



Control Number: 45624



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# State Office of Administrative Hearings



Lesli G. Ginn  
Chief Administrative Law Judge

July 27, 2016

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**TO: Stephen Journeay, Director**  
**Commission Advising and Docket Management**  
**William B. Travis State Office Building**  
**1701 N. Congress, 7th Floor**  
**Austin, Texas 78701**

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**RE: SOAH Docket No. 473-16-2751**  
**PUC Docket No. 45624**

*Application of the City of Garland to Amend a Certificate of Convenience and  
Necessity for the Rusk to Panola Double-Circuit 345-KV Transmission Line in Rusk  
and Panola Counties*

Enclosed is the Proposal for Decision (PFD) in the above-referenced case. By copy of this letter, the parties to this proceeding are being served with the PFD.

Please place this case on an open meeting agenda for the Commissioners' consideration. The 185-day deadline for the Commission's decision in this case as mandated by PURA §37.051(c-2) and (i) is Sunday, August 29, 2016. Please notify me and the parties of the open meeting date, as well as the deadlines for filing exceptions to the PFD, replies to the exceptions, and requests for oral argument.

Sincerely,

Handwritten signature of Casey A. Bell in black ink.

Casey A. Bell  
Administrative Law Judge

Sincerely,

Handwritten signature of Fernando Rodriguez in black ink.

Fernando Rodriguez  
Administrative Law Judge

Enclosure

xc: All Parties of Record

372

**SOAH DOCKET NO. 473-16-2751  
PUC DOCKET NO. 45624**

<b>APPLICATION OF THE CITY OF GARLAND TO AMEND A CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE RUSK TO PANOLA DOUBLE-CIRCUIT 345-KV TRANSMISSION LINE IN RUSK AND PANOLA COUNTIES</b>	<b>§ § § § § § §</b>	<b>BEFORE THE STATE OFFICE     OF   ADMINISTRATIVE HEARINGS</b>
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**SOAH DOCKET NO. 473-16-2751  
PUC DOCKET NO. 45624**

<b>APPLICATION OF THE CITY OF</b>	<b>§</b>	<b>BEFORE THE STATE OFFICE</b>
<b>GARLAND TO AMEND A</b>	<b>§</b>	
<b>CERTIFICATE OF CONVENIENCE</b>	<b>§</b>	
<b>AND NECESSITY FOR THE RUSK TO</b>	<b>§</b>	<b>OF</b>
<b>PANOLA DOUBLE-CIRCUIT 345-KV</b>	<b>§</b>	
<b>TRANSMISSION LINE IN RUSK AND</b>	<b>§</b>	
<b>PANOLA COUNTIES</b>	<b>§</b>	<b>ADMINISTRATIVE HEARINGS</b>

**PROPOSAL FOR DECISION**

**I. INTRODUCTION**

In this proceeding, the City of Garland (Garland) seeks an amendment to its certificate of convenience and necessity (CCN) to construct a 37-40 mile-long double-circuit 345-kilovolt (kV) transmission line in Rusk and Panola Counties (Garland Project) to interconnect the new Rusk Switching Station in Rusk County (Rusk Substation) to the new Panola Switching Station in Panola County (Panola Substation) at the Texas-Louisiana border.<sup>1</sup> The Rusk Substation, to be constructed and owned by Oncor Electric Delivery Company LLC (Oncor), will be interconnected with the Electric Reliability Council of Texas, Inc. (ERCOT) grid. The Panola Substation, to be built by Rusk Interconnection LLC (Rusk)<sup>2</sup> and owned by Garland, will be interconnected to a new high-voltage direct current (HVDC) converter station to be owned by Southern Cross Transmission LLC (SCT) adjacent to the Panola Substation but across the border in Louisiana (SCT DC Tie). The SCT DC Tie will interconnect on the Louisiana side to a 400-mile transmission line (SCT Line) that will terminate at an as-yet-to-be-determined end point in the SERC Reliability Corporation (SERC) transmission system.

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<sup>1</sup> Garland provides ratepayers electric service through its not-for-profit municipal electric department, operating today as Garland Power & Light (GP&L). Garland Ex. 2, Cline direct at 4.

<sup>2</sup> Rusk is an affiliate of Southern Cross Transmission LLC. SCT Ex. 1, Parquet direct at 12. Rusk will fund the Garland Project during construction but will convey it to Garland before it is placed in service. Garland Ex. 1, Application at 2.

The Garland Project is a facility to be constructed pursuant to an interconnection agreement appended to the offer of settlement approved by the Federal Energy Regulatory Commission (FERC) in its final order issued in FERC Docket No. TX11-01-001. The final order in FERC Docket No. TX11-01-001 (the FERC Order) requires Garland to provide the interconnection with the SCT DC Tie in accordance with the interconnection agreements attached to the offer of settlement. FERC found that the interconnection is in the public interest and determined it would not cause any ERCOT utility or other utility that is not already a public utility under the Federal Power Act (FPA) to become a public utility under the FPA.

Garland's application was filed pursuant to §§ 37.051(c-1), (c-2), (g) and (i) of the Public Utility Regulatory Act (PURA). Subsections (c-1) and (g) require a CCN for, respectively, a facility that enables additional power to be imported into or exported out of the ERCOT power grid, and a municipally-owned transmission facility located outside the boundaries of the municipality. PURA § 37.051(c-2) and (i) require the Public Utility Commission of Texas (the Commission) to, no later than 185 days after it is filed, approve an application filed under Subsection (c-1) for a facility to be constructed under an interconnection agreement appended to an offer of settlement approved in a final order in FERC Docket No. TX11-01-001 that directs physical connection between the ERCOT and SERC regions under Sections 210-212 of the FPA.

Garland presented 96 possible routes for the Garland Project, comprised of 52 primary alternative segments, which were then narrowed to 12 routes based on environmental and land use criteria, input from government agencies, and public input. Garland and SCT have joined the intervenor landowners in an unopposed Stipulation Concerning Transmission Line Route (Route Stipulation) supporting selection of Route RP9 (also known as Route 4M) by the Commission. This route consists of segments 1, 7, 9, 13, 23, 24, 28, 31, 34, 41, and 43, which are all noticed segments that were not changed or modified from the segments as filed in the application. Commission staff (Staff) and all other intervenors are unopposed to the Commission's selection of Route RP9.

Under the applicable statute, although the Commission is required to approve Garland's application, it is authorized to prescribe reasonable conditions to protect the public interest that

are consistent with the FERC Order.<sup>3</sup> The primary contested issues in this case revolve around what conditions the Commission should place on its approval of Garland's application. Staff and several intervenors propose that the Commission impose various conditions on its approval of Garland's application. Garland and SCT agree with the imposition of some, but not all, of the suggested conditions, and propose modifications to others. Further, Staff and ERCOT both propose that certain issues raised by the Commission's Preliminary Order in this case (the ERCOT issues) be addressed through the stakeholder process at ERCOT and a compliance docket at the Commission; other parties generally agree with this approach.

The ALJs recommend that, in approving Garland's application, the Commission (a) specify Route RP9 as the route for the Garland Project; (b) prescribe certain reasonable conditions to protect the public interest that are consistent with the FERC Order; and (c) reject certain other conditions requested by various parties as unreasonable and/or not protective of the public interest.

## II. PROCEDURAL BACKGROUND

On February 25, 2016, Garland filed the application to amend its CCN for the Garland Project. SCT filed its motion to intervene and direct testimony in support of Garland's application on the same date. On February 29, 2016, the Commission issued its Order of Referral, referring this matter to the State Office of Administrative Hearings (SOAH), requesting the assignment of a SOAH Administrative Law Judge (ALJ) to conduct a hearing and issue a proposal for decision, if necessary.

The ALJs found, in SOAH Order No. 1 issued March 2, 2016, that pursuant to PURA § 37.051(c-2), the deadline for the Commission to approve Garland's application is August 29, 2016. In this order, the ALJs also assumed jurisdiction over this contested case and set a prehearing conference for March 9, 2016. After the prehearing conference, the ALJs issued SOAH Order No. 2, establishing the prehearing schedule and discovery procedures; providing

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<sup>3</sup> PURA § 37.051(c-2).



notice of the hearing on the merits; approving and adopting a protective order; and granting motions and requests to intervene filed by SCT, ERCOT, CenterPoint Energy Houston Electric LLC (CenterPoint), Texas Industrial Energy Consumers (TIEC), Jeb James, and Terry Hooper.

On May 22, 2016, the Commission issued its Preliminary Order, which identified the issues to be addressed in this proceeding.

In subsequent orders, the ALJs granted numerous requests for intervention by affected landowners, Luminant Generation Company, LLC and Luminant Energy Company, LLC (collectively, Luminant); Deep East Electric Cooperative, Inc. (DETEC); Panola-Harrison Electric Cooperative, Inc. (Panola EC); Rusk County Electric Cooperative, Inc. (Rusk EC); the NRG Companies (NRG Texas Power, LLC, Reliant Energy Retail Services, LLC, and NRG Power Marketing, LLC); Southwestern Electric Power Company (SWEPCO); and Texas Competitive Power Advocates (TCPA). By SOAH Order No. 8, issued June 3, 2016, the ALJs dismissed as parties to this case those intervenors who had failed to file direct testimony or a statement of position.

The hearing on the merits in this proceeding was convened on May 31, 2016, at the SOAH facilities in Austin, Texas. The hearing concluded on June 3, 2016.

On June 8, 2016, the remaining intervening landowners who were not dismissed by SOAH Order No. 8, Garland, and SCT filed the Route Stipulation and a motion to admit the Route Stipulation into evidence.<sup>4</sup> The motion was granted by SOAH Order No. 9, issued July 26, 2016.

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<sup>4</sup> The remaining intervening landowners are: Jeb Stuart James, Justin Wagstaff, Venita Judice on behalf of Weldon and Jane Gray, Joe Beard, Tiffany Hull on behalf of Tiffany and Stephen Hull, Julia H. George, Bobby Milhauser, Jim Holder, Frances Gilbert Barker, Meredith Gautier, Fannie Watson, Ruth Stephens, Jim Hutchinson, Carl Carlswell, Jr., William Mark Wood, Betty Lou Wood, Charles Spears, John P. Carroll, Sandra Stein, Danny Milam, Thomas Patten, Billy Broadaway, Kartreba Denese McDaniel Toler, Jason Heinkel, Craig Gibbs, Joy Gibbs, Jason Spiller, Johnny Holmes, Tom Williams, Riley Booth, Sharon Kirchner, Vickie Lacy Langford, Mark Langford, Billy Langford, Brian Lillibridge, Mary Lillibridge, Michael Lillibridge, Elizabeth Lane, Glorianne Spiller, James S. Robertson on behalf of the East Area Council of the Boy Scouts of America, Jo Ann Orr Miller, Clive W. Fields, Larry W. Fields, Sylvia Hunt, and Sherri Waters.

The record closed on June 17, 2016, after the parties filed reply briefs.

### III. JURISDICTION

The Commission has jurisdiction generally over this matter pursuant to PURA §§ 37.051 and 37.056. SOAH has jurisdiction over this matter pursuant to Texas Government Code § 2003.049 and PURA § 14.053.

The 185-day deadline for the Commission's decision in this case, as mandated by PURA §§ 37.051(c-2) and (i), is Sunday, August 28, 2016.

