MISO Affected System Study
for
SPP DISIS-2017-001 #R4
Addendum#1

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Revision Table

Date	Version.	Description
01/29/2026	1	Issue addendum due to late termination of GEN-2017-048

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1. Executive Summary

This addendum is driven by the withdrawal of GEN-2017-048 from the DISIS-2017-001 cluster. Cost of the network upgrades are re-allocated among the remaining projects that were included in the MISO Affected System Study for SPP DISIS-2017-001 #R4 (Restudy#4). The Network Upgrades were also updated with information from the Facility Study reports from Transmission Owners.

1.1. Study Project(s)

5 projects from SPP's DISIS-2017-001 cluster were studied in the the Restudy#4, as listed in table 1-1. Based on SPP's GI queue posting, GEN-2017-048 terminated its GIA on 11/17/2025.

Table 1-1 Study Projects in MISO Affected System Study for SPP DISIS-2017-001 #R4

Project #	Town or County	State	Point of Interconnection	Generation Type	Pmax	SH (MW)	Current Status as of 01/26/2026
GEN-2017-004	Cloud	KS	Elm Creek - Summit 345 kV	Wind	201.6	201.6	IA FULLY EXECUTED/ON SCHEDULE
GEN-2017-010	Bowman	ND	Rhame 230 kV	Wind	200.1	200.1	IA FULLY EXECUTED/COMMERCIAL OPERATION
GEN-2017-014	Haakon	SD	Philip Tap 230 kV	Wind	300	300	IA FULLY EXECUTED/ON SCHEDULE
GEN-2017-048	Williams	ND	Neset 230 kV	Wind	300	300	TERMINATED
GEN-2017-094	Wessington / Hand	SD	Fort Thompson-Huron 230 kV	Wind	200	200	IA FULLY EXECUTED/COMMERCIAL OPERATION

1.2. Network Upgrades and Cost Allocation

Due to GEN-2017-048 termination, the Network Upgrades identified from Restudy#4 were re-allocated among the remaining projects in table 1-1, Information of the Network Upgrades was also updated based on the Facility Study Report provided by the Transmission Owners. Detailed information can be found in table 1-2 and Table 1-3.

Table 1-2 Updated Network Upgrade Cost Allocation-Percentage

Network Upgrade	Owner	GEN-2017-004	GEN-2017-010	GEN-2017-014	GEN-2017-048 (Withdrawn)	GEN-2017-094
Add 40 MVar switched cap at Wahpeton 230 kV (620329), Wahpeton to Fergus Falls 230 kV Line Modification[1]	OTP	5.75%	33.63%	34.96%	0.00%	25.66%
Add 60 MVar switched cap at Buffalo 345 kV (620329)[2]	OTP	4.55%	38.84%	34.71%	0.00%	21.90%
100 MVAR 345kV Cap Bank at Blackhawk 345 kV (636199) [3]	MEC	14.85%	24.02%	34.93%	0.00%	26.20%
100 MVAR 345kV Cap Bank at Montezuma 345 kV (635730), no longer needed[4]	MEC	14.00%	22.67%	37.33%	0.00%	26.00%

Note: the percentage values are rounded to 0.01%

Table 1-3 Updated Network Upgrade Cost Allocation-in Dollar

Network Upgrade	Owner	Upgrade Cost	GEN-2017-004	GEN-2017-010	GEN-2017-014	GEN-2017-048 (Withdrawn)	GEN-2017-094
Add 40 MVar switched cap at Wahpeton 230 kV (620329), Wahpeton to Fergus Falls 230 kV Line Modification[1]	OTP	$9,014,698	$518,345.1350	$3,031,642.9374	$3,151,538.4208	$0.0000	$2,313,171.5068
Add 60 MVar switched cap at Buffalo 345 kV (620329)[2]	OTP	$8,037,877	$365,723.4035	$3,121,911.4268	$2,789,947.1067	$0.0000	$1,760,295.0630
100 MVAR 345kV Cap Bank at Blackhawk 345 kV (636199) [3]	MEC	$8,100,000	$1,202,850.0000	$1,945,620.0000	$2,829,330.0000	$0.0000	$2,122,200.0000
100 MVAR 345kV Cap Bank at Montezuma 345 kV (635730), no longer needed[4]	MEC	$0	$0.0000	$0.0000	$0.0000	$0.0000	$0.0000
Total Cost Per Project		$25,152,575	$2,086,918.5385	$8,099,174.3642	$8,770,815.5275	$0.0000	$6,195,666.5698

Notes: (1) Section 4.ii.b and 4.ii.c, OTP Facility Study Report-Southwest Power Pool Generation Interconnections MISO Project DISIS-2017 issued on 01/20/2025

(2) Section 4.ii.a, Facility Study Report-Southwest Power Pool Generation Interconnections MISO Project DISIS-2017, issued by OTP, on 01/20/2025.

(3) Section 1.1, Facilities Study for Black Hawk Substation Add 345 kV, 100 MVAR Capacitor, issued by MidAmerican, updated October 2024

(4) Section 1.1, Addendum to Facilities Study for Montezuma Substation Add 345 kV, 100 MVAR Capacitor, issued by MidAmerican, May 2025

For the study projects with assigned Network Upgrades, the projects should not be allowed to come into service before the required Network Upgrades are in service, unless a MISO restudy removes the mitigation requirement from the project, or an interim limit is provided to the project through MISO Annual ERIS or QOL process.