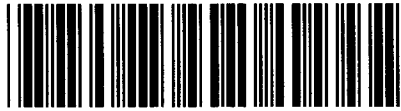




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APPLICATION OF THE CITY OF
GARLAND, TEXAS, FOR A
CERTIFICATE OF CONVEINCE
AND NECESSITY FOR THE PROPOSED
RUSK TO PANOLA DOUBLE-CIRCUIT
345-KV TRANSMISSION LINE IN RUSK
AND PANOLA COUNTIES, TEXAS

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PUBLIC UTILITY COMMISSION
FILING CLERK
BEFORE THE
PUBLIC UTILITY COMMISSION
OF TEXAS

ERCOT'S REPLY BRIEF

The 2000MW High-Voltage Direct Current (DC) tie project proposed by Southern Cross Transmission LLC ("Southern Cross") presents a host of complex market and operational policy issues that require resolution before the Public Utility Commission (Commission) or the Electric Reliability Council of Texas, Inc. (ERCOT). No party disputes that PURA authorizes the Commission to address these and any other concerns by imposing reasonable conditions on the certificate of convenience and necessity (CCN) for the City of Garland's proposed transmission facilities.¹ However, ERCOT recommends—and most parties agree—that the Commission should address these important policy issues through the less restrictive procedures of a Commission rulemaking or the ERCOT Protocol-revision process.

This does not mean, as Southern Cross suggests, that the Commission should make no findings in this proceeding regarding these policy issues. To the contrary, the Commission's authority to impose reasonable conditions on the CCN provides the opportunity for the Commission to develop a non-exhaustive list of the issues that the Commission and ERCOT stakeholders should aim to resolve in order to reliably and equitably accommodate the Southern Cross project. To that end, ERCOT and Commission Staff have also both recommended that the Commission establish a compliance docket for the purpose of tracking resolution of these issues.²

For those policy issues that involve potential reliability impacts, ERCOT and Commission Staff have also both recommended that the Commission require that each such issue be fully

¹ Public Utility Regulatory Act (PURA), Tex. Util. Code §§ 11.001-66.016, at § 37.051 (c-2), (i).

² ERCOT Initial Br. at 2; 13, Ordering Para. 11; Commission Staff Initial Br. at 7-8.

resolved as a condition for the interconnection of the Southern Cross DC tie. Southern Cross opposes such a condition on the grounds that any delays in resolving these issues could jeopardize its project development timeline. However, allowing the commercial goals of a single market participant to take precedence over the reliability of the ERCOT system would violate ERCOT's fundamental responsibility under PURA to "ensure the reliability and adequacy of the regional electrical network."³ The Commission and ERCOT are under no obligation to accelerate their rulemaking and Protocol revision processes to accommodate a private developer's timeline.

ERCOT provides the following responses to select issues in the initial briefs filed in this proceeding:

I. Market Participant Registration (Preliminary Order Issue 2.b.)

All parties taking a position on this issue have agreed that Southern Cross should be required to execute the Standard Form Market Participant Agreement (SFMPA). ERCOT and Commission Staff have further recommended that execution of the SFMPA should be required as a condition for the interconnection of the Southern Cross project.⁴

However, it is not yet clear which Market Participant type is appropriate for an entity like Southern Cross.⁵ Southern Cross and Texas Industrial Energy Consumers (TIEC) both recommend that ERCOT be required to create a new Market Participant type for "independent" DC tie owners like Southern Cross.⁶ This may well be the best solution, but as ERCOT Director of Client Services Ted Hailu noted, this approach could be more costly than modifying the existing Resource Entity or Transmission Service Provider (TSP) roles to accommodate owners of DC ties.⁷ Southern Cross's NERC registration status could also have some impact on the appropriate ERCOT registration. Accordingly, in addition to requiring Southern Cross to register as a Market Participant, the Commission should require ERCOT to develop an appropriate Market Participant category and implement appropriate changes to standards and systems.⁸ Each of these requirements should be imposed as a condition for permitting the interconnection of the Southern Cross project, as the tie owner will need to be registered with ERCOT well before the tie is

³ PURA § 39.151(a)(2)

⁴ ERCOT Initial Br. at 12, Finding of Fact (FOF) 2; Commission Staff Initial Br. at 38, FOF 97.