### IV. NOTICE

Notice was not a contested issue in this case, but was complete and extensive. On February 16, 2016, Garland requested from the Commission a docket number for this case. On February 25, 2016, Garland filed its CCN application with the Commission within the 25-day requirement of 16 Texas Administrative Code § 22.52(a)(1). On that same date, Garland provided written notice by first class U.S. Mail to owners of land, as described on the county tax rolls of Rusk and Panola counties, who are directly affected by the Garland Project.<sup>5</sup> Similarly, on the filing date Garland delivered a copy of its complete CCN filing to the Texas Parks and Wildlife Department (TPWD), and also sent written notice to the Office of Public Utility Counsel (OPUC).<sup>6</sup> Notice of Garland's application was published in the *Henderson Daily News* and the *Panola Watchman* on February 28, 2016, and therefore met the requirements of 16 Texas Administrative Code § 22.52(a)(1).<sup>7</sup>

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<sup>5</sup> For notice purposes, 16 Texas Administrative Code § 22.52(a)(3) defines "directly affected" for a transmission project greater than 230-kV as land over which an easement would be obtained for all or part of it, or land that contains a habitable structure that would be within 500 feet of the centerline of the transmission project. Garland Ex. 1, Application at Att. 5.

<sup>6</sup> Garland Ex. 1, Application, Att. 8.

<sup>7</sup> Garland Ex. 5, Proof of Notice at 1.

In addition to mailing notice of the project described in Garland's application to directly-affected landowners, on February 25, 2016, Garland sent notice of its application, by U.S. Priority Mail to all utilities providing similar service within 5 miles of the proposed project,<sup>8</sup> to mayors of cities within 5 miles of the proposed project,<sup>9</sup> and to county officials in Rusk and Panola counties.<sup>10</sup>

After having determined that certain affected landowners did not receive notice, Garland sent supplemental notice to these individuals on March 22 and 23, 2016. Notice of Garland's application was published in the *Texas Register* on March 11, 2016.<sup>11</sup> Pursuant to the provisions of Chapter 26 of the Texas Parks & Wildlife Code, Garland provided notice to TPWD and the Sabine River Authority on April 26, 2016. Similarly, to comply with the publication provision of Chapter 26 of the Texas Parks & Wildlife Code, Garland caused public notice to be published in the *Henderson Daily News* and the *Panola Watchman* on May 8, May 15, and May 22, 2016.<sup>12</sup> Garland verified it had complied with all notice requirements for its application through affidavits of notice filed March 15 and 31, 2016.<sup>13</sup>

Prior to filing its application, Garland complied with the notice provisions of 16 Texas Administrative Code § 22.52(a)(4) and provided direct-mail notice of its open houses to all persons listed on the current county tax rolls as owners of land within 500 feet of the centerline of the proposed project. Notice was mailed to approximately 631 persons owning approximately 1,078 properties in Rusk and Panola counties. Pursuant to the information provided in the notice letters, Garland held two open houses on December 1 and 2, 2015, at the Carthage Civic Center in Carthage, Texas. As stated above, notice was extensive and complied with all statutory and regulatory requirements.

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<sup>8</sup> Garland Ex. 1, Application, Att. 6.

<sup>9</sup> Garland Ex. 1, Application, Att. 7.

<sup>10</sup> Garland Ex. 1, Application, Att. 7.

<sup>11</sup> *Texas Register* notice of Garland's application may be found at 41 Tex. Reg. 2033 (2016).

<sup>12</sup> 26 Tex. Parks & Wildlife Code § 26.002.

<sup>13</sup> Garland Ex. 5, Proof of Notice; Garland Ex. 6, Supplemental Proof of Notice.

## V. DISCUSSION

### A. Application (Preliminary Order Issue No. 1)

It is undisputed that Garland's application seeks a CCN to construct a facility under an interconnection agreement appended to an offer of settlement approved in the FERC Order. The offer of settlement approved by the FERC Order includes an interconnection agreement between Garland and Oncor identifying the Garland Project as a facility to be constructed under that agreement.<sup>14</sup> The FERC Order directs Garland to physically connect the ERCOT region to the SERC region via the SCT Line and the SCT DC Tie, pursuant to Sections 210-212 of the FPA.<sup>15</sup>

### B. Reasonable Conditions to Protect the Public Interest (Preliminary Order Issue No. 2)

Several parties to this case have proposed the Commission prescribe conditions to its statutorily-required approval of Garland's application that they contend are reasonable, consistent with the FERC Order, and will protect the public interest. Garland and SCT have agreed to several of the proposed conditions and propose modifications to others, but argue that others are unnecessary and unreasonable. Conditions proposed by the parties that do not tie in to specific issues set forth in other sections of this Proposal for Decision (PFD) are discussed and analyzed in this section of the PFD. Conditions that pertain to the specific issues addressed in other sections of this PFD are discussed and analyzed in those sections.

#### 1. Conditions for Condemnation

SCT, Garland, and Rusk agree that neither they nor any of their affiliates will seek condemnation of any landowner's land in Panola County for the Garland Project, so long as the landowners provide access for surveying and design purposes, until SCT provides the Commission with evidence that it has secured financing to construct the Garland Project, the

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<sup>14</sup> Garland Ex. 1, Application, Att. 2.

<sup>15</sup> Garland Ex. 1, Application, Att. 4 at 8.

SCT DC Tie, and all related interconnection facilities.<sup>16</sup> This agreement is proposed as a condition to the Commission's approval of Garland's application by Staff and the intervening landowners, and it is set forth in the Route Stipulation. While Staff supports this condition, it recommends that in addition to evidence of this financing, SCT also be required, prior to seeking condemnation of land for the Garland Project, to file evidence showing it has: (a) secured financing for the SCT Line; (b) obtained all necessary regulatory approvals in Louisiana for the SCT DC Tie; and (c) constructed at least 75% of the SCT DC Tie.<sup>17</sup> Staff argues that these additional conditions are necessary to protect the property rights of the landowners in the area, and therefore are reasonable to protect the public interest.<sup>18</sup>

SCT and Garland argue that Staff's additional conditions are unreasonable and unworkable. They contend that the proposed requirement that 75% of the SCT DC Tie be constructed before condemnation is unreasonable because the construction schedule and lead times for delivery of equipment are unknown. Further, SCT and Garland claim that such a condition would make financing the project impossible, and that the Intervening Landowners are fully protected by the condemnation conditions agreed to in the Route Stipulation. Finally, they take the position that Staff's proposal has no supporting rationale.<sup>19</sup> SCT witness Mr. Bruce testified that, as of the hearing in this case, the SCT DC Tie project was "very likely" to be completed, given the FERC Order, the PURA provision allowing for approval of the Garland's application, SCT's discussions with ERCOT, and the interconnection studies performed by Oncor. He stated that once SCT gives notice to Oncor to begin construction on the Rusk substation, the SCT DC Tie project is highly likely to be completed.<sup>20</sup>

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<sup>16</sup> Garland Ex. 12, Route Stipulation at 2-3.

<sup>17</sup> Staff Initial Brief at 24.

<sup>18</sup> Staff Reply Brief at 8.

<sup>19</sup> SCT Reply Brief at 29-30; Garland Reply Brief at 5.

<sup>20</sup> Tr. at 217-218.

### *Analysis and Recommendation*

Staff bases its proposal regarding conditions for condemnation on its determination that it is unknown, at least at this time, whether the SCT DC Tie or the SCT Line will actually be built. Such determination is based on the fact that SCT does not know where the SCT Line will end in the east and has not secured the \$2 billion needed to build the SCT DC Tie and SCT Line. Therefore, Staff argues, additional proof that the SCT DC Tie and SCT Line will be built should be required so that the Intervening Landowners will not have their land condemned for a project that never materializes. However, Staff presented no evidence that the conditions required for condemnation that were negotiated between SCT and Garland on one side and the Intervening Landowners (most of whom were represented by counsel) on the other do not adequately protect the property rights of the Intervening Landowners. Further, there is evidence in the record that: (a) the SCT DC Tie is already very likely to be completed and will be highly likely to be completed once SCT gives Oncor notice to proceed with construction of the Rusk Substation; and (b) at least for transmission planning purposes, ERCOT considers new generation resources likely to be completed, and thus includes them in transmission modeling, upon collateralization for their necessary interconnection facilities and notice to proceed with the construction of such facilities.<sup>21</sup>

Therefore, the ALJs find that the condition negotiated and agreed to by the Intervening Landowners, Garland, and SCT is reasonable, consistent with the FERC Order, and protects the public interest. The ALJs recommend this condition be a part of the final order in this case. The additional conditions proposed by Staff would also protect the public interest, but Staff has not proven that they are reasonable under the circumstances.

## **2. Mutual Coupling**

Garland's application proposed several routes for the Garland Project composed of segments that would cross and/or parallel three existing transmission lines owned and operated

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<sup>21</sup> Tr. at 217-218; ERCOT Ex. 1, Lasher direct at 5-6.

by SWEPCO.<sup>22</sup> These three SWEPCO lines are connected to the Southwest Power Pool (SPP) and will operate asynchronously from the Garland Project. In its Statement of Position, SWEPCO expressed concerns regarding potential adverse effects on the reliability of its system due to the proximity of segments of certain proposed routes for the Garland Project to SWEPCO's existing lines. Specifically, SWEPCO contended that the paralleling and crossing of its transmission lines by the Garland Project proposed segments could create an electromagnetic mutual coupling effect. Such effect, according to SWEPCO, could lead to relay misoperations on SWEPCO's lines when faults occur on either SWEPCO's lines or the Garland Project, which could then lead to outages.<sup>23</sup>

Staff witness Kevin Mathis explained that while mutual coupling in general is well-known in the power industry, mutual coupling between asynchronous systems is much less understood. Mr. Mathis recommended that if a proposed route is approved that includes any segment that would parallel an existing SWEPCO line, it would be reasonable to require Garland to conduct a study of this situation in coordination with SWEPCO.<sup>24</sup>

At the hearing, Garland offered into evidence a letter agreement between SWEPCO, Garland, and Rusk that was reached in an effort to address SWEPCO's concerns regarding the paralleling and crossing of its transmission lines by certain segments of routes for the Garland Project proposed by Garland's application.<sup>25</sup> The letter agreement, among other issues, addresses Garland's coordination with SWEPCO with regard to Route RP9, the route agreed to in the Route Stipulation. Segment 1, which is included in Route RP9, will parallel and cross SWEPCO's Lebrock to Tenaska Switching Station 345-kV transmission line. The letter agreement calls for Garland to route Segment 1 to cross underneath SWEPCO's 345-kV line at any necessary crossing location. Further, SWEPCO, Garland, and Rusk agreed that: (a) Garland and SWEPCO will work in good faith to de-energize their transmission lines when necessary for line construction and maintenance; (b) if SWEPCO's lines will be adversely impacted or forced

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<sup>22</sup> Garland Ex. 1, Application, Att. 1, Figure 3-4 and Table 3-1.

<sup>23</sup> SWEPCO Statement of Position at 2-3.

<sup>24</sup> Staff Ex. 1, Mathis direct at 28-29.

<sup>25</sup> Garland Ex. 10, SWEPCO Letter Agreement.

to relocate or be modified by the construction of the Garland Project, Garland and Rusk will take necessary actions, potentially including compensating SWEPCO for the costs of mitigating such impacts; (c) if either Garland's or SWEPCO's line(s) adversely affects the other's line(s), Garland and SWEPCO will take necessary action to remedy such impacts; (d) the parties will work together to address other concerns that may arise following the construction of the Garland Project; and (e) the parties will address all of these issues in greater detail through transmission line parallel and crossings and/or operational agreements between the companies pursuant to good utility practices used in ERCOT and the SPP when transmission lines cross and/or parallel.<sup>26</sup>

### *Analysis and Recommendation*

Staff, Garland, and SWEPCO all take the position that the agreement between SWEPCO, Garland, and Rusk properly and adequately addresses the issue of mutual coupling. No party seeks a condition from the Commission to its approval of the Garland Project relating to this issue. Therefore, the ALJs find no need for any conditions on the Commission's approval of Garland's application pertaining to mutual coupling.

