

Feasibility analysis results for projects undergoing transition to the new GIP

G901	600 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
39340 JEFRSN4 138 39347 LKHD_CAM 138 1	39118 CMT 138 138 39120 ROE 138 138 1	-0.06	-387.00	1.00	572.80

G903	2000 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
60211 GLESNL7 115 62924 MEDINA 7 115 1	710 2	-0.52	-199.00	5.37	343.70
60206 CROWVR7 115 62924 MEDINA 7 115 1	710 2	0.49	199.00	5.15	329.40
60206 CROWVR7 115 62925 DICKNS7 115 1	655	0.77	318.70	4.78	439.60
60206 CROWVR7 115 62616 BIGSWAN7 115 1	710 2	0.26	139.00	3.40	735.10
60211 GLESNL7 115 60234 PARKERS7 115 1	710 2	0.26	167.00	2.80	855.90
60155 PULASKI7 115 62926 DCKSNSS7 115 1	009 3	-0.26	-194.00	2.43	952.90
62925 DICKNS7 115 62926 DCKSNSS7 115 1	009 3	0.26	195.60	2.41	955.50
62925 DICKNS7 115 63030 DICKNS3 345 1	925	0.53	448.00	1.99	1163.10
60181 ALDRICH7 115 60210 FIFTHST7 115 1	907 1	0.06	209.00	1.91	-1201.70
60153 MNTCELO7 115 62927 LKCONST7 115 1	009 3	-0.23	-191.00	1.88	1263.40
60159 STCTPW 7 115 60162 WAKEFLD7 115 1	710 2	-0.07	-113.00	1.78	662.70
62667 ST BONI7 115 62925 DICKNS7 115 1	009 3	-0.15	-191.60	1.74	1027.80

60210 FIFTHST7 115 60226 MAIN ST7 115 1	907 1	0.06	191.00	1.71	-177.50
60162 WAKEFLD7 115 62616 BIGSWAN7 115 1	710 2	-0.12	-141.60	1.66	1247.80
34018 HAZLTON3 345 34093 ARNOLD 3 345 1	ALTW-13A	0.14	717.00	1.63	-1330.80
34093 ARNOLD 3 345 64352 TIFFIN 3 345 1	WPS-ARP2e	0.13	717.00	1.58	-1148.00
34014 ADAMS 5 161 60102 ADAMS 3 345 1	MAPP-9	0.06	300.00	1.56	-644.50
60234 PARKERS7 115 60346 CEDARLK7 115 1	705 2	0.09	239.00	1.46	783.30
60277 WWACNIA7 115 62667 ST BONI7 115 1	009 3	-0.12	-191.60	1.43	1317.70
60202 COON CK3 345 63030 DICKNSN3 345 1	MAPP-17	-0.37	-1064.80	1.41	812.90
60270 MPLEGV13 345 63030 DICKNSN3 345 1	009 8	-0.36	-1064.80	1.37	891.20
61906 MAPLE LF 161 61948 BYRON 5 161 1	MAPP-9	-0.09	-302.00	1.35	823.10
60194 CARVRCO7 115 60277 WWACNIA7 115 1	009 3	-0.12	-191.60	1.32	1480.00
61906 MAPLE LF 161 63430 CASCADE 161 1	MAPP-9	0.09	302.00	1.30	968.80
60234 PARKERS7 115 60259 BASCRK 7 115 1	009 4	0.06	371.00	1.28	144.50
60202 COON CK3 345 60251 TERMINL3 345 1	022 9	0.21	1165.00	1.25	572.50
60227 MEDLAKE7 115 60259 BASCRK 7 115 1	009 4	-0.06	-371.00	1.23	514.10
38849 PLS PR2 345 36421 ZION ; R 345 1	825 2	0.08	1096.00	1.22	-1063.70
60233 PARKERS3 345 60270 MPLEGV13 345 1	009 8	-0.36	-1195.00	1.22	1256.90
39449 ARROWHD 345 61615 ARROWHD4 230 1	WPS-ARP1e	0.10	800.00	1.20	361.90
60194 CARVRCO7 115 60243 SCOTTAP7 115 1	009 3	0.08	139.00	1.18	1664.40
60126 SPLT RK3 345 60131 SPLTRTB3 345 1	330	0.07	717.00	1.17	134.50