⁵ ERCOT Ex. 3, Direct Testimony of Ted Hailu at 5:7-18.

⁶ Southern Cross Initial Br. at 4; TIEC Initial Br. at 20.

⁷ ERCOT Ex. 3, Direct Testimony of Ted Hailu at 6:1-9:13.

⁸ ERCOT Initial Br. at 12.

interconnected and energized. For the reasons noted above, ERCOT opposes Southern Cross's recommendation to require such modifications by June 1, 2017.

ERCOT also agrees with Southern Cross and TIEC that changes to the ERCOT Bylaws would be reasonable so as to allow Southern Cross and other similarly situated entities to participate in the stakeholder process.⁹ ERCOT does not oppose a Commission finding requiring any such modifications, although ERCOT recommends that the Commission refrain from mandating membership in any particular segment in order to give ERCOT maximum flexibility to determine the appropriate revisions.

II. Coordination Agreements (Preliminary Order Issue 2.b.)

Southern Cross acknowledges that ERCOT will need to negotiate an agreement with the appropriate Reliability Coordinator or Balancing Authority at the eastern end of the DC tie once that entity is known.¹⁰ Southern Cross also supports a Commission finding imposing such a requirement.¹¹ Because this agreement is needed to ensure the reliable operation of both connected systems, ERCOT and Commission Staff recommend that the Commission require the agreement as a condition for interconnection.¹²

Southern Cross further requests that the Commission require ERCOT to "involve [Southern Cross] in its negotiations."¹³ To the extent Southern Cross is suggesting that it should be a party to the agreement, or that ERCOT and the other RC or BA must obtain the consent of Southern Cross as a condition for executing the agreement, ERCOT opposes this recommendation. ERCOT and the counterparty RC or BA—the entities responsible for ensuring reliability for their respective systems—must be free to negotiate the terms of the agreement without interference from any other party. ERCOT would not oppose a requirement to *consult* with Southern Cross in negotiating the agreement if the Commission deems such a requirement appropriate.

III. Planning Assumptions (Preliminary Order Issues 4.a. and 4.b.)

Southern Cross agrees with ERCOT Director of System Planning Warren Lasher's testimony that a new DC tie facility should be included in the planning models once the project

⁹ TIEC Initial Br. at 20; Southern Cross Initial Br. at 4.

¹⁰ Southern Cross Initial Br. at 16.

¹¹ *Id.*

¹² Commission Staff Initial Br. at FOF 100.

¹³ Southern Cross Initial Br. at 5, 16.

reaches a milestone indicating likelihood of completion, and that one such milestone might be posting of financial security for the transmission interconnection facilities and notice to proceed.¹⁴ However, this standard is not yet codified in the ERCOT Protocols or any other binding document. For this reason, it would be appropriate to refer this issue to the ERCOT stakeholder process, as both ERCOT and Commission Staff recommend.¹⁵

With respect to the import/export assumptions that should be used for DC ties used in ERCOT planning studies, Southern Cross, ERCOT, and Commission Staff agree that this issue should likewise be referred to the ERCOT stakeholder process.¹⁶ Luminant¹⁷ stands alone in asking the Commission to “direct ERCOT to develop a method to specifically identify congestion that is caused by imports and exports across the [Southern Cross] Project.”¹⁸ Luminant recommends modeling the ties in both full import and full export scenarios.¹⁹ Although it is possible that stakeholders might ultimately conclude that Luminant’s proposed method is most appropriate, they might also be concerned that this approach could overstate transmission needs. ERCOT believes this issue would greatly benefit from ERCOT stakeholder discussion and therefore recommends that the issue be referred to ERCOT.

IV. Congestion Management and Economic Dispatch (Preliminary Order Issue 4.d.)

The parties in this proceeding have proposed a wide range of findings concerning the management of congestion caused by exports or imports over the Southern Cross DC tie. ERCOT, Commission Staff, and Southern Cross each have recommended that the Commission require ERCOT to determine how congestion from the Southern Cross DC tie should be addressed, and if appropriate, implement such a solution.²⁰ Luminant proposes that the Commission require ERCOT to implement a Constraint Management Plan (CMP) or Special Protection System (SPS) to manage the congestion. And Texas Competitive Power Advocates (TCPA) favors some form of economic dispatch coupled with a CMP.²¹

¹⁴ERCOT Ex. 1, Direct Testimony of Warren Lasher, at 5:24-6:2.

