APPENDIX A
DISIS-2017-001 AFS STUDY ASSUMPTIONS

APPENDIX A
DISIS-2017-001 AFS Study Assumptions - Setup

AECI Guideline:	**Version 3, dated 9/17/2021**				**Include**
Project:	DISIS-2017-001 AFS				x
POI:	N/A				
Pgen MW:	N/A				
POI MW:	N/A				
ISD:	N/A				
Service:	NRIS				x

SS Series:	2020				X
SS Cases:	2022L				
	2022SP				
	2022WP				
	2022Z				
	2025L				x
	2025H				x
	2025SP				x
	2025WP				x
	2030SP				x
	2030WP				x

Topology Updates:		
6/24/2020	Darlington-Stanberry to 336 ACSR Peach Bottom was made system swing bus	x
8/21/2020	Updated modeling of GI-061 In SP cases, updated SF1 so that it was in service, Pmax and Pgen set to 241 MW In all other cases, just updated Pmax to 241 MW	x
10/16/2020	Wright City upgrades	x
1/14/2021	Morgan-Brookline rating update Maryville tie-line updated to 557 ACSR Wolf Creek - Blackberry 345 kV included in 10 year models (2026+) Improvement 529 - Taps the Jamesville (300089) to Battlefield (300348) 161 kV line to a new Clever 161 bus. A new 161/69 xfmr is being added to Clever DEI area swing updated so that Pgen was within limits (was outside limits in cases off the shelf)	x
3/4/2021	Carrington topology updates Deletes Carrington Junction bus and all lines going into it Creates Fulton South 69 kV bus Added 69 kV lines to Fulton and Carrington Updated Auxvvasse – Kingdom City 69 kV line Updated Kingdom City – Fulton 69 kV line Updated Reform – Kingdom City 69 kV line Added Sumit – Carrington 69 kV line Changed area of Dell generation to AECI (area 330)	x
8/24/2021	Morgan-Dadeville rating update GI-068 removed from benchmark cases	x

Local Gen:	N/A				

Local Subs:	N/A				

Outages:	AECI singles + ties	All			x
	AECI P1 events	All			x
	AECI P2.1 events	All			x
	AECI P2.2-3 EHV events	All			x
	AECI P2.2-3 HV events				
	Tier 1 singles/ties	All			x
	Tier 1 P1 events	2 buses			x
	Tier 1 P2.1 events	2 buses			x
	Tier 1 P2.2-3 events (EHV)	2 buses			x

Monitoring:	AECI facilities	P0-P1-P2			x
	All buses within 5 buses from AECI seam	P0-P1-P2	GI only		
	AECI facilities + ties	P3-P6			
	Tier 1				

Base Upgrades:					
J1488 + J1490	New J1145 - Montgomery 345 kV double circuit (2 and 3, Ameren facilities)				x
GI-083	Upgrade Kingdom City 161/69 kV transformers #2 and #3 to 84/96 MVA units				
	Rebuild Kingdom City - Williamsburg 161 kV, 11.89 miles, utilize 1590 ACSR conductor to be designed for 100ºC				
	Rebuild Williamsburg - Montgomery City 161 kV, 17.84 miles, utilize 1590 ACSR conductor to be designed for 100ºC				
	Upgrade Thomas Hill 345/161 kV transformer #4 to 625/712 MVA unit				
	Thomas Hill - Bevier area upgrades:				
	Move Thomas Hill - Meadville 161 kV line to Thomas Hill Bus #3				
	Move Thomas Hill - Salisbury 161 kV line to Thomas Hill Bus #4				
	Add Thomas Hill Bus #2 - Bevier 161 kV line				
	Add Bevier 161/69 kV transformer rated for 112/127 MVA				
	Remove Thomas Hill - Bevier 69 kV line				
	Rebuild Reform-Chamois 69kV, 4.00 miles, utilize 795 ACSR conductor to be designed for 100ºC				
DISIS-2016-002 (contingent for GI-083)	Rebuild Bevier - Macon Lake 69 kV, 4.14 miles, utilize 477 ACSR conductor to be designed for 100ºC (Contingent facility)				
	Rebuild Axtell - Macon Lake 69 kV, 1.15 miles, utilize 477 ACSR conductor to be designed for 100ºC (Contingent facility)				
	Rebuild Axtell - Macon Tap 69 kV, 1.05 miles, utilize 477 ACSR conductor to be designed for 100ºC (Contingent facility)				