### **3. Disconnection from the SCT DC Tie**

Staff and TIEC recommend that the Commission impose as a condition to its approval of Garland's application a requirement that Garland disconnect from the SCT DC Tie if: (a) FERC asserts jurisdiction over ERCOT due to the Garland Project; (b) a synchronous connection is ever made to the Garland Project outside Texas; or (c) SCT fails to follow any ERCOT Protocol or Commission rule and, as a result, the Commission orders the disconnection.<sup>27</sup> As to the last contingency, Staff seeks a clarification in the Commission's final order that the Commission can order the disconnection of the SCT DC Tie if SCT fails to abide by ERCOT Protocols or

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<sup>26</sup> Garland Ex. 10, SWEPCO Letter Agreement at 1-2.

<sup>27</sup> Staff Initial Brief at 26; TIEC Ex. 1, Griffey direct at 13-14.



Commission rules.<sup>28</sup> TIEC proposes a condition on the Commission's approval of Garland's application requiring Garland and SCT to immediately disconnect their facilities upon receipt of a final Commission order requesting such action.<sup>29</sup> TIEC witness Mr. Griffey testified that these conditions pertaining to disconnection from the SCT DC Tie will ensure that the Garland Project is in the public interest.<sup>30</sup> Mr. Griffey also stated that the Commission should condition its approval of Garland's application on a requirement that Garland disconnect the SCT DC Tie from the Panola Substation and/or Oncor disconnect the facilities from the Rusk Substation if SCT challenges Commission jurisdiction or ERCOT Protocols.<sup>31</sup>

Garland has agreed to immediately disconnect from the SCT DC Tie if necessary to prevent ERCOT or any ERCOT utility from becoming subject to FERC jurisdiction.<sup>32</sup> SCT also points out that ERCOT bylaws would require Garland and Oncor, as ERCOT members, to take such action.<sup>33</sup> Based on Garland's agreement, and the fact Garland will be bound to ERCOT Protocols, SCT argues that Staff's proposed condition in this regard is unnecessary.

As to the second requirement of Staff's and TIEC's proposal, SCT contends that it will not be physically possible to make a synchronous connection between the Panola Substation and SCT's western converter station outside of Texas because: (a) the connection is not a transmission line; and (b) the distance it covers is inadequate to make such connection.<sup>34</sup> Because this condition concerns what SCT claims is an "impossibility," SCT argues that it should be rejected.

SCT objects to Staff's proposal that the Commission clarify its authority regarding a disconnection order in the event of a violation of a protocol or rule by SCT, contending that such

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<sup>28</sup> Staff Reply Brief at 26.

<sup>29</sup> TIEC Initial Brief at 23.

<sup>30</sup> TIEC Ex. 1, Griffey direct at 13-14.

<sup>31</sup> TIEC Ex. 1, Griffey direct at 29.

<sup>32</sup> Garland Ex. 1, Application, Att. 2 at 21; Tr. at 28-29.

<sup>33</sup> SCT Reply Brief at 26-27.

<sup>34</sup> SCT Reply Brief at 27.

authority is not dependent on the condition recommended by Staff.<sup>35</sup> Finally, SCT contends that Mr. Griffey's proposed condition requiring disconnection in the event SCT challenges Commission jurisdiction or ERCOT protocols deprives it of its legal rights without due process.<sup>36</sup>

According to Garland witness Darrell Cline, Garland generally agrees with Staff's and Mr. Griffey's proposed conditions concerning disconnection of the SCT DC Tie.<sup>37</sup> Mr. Cline testified that the condition requiring disconnection if FERC asserts jurisdiction over ERCOT is set forth in the interconnection agreements between Garland and Oncor and between Garland and SCT, both of which were filed with Garland's application.<sup>38</sup> He further stated that it is difficult to imagine how the Garland Project could be synchronously connected outside of Texas; he testified there would be no physical way to connect to the Garland Project outside of Texas because no part of the line will be located outside of Texas. Therefore, the condition regarding disconnection upon a synchronous connection requested by Staff and Mr. Griffey is, according to Mr. Cline, unnecessary.

### *Analysis and Recommendation*

SCT and Garland have both agreed that the interconnection agreements between Garland and Oncor and between Garland and SCT give the parties the right to immediately disconnect the Garland Project from the SCT DC Tie if such action is necessary to prevent FERC from asserting jurisdiction over ERCOT or an ERCOT utility. However, the agreements do not require the parties to disconnect. Further, the ERCOT bylaws cited by SCT prohibit ERCOT members from taking action to cause ERCOT or an ERCOT member to become a "public utility" subject to FERC rules, but do not require ERCOT members to take action to prevent ERCOT or ERCOT members from becoming a "public utility" subject to FERC rules. Nevertheless, Garland witness Mr. Cline testified clearly that Garland commits to disconnecting the Garland Project under these

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<sup>35</sup> SCT Reply Brief at 27.

<sup>36</sup> SCT Reply Brief at 24-25.

<sup>37</sup> Garland Ex. 8, Cline rebuttal at 6.

<sup>38</sup> Garland Ex. 8, Cline rebuttal at 6.

circumstances.<sup>39</sup> The only evidence in the record that conditioning the approval of Garland's application on Garland's commitment is in the public interest comes from TIEC witness Mr. Griffey, who testified that such a condition will ensure the Garland Project is in the public interest, but offered no supporting details or rationale as to why. Regardless, all parties are in agreement that FERC should not assert jurisdiction over ERCOT or ERCOT utilities. Therefore, the ALJs find that a condition for the Commission's approval of Garland's application requiring Garland and SCT to immediately disconnect the Garland Project from the SCT DC Tie if necessary to avoid ERCOT or any ERCOT utility becoming subject to FERC rules and jurisdiction is reasonable to protect the public interest and consistent with the FERC Order.

Similarly, the only evidence presented as to whether a condition requiring Garland and SCT to disconnect the Garland Project from the SCT DC Tie if a synchronous connection is made to the line outside of Texas would protect the public interest was TIEC witness Mr. Griffey's testimony. He testified clearly that such condition will ensure the Garland Project is in the public interest, although he did not offer any additional testimony as to how he reached that conclusion. No party offered any contradicting testimony or evidence. Garland witness Mr. Cline testified that he found it "difficult to imagine" a synchronous connection could be made with the Garland Project outside of Texas, and SCT argued that it is impossible, but there is no evidence that a synchronous connection absolutely could not happen. Further, SCT and Garland offered no evidence that the disconnection could not be done if it did happen, or that it would be unreasonable to require a disconnection under that circumstance. Therefore, the ALJs find that a condition to the Commission's approval of Garland's application requiring Garland and SCT to disconnect the Garland Project from the SCT DC Tie if a synchronous connection is made with the line outside of Texas is reasonable to protect the public interest and consistent with the FERC Order.

The only evidence in the record that a condition to the Commission's approval of Garland's application requiring SCT and Garland to disconnect the Garland Project from the SCT DC Tie pursuant to a Commission order to do so protects the public interest is TIEC

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<sup>39</sup> Tr. at 28-29.

witness Mr. Griffey's testimony. Garland stated that it would not wait until all appeals had run before complying with a Commission order to disconnect, understanding that Commission orders are effective during the pendency of an appeal absent a stay or other order suspending its effectiveness. Garland committed to comply with an effective Commission order to disconnect; SCT made a similar commitment.<sup>40</sup> Given these commitments, and the applicable statutes cited by Garland in its reply brief, it does not appear necessary to the ALJs for the Commission to condition its approval of Garland's application on a requirement that the law already prescribes and that is recognized by the parties.<sup>41</sup> Therefore, the ALJs recommend that such a condition not be imposed. However, based on the evidence, this condition, however redundant and unnecessary, would be reasonable to protect the public interest and consistent with the FERC Order.

Finally, concerning Mr. Griffey's proposal that approval of Garland's application be conditioned on disconnection by Garland or Oncor in the event SCT challenges Commission jurisdiction or ERCOT Protocols, there is no evidence in the record that such a condition would protect the public interest. Further, the ALJs agree with SCT that if it does challenge a Commission rule or ERCOT Protocol at some point in the future, the Commission at that time will make a decision based on the facts and the law whether such a challenge has merit. Therefore, the ALJs recommend that the Commission reject this proposed condition to its approval of Garland's application.

#### **4. Put and Call Options Under Transmission Line Agreement**

TIEC witness Mr. Griffey noted that the Transmission Line Agreement between Garland and Rusk (the TLA) allows Garland to transfer the Garland Project back to Rusk and for Rusk to require such a transfer, under certain circumstances and for certain payments.<sup>42</sup> In discovery responses, and at the hearing through the testimony of SCT witness David Parquet, Garland and

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<sup>40</sup> Garland Reply Brief at 6-7; SCT Reply Brief at 27.

<sup>41</sup> Tex. Gov't Code § 2001.176(b)(3); PURA §§ 15.001, .004.

<sup>42</sup> TIEC Ex. 1, Griffey direct at 27.

SCT agreed that if such a situation arose, Rusk would not automatically obtain a CCN for the Garland Project.<sup>43</sup> However, Mr. Griffey testified that Garland and SCT, or a successor to Rusk, might take a different position later, so the Commission should condition its approval of Garland's application on a requirement for Commission approval of any transfer of the Garland Project between Garland and Rusk.<sup>44</sup> Further, TIEC argues that before any such transfer, Rusk or any other non-utility successor must apply for a CCN to become a new utility in ERCOT under PURA § 37.051(e), and the Commission should condition its approval of Garland's application on this requirement.<sup>45</sup>

SCT witness Mr. Parquet testified that approval from the Commission would be necessary to transfer the Garland Project to Rusk, and that such a transfer will not happen without Commission approval, among other things.<sup>46</sup> He also stated that SCT did not believe Rusk would be a suitable entity to receive the Garland Project because Rusk is not an "electric utility" under the FPA; therefore, such a transfer would not meet FPA requirements.<sup>47</sup> SCT argues that the TLA already requires Commission approval for the CCN for the Garland Project. Further, it notes that PURA § 37.054 requires a utility to obtain Commission approval before selling or assigning a CCN. SCT does not take a position on whether PURA § 37.051 would apply to the transfer, but contends that placing a condition on the Commission's approval of Garland's application will not change the statute, and that therefore the condition is unnecessary.<sup>48</sup>

Garland witness Mr. Cline testified that he was unsure whether a transfer of the CCN for the Garland Project to Rusk under PURA § 37.054 would permit Rusk to provide electric service

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<sup>43</sup> TIEC Ex. 1, Griffey direct at 27 (citing Garland Response to TIEC 2-3(c) and SCT Response to TIEC 2-34); Tr. at 135.

<sup>44</sup> TIEC Ex. 1, Griffey direct at 27.

<sup>45</sup> TIEC Initial Brief at 24-26.

<sup>46</sup> Tr. at 134-135.

<sup>47</sup> Tr. at 135-136.

<sup>48</sup> SCT Reply Brief at 27-28.

in Texas.<sup>49</sup> Garland argues that TIEC's requested condition essentially seeks an advisory opinion regarding a potential future transfer that may not occur, and that the Commission lacks jurisdiction to issue advisory opinions based on hypothetical situations not ripe for decision.

### *Analysis and Recommendation*

The ALJs agree with Garland that conditioning the Commission's approval of Garland's application on a requirement that Rusk meet the requirements of PURA § 37.051(e) in the event a transfer of the Garland Project is sought under the TLA is not reasonable. Such a condition is unreasonable at this time given that (a) a transfer has not yet been sought; (b) Garland agrees to a condition that a transfer of the Garland Project to Rusk requires Commission approval; and (c) it is not clear whether such a transfer would be subject to the requirements of PURA § 37.051(e). TIEC offered no evidence that requiring Commission approval under PURA § 37.054 for such a transfer as a condition to approving Garland's application would not adequately protect public interest.