¹⁵ERCOT Initial Br. at 5; Commission Staff Initial Br. at 16.

¹⁶ERCOT Initial Br. at 6; Commission Staff Initial Br. at 16; Southern Cross Initial Br. at 24.

¹⁷ Luminant Generating Company LLC and Luminant Energy Company LLC (“Luminant”)

¹⁸ Luminant Br. at 11.

¹⁹ *Id.*

²⁰ ERCOT Initial Br. at 13, Ordering Para. 5; Staff Br. at 39, FOF 113, 114; City of Garland Proposed Findings of Fact and Conclusions of Law at 9, FOF 71.

²¹ TCPA Initial Br. at 7-8.

ERCOT strongly prefers that this issue be referred to the stakeholder process at ERCOT for further discussion and study without restricting the range of possible solutions that may be developed. Under established procedures, SPSs and CMPs must be reviewed and approved by ERCOT and each affected Transmission Service Provider.²² No CMP or SPS has yet been studied or proposed for the Southern Cross DC tie, so it is uncertain at this time whether any feasible CMP or SPS solution exists. Furthermore, as Dan Woodfin, ERCOT Director of System Operations, testified, CMPs “have significant drawbacks” that would need to be evaluated.²³ Given the potential number of transmission elements that would need to be monitored by a CMP or SPS, there is no guarantee that an acceptable solution will be identified. ERCOT therefore disagrees with Luminant’s and TCPA’s position that a CMP or SPS should be explicitly required by the order. ERCOT recommends only that the Commission require ERCOT to determine an appropriate means of managing this congestion as a condition for the interconnection of the DC tie.

Southern Cross argues that the identification of a congestion management solution “should not be a condition of the order in this case.”²⁴ However, the only way the Commission could permissibly address that issue in its final order in this proceeding is by including it as a condition on the Garland CCN, as permitted by subsections (i) and (c-2) of PURA section 37.051.

V. Primary Frequency Response and Voltage Support Service (Preliminary Order Issue 4.h.)

ERCOT witness Dan Woodfin testified that the interconnection of the Southern Cross DC tie could result in the displacement of generators that would otherwise provide Primary Frequency Response (PFR) or Voltage Support Service (VSS), which could have reliability implications under certain system conditions.²⁵ Mr. Woodfin opined that, because of this potential displacement, “[i]t would be helpful for Southern Cross to be able to provide [PFR] and [VSS].”²⁶

While there are compelling questions about exactly how DC-tie-related PFR and VSS might feasibly be implemented, ERCOT would still prefer to explore these questions through the ERCOT stakeholder process. Requiring consideration of these issues does not necessarily mandate that ERCOT require PFR or VSS of DC tie owners. Both ERCOT’s and Commission Staff’s

²² ERCOT Nodal Operating Guides §§ 11.2(3)(a); 11.3.1(c); 11.4(2); 11.5(2); 11.6(2).

²³ ERCOT Ex. 2, Direct Testimony of Dan Woodfin at 9:10.

²⁴ Southern Cross Initial Br. at 5.

²⁵ ERCOT Ex. 2, Direct Testimony of Dan Woodfin at 16:16-19.

²⁶ ERCOT Ex. 2, Direct Testimony of Dan Woodfin at 16:11-12.

proposed findings reflect the possibility that ERCOT could resolve the issue by determining that there is no feasible solution.²⁷ ERCOT also notes that, if some form of these services is ultimately approved for DC ties, it is possible that the Qualified Scheduling Entity (QSE) scheduling a transaction over a tie could be identified as the appropriate party to bear any such costs, and not the tie owner. This is one of many components of various possible solutions to this issue that would need to be considered by stakeholders.