APPENDIX A

DISIS-2017-001 AFS Study Assumptions - Generation Dispatch

SPP

Study	GIR	Status	Type	Fuel Type	Study Region	Scale Region	POI	SP Pmax	WP Pmax	S	W	L	H	25S	25W	25L	25H	30S	30W	Include
DISIS-2016-002	GEN-2016-162	Withdrawn	-	Wind	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2016-002	GEN-2016-163	Withdrawn	-	Wind	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2016-002	GEN-2016-118	IA FULLY EXECUTED/COMMERCIAL OPERATION	-	Wind	SPP	SPP	-	288	288	0.2	0.2	0.2	0.2	57.6	57.6	57.6	57.6	57.6	57.6	X
DISIS-2016-002	GEN-2016-091	IA FULLY EXECUTED/COMMERCIAL OPERATION	-	Wind	SPP	SPP	-	303.6	303.6	0.2	0.2	0.2	0.2	60.72	60.72	60.72	60.72	60.72	60.72	X
DISIS-2016-002	GEN-2016-133	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	187.1	187.5	0.2	0.2	0.2	0.2	37.42	37.5	37.42	37.42	37.42	37.5	X
DISIS-2016-002	GEN-2016-134	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	187.5	187.5	0.2	0.2	0.2	0.2	37.5	37.5	37.5	37.5	37.5	37.5	X
DISIS-2016-002	GEN-2016-137	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	187.5	187.5	0.2	0.2	0.2	0.2	37.5	37.5	37.5	37.5	37.5	37.5	X
DISIS-2016-002	GEN-2016-138	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	187.5	187.5	0.2	0.2	0.2	0.2	37.5	37.5	37.5	37.5	37.5	37.5	X
DISIS-2016-002	GEN-2016-141	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	350	350	0.2	0.2	0.2	0.2	70	70	70	70	70	70	X
DISIS-2016-002	GEN-2016-142	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	350	350	0.2	0.2	0.2	0.2	70	70	70	70	70	70	X
DISIS-2016-002	GEN-2016-143	Withdrawn	-	Wind	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2016-002	GEN-2016-144	Withdrawn	-	Wind	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2016-002	GEN-2016-145	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	175	175	0.2	0.2	0.2	0.2	35	35	35	35	35	35	X
DISIS-2016-002	GEN-2016-146	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	175	175	0.2	0.2	0.2	0.2	35	35	35	35	35	35	X
DISIS-2016-002	GEN-2016-100	Withdrawn	-	Wind	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2016-002	GEN-2016-101	Withdrawn	-	Wind	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2016-002	GEN-2016-119	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	600	600	0.2	0.2	0.2	0.2	120	120	120	120	120	120	X
DISIS-2016-002	GEN-2016-149	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	302	302	0.2	0.2	0.2	0.2	60.4	60.4	60.4	60.4	60.4	60.4	X
DISIS-2016-002	GEN-2016-150	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	302	302	0.2	0.2	0.2	0.2	60.4	60.4	60.4	60.4	60.4	60.4	X
DISIS-2016-002	GEN-2016-174	IA FULLY EXECUTED/COMMERCIAL OPERATION	-	Wind	SPP	SPP	-	302	302	0.2	0.2	0.2	0.2	60.4	60.4	60.4	60.4	60.4	60.4	X