Therefore, the ALJs recommend that, pursuant to agreement by SCT and Garland, the Commission condition its approval of Garland's application on a requirement that any transfer of the CCN for the Garland Project to Rusk cannot occur without Commission approval pursuant to PURA § 37.054. Such a condition is reasonable, would protect the public interest, and is consistent with the FERC Order. If request for approval of such proposed transfer is made, the Commission can decide at that time whether the requirements of PURA § 37.051(e) apply to the transfer.

### **5. Treatment of Garland as Affiliate of SCT and the Pattern Companies**

TIEC witness Mr. Griffey testified that to ensure the Garland Project is in the public interest, the Commission should condition its approval of Garland's application on Garland being treated as an affiliate of SCT and "the Pattern Companies" for all purposes related to the

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<sup>49</sup> Tr. at 27-28.

Garland Project.<sup>50</sup> Mr. Griffey stated that the TLA requires Garland to upgrade facilities at Rusk's request, if Rusk reimburses Garland. According to Mr. Griffey, this requirement provides a competitive advantage to Rusk's affiliates, and requiring Garland to treat Pattern's affiliates as its own for purposes of the facilities at issue in this case would prevent Pattern from gaining this advantage.

In response to Mr. Griffey's concern, SCT and Rusk agreed that Rusk will not ask Garland to upgrade the Garland Project under the TLA.<sup>51</sup> At the hearing, SCT witness Mr. Parquet indicated SCT would agree to a condition in line with this agreement on the Commission's approval of Garland's application.<sup>52</sup> In its post-hearing briefing, TIEC seeks not the condition originally recommended by Mr. Griffey, but the condition agreed-upon by Mr. Parquet and SCT.<sup>53</sup> Therefore, this issue has been resolved by agreement of the parties.

### *Analysis and Recommendation*

The ALJs find that a condition to the Commission's approval of Garland's application prohibiting Rusk from asking Garland to upgrade the Garland Project under the TLA is reasonable to protect the public interest and consistent with the FERC Order.

#### **C. Routing Issues (Preliminary Order Issue No. 2a)<sup>54</sup>**

Garland retained Burns & McDonnell Engineering Company, Inc. (Burns & McDonnell) to prepare the *Environmental Assessment and Alternative Route Analysis Report for the Rusk to*

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<sup>50</sup> TIEC Ex. 1, Griffey direct at 13. SCT is an affiliate of Pattern Energy Group, LP, an independent energy company that develops, constructs, owns, and operates transmission assets throughout North America, Latin America and Japan. SCT Ex. 1, Parquet direct at 3.

<sup>51</sup> SCT Ex. 6, Parquet rebuttal at 6.

<sup>52</sup> Tr. at 136.

<sup>53</sup> TIEC Reply Brief at 17.

<sup>54</sup> Given the Route Stipulation and lack of opposition to Route RP9 as the route for the Garland Project, the ALJs borrowed liberally from Garland's briefing in summarizing the evidence on these issues. Further, most undisputed facts are set forth in the Findings of Fact without further discussion in this section of the PFD.

*Panola 345-kV Transmission Line Project* (EA) for the Garland Project.<sup>55</sup> Professionals from various environmental disciplines acquired necessary data and performed the required routing analysis and environmental impacts assessment.<sup>56</sup> Routes were evaluated based on land use, aesthetics, cultural resources, the number of potentially affected habitable structures, and potential environmental impacts.<sup>57</sup> Burns & McDonnell balanced these factors against engineering and construction constraints, costs, public input, and community values.<sup>58</sup>

**1. Appropriateness of Route as a Reasonable Condition, and Route to Be Selected**

No party disputes the conclusion that it is appropriate for the Commission to specify a route as a reasonable condition to approving Garland's application. Further, as previously discussed, Garland, SCT, and the intervening landowners have reached a Route Stipulation, unopposed by all other parties, in which they agree that Route RP9 should be selected.<sup>59</sup>

**2. Effect of Granting the Certificate on the Recipient and any Electric Utility Serving the Area**

Garland has been providing electric service to its ratepayers since 1923 through its electric department, now known as GP&L. GP&L is the fourth-largest municipal utility in Texas. GP&L has two gas-fired generating plants and participates in the Texas Municipal Power Agency (TMPA), which operates the 470 megawatt (MW) coal-fired Gibbons Creek Power Plant. Its transmission systems consists of 28 substations and 199 miles of transmission lines, including 345-kV, 138-kV, and 69-kV facilities, with additional transmission lines in the Houston Import Project to be operated and maintained in the future. GP&L has approximately 69,000 distribution customers, and its annual operating revenues in 2014 were \$378 million. Fitch Ratings has rated Garland's electric utility system revenue bonds at AA-, and Standard and

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<sup>55</sup> Garland Ex. 1, Application at 8.

<sup>56</sup> Garland Ex. 3, Wise direct at 7.

<sup>57</sup> Garland Ex. 1, Application, Att. 1 at 3-9, Att. D.

<sup>58</sup> Garland Ex. 1, Application at Appendix D.

<sup>59</sup> Garland Ex. 12, Route Stipulation. All intervening landowners have entered into the Route Stipulation.



Poor's has rated such bonds as A+. GP&L is a Qualified Scheduling Entity operating within ERCOT, and serves as the Transmission Operator for its transmission system and all of TMPA's 345-kV and 138-kV transmission lines and substations in Texas.<sup>60</sup> Given this evidence, the ALJs find that Garland can capably operate the Garland Project reliably and effectively.

No existing facilities of any other utility will be used for the Garland Project. Based on several reliability studies conducted by Oncor at ERCOT's direction, the FERC Order found that nothing in SCT's application for an order requiring interconnection of the SCT Line with the Garland Project indicated that the requested interconnection and transmission service would impair the continued reliability of the affected electric systems.<sup>61</sup> ERCOT believes these reliability studies are sufficient to support the requested interconnection.<sup>62</sup> The FERC Order also found that compliance with the FERC Order and the offer of settlement approved by the FERC Order would not cause ERCOT, Oncor, CenterPoint, or any other ERCOT utility that is not already a public utility to become a public utility, as that term is defined by section 201 of the FPA and subject to FERC jurisdiction.<sup>63</sup>

Finally, Garland has executed agreements with SWEPCO, DETEC, Rusk EC, and Panola EC, all of which have own facilities and serve customers in the area of the Garland Project. These agreements provide that Garland will keep these entities informed about the Garland Project and coordinate concerning paralleling or crossing of facilities, and to avoid or mitigate impacts on these entities' facilities.<sup>64</sup> Garland and Rusk have committed to making reasonable efforts to coordinate with these entities to mitigate impacts of the Garland Project on their facilities.<sup>65</sup>

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<sup>60</sup> Garland Ex. 2, Cline direct at 4-5.

<sup>61</sup> Garland Ex. 2, Cline direct, Att. 4 at 6-7.

<sup>62</sup> SCT Ex. 10, Gray rebuttal at 3, WP/SG Rebuttal Testimony/1.

<sup>63</sup> Garland Ex. 2, Cline direct, Att. 4 at 8.

<sup>64</sup> Garland Ex. 10, SWEPCO Letter Agreement; Garland Ex. 11, Cooperatives Letter Agreement.

<sup>65</sup> Garland Ex. 8, Cline rebuttal at 8.

The ALJs have considered the effect of granting the application and approval of Route RP9 on Garland, GP&L, and the electric utilities serving the proximate area, as required by PURA § 37.056(c)(3), and find that no such effect warrants the imposition of any condition on the Commission's approval of the application.

### **3. Community Values**

The Route Stipulation, along with evidence presented by Garland, Staff, and the intervening landowners, shows that Route RP9 best reflects community values.<sup>66</sup> No party disputes that Route RP9 best reflects community values, and there is no evidence to the contrary in the record.

### **4. Recreational and Park Areas**

According to the undisputed evidence, Route RP9 does not cross any recreational or park areas and has one recreational and park area located within 1,000 feet, similar to most of the other proposed routes in Garland's application.<sup>67</sup>

### **5. Historical and Aesthetic Values**

According to the undisputed evidence, Route RP9 crosses 70,690 feet of High-Probability Areas (HPAs), crosses no recorded cultural sites, and would be located within 1,000 feet of only one recorded cultural site.<sup>68</sup> The routes proposed by Garland in the application cross between 57,740 feet and 102,100 feet of HPAs and would be located within 1,000 feet of

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<sup>66</sup> Garland Ex. 12, Route Stipulation; Panola Landowner Group Exs. 1-29, direct of group members; Garland Ex. 1, Application at Att. 2 at 8-9 to 8-32; Garland Ex. 3, Wise direct at 39.

<sup>67</sup> Staff Ex. 1, Mathis direct at WP-6; Garland Ex. 1, Application, Att. 1 at D-1.

<sup>68</sup> Staff Ex. 1, Mathis direct at WP-6. HPAs are locations usually identified as having a high probability for the occurrence of prehistoric sites and include areas where the Garland Project crosses water, stream confluences, drainages, alluvial terraces, wide floodplains, upland knolls, and areas where lithics (workable stone) could be found. Garland Ex. 3, Wise direct at 25-26.

between one and five recorded cultural sites.<sup>69</sup> Once the Commission approves a route for the Garland Project, Garland will work with the Texas Historical Commission to determine what sites, if any, will be affected and what mitigation efforts could be required to limit such impacts.<sup>70</sup>

## **6. Environmental Integrity**

According to the undisputed and uncontradicted evidence, construction and operation of the Garland Project should not have any significant adverse effects on the physiographic or geologic features or resources in the area, nor result in any significant impacts to the existing physiography, surface water features, groundwater, or aquifers.<sup>71</sup> The Garland Project could result in some temporary adverse impacts to wildlife, primarily from removal of large trees, but these impacts will be short-term during construction and would mostly consist of displacement and disruption.<sup>72</sup> Land clearing will consist only of tree and shrub removal, and any impact to topography will be minimal and temporary from the use of heavy construction equipment and excavation required for construction of foundations and support structures for the line.<sup>73</sup> No impacts to threatened or endangered plant species are expected.<sup>74</sup> Upon approval of a final route by the Commission, surveys will be conducted along the line to identify any potential wildlife, water, or vegetation concerns, and Garland will develop management measures to minimize adverse impacts.<sup>75</sup> Garland and Rusk will obtain required permits and coordinate with the appropriate federal, local, and state agencies.<sup>76</sup>

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<sup>69</sup> Garland Ex. 3, Wise direct at 26.

<sup>70</sup> Garland Ex. 3, Wise direct at 26.

<sup>71</sup> Garland Ex. 3, Wise direct at 26-30.

<sup>72</sup> Garland Ex. 3, Wise direct at 33.

<sup>73</sup> Garland Ex. 3, Wise direct at 27.

<sup>74</sup> Garland Ex. 3, Wise direct at 31.

<sup>75</sup> Garland Ex. 3, Wise direct at 31.

<sup>76</sup> Garland Ex. 3, Wise direct at 31.