VI. Ramp Rates (Preliminary Order Issue 4.e.)

ERCOT's Initial Brief proposed an ordering paragraph that would require ERCOT to "adopt and implement any necessary changes to standards or systems to ensure that the potential ramping of the DC tie does not create a reliability concern."²⁸ Commission Staff proposed a similar finding.²⁹ Southern Cross "agrees that ramp rates will need to be established for the [Southern Cross] DC tie."³⁰ However, Southern Cross claims that "ERCOT's authority and the successful history in the ERCOT stakeholder process" in developing ramp-rate limitations for wind turbines counsels against including a finding in this case requiring such limitations.³¹ ERCOT disagrees. A Commission order requiring that the issue be addressed in the stakeholder process will help ensure that the issue receives the appropriate attention in the stakeholder process. And because this issue potentially impacts system reliability, it is important that this issue be addressed as a condition for the interconnection of the Southern Cross DC tie.³²

VII. Outage Coordination (Preliminary Order Issue 4.f.)

Because of the significant increase in the complexity of outage coordination due to the interconnection of a 2000MW DC tie which may be importing or exporting in any future hour,³³ ERCOT and Commission Staff both recommended findings that would require ERCOT to ensure

²⁷ Commission Staff Initial Br. at 39, FOF 106 ("ERCOT must study *whether* and how Southern Cross should provide Primary Frequency Response and reactive power to the ERCOT transmission system before the Garland Project is energized."); ERCOT Initial Br. at 13, Ordering Para. 9 ("ERCOT shall determine *whether* Southern Cross, or any entity scheduling a transaction over the Southern Cross DC tie, should be required to provide or procure Voltage Support Service or Primary Frequency Response, or the technical equivalent of either service. ERCOT shall adopt and implement any standard revisions necessary to effectuate any such requirement.").

²⁸ ERCOT Initial Br. at 13, Ordering Para. 6.

²⁹ Commission Staff Initial Br. at 38, FOF 101-102.

³⁰ Southern Cross Initial Br. at 17.

³¹ Southern Cross Initial Br. at 31.

³² ERCOT Initial Br. at 13, Ordering Para. 6.

³³ ERCOT Ex. 2, Direct Testimony of Dan Woodfin, at 14:14-18.

that outages can still feasibly be coordinated as a condition for the interconnection of the Southern Cross project.³⁴ Southern Cross agrees that these outage coordination matters should appropriately be addressed through the ERCOT stakeholder process, but asserts that no finding is needed to ensure this review occurs.³⁵ Although it is certainly possible that ERCOT could take up the issue without a Commission order to that effect, requiring that this issue be addressed before allowing the interconnection of the Southern Cross DC Tie ensures that this important matter does not go unaddressed. Also, ERCOT agrees with Southern Cross that the Commission has the authority to set a timeline for the resolution of any of these issues,³⁶ but for any matter involving reliability (such as this one), an ultimatum would be inappropriate if a reliable solution cannot be devised within the established timeframe.

VIII. Compliance Docket

ERCOT's Initial Brief endorses Commission Staff's proposal to establish a compliance docket to manage the various policy issues identified in this proceeding.³⁷ However, Southern Cross opposes this approach on the grounds that a compliance docket would be "too vague in its mechanics and too uncertain in its scope."³⁸ Southern Cross argues that this would therefore increase its project risk, potentially resulting in a catch-22 in which, for example, proof of financing would somehow be required in the docket, but unattainable due to the docket being open.³⁹ First, ERCOT assumes that the Commission's order in this case could easily clarify the purpose of the compliance docket, which would presumably be to collect filings from ERCOT (or perhaps Commission Staff) which certify that certain requirements of this order have been satisfied. Second, ERCOT is unaware of any proposed condition that would or could put Southern Cross in a "catch-22," and ERCOT assumes Southern Cross could always raise a complaint about such a nonsensical requirement if and when that concern were to arise. Otherwise, to the extent Southern Cross's financing depends on having completed all regulatory hurdles, an open compliance docket should only serve to provide accurate information about the items that remain to be resolved.

³⁴ ERCOT Initial Br. at 13, Ordering Para. 7; Commission Staff Initial Br. at 38, FOF 104.

³⁵ Southern Cross Initial Br. at 32.

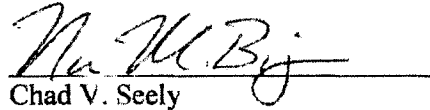
³⁶ Southern Cross Initial Br. at 33.

³⁷ ERCOT Initial Br. at 2; 13, Ordering Para. 11.

³⁸ Southern Cross Initial Br. at 18.

³⁹ Southern Cross Initial Br. at 18-19.

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CERTIFICATE OF SERVICE

I hereby certify that a copy of this document was served on all parties of record on June 17, 2016, by posting on the PUC Interchange or by first class U.S. mail in accordance with the provisions regarding service in SOAH Order No. 3 in this proceeding.

