

AECI 2026 GENERATOR INTERCONNECTION LIMITED OPERATIONS STUDY REPORT

INTRODUCTION

Based on data available through the Associated Electric Cooperative Inc. (AECI), the Southwest Power Pool (SPP), and the Midcontinent Independent System Operator (MISO) generation interconnection queues, AECI has identified generator interconnection requests (GIRs) that have come into operation or will be placed into operation before June 1, 2027. Some or all of the Network Upgrades (NUs) assigned to these requests through the AECI GI/Affected System Study (AFS) evaluation are not yet in service; as such, these GIRs (Study Requests) may be subject to operation at a limited output. The full lists of Study Requests included in the Study are listed in Table 1, Table 2, and Table 3.

Table 1: MISO Study Requests Evaluated

Study Cycle	Project #	Study Region	TO	POI	Fuel Type	Capacity (MW)
DPP-2017-AUG	J817	Central	AMMO	Warrenton 161kV Substation	Solar	139.0
	J944	South	EES	Portageville to New Madrid 161kV Line	Solar	200.0
DPP-2018-APR	J994	Central	AMMO	Guthrie 161kV Substation	Solar	100.0
	J1107	Central	AMMO	Kelso to Lutesville 345kV Line	Solar	200.0
	J1026	Central	AMMO	Spencer Creek 345kV Substation	Wind	380.0
	J1145	Central	AMMO	Overton to McCredie to Montgomery 345kV Line	Solar	250.0
	J1087	Central	AMMO	Miner to Kelso 161kV Line	Solar	200.0
	J976	Central	AMMO	Montgomery to Enon 345kV Line	Solar	300.0
	J987	Central	AMMO	Montgomery 161kV Substation	Solar	100.0
	J956	Central	AMMO	Spencer Creek 345kV Substation	Solar	200.0
	J1025	Central	AMIL	Zachary to Maywood 345kV Line	Wind	290.0
	J1182	Central	AMIL	Zachary Substation 345kV Bus	Solar	250.0
	J1007	South	EES-EAI	Marion to Marked Tree 161kV Line	Solar	180.0
	J1060	South	EES-EAI	West Memphis to Keo 500kV Line	Solar	450.0
	J1125	South	EES-EAI	Wynne South to Wynne East AECC 161kV Line	Solar	135.0
	J1132	West	ITCT	Creston East 69kV Substation	Solar	50.0
	J1040	West	MDU	Wishek Junction 230kV Substation	Wind	250.0
DPP-2019-Cycle	J1354	Central	HE	Decatur County 138kV Substation	Battery Storage	118.0
	J1453	Central	AMIL	Havana to Shockley 138kV Line	Wind	165.0
	J1383	Central	AMIL	Ipava 138kV Substation	Solar	150.0
	J1464	Central	AMIL	Meredosia to Austin 345kV Line	Solar	592.8
	J1299	Central	AMMO	Miner to Kelso 161kV Line	Solar	149.0
	J1268	Central	AMMO	Pike to Troy 161kV Line	Solar	150.0
	J1213	Central	AMMO	Taum Sauk 138kV Substation (Bus 1 & 2)	Hydro	60.0