DISIS-2016-002	GEN-2016-176	IA FULLY EXECUTED/COMMERCIAL OPERATION	-	Wind	SPP	SPP	-	302	302	0.2	0.2	0.2	0.2	60.4	60.4	60.4	60.4	60.4	60.4	X
DISIS-2016-002	GEN-2016-157	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	252	252	0.2	0.2	0.2	0.2	50.4	50.4	50.4	50.4	50.4	50.4	X
DISIS-2016-002	GEN-2016-158	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	252	252	0.2	0.2	0.2	0.2	50.4	50.4	50.4	50.4	50.4	50.4	X
DISIS-2016-002	GEN-2016-128	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	176	176	0.2	0.2	0.2	0.2	35.2	35.2	35.2	35.2	35.2	35.2	X
DISIS-2017-001	GEN-2017-090	Withdrawn	-	Solar	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2017-001	GEN-2017-009	IA FULLY EXECUTED/COMMERCIAL OPERATION	-	Wind	SPP	SPP	-	302	302	1	1	1	1	302	302	302	302	302	302	Study
DISIS-2017-001	GEN-2017-061	IA FULLY EXECUTED/ON SCHEDULE	-	Solar	SPP	SPP	-	101.5	101.5	1	1	1	1	101.5	101.5	101.5	101.5	101.5	101.5	Study
DISIS-2017-001	GEN-2017-005	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	190	190	1	1	1	1	190	190	190	190	190	190	Study
DISIS-2017-001	GEN-2017-030	Withdrawn	-	Wind	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2017-001	GEN-2017-060	IA FULLY EXECUTED/COMMERCIAL OPERATION	-	Wind	SPP	SPP	-	149.4	149.4	1	1	1	1	149.4	149.4	149.4	149.4	149.4	149.4	Study
DISIS-2017-001	GEN-2017-073	IA FULLY EXECUTED/ON SCHEDULE	-	Solar	SPP	SPP	-	72.5	72.5	1	1	1	1	72.5	72.5	72.5	72.5	72.5	72.5	Study
DISIS-2017-001	GEN-2017-022	IA FULLY EXECUTED/ON SCHEDULE	-	Solar	SPP	SPP	-	65	65	1	1	1	1	65	65	65	65	65	65	Study
DISIS-2017-001	GEN-2017-008	Withdrawn	-	Solar	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2017-001	GEN-2017-055	Withdrawn	-	Solar	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2017-001	GEN-2017-076	IA FULLY EXECUTED/ON SCHEDULE	-	Solar	SPP	SPP	-	52.2	52.2	1	1	1	1	52.2	52.2	52.2	52.2	52.2	52.2	Study
DISIS-2017-001	GEN-2017-074	IA FULLY EXECUTED/ON SCHEDULE	-	Solar	SPP	SPP	-	72.5	72.5	1	1	1	1	72.5	72.5	72.5	72.5	72.5	72.5	Study
DISIS-2017-001	GEN-2017-082	IA FULLY EXECUTED/COMMERCIAL OPERATION	-	Wind	SPP	SPP	-	149.4	149.4	1	1	1	1	149.4	149.4	149.4	149.4	149.4	149.4	Study
DISIS-2017-001	GEN-2017-092	IA FULLY EXECUTED/ON SCHEDULE	-	Solar	SPP	SPP	-	200	200	1	1	1	1	200	200	200	200	200	200	Study
DISIS-2017-001	GEN-2017-077	IA FULLY EXECUTED/ON SCHEDULE	-	Solar	SPP	SPP	-	124.7	124.7	1	1	1	1	124.7	124.7	124.7	124.7	124.7	124.7	Study
DISIS-2017-001	GEN-2017-086	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	150	150	1	1	1	1	150	150	150	150	150	150	Study
DISIS-2017-001	GEN-2017-018	IA FULLY EXECUTED/ON SCHEDULE	-	Solar	SPP	SPP	-	189	189	1	1	1	1	189	189	189	189	189	189	Study
