

Addendum to

Report: ERCOT Southern Cross DC Tie Transmission Study

**Version 1.0**

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# Executive Summary

This addendum memorializes the results of a sensitivity analysis conducted by ERCOT to evaluate dynamic stability for the ERCOT grid assuming the proposed Southern Cross Transmission (SCT) DC Tie was importing 1,375 MW into ERCOT during summer peak conditions based on the consideration of the Most Severe Single Contingency (MSSC). To perform this analysis ERCOT used the 2018 ERCOT Dynamics Working Group (DWG) Future Year 2020 Summer Peak flat start case.

The results of this analysis showed that the transmission system would experience instability at the studied SCT DC Tie import level (1,375 MW) for the loss of a double circuit transmission line (NERC P7 Event). Previous analysis indicated that thermal constraints would be the most binding for imports; however, if those constraints were relieved, a stability limit would prevent SCT DC Tie imports at 1,375 MW without additional transmission system upgrades. The actual stability limit could be lower and could be managed in real time by curtailing the SCT DC Tie or by creating a Generic Transmission Constraint (GTC).