SPP Southwest Power Pool

System Impact Study
SPP-2026-012

For Transmission Service
Requested By:
REMC

From OPPD to MEC

For a Reserved Amount Of
75 MW

From 01/24/2026
To 01/27/2026

1. Executive Summary

REMC has requested a system impact study for daily firm transmission service from OPPD to MEC. The period of the transaction is from 01/24/2026 00:00 to 01/27/2026 00:00. The request is for reservation 108283004.

The 75 MW transaction from OPPD has an impact on the following flowgates with no AFC: NEBS56S40S55, COPSTJCPFRSJ. 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

REMC has requested a system impact study for transmission service from OPPD to MEC.

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

- NEBS56S40S55: Nebraska City – Sub 3456 345 kV for the loss of Sub 3740 – Sub 3455 345 kV

- COPSTJCPFRSJ: Cooper – St. Joe 345 kV for the loss of St. Joe to Fairport to Cooper 345 kV

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)
5508:NEBS56S40S55	1/26/2026 00:00 - 1/26/2026 00:00	13.81%	10.36
5566:COPSTJCPFRSJ	1/24/2026 00:00 - 1/27/2026 00:00	5.32%	3.99

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

5508:NEBS56S40S55			
Increment	**Decrement**	**Sensitivity**	**MW**
LES_CBLUF3	NEBCTY1G	45.76%	22.64
LES_CBLUF3	CASS 2G	45.76%	22.64
N OMA 5G	NEBCTY1G	45.10%	22.97
N OMA 5G	CASS 2G	45.10%	22.97

5566:COPSTJCPFRSJ			
Increment	**Decrement**	**Sensitivity**	**MW**
LAKERD34 5	NEBCTY1G	46.34%	8.61
LAKERD34 5	CASS 2G	44.64%	8.94

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.