DISIS-2017-001	GEN-2017-040	IA FULLY EXECUTED/ON SCHEDULE	-	Solar	SPP	SPP	-	200.1	200.1	1	1	1	1	200.1	200.1	200.1	200.1	200.1	200.1	Study
DISIS-2017-001	GEN-2017-071	IA FULLY EXECUTED/ON SCHEDULE	-	Solar	SPP	SPP	-	124.7	124.7	1	1	1	1	124.7	124.7	124.7	124.7	124.7	124.7	Study
DISIS-2017-001	GEN-2017-072	IA FULLY EXECUTED/ON SCHEDULE	-	Solar	SPP	SPP	-	52.2	52.2	1	1	1	1	52.2	52.2	52.2	52.2	52.2	52.2	Study
DISIS-2017-001	GEN-2017-075	IA FULLY EXECUTED/ON SCHEDULE	-	Solar	SPP	SPP	-	200	200	1	1	1	1	200	200	200	200	200	200	Study
DISIS-2017-001	GEN-2016-037	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	300	300	1	1	1	1	300	300	300	300	300	300	Study
DISIS-2017-001	GEN-2016-159	Withdrawn	-	Wind	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2017-001	GEN-2017-004	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	201.6	201.6	1	1	1	1	201.6	201.6	201.6	201.6	201.6	201.6	Study
DISIS-2017-001	GEN-2017-094	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	200	200	1	1	1	1	200	200	200	200	200	200	Study
DISIS-2017-001	GEN-2016-103	Withdrawn	-	Wind	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2017-001	GEN-2017-027	IA FULLY EXECUTED/COMMERCIAL OPERATION	-	Wind	SPP	SPP	-	140	140	1	1	1	1	140	140	140	140	140	140	Study
DISIS-2017-001	GEN-2017-065	Withdrawn	-	Solar	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2017-001	GEN-2017-014	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	300	300	1	1	1	1	300	300	300	300	300	300	Study
DISIS-2017-001	GEN-2017-026	Withdrawn	-	Wind	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2017-001	GEN-2017-033	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	200	200	1	1	1	1	200	200	200	200	200	200	Study
DISIS-2017-001	GEN-2017-080	Withdrawn	-	Solar	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2017-001	GEN-2017-039	Withdrawn	-	Wind	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2017-001	GEN-2017-064	Withdrawn	-	Solar	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2017-001	GEN-2017-078	Withdrawn	-	Wind	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2017-001	GEN-2017-097	IA FULLY EXECUTED/ON SCHEDULE	-	Solar	SPP	SPP	-	128	128	1	1	1	1	128	128	128	128	128	128	Study
DISIS-2017-001	GEN-2017-104	Withdrawn	-	Solar	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2017-001	GEN-2016-172	Withdrawn	-	Wind	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2017-001	GEN-2017-007	Withdrawn	-	Wind	SPP	SPP	-			0.2	0.2	0.2	0.2	0	0	0	0	0	0	
DISIS-2017-001	GEN-2017-048	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	300	300	1	1	1	1	300	300	300	300	300	300	Study
DISIS-2017-001	GEN-2017-010	IA FULLY EXECUTED/ON SCHEDULE	-	Wind	SPP	SPP	-	200.1	200.1	1	1	1	1	200.1	200.1	200.1	200.1	200.1	200.1	Study

