

Item 10: ERCOT Recommendations to PUC Regarding Project No. 46304, Oversight Proceeding Regarding ERCOT Matters Arising Out of PUC Docket No. 45624 Relating to DC Tie Project Proposed by Southern Cross Transmission, LLC

Nathan Bigbee Deputy General Counsel

Board of Directors Meeting

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Overview

- Background of Project and PUC Directives
- Consideration of Directive #1 Registration and Market Segment
- Consideration of Directive #11 Cost Allocation
- Consideration of Directive #12 Export-Related Cost Allocation
- Next Steps
- Appendix: List of PUC Order 46304 Directives and Status



Background of Project and PUC Directives

- In 2014, Southern Cross Transmission LLC (SCT) and Pattern Power Marketing LLC received FERC approval (FERC Docket No. TX11-1-001) to interconnect a DC Tie that would connect ERCOT with the southeastern United States. The DC Tie would be capable of importing 2,000 MW and exporting 2,100 MW.
- In 2015, the Texas Legislature amended the Public Utility Regulatory Act (PURA) to authorize the PUC to "prescribe reasonable conditions" on the interconnection of the SCT DC Tie "to protect the public interest." (PURA § 37.051(c-2))
- In 2017, PUC imposed conditions for interconnection of the SCT DC Tie in two PUC proceedings:
 - City of Garland CCN docket (Docket No. 45624)
 - Oversight proceeding arising out of City of Garland CCN docket (Project No. 46304)
- As part of the oversight proceeding, PUC issued 14 directives to ERCOT requiring evaluation of the need for revisions to market, planning, and operational rules and practices to accommodate the SCT DC Tie.
- ERCOT began work with stakeholders on the 14 directives in 2017.



Directive 1

"ERCOT shall (a) determine the appropriate market participation category for Southern Cross Transmission LLC and for any other entity associated with the Southern Cross DC tie for which a new market participant category may be appropriate (creating new ones if necessary), (b) implement the modifications to the standard-form market-participant agreement and its protocols, bylaws, operating guides, and systems required for Southern Cross Transmission's participation and any other entity's participation, and (c) determine the appropriate market segment for Southern Cross Transmission and any other entity."



Directive 1 Determination

"ERCOT, after consultation with stakeholders, has determined that a new Market Participant type is needed to address the unique attributes of entities that operate Direct Current (DC) Ties. NPRR857, Creation of Direct Current Tie Operator Market Participant Role, and NOGRR177, Related to NPRR857, Creation of Direct Current Tie Operator Market Participant Role, created the role of "Direct Current Tie Operator" (DCTO) and established new requirements for DCTOs. NPRR857 and NOGRR177 were approved by the ERCOT Board of Directors on October 9, 2018. ERCOT will begin development of the software changes to implement NPRR857 and NOGRR177 upon Southern Cross Transmission LLC's ("Southern Cross") provision of funding for those changes, as provided in the memorandum of understanding between ERCOT and Southern Cross.

Additionally, Southern Cross has informed ERCOT that it does not wish to proceed with revisions to ERCOT Bylaws that would enable Southern Cross to join an appropriate market segment at this time. ERCOT rules do not require that a Market Participant belong to an ERCOT market segment. Consequently, ERCOT concludes that the ERCOT Bylaws should not be revised to enable Southern Cross to join an appropriate market segment. Should Southern Cross or any other Entity associated with the Southern Cross DC Tie wish to pursue membership in a market segment in the future, the ERCOT Bylaws and Bylaws change process in effect at the time of the application will apply."



Basis for Determination

Market Participant Type

- PUC's order in Project No. 46304 requires ERCOT to "determine the appropriate market participation category for Southern Cross Transmission LLC" and to implement any appropriate modifications to ERCOT rules and systems.
- In 2017, ERCOT concluded that no existing no existing Market Participant category was appropriate for entities, like SCT, that own and/or operate DC Ties but that are not eligible to be considered Transmission Service Providers (TSP) under ERCOT or PUC rules.
- NPRR857 and NOGRR177 established the DCTO role and the rights and duties of this new Market Participant type.
- The revisions to ERCOT rules will be formally implemented once SCT has funded the system changes needed to effectuate those revisions, consistent with the PUC's order in Docket No. 45624.