Study Cycle	Project #	Study Region	TO	POI	Fuel Type	Capacity (MW)
	J1289	Central	AMIL	Turner to Austin 345kV Line	Wind	200.0
	J1241	Central	AMIL	West Mt Vernon to Xenia 345kV Line	Solar	165.0
	J1437	South	AECC	AECC Dry Creek 161kV Substation	Wind	180.0
	J1218	West	MEC	Sub 92 345kV Substation	Solar	200.0
	J1229	West	MEC	Sub 92 345kV Substation	Hydro	50.0
DPP-2020-Cycle	J1734	West	ITCT	Burlington Generation to Wever 161kV Line	Solar	150.0
	J1519	Central	AMMO	St. Francois to Lutesville 345kV Line	Solar	180.0
	J1514	South	EES-EAI	Driver 230kV Substation	Solar	100.0
	J1670	South	EES-EAI	Crooked Lake 161kV Substation (at J586 POI)	Solar	50.0
	J1701	Central	AMIL	Macomb to Ipava 138kV Line	Wind	200.0
	J1813	South	EES-EMI	Entergy Freeport 230kV Substation	Gas	205.0
	J1816	South	EES-EAI	Cherry Valley to Parkin 161kV Line	Solar	135.0
	J1581	West	XEL	Nobles County 345kV Substation	Solar	200.0
	J1620	West	XEL	Split Rock to Pipestone 115kV Line	Solar	125.0
	J1842	South	EES-EAI	Forrest City N SS to Wynne South 161kV Line	Wind	135.0
	J1839	Central	AMIL	Decatur ADM North 138kV Substation	Gas	340.3
	J1566	West	MMPA	Rutland 161kV Substation	Solar	150.0
	J1502	West	WEC	Briggs Road to North Madison 345kV Line	Solar	225.0
	J1562	South	EES-EAI	Blytheville I-55 to AECC Blytheville North 161kV Line	Solar	200.0
	J1834	South	EES	Sabine 138/230kV Substation	Gas	126.0
	J1769	West	DPC	Beaver Creek to Rice 161 kV Line (same POI as J898)	Wind	80.0
	J1649	Central	BREC	Shell to McCracken County 69kV Line	Solar	60.0
	J1590	West	MEC	Remsen Township 345kV Substation	Wind	200.0

Table 2: SPP Study Requests Evaluated

Study Cycle	Project #	Study Region	TO	POI	Fuel Type	Capacity (MW)
DISIS-2016-002	GEN-2016-118	SPP	WFEC	Dover Switchyard 138kV Substation	Wind	288.0
	GEN-2016-091	SPP	AEP	Gracemont to Lawton East Side 345kV Line	Wind	303.6
	GEN-2016-133	SPP	AEP	Riverside 345kV Substation	Wind	187.5
	GEN-2016-134	SPP	AEP	Riverside 345kV Substation	Wind	187.5
	GEN-2016-137	SPP	AEP	Riverside 345kV Substation	Wind	187.5
	GEN-2016-138	SPP	AEP	Riverside 345kV Substation	Wind	187.5
	GEN-2016-141	SPP	AEP	Riverside 345kV Substation	Wind	350.0
	GEN-2016-142	SPP	AEP	Riverside 345kV Substation	Wind	350.0
	GEN-2016-145	SPP	AEP	Riverside 345kV Substation	Wind	175.0
	GEN-2016-146	SPP	AEP	Riverside 345kV Substation	Wind	175.0
	GEN-2016-119	SPP	OGE	Spring Creek to Sooner 345kV Line	Wind	600.0
	GEN-2016-149	SPP	WERE	Stranger Creek 345kV Substation	Wind	302.0
	GEN-2016-150	SPP	WERE	Stranger Creek 345kV Substation	Wind	302.0
	GEN-2016-174	SPP	WERE	Stranger Creek 345kV Substation	Wind	302.0
	GEN-2016-176	SPP	WERE	Stranger Creek 345kV Substation	Wind	302.0
	GEN-2016-128	SPP	OGE	Woodring 345kV Substation	Wind	176.0
DISIS-2017-001	GEN-2017-009	SPP	WERE	Neosho to Caney River 345kV Line	Wind	302.0
	GEN-2017-061	SPP	GRDA	GRDA1 to CLARMR 5 161kV Line	Solar	101.5
	GEN-2017-005	SPP	WERE	Marmaton to Litchfield 161kV Line	Wind	190.0
	GEN-2017-060	SPP	EDE	LaRussell Energy Center 161kV Substation	Wind	149.4
	GEN-2017-073	SPP	GRDA	Dry Gulch 161kV Substation	Solar	72.5
	GEN-2017-022	SPP	WERE	Altoona to NE Parson 138kV Line	Solar	65.0
	GEN-2017-074	SPP	AEP	Pryor Junction 138kV Substation	Solar	72.5
	GEN-2017-082	SPP	EDE	Asbury Plant 161kV Substation	Wind	149.4
	GEN-2017-092	SPP	OGE	Canadian River to Muskogee and Muskogee to Seminole 345kV Line	Solar	200.0
	GEN-2017-077	SPP	AEP	Explorer Claremore Tap COOYYAH4 138kV Substation	Solar	124.7
	GEN-2017-086	SPP	WERE	Viola 345kV Substation	Wind	150.0
	GEN-2017-018	SPP	ITCGP	Thistle 345kV Substation	Solar	189.0
	GEN-2017-040	SPP	OGE	Canadian River to Muskogee and Muskogee to Seminole 345kV Line	Solar	200.1
	GEN-2017-071	SPP	OGE	Greenwood 138kV Substation	Solar	124.7
	GEN-2017-072	SPP	OGE	Greenwood 138kV Substation	Solar	52.2
	GEN-2017-075	SPP	OGE	Hugo to Sunnyside 345kV Line	Solar	200.0
	GEN-2016-037	SPP	AEP	Chisholm to Gracemont 345kV Line	Wind	300.0
	GEN-2017-094	SPP	WAPA	Fort Thompson to Huron 230kV Line	Wind	200.0
	GEN-2017-027	SPP	OGE	Pooleville to Ratliff (Carter County) 138kV Line	Wind	140.0
	GEN-2017-033	SPP	AEP	Oklunion 345kV Substation	Wind	200.0