APPENDIX A

DISIS-2017-001 AFS Study Assumptions - Generation Dispatch

MISO

Study	GIR	Status	Type	Fuel Type	Study Region	Scale Region	POI	SP Pmax	WP Pmax	S	W	L	H	25S	25W	25L	25H	30S	30W	Include
DPP-2016-AUG	J541	Done	-	Wind	Central	North	-	400	400	0.156	0.156	1	1	62.4	62.4	400	400	62.4	62.4	X
DPP-2016-AUG	J611	Done	-	Wind	West	North	-	110	110	0.156	0.156	1	1	17.16	17.16	110	110	17.16	17.16	X
DPP-2017-AUG	J817	Done	-	Solar	Central	North	-	139	139	1	1	0	0	139	139	0	0	139	139	X
DPP-2017-AUG	J944	Done	-	Solar	South	South	-	200	200	1	1	0	0	200	200	0	0	200	200	X
DPP-2018-APR	J994	Done	-	Solar	Central	North	-	100	100	1	1	0	0	100	100	0	0	100	100	X
DPP-2018-APR	J1107	Done	-	Solar	Central	North	-	200	200	1	1	0	0	200	200	0	0	200	200	X
DPP-2018-APR	J1026	Done	-	Wind	Central	North	-	400	400	0.156	0.156	1	1	62.4	62.4	400	400	62.4	62.4	X
DPP-2018-APR	J1145	Done	-	Solar	Central	North	-	250	250	1	1	0	0	250	250	0	0	250	250	X
DPP-2018-APR	J1087	Done	-	Solar	Central	North	-	200	200	1	1	0	0	200	200	0	0	200	200	X
DPP-2018-APR	J1039	Withdrawn	-	Battery Storage	Central	North	-	50	50	1	1	1	1	0	0	0	0	0	0	
DPP-2018-APR	J976	Done	-	Solar	Central	North	-	300	300	1	1	0	0	300	300	0	0	300	300	X
DPP-2018-APR	J987	Done	-	Solar	Central	North	-	100	100	1	1	0	0	100	100	0	0	100	100	X
DPP-2018-APR	J956	Done	-	Solar	Central	North	-	200	200	1	1	0	0	200	200	0	0	200	200	X
DPP-2018-APR	J1033	Withdrawn	-	Battery Storage	Central	North	-	50	50	1	1	1	1	0	0	0	0	0	0	
DPP-2018-APR	J1034	Done	-	Solar	Central	North	-	225	225	1	1	0	0	225	225	0	0	225	225	X
DPP-2018-APR	J1025	Done	-	Wind	Central	North	-	300	300	0.156	0.156	1	1	46.8	46.8	300	300	46.8	46.8	X
DPP-2018-APR	J1182	Done	-	Solar	Central	North	-	250	250	1	1	0	0	250	250	0	0	250	250	X
DPP-2018-APR	J1007	Done	-	Solar	South	South	-	200	200	1	1	0	0	200	200	0	0	200	200	X
DPP-2018-APR	J1060	Done	-	Solar	South	South	-	500	500	1	1	0	0	500	500	0	0	500	500	X
DPP-2018-APR	J1125	Done	-	Solar	South	South	-	135	135	1	1	0	0	135	135	0	0	135	135	X
DPP-2018-APR	J1155	Done	-	Solar	South	South	-	150	150	1	1	0	0	150	150	0	0	150	150	X
DPP-2018-APR	J1132	Done	-	Solar	West	North	-	50	50	1	1	0	0	50	50	0	0	50	50	X
DPP-2018-APR	J1135	Done	-	Solar	West	North	-	50	50	1	1	0	0	50	50	0	0	50	50	X
DPP-2018-APR	J1024	Withdrawn	-	Wind	West	North	-	200	200	0.156	0.156	1	1	0	0	0	0	0	0	
DPP-2018-APR	J1187	Withdrawn	-	Wind	West	North	-	151.8	151.8	0.156	0.156	1	1	0	0	0	0	0	0	
DPP-2018-APR	J981	Withdrawn	-	Wind	West	North	-	200	200	0.156	0.156	1	1	0	0	0	0	0	0	
DPP-2018-APR	J1040	Done	-	Wind	West	North	-	250	250	0.156	0.156	1	1	39	39	250	250	39	39	X
DPP-2019-Cycle	J1216	Active	-	Solar	Central	North	-	250	250	1	1	0	0	250	250	0	0	250	250	X
DPP-2019-Cycle	J1250	Withdrawn	-	Battery Storage	South	South	-	35	35	1	1	1	1	0	0	0	0	0	0	