Basis for Determination

<u>Market Segment</u>

- The PUC's order in Project No. 46304 requires ERCOT to "determine the appropriate market segment for Southern Cross Transmission and any other entity."
- In a 2018 memorandum, ERCOT concluded that Southern Cross "does not fit within any of the existing Segments" and recommended that stakeholders consider modifying either the Investor-Owned Utility or Independent Power Marketer segment definitions to include entities like SCT.
- Stakeholders discussed this issue at the February 22, 2018 TAC meeting, but did not reach a consensus.
- In May 2022, SCT confirmed to ERCOT that it does not intend to pursue placement in an ERCOT market segment at this time.
- If SCT or any other Entity associated with the SCT DC Tie wishes to pursue membership in a Market Segment in the future, the ERCOT Bylaws and Bylaws change process in effect at the time of the application will apply.

WMS endorsed ERCOT staff's determination on June 1, 2022.

ROS endorsed ERCOT staff's determination on June 2, 2022.

TAC endorsed ERCOT staff's determination on June 27, 2022.



Determination on Directive #1

ERCOT staff recommends that the Board accept ERCOT staff's determination that: (1) a new Market Participant type is needed to address the unique attributes of entities that operate DC Ties, (2) approved NPRR857 and NOGRR177 created the DCTO role and established new requirements for DCTOs, (3) the ERCOT Bylaws should not be revised to enable SCT to join an appropriate market segment because SCT does not wish to pursue membership in a market segment at this time, and (4) should SCT or any entity associated with the SCT DC Tie wish to pursue membership in a Market Segment in the future, the ERCOT Bylaws and Bylaws change process in effect at the time of application will apply.

<VOTE>



Directive 11

"ERCOT shall study and recommend appropriate responsibility for, and allocation of, the costs identified in the Commission's final order in Docket No. 45624, including costs common to the ERCOT system and special costs that are specific to the Garland line and Southern Cross DC tie, and shall identify any existing protocols that need to be modified or new protocols that need to be created, or (if appropriate) any existing Commission rules that need to be modified or new rules that need to be enacted, to appropriately address those costs."

Directive 11 Determination

"ERCOT has determined that costs identified in the Public Utility Commission of Texas's (PUC) final order in Docket No. 45624 have been appropriately addressed through the resolution of each of the PUC's directives in Project No. 46304 and through the memorandum of understanding between ERCOT and Southern Cross Transmission LLC. ERCOT has not identified any additional revisions to ERCOT Protocols or PUC rules that are required to appropriately address these costs."



Basis for Determination

- Costs associated with the operation of the SCT DC Tie have been implicitly addressed by the resolution of each of the directives in the 46304 Order without requiring an explicit allocation of those costs.
- Costs of studies and other ERCOT staff activities were allocated pursuant to an October 2017 memorandum of understanding (MOU) between ERCOT and SCT. The MOU provides that SCT will reimburse ERCOT each month for its labor costs associated with the resolution of the directives.
- The MOU also provides that SCT will fund the development of software changes needed to implement the revisions to ERCOT rules required by the directives.

WMS endorsed ERCOT staff's determination on June 1, 2022. ROS endorsed ERCOT staff's determination on June 2, 2022. TAC endorsed ERCOT staff's determination on June 27, 2022.



Determination on Directive #11

ERCOT staff recommends that the Board accept ERCOT staff's determination that costs identified in the PUC's final order in Docket No. 45624 have been appropriately addressed through the resolution of each of the PUC's directives in Project No. 46304 and through the memorandum of understanding between ERCOT and SCT, and that ERCOT has not identified any additional revisions to ERCOT Protocols or PUC rules that are required to appropriately address these costs.