Study Cycle	Project #	Study Region	TO	POI	Fuel Type	Capacity (MW)
	GEN-2017-097	SPP	WAPA	Underwood 115kV Substation	Solar	128.0
	GEN-2017-010	SPP	BEPC	Rhame 230kV Substation	Wind	200.1
DISIS-2017-002	GEN-2017-108	SPP	KCPL	Stillwell to Clinton 161kV Line	Solar	400.0
	GEN-2017-115	SPP	KCPL	Holt County 345kV Substation	Wind	244.0
	GEN-2017-121	SPP	WERE	Sumner 138kV Substation	Wind	200.0
	GEN-2017-144	SPP	NPPD	Holt County 345kV Substation	Wind	200.0
	GEN-2017-146	SPP	SPS	Deaf Smith to Plant X 230kV Line	Wind	151.8
	GEN-2017-150	SPP	OGE	Minco 345kV Substation	Solar	250.0
	GEN-2017-151	SPP	SPS	TUCO to Oklaunion 345kV Line	Wind	300.0
	GEN-2017-158	SPP	SPS	Tolk 230kV Substation	Wind	265.0
	GEN-2017-164	SPP	OGE	Woodring 345kV Substation	Solar	250.0
	GEN-2017-175	SPP	WAPA	Vfodnes to Utica Jct. 230kV Line	Wind	300.0
	GEN-2017-187	SPP	SPS	Flatland 115kV Substation	Solar	150.0
	GEN-2017-188	SPP	EDE	Asbury 161kV Substation	Solar	130.0
	GEN-2017-210	SPP	NPPD	McCool 345kV Substation	Solar	310.0
	GEN-2017-231	SPP	OGE	Branch 161kV Substation	Solar	72.5
	GEN-2017-234	SPP	NPPD	Spalding to North Loup 115kV Line	Wind	115.0
	GEN-2017-239	SPP	SPS	Mahoney 230kV Substation	Solar	300.0
DISIS-2018-001	GEN-2018-026	SPP	OGE	Mustang 138kV Substation	Battery Storage	100.0
	GEN-2018-050	SPP	AEP	Longwood 345kV Substation	Solar	200.0
	GEN-2018-055	SPP	AEP	Terry Road 345kV Substation (shared with Rush Springs Windfarm on a common gen-tie)	Solar	252.0
DISIS-2018-002/ DISIS-2019-001	GEN-2019-012	SPP	OGE	Woodward 345kV Substation	Battery Storage	200.0
	GEN-2019-030	SPP	ITCGP	Spearville to Clark County 345kV Line	Wind	252.0

Table 3: AECI Study Requests Evaluated

Study Cycle	Project #	Study Region	TO	POI	Fuel Type	Capacity (MW)
AECI GI	GI-101/GI-102	AECI	AECI	Rockies Express 161kV Substation	Gas	535.0
AECI GI	GI-104	AECI	AECI	Stillwater 138kV Substation	Gas	460.0
AECI GI	GI-116	AECI	AECI	St Francis 161kV Substation	Gas	26.0
AECI GI	GI-117	AECI	AECI	St Francis 161kV Substation	Gas	46.0