DPP-2019-Cycle	J1330	Withdrawn	-	Solar	Central	North	-	200	200	1	1	0	0	0	0	0	0	0	0	
DPP-2019-Cycle	J1376	Withdrawn	-	Wind	Central	North	-	100	100	0.156	0.156	1	1	0	0	0	0	0	0	
DPP-2019-Cycle	J1191	Active	-	Solar	Central	North	-	64	64	1	1	0	0	64	64	0	0	64	64	X
DPP-2019-Cycle	J1354	Active	-	Battery Storage	Central	North	-	146	146	1	1	1	1	146	146	146	146	146	146	X
DPP-2019-Cycle	J1414	Withdrawn	-	Solar	South	South	-	150	150	1	1	0	0	0	0	0	0	0	0	
DPP-2019-Cycle	J1453	Active	-	Wind	Central	North	-	188.3	188.3	0.156	0.156	1	1	29.3748	29.3748	188.3	188.3	29.3748	29.3748	X
DPP-2019-Cycle	J1383	Active	-	Solar	Central	North	-	150	150	1	1	0	0	150	150	0	0	150	150	X
DPP-2019-Cycle	J1488	Active	-	HVDC	Central	North	-	500	500	1	1	1	1	500	500	500	500	500	500	X
DPP-2019-Cycle	J1490	Active	-	HVDC	Central	North	-	1000	1000	1	1	1	1	1000	1000	1000	1000	1000	1000	X
DPP-2019-Cycle	J1464	Active	-	Solar	Central	North	-	592.8	592.8	1	1	0	0	592.8	592.8	0	0	592.8	592.8	X
DPP-2019-Cycle	J1299	Active	-	Solar	Central	North	-	200	200	1	1	0	0	200	200	0	0	200	200	X
DPP-2019-Cycle	J1306	Active	-	Solar	Central	North	-	200	200	1	1	0	0	200	200	0	0	200	200	X
DPP-2019-Cycle	J1268	Active	-	Solar	Central	North	-	150	150	1	1	0	0	150	150	0	0	150	150	X
DPP-2019-Cycle	J1338	Withdrawn	-	Wind	Central	North	-	150	150	0.156	0.156	1	1	0	0	0	0	0	0	
DPP-2019-Cycle	J1363	Withdrawn	-	Solar	Central	North	-	150	150	1	1	0	0	0	0	0	0	0	0	
DPP-2019-Cycle	J1352	Active	-	Solar	Central	North	-	100	100	1	1	0	0	100	100	0	0	100	100	X
DPP-2019-Cycle	J1222	Withdrawn	-	Solar	Central	North	-	200	200	1	1	0	0	0	0	0	0	0	0	
DPP-2019-Cycle	J1213	Active	-	Hydro	Central	North	-	60	60	1	1	1	1	60	60	60	60	60	60	X
DPP-2019-Cycle	J1289	Active	-	Wind	Central	North	-	200	200	0.156	0.156	1	1	31.2	31.2	200	200	31.2	31.2	X
DPP-2019-Cycle	J1408	Active	-	Hybrid	Central	North	-	100	100	1	1	1	1	100	100	100	100	100	100	X
DPP-2019-Cycle	J1241	Active	-	Solar	Central	North	-	200	200	1	1	0	0	200	200	0	0	200	200	X
DPP-2019-Cycle	J1437	Done	-	Wind	South	South	-	180	180	0.156	0.156	1	1	28.08	28.08	180	180	28.08	28.08	X
DPP-2019-Cycle	J1479	Withdrawn	-	Battery Storage	West	North	-	100	100	1	1	1	1	0	0	0	0	0	0	
DPP-2019-Cycle	J1456	Withdrawn	-	Wind	West	North	-	300	300	0.156	0.156	1	1	0	0	0	0	0	0	
DPP-2019-Cycle	J1478	Withdrawn	-	Battery Storage	West	North	-	25	25	1	1	1	1	0	0	0	0	0	0	
DPP-2019-Cycle	J1471	Withdrawn	-	Solar	West	North	-	200	200	1	1	0	0	0	0	0	0	0	0	
DPP-2019-Cycle	J1315	Withdrawn	-	Wind	West	North	-	600	600	0.156	0.156	1	1	0	0	0	0	0	0	
DPP-2019-Cycle	J1218	Active	-	Solar	West	North	-	200	200	1	1	0	0	200	200	0	0	200	200	X
DPP-2019-Cycle	J1229	Active	-	Hydro	West	North	-	50	50	1	1	1	1	50	50	50	50	50	50	X