<VOTE>



Directive 12

"ERCOT shall study and determine for export-related costs whether the qualified scheduling entity should be assigned costs that ordinarily would ultimately be paid by the end-use customer."

Directive 12 Determination

"ERCOT has determined that costs associated with exports over DC Ties have been sufficiently addressed by the resolution of other directives and that no further revision to any cost allocation mechanism is necessary."



Basis for Determination

- ERCOT has determined that the impacts of imports and exports over the SCT DC Tie have been identified through ERCOT's resolution of the various other directives in PUC Project No. 46304.
- The costs associated with resolving these impacts have been implicitly allocated through resolution of the directives or have been explicitly allocated to SCT under the October 2017 memorandum of understanding (MOU) between ERCOT and SCT.
- ERCOT has evaluated the impact of exports over the DC Ties and has not identified any other category of costs that should properly be allocated to QSEs or SCT pursuant to this directive.

WMS endorsed ERCOT staff's determination on June 1, 2022. ROS endorsed ERCOT staff's determination on June 2, 2022. TAC endorsed ERCOT staff's determination on June 27, 2022.



Determination on Directive #12

ERCOT staff recommends that the Board accept ERCOT staff's determination that the costs associated with exports over DC Ties have been sufficiently addressed by the resolution of other directives and that no further revision to any cost allocation mechanism is necessary.

<VOTE>



Next steps

- ERCOT staff will continue to provide updates to the PUC on the status of these directives, as required by directives 13 and 14.
- ERCOT staff has provided determinations for all other directives except for directive 2, which requires ERCOT staff to execute a coordination agreement with the grid operator on the eastern end of the DC Tie. Work on directive 2 cannot commence until ERCOT has been notified of the precise location of the eastern end of the DC Tie.
- Additional information about ERCOT's work and progress on each of the PUC's directives is available at <u>http://www.ercot.com/mktrules/puctDirectives/southernCross</u>



Appendix



List of PUCT Order 46304 Directives

Directive	Subject	Anticipated Start
1	Determination of appropriate Market Participant category and market segment for SCT.	In Progress
2	Execution of any necessary coordination agreements.	Not Started
3	Determination regarding ramp rate restrictions.	Complete
4	Development of methodology for outage coordination.	Complete
5	Determination of planning model assumptions and considerations.	Complete
6	Determination regarding any needed transmission upgrades.	Complete
7	Determination as to how to manage congestion caused by DC Ties.	Complete



List of PUCT Order 46304 Directives (continued)

Directive	Subject	Anticipated Start
8	Determination regarding Primary Frequency Response and Voltage Support Service.	Complete
9	Determination regarding modifications to Ancillary Services.	Complete
10	Determination regarding price formation under emergency conditions.	Complete
11	Determination regarding allocation of costs identified in PUCT Docket No. 45624.	In Progress
12	Determination regarding possible assignment of export-related costs to Qualified Scheduling Entities (QSEs).	In Progress
13	ERCOT reporting of status of work on Directives to PUCT.	Ongoing
14	ERCOT updates to PUCT regarding completion dates for Directives 1 to 12.	Ongoing



Market Stakeholder Process Summary

Working Groups ERCOT's engagement with experts in nonvoting Working Groups or Workshops

Capture key assumptions and solutions in whitepapers and/or Revision Requests



Subcommittee

IAC

Board

Take determinations to appropriate voting body (ROS, WMS, PRS) for endorsement

Whitepapers presented to relevant subcommittees for endorsement. Stakeholder comments posted on ercot.com along with other documents relevant to work on Directives.

Determination on Directive presented to Technical Advisory Committee (TAC)

TAC has the option to vote to endorse a determination on a Directive.



Determination on Directive presented to ERCOT Board of Directors ERCOT Board must approve a determination on a Directive before it will be submitted as resolved to PUC.