INPUTS AND ASSUMPTIONS

The following process was used to determine which Study Requests were included in this year's Limited Operation Study:

1. A list is compiled of all GIRs that have been included in an AECI AFS study or AECI GI study.
2. The GIR list is filtered to include any GIRs that meet all of the following requirements:
 - a. For AECI GIRs:
 - i. The GIR has executed a GIA with AECI and,
 - ii. The GIR's is expected to be in service on or before 6/1/27.
 - b. For SPP GIRs:
 - i. The GIR has executed a GIA with SPP and,
 - ii. The GIR's is expected to be in service on or before 6/1/27.
 - c. For MISO GIRs:
 - i. Per MISO's public queue, the GIR has a "Negotiated In Service Date" on or before 6/1/27.
3. The filtering process described in item 2 is based on information available through MISO and SPP public GI queues. AECI coordinates with SPP/MISO to confirm the public queue information is accurate and adjusts the filtered list based on SPP/MISO feedback.

Each of the SERC (Southeast Electric Reliability Council) member transmission planners are responsible for submitting system modeling data to SERC for development of the power flow models. Power flow analysis utilized the 2025 cases from the latest Long-Term Working Group (LTWG) models, as developed by SERC Reliability Corporation (SERC). The models used in analysis are shown in Appendix A.

To create the Base Cases used in study, existing AECI generators designated as "Local Gen" in Appendix A were dispatched at Pmax in the summer and winter peak cases and sunk off the AECI system. These generator's dispatch values were not modified in the light load case.

To create the Project Cases, the Study Requests are added to the Base Cases and dispatched their max capacity shown in Table 1, Table 2, and Table 3 in the summer and winter peak cases. For the light load case, all Study Requests are added and dispatched at their max capacity with the exception of SPP Solar and Battery Study Requests which are dispatched at 0% to match SPP GI study methodology. AECI requests were sunk to the regions surrounding AECI, SPP requests were sunk to SPP, MISO Central and West requests were sunk to MISO North (Classic), and MISO South requests were sunk to MISO South.

Appendix D lists the Network Upgrades assigned by AECI in the AECI GI/AFS studies that include the Study Requests, along with the current status of each upgrade.

Full details of the inputs and assumptions are provided in Appendix A.

METHODOLOGY

Steady state analysis was performed to confirm the reliability impacts on the AECI system under various system conditions and outages. AECI's transmission system must be capable of operating within the applicable normal ratings, emergency ratings, and voltage limits of AECI planning criteria. AECI is a member of SERC, one of eight Electric Reliability Organizations under the North American Electric Reliability Corporation (NERC). As a member of SERC, AECI develops its planning criteria consistent with NERC Reliability Planning Standards and the SERC planning criteria. The NERC TPL-001-5 Planning Standard Table 1 requires that, for normal and contingency conditions, line and equipment loading shall be within applicable thermal limits, voltage levels shall be maintained within applicable limits, all customer demands shall be supplied, and stability of the network shall be maintained.

In evaluating the impacts of the Study Requests, the following thermal and voltage limits were applied to the analysis for P0 or normal system conditions:

- Thermal Limits within Applicable Rating – Applicable Rating shall be defined as the Normal Rating. The thermal limit shall be 100% of Rating A.
- Voltage Limits within Applicable Rating – Applicable Rating shall have the meaning of Nominal Voltage. Voltage limits shall be set at plus or minus five percent (+/- 5%), 0.95 p.u. - 1.05 p.u. for systems operating at 60 kV or above on load serving buses.

The following thermal and voltage limits were applied to the analysis for contingency conditions under P1 and P2EHV planning events:

- Thermal Limits within Applicable Rating – Applicable Rating shall be defined as the Emergency Rating. The thermal limit shall be 100% of Rating B.
- Voltage Limits within Applicable Rating – Applicable Rating shall have the meaning of Nominal Voltage. Voltage limits shall be set at plus five percent to minus ten percent (+5%/-10%), 0.90 p.u. – 1.05 p.u. for systems operating at 60 kV or above on load serving buses.