## 7. Engineering Constraints

According to the undisputed and uncontradicted evidence, the design for the Garland Project meets or exceeds the requirements for construction as defined in the National Electrical Safety Code (NESC) and all local and ERCOT design requirements.<sup>77</sup> These requirements will also be specified by Garland and Rusk to the Engineering, Procurement and Construction (EPC) contractor.<sup>78</sup> Route RP9 should not have any impact on communication towers, and there are no known commercial AM radio towers located within 10,000 feet of the centerline of Route RP9.<sup>79</sup> Route RP9 has four FM towers within 2,000 feet of the centerline.<sup>80</sup> Route RP9 is not within 10,000 feet of any FAA-registered airstrips or airports with runways less than 3,200 feet in length or within 5,000 feet of a heliport.<sup>81</sup> Route RP9 does not cross any known cropland or pastureland irrigated by traveling irrigation systems, either rolling or pivot type.<sup>82</sup>

## 8. Costs

According to the undisputed and uncontradicted evidence, Garland's estimated costs for the twelve preliminary alternative routes, which included the costs of engineering, acquiring rights-of-way, procurement of materials and supplies, construction labor and transportation, and administration, range from approximately \$103.8 million to approximately \$109.9 million.<sup>83</sup> The estimated cost to construct Route RP9 is approximately \$109 million.<sup>84</sup>

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<sup>77</sup> Garland Ex. 4, McCall direct at 9.

<sup>78</sup> Garland Ex. 4, McCall direct at 9.

<sup>79</sup> Garland Ex. 3, Wise direct at 19.

<sup>80</sup> Staff Ex. 1, Mathis direct at WP-6.

<sup>81</sup> Staff Ex. 1, Mathis direct at WP-6.

<sup>82</sup> Garland Ex. 1, Application at 14.

<sup>83</sup> Staff Ex. 1, Mathis direct at WP-6.

<sup>84</sup> Staff Ex. 1, Mathis direct at WP-6.

## **9. Moderation of Impact on Affected Landowners**

By the Route Stipulation, the intervening landowners have agreed that Route RP9, out of all the proposed routes and segment combinations set forth in Garland's application, best moderates the impact of the Garland Project on affected landowners.<sup>85</sup>

## **10. Existing Compatible Rights-of-Way, Property Lines, or Other Features**

According to the undisputed and uncontradicted evidence, the use of vacant positions on existing multiple circuit transmission lines was not an option for the Garland Project.<sup>86</sup> Route RP9 crosses 733.9 acres of woodland within the proposed rights-of-way (ROWs).<sup>87</sup> Burns & McDonnell's route delineation and route evaluation process considered utilizing and paralleling existing compatible property boundaries, natural features, and cultural features where practical and reasonable.<sup>88</sup> By paralleling existing corridors, potential impacts to property, community values and resources, and viewsheds were limited.<sup>89</sup> Natural or cultural features, such as areas of concentrated residential development, wetlands, floodplains, cemeteries, parks and recreation areas, airports or airstrips, and center-pivot irrigation, were avoided where reasonable and feasible.<sup>90</sup>

## **11. Prudent Avoidance**

According to the undisputed and uncontradicted evidence, Burns & McDonnell determined the number, distance, and direction of habitable structures located within 500 feet of the centerline of each proposed route through interpretation of aerial photography and

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<sup>85</sup> Garland Ex. 12, Route Stipulation.

<sup>86</sup> Garland Ex. 3, Wise direct at 36.

<sup>87</sup> Staff Ex. 1, Mathis direct at WP-6.

<sup>88</sup> Garland Ex. 3, Wise direct at 36.

<sup>89</sup> Garland Ex. 3, Wise direct at 39.

<sup>90</sup> Garland Ex. 3, Wise direct at 36.

verification during reconnaissance surveys along public roads, where possible.<sup>91</sup> Burns & McDonnell, to the extent reasonable and in accordance with the policy of prudent avoidance, attempted to avoid habitable structures in the all proposed routes.<sup>92</sup> Route RP9 has only 13 habitable structures within 500 feet of the centerline.<sup>93</sup> Route RP9 conforms to the Commission's policy of prudent avoidance in that its construction will involve reasonable investments of money and effort to limit exposure to electric and magnetic fields.<sup>94</sup>

**D. Representations Made in *Southern Cross* (Preliminary Order Issue No. 2b)**

Garland and SCT in their initial briefs both state that they "expect" to honor the representations they made in FERC Docket No. TX11-1-001, *Southern Cross Transmission LLC*, 147 FERC ¶ 61,113 (2014) (*Southern Cross*). Both Garland and SCT note that the primary commitments they made in *Southern Cross* were that SCT would not seek to recover from ERCOT ratepayers and Garland would not seek to recover from wholesale or retail customers in Texas the costs incurred in the construction of the interconnection facilities identified in the interconnection agreement between Garland and SCT.<sup>95</sup>

Given Garland and SCT's expectations in this regard, and the binding nature of the offer of settlement approved by the FERC Order, the interconnection agreement between Garland and SCT attached to the offer of settlement approved by the FERC Order, and the FERC Order itself, the ALJs find that it would be appropriate for the Commission to require Garland and SCT to give effect to their representations made in *Southern Cross* as a reasonable condition to its approval of Garland's application. Such condition would protect the public interest and be consistent with the FERC Order.

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<sup>91</sup> Garland Ex. 3, Wise direct at 40.

<sup>92</sup> Garland Ex. 9, Wise rebuttal at 6.

<sup>93</sup> Staff Ex. 1, Mathis direct at WP-6.

<sup>94</sup> 16 Tex. Admin. Code § 25.101(a)(4).

<sup>95</sup> Garland Ex. 1, Application, Att. 2 at 10, 54-55.

**E. Application of PURA § 37.051(c-2) to SCT (Preliminary Order Issue 3)**

SCT has agreed that it is subject to the requirements of PURA § 37.051(c-2) and to the imposition of reasonable conditions on the Commission's approval of Garland's application to protect the public interest, and no party disputes SCT's position.

**1. Market Participant Agreement (Preliminary Order Issue No. 3a)**

Staff proposes that the Commission, as a condition to its approval of Garland's application, require SCT to execute ERCOT's Standard Form Market Participant Agreement (SFMPA) prior to energizing the interconnection facilities. SCT has committed to doing so.<sup>96</sup> Signing the SFMPA will formally bind SCT to the ERCOT Protocols and other standards, and provide ERCOT with legal grounds to demand such compliance.<sup>97</sup> All other parties, including Garland and ERCOT, agree to the Commission's prescription of this condition in approving Garland's application, recognizing the importance of legally binding SCT to comply with ERCOT protocols and the implementation by ERCOT of all necessary system changes to ensure the reliability of the ERCOT system before power flows across the SCT DC Tie.<sup>98</sup> The parties agree that ERCOT will need to make changes to the SFMPA and, at least potentially, its bylaws, protocols, and systems to accommodate this condition. The parties disagree as to whether the Commission should determine in this case the type of market participant SCT will be, and whether the Commission should impose a timeline for ERCOT to make the needed changes.

Staff notes that SCT does not meet the definition of one of the eight market participant types set forth in the SFMPA and as currently defined in Sections 2 and 22-A of the ERCOT protocols, so changes must be made to the SFMPA in order for SCT to execute it.<sup>99</sup> According to SCT witness Mark Bruce, a ninth market participant category, Independent DC Tie Operator, should be created as part of the Commission's final order in this docket. Mr. Bruce took the

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<sup>96</sup> SCT Ex. 6, Parquet rebuttal at 5.

<sup>97</sup> ERCOT Ex. 3, Hailu direct at 4.

<sup>98</sup> ERCOT Ex. 3, Hailu direct at 9-10.

<sup>99</sup> Tr. at 219-220; SCT Ex. 5, Bruce supp. direct at 5.

position that regulatory classification issues are policy matters historically addressed by the Commission, and advocated for the Commission to instruct ERCOT to submit a Nodal Protocol Revisions Request creating the Independent DC Tie Operator market participant category.<sup>100</sup> TIEC witness Charles Griffey also testified that to ensure the Garland Project is in the public interest, SCT should be registered as an independent DC tie operator and become a member of the Investor-Owned Utility (IOU) market segment for ERCOT governance.<sup>101</sup>

ERCOT witness Ted Hailu testified that ERCOT is unsure how SCT would be categorized under the North American Electric Reliability Corporation (NERC) functional registration model, which could have implications on how ERCOT interacts with SCT. Further, Mr. Hailu stated that if SCT's role in ERCOT differs from current DC tie operators, *i.e.* if the SCT DC Tie will be subject to economic dispatch, the evaluation of the proper market participant category for SCT could change. Given the important policy considerations involved, Mr. Hailu determined that evaluation of the options for having SCT join ERCOT as a market participant, and the effects of each, is most appropriately conducted through the ERCOT stakeholder process.<sup>102</sup>

Nevertheless, Mr. Hailu felt it appropriate to analyze the possibility of SCT registering in ERCOT as a Transmission Service Provider (TSP) or as a Resource Entity (RE), or as a new type of market participant.<sup>103</sup> According to Mr. Hailu, registration of SCT as a TSP would likely require policy changes to carve out performance and compliance exceptions applicable only to SCT, given the vast responsibilities of TSPs set out in ERCOT protocols, guides, and other binding documents as compared to SCT's responsibilities as operator of the SCT DC Tie.<sup>104</sup>

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<sup>100</sup> SCT Ex. 5, Bruce supp. direct at 5-6.

<sup>101</sup> TIEC Ex. 1, Griffey direct at 13-14. Mr. Bruce also testified that once registered as a market participant, SCT will need to be placed within one of the existing market segments within ERCOT. He stated that SCT, as an Independent DC Tie Operator, could be placed in the IOU market segment or the Power Marketer market segment, but that "SCT believes it may be most analogous to members of the IOU market segment." SCT Ex. 9, Bruce rebuttal at 6-7. Luminant witness Amanda Frazier suggests that "it may be appropriate" for SCT to join the Power Marketer market segment. Luminant Ex. 2, Frazier direct at 6.

<sup>102</sup> ERCOT Ex. 3, Hailu direct at 5.

<sup>103</sup> ERCOT Ex. 3, Hailu direct at 6-9.

<sup>104</sup> ERCOT Ex. 3, Hailu direct at 6.



Mr. Hailu also noted that the ERCOT policy of granting TSPs access to ERCOT systems and market data may need revision to accommodate SCT's more limited participation.<sup>105</sup> To register SCT as an RE, the RE definition in ERCOT's protocols would have to change, but RE registration would avoid the concerns regarding the level of access to ERCOT systems and market data provided to SCT. According to Mr. Hailu, most of the protocol requirements for REs related to ownership and operation of load and generation resources would not apply to SCT, but SCT would still be required to designate a qualified scheduling entity (QSE) to meet all the requirements of operating the SCT DC tie, such as managing transmission outages and real-time communication.<sup>106</sup> Mr. Hailu testified that creating a new category of market participant for SCT will require modification of ERCOT protocols and other procedural documents. While he sees benefits to creating a new market participant type from an operational standpoint, given the specifics regarding level of data access and other rights and obligations that would attach to SCT, Mr. Hailu expressed concerns regarding the cost of this approach. ERCOT's recent creation of the Independent Market Information System Registration Entity market participant category cost approximately \$100,000. Mr. Hailu believes the cost of creating a new category for SCT will be significantly higher, given SCT's need for additional access to ERCOT systems and the additional integration required across more ERCOT systems.

In response to Mr. Hailu's testimony, SCT witness Mr. Bruce indicated his agreement that: (a) the determination of the proper market participant type for SCT; and (b) the mechanics of how to register SCT as a market participant are "best suited to the ERCOT stakeholder process."<sup>107</sup> Mr. Bruce testified regarding his concerns about Mr. Hailu's suggestion for registering SCT as an RE, noting that ERCOT protocols pertaining to REs primarily refer to entities owning or controlling generation, which SCT will not do in ERCOT. He reiterated his position that the Independent DC Tie Operator concept is the simplest way to integrate a non-TSP DC tie owner or operator in the ERCOT protocols. Mr. Bruce contended that there is enough agreement between the parties in this case for the Commission to order the establishment

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<sup>105</sup> ERCOT Ex. 3, Hailu direct at 6.