APPENDIX A

DISIS-2017-001 AFS Study Assumptions - Generation Dispatch

TVA

Study	GIR	Status	Type	Fuel Type	Study Region	Scale Region	POI	SP Pmax	WP Pmax	S	W	L	H	25S	25W	25L	25H	30S	30W	Include
TVA	292	Active	-	Solar	TVA	TVA	-	80	80	1	1	1	1	80	80	80	80	80	80	X
TVA	299	Active	-	Solar	TVA	TVA	-	67	67	1	1	1	1	67	67	67	67	67	67	X
TVA	337	Active	-	Solar	TVA	TVA	-	30	30	1	1	1	1	30	30	30	30	30	30	X

AECI

Study	GIR	Status	Type	Fuel Type	Study Region	Scale Region	POI	SP Pmax	WP Pmax	S	W	L	H	25S	25W	25L	25H	30S	30W	Include
Local	ThomasHill	Operation	NRIS	Conv	AECI	SixCluster	-	1210.0	1228.0	1	1	NC	NC	1210.0	1228.0	-	-	1210.0	1228.0	X
Local	MtPleasant	Operation	NRIS	Conv	AECI	SixCluster	-	24.0	24.0	1	1	NC	NC	0.0	0.0	-	-	0.0	0.0	
Local	NewMadrid	Operation	NRIS	Conv	AECI	SixCluster	-	1232.9	1257.9	1	1	NC	NC	0.0	0.0	-	-	0.0	0.0	
Local	StFrancis	Operation	NRIS	Conv	AECI	SixCluster	-	465.9	488.9	1	1	NC	NC	0.0	0.0	-	-	0.0	0.0	
Local	Essex	Operation	NRIS	Conv	AECI	SixCluster	-	105.1	123.1	1	1	NC	NC	0.0	0.0	-	-	0.0	0.0	
Local	Nodaway	Operation	NRIS	Conv	AECI	SixCluster	-	186.2	230.2	1	1	NC	NC	186.2	230.2	-	-	186.2	230.2	X
Local	Holden	Operation	NRIS	Conv	AECI	SixCluster	-	325.5	347.5	1	1	NC	NC	325.5	347.5	-	-	325.5	347.5	X
Local	WestPlains	Operation	NRIS	Conv	AECI	SixCluster	-	44.0	44.0	1	1	NC	NC	0.0	0.0	-	-	0.0	0.0	
Local	Chouteau	Operation	NRIS	Conv	AECI	SixCluster	-	-	-	-	-	-	-	-	-	-	-	-	-	
Local	Dell	Operation	NRIS	Conv	AECI	SixCluster	-	578.9	578.9	1	1	NC	NC	0.0	0.0	-	-	0.0	0.0	
Existing	BluegrassRidge	Operation	NRIS	Wind	AECI	SixCluster	-	56.7	56.7	1	1	1	1	56.7	56.7	56.7	56.7	56.7	56.7	X
Existing	CowBranch	Operation	NRIS	Wind	AECI	SixCluster	-	50.4	50.4	1	1	1	1	50.4	50.4	50.4	50.4	50.4	50.4	X
Existing	Conception	Operation	NRIS	Wind	AECI	SixCluster	-	50.4	50.4	1	1	1	1	50.4	50.4	50.4	50.4	50.4	50.4	X
Existing	LostCreek	Operation	NRIS	Wind	AECI	SixCluster	-	168	168	1	1	1	1	168	168	168	168	168	168	X
Existing	Osage	Operation	NRIS	Wind	AECI	SixCluster	-	150	150	1	1	1	1	150	150	150	150	150	150	X
Existing	WhiteCloud	Operation	NRIS	Wind	AECI	SixCluster	-	236.5	236.5	1	1	1	1	236.5	236.5	236.5	236.5	236.5	236.5	X
Existing	ClearCreek	Operation	NRIS	Wind	AECI	SixCluster	230	242	242	1	1	1	1	242	242	242	242	242	242	X
Existing	FoxTrot	Withdrawn*	NRIS	Solar	AECI	SixCluster	200	201.6	201.6	1	1	1	1	0	0	0	0	0	0	
Queue	GI-077	Active	NRIS	Gas	AECI	SixCluster	-	587	587	1	1	1	1	587	587	587	587	587	587	X
Queue	GI-078	Active	NRIS	Gas	AECI	SixCluster	-	564	564	1	1	1	1	564	564	564	564	564	564	X
Queue	GI-082	Withdrawn	NRIS	Solar	AECI	SixCluster	0	0	0	1	1	1	1	0	0	0	0	0	0	
Queue	GI-083	Active	NRIS	HVDC	AECI	SixCluster	1018	1031	1031	1	1	1	1	1031	1031	1031	1031	1031	1031	X
Queue	GI-084	Withdrawn	ERIS	Solar	AECI	SixCluster	196	200.6	200.6	0.65	0.55	0.65	0.65	0	0	0	0	0	0	
Queue	GI-085	Active	NRIS	Solar	AECI	SixCluster	436	447.3	447.3	1	1	1	1	447.3	447.3	447.3	447.3	447.3	447.3	X
Queue	GI-086	Active	NRIS	Solar	AECI	SixCluster	100	103.4	103.4	1	1	1	1	103.4	103.4	103.4	103.4	103.4	103.4	X
Queue	GI-088	Withdrawn	NRIS	Solar	AECI	SixCluster	86.5	87.52	87.52	1	1	1	1	0	0	0	0	0	0	
Queue	GI-089	Withdrawn	NRIS	Solar	AECI	SixCluster	0	0	0	1	1	1	1	0	0	0	0	0	0	
Queue	GI-090	Active	NRIS	Solar	AECI	SixCluster	100	103.15	103.15	1	1	1	1	103.15	103.15	103.15	103.15	103.15	103.15	X
Queue	GI-091	Active	NRIS	Solar	AECI	SixCluster	96	98.4	98.4	1	1	1	1	98.4	98.4	98.4	98.4	98.4	98.4	X
Queue	GI-092	Withdrawn	NRIS	Wind	AECI	SixCluster	170	179.4	179.4	1	1	1	1	0	0	0	0	0	0	