Analysis was performed on power flow cases prior to (Base Cases) and after (Project Cases) Study Requests being dispatched. Thermal and voltage criteria violations will be deemed an impact of the Study Requests if:

- A three percent (3%) or greater increase in flow on an overloaded facility based upon the rating of the facility is seen between Base and Project cases and that facility is assigned as either a Network

Upgrade (NU) or Contingent Facility (CF) in a AECI GI/AFS report that includes the Study Requests.

- Or a voltage violation has a two percent (2%) or greater change in the voltage between Base and Project cases.

To alleviate criteria violations deemed an impact of the Study Requests, the MW injection of the Study Request's shall be reduced as calculated in Maximum Facility Output (MFO) tool included in Appendix B. Instructions and parameters used to determine the reduction amount of each Study Request is detailed in Appendix B.

MFO amounts may differ between seasons. Power flow cases and any resulting MFO amounts will be applicable to the months shown in Table 4.

Table 4: Power Flows Cases Applicable Months

Case	Applicable Months
26W	Jan 1-Jan 31, Nov 1-Dec 31
26L	Feb 1-April 30
26S	May 1-Oct 31

STEADY STATE ANALYSIS RESULTS

Power flow results are shown in Appendix C. Elements in which criteria violations were observed and deemed an impact of the Study Requests are shown in Table 5.

Table 5: P0-P1-P2 Impact Results

Event	Monitored Facility					Season	Primary Outage	Base Loading	Project Loading	Tap Adjusted Loading
P0	300071	5CLINTN	161.00	761278	G17-108-TAP 161.00 1	26W	BASE CASE	23.0	106.8	-
P1	300036	5ELATHRP	161.00	300091	5LATHRP 161.00 1	26L	OPEN LINE FROM BUS 301563 [5MOCITYB1 161.00] TO BUS 301602 [5SHLCRK 161.00] CKT 1	20.3	125.4	-
P1	300036	5ELATHRP	161.00	300091	5LATHRP 161.00 1	26S	OPEN LINE FROM BUS 301563 [5MOCITYB1 161.00] TO BUS 301602 [5SHLCRK 161.00] CKT 1	29.7	131.6	-
P1	300036	5ELATHRP	161.00	300091	5LATHRP 161.00 1	26W	OPEN LINE FROM BUS 301563 [5MOCITYB1 161.00] TO BUS 301602 [5SHLCRK 161.00] CKT 1	62.5	123.9	-
P1	300036	5ELATHRP	161.00	301602	5SHLCRK 161.00 1	26L	OPEN LINE FROM BUS 301563 [5MOCITYB1 161.00] TO BUS 301602 [5SHLCRK 161.00] CKT 1	23.3	128.2	-
P1	300036	5ELATHRP	161.00	301602	5SHLCRK 161.00 1	26S	OPEN LINE FROM BUS 301563 [5MOCITYB1 161.00] TO BUS 301602 [5SHLCRK 161.00] CKT 1	39.1	141.9	-
P1	300036	5ELATHRP	161.00	301602	5SHLCRK 161.00 1	26W	OPEN LINE FROM BUS 301563 [5MOCITYB1 161.00] TO BUS 301602 [5SHLCRK 161.00] CKT 1	70.6	132.1	-
P1	300071	5CLINTN	161.00	761278	G17-108-TAP 161.00 1	26S	OPEN LINE FROM BUS 542969 [STILWEL5 161.00] TO BUS 761278 [G17-108-TAP 161.00] CKT 1	0.7	118.6	-
P1	300071	5CLINTN	161.00	761278	G17-108-TAP 161.00 1	26W	OPEN LINE FROM BUS 542969 [STILWEL5 161.00] TO BUS 761278 [G17-108-TAP 161.00] CKT 1	0.7	118.5	-
P1	300091	5LATHRP	161.00	300302	2LATHRP 69.000 1	26L	OPEN LINE FROM BUS 300107 [5OSBORN 161.00] TO BUS 301602 [5SHLCRK 161.00] CKT 1	14.7	125.2	-
P1	300091	5LATHRP	161.00	300302	2LATHRP 69.000 1	26S	OPEN BRANCH FROM BUS 300107 [5OSBORN 161.00] TO BUS 301564 [5FAIRPTB1 161.00] CKT 1 OPEN BRANCH FROM BUS 300290 [2OSBORN 69.000] TO BUS 300107 [5OSBORN 161.00] CKT 1 OPEN BRANCH FROM BUS 300107 [5OSBORN 161.00] TO BUS 301602 [5SHLCRK 161.00] CKT 1	48.6	136.3	-

