not be served on the parties to this docket except by electronic filing in the docket.

Andrea Moore Stover