<sup>106</sup> ERCOT Ex. 3, Hailu direct at 7-8.

<sup>107</sup> SCT Ex. 9, Bruce rebuttal at 6.

of a new Independent DC Tie Operator market participant type.<sup>108</sup> Further, Mr. Bruce testified as to the importance from SCT's perspective (and that of its "financial counterparties") that a decision as to SCT's market participation category be made by a date certain, in order to avoid disruption of "other key project development milestones."<sup>109</sup> Mr. Bruce suggested June 1, 2017, as a reasonable deadline for resolution of the market participation category question and the market segment question.<sup>110</sup> He stated that these are not complex issues, and that in order for SCT to obtain financing, its investors and lenders need to know SCT's regulatory classification and its resulting compliance obligations and performance requirements.<sup>111</sup>

Staff agrees with Mr. Hailu's position, arguing additional information is necessary and should be considered through the ERCOT stakeholder process before the Commission orders ERCOT to create a new market participant category to apply solely to SCT. Garland and SCT propose the Commission require ERCOT to decide on a market participant category for SCT and make the necessary changes to the SFMPA and its protocols, bylaws, and systems so that SCT can execute the SFMPA by no later than June 1, 2017. SCT also seeks an order from the Commission requiring ERCOT to determine which market segment SCT will belong to by the same deadline. Staff disagrees with SCT's and Mr. Bruce's assertion that the market participant registration issue needs to be decided by a date certain, noting that Mr. Bruce also testified that these issues are the "fundamental question for all the stakeholders involved . . ."<sup>112</sup> According to Staff, ERCOT should not be required to put off or reprioritize other projects to meet SCT's deadline.

### *Analysis and recommendation*

The ALJs conclude that: (a) requiring SCT to execute the SFMPA prior to energizing the Garland Project; (b) requiring ERCOT to develop an appropriate market participant category for

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<sup>108</sup> SCT Ex. 9, Bruce rebuttal at 7.

<sup>109</sup> SCT Ex. 5, Bruce supp. direct at 6.

<sup>110</sup> SCT Ex. 9, Bruce rebuttal at 8.

<sup>111</sup> Tr. at 222.

<sup>112</sup> Tr. at 222.

SCT; and (c) requiring ERCOT to implement necessary changes to its protocols, standards, bylaws, and systems to accommodate SCT's participation in ERCOT are all reasonable conditions for the Commission to prescribe in approving Garland's application. The evidence clearly shows that these requirements would protect the public interest by ensuring the reliability of the ERCOT system is not adversely affected by the interconnection of the SCT DC Tie. These requirements are also consistent with the FERC Order.

However, the ALJs do not find that a condition requiring ERCOT to create a new Independent DC Tie Operator market participant category is a reasonable condition on the Commission's approval of Garland's application to protect the public interest. Only TIEC and SCT agree that the Commission should order that this new category be established, and neither Mr. Griffey nor Mr. Bruce offer any explanation as to why such a condition is needed to protect the public interest. ERCOT witness Mr. Hailu noted that it is not yet clear what market participant category is appropriate for SCT. The preponderance of the evidence shows that the determination of the appropriate market participant category for SCT, the modifications to ERCOT protocols, bylaws, and systems required for SCT's participation, and the appropriate market segment for SCT to join should all be determined through the ERCOT stakeholder process.

Finally, there is insufficient evidence in the record to support a finding that a deadline for ERCOT to make these determinations and modifications is a reasonable condition to protect the public interest. SCT and Garland offered no evidence, nor did they argue, that the June 1, 2017 deadline is a condition necessary to protect the public interest. While it is understandable that SCT and Garland want the Garland Project to move forward as expeditiously as possible, and that financing can depend on this timing, the evidence does not support a conclusion that these are public interest concerns.

## **2. Coordination Agreement (Preliminary Order Issue No. 3b)**

According to ERCOT, coordination issues between ERCOT and SCT can be addressed through the applicable standards that govern other DC ties in the ERCOT system, such that no

separate coordination agreement between ERCOT and SCT is necessary.<sup>113</sup> No other party takes the position that such an agreement is necessary.

However, to ensure reliable operations on the ERCOT grid, ERCOT will need to negotiate one or more agreements with the Independent System Operator (ISO)/Regional Transmission Organization (RTO) and/or Reliability Coordinator (RC) on the eastern end of the SCT Line, once that party is known, prior to energization of the SCT DC Tie.<sup>114</sup> According to ERCOT, the agreement(s) will address issues such as emergency coordination, inadvertent energy transfers, and related settlements.<sup>115</sup> Given the large scale of the SCT DC Tie, ERCOT witness Dan Woodfin testified that the amount of coordination needed to operate the SCT DC Tie will be greater than any of the other DC ties in the ERCOT system.<sup>116</sup> According to Mr. Woodfin, the more entities with which ERCOT will have to coordinate, which is unknown at this time, the more complex the agreement(s) will be. Until SCT identifies the precise location of the eastern end of the SCT Line, ERCOT will not know how complex the coordination agreement(s) will need to be.<sup>117</sup> ERCOT seeks a condition to the Commission's approval of Garland's application that requires the coordination agreement(s) be negotiated and executed prior to interconnection of the SCT DC Tie with the ERCOT system.<sup>118</sup>

No party disputes the need for such coordination agreement(s). SCT agrees that such agreement(s) will be necessary and agrees to the Commission requiring such agreement(s) be reached.<sup>119</sup> SCT proposes that the condition require the agreement(s) be reached by June 1, 2017. SCT seeks imposition of this deadline to allow it to close financing for the SCT

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<sup>113</sup> ERCOT Statement of Position at 5.

<sup>114</sup> ERCOT Ex. 2, Woodfin direct at 15-16.

<sup>115</sup> ERCOT Statement of Position at 5; ERCOT Ex. 2, Woodfin direct at 15.

<sup>116</sup> ERCOT Ex. 2, Woodfin direct at 15.

<sup>117</sup> ERCOT Ex. 2, Woodfin direct at 15-16.

<sup>118</sup> ERCOT Reply Brief at 3; ERCOT Ex. 2, Woodfin direct at 15.

<sup>119</sup> SCT Ex. 6, Parquet rebuttal at 4-5; Tr. at 157.

DC Tie project.<sup>120</sup> SCT also proposes language for this condition that would require ERCOT to involve SCT in the negotiation of the agreement(s).

ERCOT opposes any requirement that SCT be a party to the coordination agreement(s) with the ISO/RTO and/or RC at the eastern end of the SCT Line, or that SCT must give consent to any such agreement before it can be executed. As the parties responsible for the reliability of their respective systems, ERCOT argues that it and the counterparty or counterparties must have freedom to negotiate the agreement(s) without interference. However, ERCOT would not oppose a Commission condition requiring it to consult with SCT in negotiating the agreement(s).<sup>121</sup>

Staff opposes both SCT's proposed deadline for execution of the coordination agreement(s) and a condition requiring ERCOT to involve SCT in the negotiation of the agreement(s). Staff argues that there is no evidence that June 1, 2017, is the date SCT will close on financing for the SCT DC Tie project, that the financing is contingent on coordination agreements being finalized by such date, or that this deadline is protective of the public interest. Further, while recognizing that ERCOT will need technical input and guidance from SCT, Staff contends that SCT should not be a required party to ERCOT's negotiations with the eastern-end ISO/RTO and/or RC.

SCT takes issue with Staff and ERCOT's position that the coordination agreement(s) with the eastern-end ISO/RTO and/or RC should be executed prior to interconnection of the SCT DC Tie with the ERCOT system. SCT contends that the purpose of the coordination agreement(s) is to obtain mutual commitments to assistance between ERCOT and the eastern-end ISO/RTO and/or RC, and the settlement obligations based on such commitments. SCT argues that power can flow over the SCT DC Tie with ERCOT accepting or rejecting e-Tags and

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<sup>120</sup> SCT Ex. 6, Parquet rebuttal at 5; Tr. at 157.

<sup>121</sup> ERCOT Reply Brief at 3.

restricting or terminating tie flows in emergency situations, if necessary, without a coordination agreement in place between ERCOT and the eastern-end ISO/RTO and/or RC.<sup>122</sup>

### *Analysis and Recommendation*

The preponderance of the evidence shows that requiring negotiation and execution of a coordination agreement or agreements between ERCOT and the ISO/RTO and/or RC for the eastern end of the SCT Line is a reasonable condition for the Commission to prescribe in approving Garland's application. Such agreements will address issues, such as coordination during emergencies, necessary for the reliable operation of the ERCOT system. Given the importance to reliability concerns, conditioning approval of Garland's application on the execution of the coordination agreement(s) will protect the public interest. This condition is also consistent with the FERC Order.

Likewise, the evidence shows that the Commission should include as part of this condition a requirement that the coordination agreement(s) between ERCOT and the eastern-end ISO/RTO and/or RC be negotiated and executed prior to energizing the SCT DC Tie and the Garland Project. ERCOT witness Mr. Woodfin unequivocally testified that all coordination agreements should be in place before the SCT DC Tie is permitted to energize to ensure reliability of the ERCOT grid. Although SCT argued in its briefing that there is no need to require the coordination agreement(s) be finalized prior to interconnection of the SCT DC Tie to ERCOT, neither SCT nor any other party offered any evidence, in the form of testimony or otherwise, to contradict Mr. Woodfin's position.

The ALJs do not find sufficient evidence in the record to support a condition that requires the coordination agreement(s) between ERCOT and the eastern-end ISO/RTC and/or RC to be executed by June 1, 2017. SCT provided no rationale for imposition of this deadline other than its desire to close financing on the SCT DC Tie project. The evidence does not show that SCT's

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<sup>122</sup> SCT Reply Brief at 34.

financing issues are public interest concerns that support a condition on the Commission's approval of Garland's application requiring the coordination agreements by a date certain.

Likewise, the preponderance of the evidence does not support a requirement that ERCOT involve SCT in the negotiations of the coordination agreement(s). SCT did not show that such a requirement would protect the public interest. However, the ALJs find it reasonable and protective of the public interest to condition the Commission's approval of Garland's application on a requirement that ERCOT consult with SCT for technical input and guidance, as needed, while negotiating the agreement(s). Such condition would also be consistent with the FERC Order.

**F. ERCOT Issues (Preliminary Order Issue No. 4)**

Given that the ERCOT issues presented in the Commission's Preliminary Order Issue No. 4 (the ERCOT Issues) involve complex and technical policy considerations, most parties to this case who have taken a position, including ERCOT, Staff, SCT, TIEC, and CenterPoint, determined that most if not all of the ERCOT Issues are better addressed through the ERCOT stakeholder process or in a rulemaking proceeding at the Commission than in this expedited CCN proceeding.

Luminant witness Amanda Frazier took the position that although several of the ERCOT Issues will need to be evaluated through the ERCOT stakeholder process, the ERCOT stakeholder process works more efficiently when the Commission has brought its influence to bear on specific policy issues.<sup>123</sup> Luminant cites the Texas Senate's Bill Analysis for the PURA provision pursuant to which Garland's application was filed in contending that issues such as price formation, resource dispatch practices, reliability, quantity and cost of ancillary services, and resource adequacy must be addressed through the imposition of reasonable conditions on the approval of Garland's application to protect the public interest.<sup>124</sup> Therefore, Luminant argues

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<sup>123</sup> Luminant Ex. 3, Frazier cross-rebuttal at 4.

