SPP

Southwest Power Pool

System Impact Study
SPP-2026-024

For Transmission Service
Requested By:
MAG

From ERCOTE to CSWS.GATEWAY

For a Reserved Amount Of
300 MW

From 01/29/2026
To 02/01/2026

1. **Executive Summary**

MAG has requested a system impact study for daily firm transmission service from ERCOTE to CSWS.GATEWAY. The period of the transaction is from 01/29/2026 00:00 to 02/01/2026 00:00. The request is for reservation 108334526.

The 300 MW transaction from ERCOTE has an impact on the following flowgates with no AFC: WELLYDWELNWT, LYDVALNWTVAL. To provide the AFC necessary for this transfer, the impact on the flowgates must be relieved.

After studying many scenarios using generation redispatch, there are several feasible scenarios that will relieve the flowgates in question.

2. Introduction

MAG has requested a system impact study for transmission service from ERCOTE to CSWS.GATEWAY.

Two constrained flowgates require relief for this reservation to be accepted. The flowgates and their explanations are as follows:

- WELLYDWELNWT: Welsh – Lydia 345kV for the loss of Welsh – Northwest Texarkana 345kV

- LYDVALNWTVAL: Lydia – Valiant 345kV for the loss of Northwest Texarkana - Valiant 345kV

3. Study Methodology

A. Description

Southwest Power Pool used Transmission Adequacy & Reliability Assessment (TARA) to obtain possible unit pairings that would relieve the constraint. TARA calculates impacts on monitored facilities for all units within the Southwest Power Pool Footprint. The SPP ATC Calculator is used to determine response factors for the time period of the reservation.

B. Model Updates

The 2025 Southwest Power Pool model was used for the study. This model was updated to reflect the most current information available.

C. Transfer Analysis

Using the short-term calculator, the limiting constraints for the transfer are identified. The response factor of the transfer on each constraint is also determined.

The product of the transfer amount and the response factor is the impact of a transfer on a limiting flowgate that must be relieved. With multiple flowgates affected by a transfer, relief of the largest impact may also provide relief of smaller impacts.

Using Transmission Adequacy & Reliability Assessment (TARA), specific generator pairs are chosen to reflect the units available for redispatch. The quotient of the amount of impact that must be relieved, and the generation sensitivity factor calculated by TARA is the amount of redispatch necessary to relieve the impact on the affected flowgate.

4. Study Results

After studying the impacts of the request, two flowgates require relief. The flowgates and associated amount of relief are as follows:

Table 1

Flowgate	Duration	Sensitivity (%)	Required Relief (MW)
5320:WELLYDWELNWT	1/29/2026 00:00 - 2/1/2026 00:00	8.12%	24.35
5658:LYDVALNWTVAL	1/29/2026 00:00 - 2/1/2026 00:00	4.58%	13.73

Table 2 displays a list of generator pairs that are possible relief options for each flowgate in question and the amount of redispatch capacity needed.

Table 2

5320:WELLYDWELNWT			
Increment	Decrement	Sensitivity	MW
KIOWA S1	WELSH3-1	56.51%	43.09
TUCO_INT 7_1	WELSH3-1	51.74%	47.06
CUNINGHAM4 1	WELSH3-1	51.54%	47.24
KIOWA S1	LEBROCS1	48.02%	50.70
KIOWA S1	KNOXLEE4	46.52%	52.35
TUCO_INT 7_1	LEBROCS1	43.25%	56.30
CUNINGHAM4 1	LEBROCS1	43.05%	56.56
TUCO_INT 7_1	KNOXLEE4	41.74%	58.33
CUNINGHAM4 1	KNOXLEE4	41.55%	58.61

5658:LYDVALNWTVAL			
Increment	Decrement	Sensitivity	MW
KIOWA S1	WELSH3-1	55.42%	24.78
KIOWA S1	LEBROCS1	50.72%	27.07
KIOWA S1	KNOXLEE4	50.18%	27.36
TUCO_INT 7_1	WELSH3-1	49.14%	27.94
CUNINGHAM4 1	WELSH3-1	48.88%	28.09
TUCO_INT 7_1	LEBROCS1	44.44%	30.89
CUNINGHAM4 1	LEBROCS1	44.19%	31.07
TUCO_INT 7_1	KNOXLEE4	43.90%	31.28
CUNINGHAM4 1	KNOXLEE4	43.65%	31.46

Increment	Decrement	Sensitivity	MW

5. Conclusion

Generation redispatch options were studied to relieve the necessary constraints. The results of this study show that the constraints on the flowgates in question could be relieved by executing one or more of the options described in the Study Results section of this document.