Event	Monitored Facility						Season	Primary Outage	Base Loading	Project Loading	Tap Adjusted Loading	
P1	300091	5LATHRP	161.00	300302	2LATHRP	69.000	1	26L	OPEN LINE FROM BUS 300107 [5OSBORN 161.00] TO BUS 301602 [5SHLCRK 161.00] CKT 1	14.7	125.2	-
P1	300091	5LATHRP	161.00	301563	5MOCITYB1	161.00	1	26L	OPEN LINE FROM BUS 301563 [5MOCITYB1 161.00] TO BUS 301602 [5SHLCRK 161.00] CKT 1	17.5	103.2	-
P1	300091	5LATHRP	161.00	301563	5MOCITYB1	161.00	1	26S	OPEN LINE FROM BUS 301563 [5MOCITYB1 161.00] TO BUS 301602 [5SHLCRK 161.00] CKT 1	20.5	103.2	-
P1	300107	5OSBORN	161.00	300290	2OSBORN	69.000	1	26S	OPEN BRANCH FROM BUS 300036 [5ELATHRP 161.00] TO BUS 300091 [5LATHRP 161.00] CKT 1 OPEN BRANCH FROM BUS 300036 [5ELATHRP 161.00] TO BUS 344923 [5LATHROP 161.00] CKT 1 OPEN BRANCH FROM BUS 300091 [5LATHRP 161.00] TO BUS 301563 [5MOCITYB1 161.00] CKT 1 OPEN BRANCH FROM BUS 300036 [5ELATHRP 161.00] TO BUS 301602 [5SHLCRK 161.00] CKT 1	63.8	105.4 ¹	99.6
P1	300115	5STFRANB2	161.00	338202	5JIM HILL%	161.00	1	26L	OPEN LINE FROM BUS 300048 [7STFRAN 345.00] TO BUS 300116 [5STFRNB3 161.00] CKT 2	123.5 ²	144.9	-
P1	300115	5STFRANB2	161.00	338202	5JIM HILL%	161.00	1	26S	OPEN LINE FROM BUS 300048 [7STFRAN 345.00] TO BUS 300116 [5STFRNB3 161.00] CKT 2	102.5 ²	123.4	-
P1	300115	5STFRANB2	161.00	338202	5JIM HILL%	161.00	1	26W	OPEN LINE FROM BUS 300048 [7STFRAN 345.00] TO BUS 300116 [5STFRNB3 161.00] CKT 2	88.2	105.8	-
P1	300124	5HOLDENB2	161.00	300336	2HOLDEN	69.000	1	26S	OPEN LINE FROM BUS 300110 [5PITTSV 161.00] TO BUS 301561 [5HOLDENB1 161.00] CKT 1	102.1	110.7 ³	-
P1	300139	4FAIRFAX	138.00	300929	2FAIRFAX	69.000	1	26S	OPEN LINE FROM BUS 301369 [4REMNGTON 138.00] TO BUS 510403 [SHIDLER4 138.00] CKT 1	90.4	103.1 ¹	97.1
P1	300327	2ELM	69.000	300336	2HOLDEN	69.000	1	26S	OPEN LINE FROM BUS 300110 [5PITTSV 161.00] TO BUS 301561 [5HOLDENB1 161.00] CKT 1	95.1	108.0	-
P1	300772	2COFMAN	69.000	300780	2KNOBBY	69.000	1	26W	OPEN LINE FROM BUS 300034 [5EDMONS 161.00] TO BUS 301402 [5LOSTVALY 161.00] CKT 1	92.2	105.2	-
P1	300780	2KNOBBY	69.000	301401	2TURKEYCRK	69.000	1	26W	OPEN LINE FROM BUS 300034 [5EDMONS 161.00] TO BUS 301402 [5LOSTVALY 161.00] CKT 1	104.1	117.6	-

¹ Project loading is mitigated via transformer tap adjustments.