<sup>124</sup> Luminant Reply Brief at 8, *citing* Senate Research Center, Bill Analysis, S.B. 933, 84th Leg., R.S. (July 1, 2015).

that the Commission should provide policy guidance in its final order in this docket on several of the ERCOT Issues.<sup>125</sup>

**1. Inclusion of SCT DC Tie in Planning Models (Preliminary Order Issue No. 4a)**

According to ERCOT, the specific phase of development at which a DC tie should be presumed a part of the ERCOT system for transmission planning purposes is not addressed by ERCOT standards. ERCOT witness Warren Lasher noted that timing in this regard is important so as to avoid unnecessary expenditures for the construction of transmission improvements, paid for by ERCOT ratepayers, if the DC tie is not completed. He explained that transmission planning seeks to determine sufficient infrastructure to allow DC ties to operate in a manner consistent with future needs of market participants.<sup>126</sup> Mr. Lasher testified that ERCOT should not include a new DC tie project in its planning models until it reaches milestones making it likely the project will be completed. This approach would treat a proposed DC tie project the same as new generation resources and discrete customer loads in terms of the timing of their inclusion in ERCOT transmission planning studies.<sup>127</sup> Mr. Lasher expressed concern that the nature of transmission planning models is such that inclusion of a proposed DC tie project that is not ultimately constructed could overstate or understate the need for other transmission projects in the general vicinity.<sup>128</sup>

SCT witness Mr. Bruce shared Mr. Lasher's concerns regarding the potential for overstating or understating system economic or reliability benefits if a DC tie is included in the planning model but not ultimately completed. He noted that failing to include a transmission element such as the SCT DC Tie in the planning models would also generate inaccurate results. Mr. Bruce agreed with Mr. Lasher as to the importance of determining the appropriate time to

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<sup>125</sup> Luminant Initial Brief at 10-11; Luminant Reply Brief at 6-7.

<sup>126</sup> ERCOT Ex. 1, Lasher direct at 9.

<sup>127</sup> ERCOT Ex. 1, Lasher direct at 5-6.

<sup>128</sup> ERCOT Ex. 1, Lasher direct at 6.

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include the SCT DC Tie in ERCOT's transmission planning studies.<sup>129</sup> Mr. Bruce suggested that a process similar to that used by ERCOT for determining when TSPs in ERCOT add transmission system elements, such as a new DC tie, to the planning models could be developed for non-TSP-owned DC ties such as the SCT DC Tie.<sup>130</sup> Transmission facilities owned by TSPs are added to the planning models, for the year they will be energized, once a rule or a CCN from the Commission is issued allowing for construction of the facilities.<sup>131</sup> Mr. Bruce testified that the SCT DC Tie will be highly likely to be completed once SCT posts the required financial security and issues notice to Oncor to proceed with construction of the facilities required for interconnection at the Rusk Substation.<sup>132</sup> Mr. Lasher testified similarly, stating that a milestone indicating likelihood of completion could involve collateralization of the necessary upgrades for interconnecting the project and notice to proceed with construction of interconnection facilities.<sup>133</sup>

SCT and ERCOT ultimately agreed that the determination of when and how the SCT DC Tie should be included in ERCOT's transmission planning models can be resolved by ERCOT stakeholders if the Commission does not address it directly in this proceeding.<sup>134</sup> ERCOT advocates for the Commission to include a requirement in the final order in this docket that ERCOT determine at what stage of development a proposed merchant DC tie project should be included in the planning models.<sup>135</sup> SCT contends that no such condition from the Commission is necessary, given Mr. Lasher's and Mr. Bruce's agreement that posting of financial security for the SCT DC Tie and notice to proceed with the interconnection facilities could be a milestone indicating likelihood of completion.<sup>136</sup> ERCOT argues that this standard

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<sup>129</sup> SCT Ex. 4, Bruce supp. direct at 8.

<sup>130</sup> SCT Ex. 4, Bruce supp. direct at 7-8.

<sup>131</sup> SCT Ex. 4, Bruce supp. direct at 9.

<sup>132</sup> SCT Ex. 4, Bruce supp. direct at 10.

<sup>133</sup> ERCOT Ex. 1, Lasher direct at 5-6.

<sup>134</sup> ERCOT Ex. 1, Lasher direct at 11; SCT Ex. 9, Bruce rebuttal at 8-9.

<sup>135</sup> ERCOT Initial Brief at 5.

<sup>136</sup> SCT Reply Brief at 30.

for likelihood of completion of a DC tie is not codified in the ERCOT protocols or any other binding document, so it is appropriate to refer the issue to the ERCOT stakeholder process.<sup>137</sup>

### *Analysis and Recommendation*

The only parties taking a position on this issue, SCT and ERCOT, both agree that the ERCOT stakeholder process is designed to address the technical questions of when and how a DC tie is included in transmission planning models. However, ERCOT recommends an ordering paragraph requiring ERCOT to answer these questions, while SCT argues that no Commission action on the issue is necessary. The preponderance of the evidence shows that a DC tie should be included in modeling for transmission planning when it reaches the point in its development when it is likely that it will be constructed and completed, and there appears to be agreement between SCT witness Mr. Bruce and ERCOT witness Mr. Lasher as to what point might be appropriate. The proposed milestone is similar to those set forth in the ERCOT protocols for when new generation resources are included in planning models.<sup>138</sup> There is no evidence that ERCOT protocols set forth standards for determining when to include proposed DC tie projects to transmission modeling. The evidence shows that determining when to include a proposed DC tie project in transmission planning models is important in order to accomplish the goals of transmission planning and to avoid unnecessary costs.

Given: (a) the importance of transmission modeling and the potential adverse effects of including in the models a DC tie in that is not ultimately completed or excluding from the models a DC tie that is approved and built; and (b) that the timing issue has not gone through the ERCOT stakeholder process, the ALJs find that ERCOT, through its stakeholder process, should make the final determination as to the point of project development at which a proposed DC tie project such as the SCT DC Tie should be included in ERCOT's transmission planning models.

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<sup>137</sup> ERCOT Reply Brief at 4.

<sup>138</sup> ERCOT Ex. 1, Lasher direct at 5.

**2. Treatment of DC Ties in Transmission Planning (Preliminary Order Issue No. 4b)**

SCT, ERCOT, and Staff all agree that the issue of how ERCOT transmission planning should address the uncertainty regarding whether DC ties will be exporting or importing would best be resolved through the ERCOT stakeholder process.<sup>139</sup> ERCOT asks for a finding that it should determine how to best model large DC ties in its transmission planning and make the necessary standard revisions.<sup>140</sup> Staff specifically seeks a condition to the Commission's approval of Garland's application requiring ERCOT to study what changes in transmission planning assumptions or criteria should be made to identify upgrades necessary to address potential congestion caused by SCT DC Tie flows.<sup>141</sup> Luminant proposes that the Commission direct ERCOT to develop a method to specifically identify congestion caused by imports and exports across the SCT DC Tie, offering as a potential approach the modeling of full imports and full exports as bookends.<sup>142</sup>

According to ERCOT witness Mr. Lasher, transmission planning is performed "to identify future system needs for improvements in grid infrastructure." Assumptions made in transmission planning regarding whether DC ties will be exporting or importing, and at what levels, can result in the identification of different system needs.<sup>143</sup> ERCOT performs both reliability transmission planning studies to determine projects necessary to reliably serve expected demand, and economic transmission planning studies to identify projects that will improve system operating efficiency. DC ties are modeled differently for each type of study.<sup>144</sup> The assumptions used for DC ties in reliability studies are set out in the Regional Transmission Plan Scope document, a non-binding document reviewed and revised by stakeholders during Regional Planning Group (RPG) meetings every year, while DC tie modeling assumptions for

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<sup>139</sup> ERCOT Initial Brief at 6; Staff Initial Brief at 16; SCT Initial Brief at 24.

<sup>140</sup> ERCOT Initial Brief at 11, proposed FoF 11.

<sup>141</sup> Staff Reply Brief at 18.

<sup>142</sup> Luminant Initial Brief at 11. The issues of congestion management related to the SCT DC Tie, and transmission upgrades needed to avoid such congestion, are more fully discussed in Sections V.F.3 and V.F.4., below.

<sup>143</sup> ERCOT Ex. 1, Lasher direct at 6-7.

<sup>144</sup> ERCOT Ex. 1, Lasher direct at 7.

economic studies are discussed with RPG participants. Currently, ERCOT models DC ties in all planning studies using historical operations of those ties and assesses the resulting constraints on the system. ERCOT also communicates with its operations staff to account for real-time operational limitations of DC tie operations in planning studies.<sup>145</sup>

Obviously, the SCT DC Tie has no historical operations, and it is unclear whether the operational history of the smaller DC ties is suitable for comparison to the SC DC Tie, given its large size and geographically distinct interconnection point.<sup>146</sup> Therefore, Mr. Lasher is currently unsure how the SCT DC Tie will be modeled in future planning studies. He suggested that modeling data presented by SCT in this proceeding could be used to develop assumptions about the SCT DC Tie, and noted that ERCOT might perform a market analysis at the eastern end of the SCT Line to develop estimates of project utilization. Mr. Lasher also testified that another approach would be for ERCOT to use assumptions which minimize the need for system improvements near the SCT DC Tie until such time that market operation results show that participants seek to make use of the SCT DC Tie beyond existing local transmission capacity.<sup>147</sup>

SCT witness Mr. Bruce testified that given periods of high wind production and low system load, favoring exports from ERCOT, and periods of high system demand and resulting higher prices, favoring imports, DC tie flows should be "largely predictable."<sup>148</sup> He also noted that, in reliability studies, ERCOT currently models DC tie flows as firm loads and does not use DC ties as resources to resolve congestion. These are conservative assumptions which ignore certain realities (i.e. ERCOT's authority to cut DC tie exports in emergencies), but they are designed to ensure reliability. Mr. Bruce suggested that more realistic and less conservative assumptions regarding DC tie flows could be used to balance reliability with cost considerations, and predicted that ERCOT and its stakeholders will learn over time through experience how to better model DC tie activity.<sup>149</sup> Mr. Bruce agreed that the question of how to model the

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<sup>145</sup> ERCOT Ex. 1, Lasher direct at 9-10

<sup>146</sup> ERCOT Ex. 1, Lasher direct at 10.

<sup>147</sup> ERCOT Ex. 1, Lasher direct at 10-11.

<sup>148</sup> SCT Ex. 4, Bruce supp. direct at 10.

<sup>149</sup> SCT Ex. 4, Bruce supp. direct at 10-11.

SCT DC Tie in transmission planning studies should be determined through the ERCOT stakeholder process, given the participants' technical experience and expertise in addressing these issues.<sup>150</sup>

### *Analysis and Recommendation*

The preponderance of the evidence shows that ERCOT should conduct additional analyses and studies to determine how it should address the uncertainty regarding imports and exports over DC ties in its transmission planning. Especially given the interconnection of the SCT DC Tie, a much larger and geographically distinct DC tie which can result in significant imports and exports, ERCOT's current practices of modeling DC ties in its planning studies must be reviewed for needed revision. The ALJs find that a condition to approval of Garland's application requiring ERCOT, through its stakeholder process and prior to the energization of the SCT DC Tie and the Garland Project, to study and determine how best to model the SCT DC Tie in its transmission planning cases and make any necessary standard revisions is reasonable, would protect the public interest, and is consistent with the FERC Order.

### **3. Transmission Upgrades to Facilitate Exports Over DC Ties (Preliminary Order No. 4c)**

The possibility of congestion resulting from export or import of up to 2,100 MW of power over the SCT DC Tie raised the issue that transmission upgrades to the ERCOT system may be necessary to accommodate the transmission of that much power. More importantly, if transmission upgrades are necessary to accommodate the SCT DC Tie, the answer to the question of who should pay for such upgrades differs greatly among the parties.

SCT takes the position that transmission upgrades associated with DC ties, including its own, are simply transmission infrastructure like any other transmission element in ERCOT, and it is appropriate for ERCOT ratepayers to be financially responsible for the costs to upgrade the transmission system. SCT witness Mr. Bruce testified that transmission upgrades resulting from

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<sup>150</sup> SCT Ex. 9, Bruce rebuttal at 9.

the SCT DC Tie will provide access to ERCOT system resources, improve ERCOT market efficiency, and facilitate economic transactions for ERCOT market participants.<sup>151</sup> However, Mr. Bruce also acknowledged that the issue is highly technical and does not lend itself well to complete resolution in this docket because of its limited scope, limited stakeholder participation, and the limited time available to completely review the issues.<sup>152</sup>

Former PUC Commissioner Paul Hudson, testifying on behalf of SCT, concurred with Mr. Bruce's position that this docket does not lend itself to a thorough dissection of the cost allocation issue (among other potential conditions). In addressing the number of proposed conditions to which parties testified, Commissioner Hudson stated that, "The Commission challenge is determining the appropriate bounds for those conditions, all within a statutorily proscribed timeframe that favors pace, perhaps over analytical depth."<sup>153</sup> Commissioner Hudson opposed any change or investigation into the existing method for transmission upgrade cost allocation, as suggested by TIEC and Luminant and concurred in by Staff. He pointed out that the existing system of transmission cost recovery has resulted in a robust transmission network in ERCOT that is reliably supporting the state's growing population and its electrical needs.<sup>154</sup>

Commissioner Hudson listed several benefits from the existing system of transmission cost allocation, including: (1) the fact that TSPs can credit against their respective transmission costs of service (TCOS) export charges included in their transmission rates, thereby benefiting ERCOT transmission customers; (2) avoidance of the Balkanization that exists in other parts of the country where transmission cost allocation issues are a source of constant controversy; (3) regulatory stability; (4) "system dynamism" in ERCOT, which permits significant resources to enter and exit the market;<sup>155</sup> (5) ERCOT non-discriminatory treatment of transmission

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<sup>151</sup> SCT Ex. 4, Bruce supp. direct at 13.

<sup>152</sup> SCT Ex. 4, Bruce supp. direct at 3.

<sup>153</sup> SCT Ex. 11, Hudson rebuttal at 4.

<sup>154</sup> SCT Ex. 11, Hudson rebuttal at 8.

<sup>155</sup> Commissioner Hudson identified, as an example of this principle, the fact that the Competitive Renewable Energy Zones (CREZ) lines were originally planned to transmit wind energy from the windy areas of West Texas to the load zones in the more populated areas of the state, but later served to relieve congestion in the West Texas oil fields during the oil boom, a purpose that was not envisioned when the CREZ buildout occurred. SCT Ex. 11,

resources; and (6) general benefits, of which he listed seven different items.<sup>156</sup> Finally, Commissioner Hudson noted that this CCN proceeding does not lend itself to full stakeholder participation, which is necessary before the Commission considers possible changes to the current cost-recovery methodology.<sup>157</sup>

SCT witness Stan Gray sidestepped the issue by testifying that the Oncor interconnection study performed at ERCOT's request, "... can give some insight into system upgrades that could allow more area deliverability of generation and SCT flows, but the upgrades are not necessary to interconnect SCT."<sup>158</sup> However, Mr. Gray's position was not without controversy, as he testified that the same Oncor interconnection study showed that in the 1,500 MW case modeled by Oncor (a range entirely within the capability of the SCT DC Tie), there was only a need for reactive devices for imports and exports and the upgrade of one mile of the 138-kV Tyler Grande to Tyler GE transmission line for imports. During cross examination, however, Mr. Gray acknowledged that the Oncor interconnection study showed that, in the 1,500 MW case, data showed the necessary addition of 147 miles of 345-kV transmission line that do not exist today.<sup>159</sup> The disagreement and potential discrepancy in facts provides additional reason to consider that this issue, like many others in this case, is better suited for a more detailed review in the ERCOT stakeholder process than in a contested proceeding limited by the 185-day time limit contained in PURA § 37.051(c-2).

TIEC witness Charles Griffey took an unequivocal position grounded in the principle that "[N]o costs related to the Rusk or Panola Substations or the Rusk to Panola Line shall be allowed in TCOS [transmission cost of service] under any circumstances."<sup>160</sup> Mr. Griffey testified that, in his opinion, there is no evidence that the Garland Project will provide any benefit to ERCOT

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Hudson rebuttal at 10.

<sup>156</sup> SCT Ex. 11, Hudson rebuttal at 9-11.

<sup>157</sup> SCT Ex. 11, Hudson rebuttal at 11.

<sup>158</sup> SCT Ex. 10, Gray rebuttal at 3.

<sup>159</sup> Tr. at 195; SCT Ex. 10, Gray rebuttal at Ex. SG-1-R, Table 2. The 147 miles refer to the 23-mile Lufkin Switch – Nacogdoches 345-kV transmission line and the 124-mile Martin Lake – Royse North 345-kV transmission line.

<sup>160</sup> TIEC Ex. 1, Griffey direct at 13.

customers, and that any alleged benefit is, at best, *de minimus*.<sup>161</sup> His opinion is grounded in the belief that the analysis provided by SCT is fundamentally flawed. Therefore, because cost responsibility generally follows benefits, Mr. Griffey argued that ERCOT ratepayers should not be responsible for costs to support additional exports of power over the SCT DC Tie because they will receive no benefit. Mr. Griffey found common ground with Luminant witness Ms. Frazier, in that both agreed that any costs for transmission upgrades to the SCT DC Tie or the Garland Project should be borne by SCT and the exporters of power from ERCOT, and that the Commission should make a general finding to that effect.

Ms. Frazier discussed ERCOT's transmission planning cases and noted that they should be designed to evaluate the need for new transmission lines assuming full import over the SCT DC Tie. She testified that the Commission should clarify that ERCOT should plan to allow for full deliverability of both the SCT DC Tie and existing generation.<sup>162</sup> Ms. Frazier expressed more concern with respect to exports over the SCT DC Tie because few, if any, of the transmission upgrades would be identified by ERCOT's current test, despite the fact the SCT DC Tie may cause or exacerbate congestion in the region, contributing to the need for additional transmission upgrades and infrastructure. Ms. Frazier testified that as a matter of policy, the Commission should decide in this docket that new planning methods related to related to exports of power out of ERCOT must be devised, and that all costs attributable to transmission upgrades necessary to accommodate any resulting congestion should be charged to SCT or the SCT DC Tie users.<sup>163</sup> While acknowledging that her proposal could lead to a departure from the postage-stamp methodology generally used for recovery of wholesale transmission costs, Ms. Frazier did not appear to oppose having ERCOT stakeholders debate these issues, as long as the debate is accompanied by a Commission directive that ensures any costs attributable to exports are charged to SCT and users of the SCT DC Tie.

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<sup>161</sup> TIEC Ex. 1, Griffey direct at 10. Mr. Griffey concluded that SCT's own analysis shows imports over the SCT DC Tie would be 49,951 megawatt hours (MWh), or approximately 0.01% of ERCOT's overall usage. If Mr. Griffey is correct, 0.01% would appear to qualify as *de minimus*.

<sup>162</sup> Luminant Ex. 2, Frazier direct at 6-7.

<sup>163</sup> Luminant Ex. 2, Frazier direct at 8.



In their direct testimonies, ERCOT's witnesses did not address the issue of transmission upgrades, *per se*, or more importantly, who should pay for them if they are made necessary due to the interconnection of the SCT DC Tie. However, on cross-examination by Luminant, Mr. Lasher acknowledged that the Oncor interconnection study attached to Mr. Gray's rebuttal testimony shows the need for 147 miles of 345-kV transmission line in the 1,500 MW case modeled by Oncor.<sup>164</sup> Mr. Lasher also agreed with Oncor's conclusion that if the SCT DC Tie were constructed today and imported 1,500 MW (again, well with the capability of the SCT DC Tie), there would be thermal overloads on the ERCOT system.<sup>165</sup> This suggests that some transmission upgrades may be necessary to avoid thermal overloads and relieve congestion when the SCT DC Tie operates at levels within its rated capacity.

Staff witness Kevin Mathis did not directly address in detail the issue of cost recovery for transmission upgrades in his testimony, but Staff takes a very strong position in its Statement of Position and in briefing. Staff agrees with ERCOT and many other parties who believe the Commission has identified many issues that are very technical in nature and do not lend themselves to resolution in this docket. In addition, like ERCOT, Staff believes that the level of study necessary to address these technical issues cannot be accomplished within the 185-day timeframe for a decision in this case mandated by PURA. Staff asserts that any of the issues affecting ERCOT reliability that arise in this case should be addressed before the Garland Project is energized "by conditioning approval of the CCN application on their resolution."<sup>166</sup> Staff recommends that a compliance docket be opened so the Commission can confirm that whatever conditions it decides to approve are actually being met.<sup>167</sup>

As a general proposition, Staff recommends that the Commission put in place protections to ensure that Texas ratepayers do not subsidize the SCT DC Tie, a project "from which Texas ratepayers may receive few, if any, benefits."<sup>168</sup> Staff echoes Luminant witness Frazier's

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<sup>164</sup> Tr. at 275-277; SCT Ex. 10, Gray rebuttal at Ex. SG-1-R, Table 2.

<sup>165</sup> SCT Ex. 10, Gray rebuttal at Ex. 4.1-1; Tr. at 276.

<sup>166</sup> Staff Statement of Position at 3.

<sup>167</sup> Staff Statement of Position at 3.

<sup>168</sup> Staff Statement of Position at 3.

recommendation that the Commission should consider studying whether a new cost allocation methodology should be adopted to deal with any transmission upgrades necessitated by the SCT DC Tie and the Garland Project by the time the Garland Project is energized. While Staff refers to ERCOT's assertion that it did not identify any transmission upgrades related to the SCT DC Tie at this time, Staff also asserts that if any future transmission upgrades are identified by ERCOT, SCT should pay for them.<sup>169</sup> Staff admits that its proposal would be a departure from the current postage-stamp method for recovering transmission costs, but contends that it is also consistent with the overarching principle that the entity that caused a cost should pay the cost.<sup>170</sup>

### *Analysis and Recommendation*

The evidence on whether transmission upgrades are necessary to accommodate imports and exports over the SCT DC Tie militates in favor of a conclusion that some degree of transmission upgrades – either transmission lines or reactive equipment – will be necessary to accommodate the SCT DC Tie. However, to address this issue properly, the Commission needs a more robust record that identifies whether or not ERCOT ratepayers will derive any measurable benefits from the construction of the Garland Project and the SCT DC Tie. If ERCOT ratepayers derive such benefits, the Commission must determine whether the benefits are substantial enough to simply treat the SCT DC Tie and the Garland Project as just another 345-kV transmission element in ERCOT for purposes of cost recovery. Given the state of the record, the ALJs conclude that the putative benefits to ERCOT and its ratepayers are questionable. If Mr. Griffey is correct in his estimation of the benefits of imports over the SCT DC Tie, then the characterization of those benefits as *de minimus* is apt.

It is clear from the evidence that in order to ensure reliability in the operation of the ERCOT system, it is necessary to determine what transmission upgrades will be needed, if any, to adequately address potential congestion caused by power flows over the SCT DC Tie. The issue of whether such transmission upgrades are necessary, and if so, who should pay for them,

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<sup>169</sup> Staff Statement of Position at 7.

<sup>170</sup> Staff Statement of Position at 8.