² The Base case overload is mitigated through an existing Operation Guide with AECL.

³ No GI requests will be limited for this element. Transformer tap adjustments will be used to reduce the loading on this element.

Event	Monitored Facility	Season	Primary Outage	Base Loading	Project Loading	Tap Adjusted Loading
P2EHV	300071 5CLINTN 161.00 761278 G17-108-TAP 161.00 1	26W	OPEN BRANCH FROM BUS 300739 [7BLACKBERRY 345.00] TO BUS 300949 [7JASPER 345.00] CKT 1 OPEN BRANCH FROM BUS 300739 [7BLACKBERRY 345.00] TO BUS 532797 [WOLFCRK7 345.00] CKT 1	30.2	108.9	-
P2EHV	300115 5STFRANB2 161.00 338202 5JIM HILL% 161.00 1	26L	OPEN BRANCH FROM BUS 300048 [7STFRAN 345.00] TO BUS 301418 [7WNWMADRID2 345.00] CKT 1 OPEN BRANCH FROM BUS 300046 [7NEWMAD 345.00] TO BUS 301418 [7WNWMADRID2 345.00] CKT 2 OPEN BRANCH FROM BUS 300048 [7STFRAN 345.00] TO BUS 300054 [7GOBKNOB 345.00] CKT 1	125.8	148.8	-
P2EHV	300115 5STFRANB2 161.00 338202 5JIM HILL% 161.00 1	26S	OPEN BRANCH FROM BUS 300048 [7STFRAN 345.00] TO BUS 301418 [7WNWMADRID2 345.00] CKT 1 OPEN BRANCH FROM BUS 300046 [7NEWMAD 345.00] TO BUS 301418 [7WNWMADRID2 345.00] CKT 2 OPEN BRANCH FROM BUS 300048 [7STFRAN 345.00] TO BUS 300054 [7GOBKNOB 345.00] CKT 1	95.0	117.6	-
P2EHV	300115 5STFRANB2 161.00 338202 5JIM HILL% 161.00 1	26W	OPEN BRANCH FROM BUS 300048 [7STFRAN 345.00] TO BUS 301418 [7WNWMADRID2 345.00] CKT 1 OPEN BRANCH FROM BUS 300046 [7NEWMAD 345.00] TO BUS 301418 [7WNWMADRID2 345.00] CKT 2 OPEN BRANCH FROM BUS 300048 [7STFRAN 345.00] TO BUS 300054 [7GOBKNOB 345.00] CKT 1	85.4	104.7	-

MAXIMUM FACILITY OUTPUT

Study Requests subject to limited operation through June 1, 2027 due to AECI facilities are listed in Table 6 below. All Study Requests not listed in Table 6 do not face limitations to their facility's output due to AECI facilities.

Table 6: Maximum Facility Output Limitations

Project #	Project Size	26L MFO	26S MFO	26W MFO
GEN-2017-108	400.0	400.0	257.2	211.8
GI-101/GI-102 ⁴	535.0	301.4	203.1	282.5
GI-116 ⁵	26.0	19.7	26.0	26.0
GI-117 ⁵	46.0	34.9	46.0	46.0

⁴ GI-101/GI-102 are studied together thus the MFO value is determined by their combined dispatch value.

⁵ GI-116/117 are uprates to existing units. The MW amounts shown are the uprate values to the existing units. Appendix B shows these units are only limited for the St. Francis-Jim Hill 161 kV line. These uprate requests will be reduced in conjunction with the existing units per the existing Operating Guide to alleviate loading on the St. Francis-Jim Hill 161 kV line.

VERSION HISTORY

Version Number and Date	Author	Change Description
V0 – 11/04/2025	AECI	Initial release