63875 RAUN 3 345 65351 S3451 3 345 1		330	0.09	956.00	1.17	181.90
60131 SPLTRTB3 345 66564 SIOUXCY3 345 1		330	0.07	720.00	1.16	192.80
60186 AS KING3 345 60304 EAU CL 3 345 1		905	0.19	1165.00	1.16	1047.30
33580 CYPRESS 345 39304 FORST JT 345 1	WPS-FIZ-MULT		-0.06	-488.00	1.12	963.50
33580 CYPRESS 345 39247 ARCADN3 345 1	WPS-FIZ-MULT		0.06	488.00	1.11	1049.50
60202 COON CK3 345 60221 KOLMNLK3 345 1	907 3		0.21	1165.00	1.09	1489.90
60262 EDEN PR3 345 60263 EDEN PR7 115 10	705 1		0.07	448.00	1.08	1466.60
60221 KOLMNLK3 345 60222 KOLMNLK7 115 9	022 8		0.06	448.00	1.06	1542.90
64198 GRIMES 3 345 64202 LEHIGH 3 345 1	MAPP-19		-0.07	-926.00	1.06	1224.60
62982 HUTCHMN7 115 62983 HUTCH3M7 115 1	710 2		0.12	168.90	1.03	1960.70

G904	150 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
66447 LEEDS 7 115 66452 RUGBY 7 115 1	63047 RAMSEY 4 230 63056 BALTA 4 230 1	-0.05	-120.00	1.17	-221.03
66431 DEVILSL7 115 66447 LEEDS 7 115 1	63047 RAMSEY 4 230 63056 BALTA 4 230 1	-0.05	-120.00	1.06	11.91

G905	200 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC

NO CONSTRAINTS

G906	200 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
25478 08KOKOMO 138 26462 08CHRYS3 138 1	08DELBK2-08KOKOMO-08DELCO-138	0.08	179.00	1.49	-897.50
25478 08KOKOMO 138 25483 08DELBK2 138 2	08GRTOW2-08MAPLE-08CHRYS2-138	0.08	179.00	1.28	-417.50
22656 05DEQUIN 345 94940 Q01COP1 345 1	28030 17GODLND 138 31958 Watseka 138 1	0.07	848.00	1.27	-3040.00
25473 08DELCO 138 25475 08GRTOW2 138 1	08GRTOW2-08MAPLE-08CHRYS2-138	0.08	146.00	1.26	-278.75
25416 08KOK HP 230 25478 08KOKOMO 138 1	Kokomo 3 winding xfr 230/138/69.	0.09	278.10	1.26	-600.00
25471 08MAPLE 138 25475 08GRTOW2 138 1	08DELBK2-08KOKOMO-08DELCO-138	0.08	146.00	1.26	-268.75
25375 08NUCOR 345 25380 08WHITST 345 1	22667 05JEFRSO 765 22671 05ROCKPT 765 1	0.07	956.00	1.09	-1070.00
25415 08FRNKFT 230 25411 08NEWLON 230 1	22656 05DEQUIN 345 22663 05EUGENE 345 1	0.59	637.00	1.03	161.86
22656 05DEQUIN 345 22669 05REYNOL 345 1	22660 05DUMONT 765 22665 05GRNTWN 765 1	0.06	932.00	1.00	126.67
22668 05OLIVE 345 22669 05REYNOL 345 1	22667 05JEFRSO 765 22671 05ROCKPT 765 1	0.06	961.00	1.01	31940.00
25408 08WEBSTE 230 25411 08NEWLON 230 1	22667 05JEFRSO 765 22671 05ROCKPT 765 1	0.26	797.00	1.03	6024.23
25373 08WALTON 345 25407 08WALTON 230 1	22660 05DUMONT 765 22665 05GRNTWN 765 1	0.10	637.40	1.07	12993.00
22668 05OLIVE 345 94940 Q01COP1 345 1	05DEQUIN 345-05REYNOL 345 1 05OLIVE 345-05REY	0.07	848.00	1.25	27022.86
25471 08MAPLE 138 26461 08CHRYS2 138 1	08DELBK2-08KOKOMO-08DELCO-138	0.08	146.00	1.38	4133.75
25473 08DELCO 138 25483 08DELBK2 138 1	08GRTOW2-08MAPLE-08CHRYS2-138	0.08	146.00	1.42	4208.75

G907	450 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
69547 ROCHSTR5 161 69549 WABACO 5 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	0.14	201.00	3.05	-2506.71
34570 ADAMS_N5 161 61984 AUSTIN 5 161 1	63032 PL VLLY3 345 63070 PL VLLY5 161 1	-0.56	-279.00	3.05	-571.43
34009 WINBAGO5 161 34013 WNBAGOS5 161 1	63032 PL VLLY3 345 63070 PL VLLY5 161 1	-0.16	-167.00	2.74	-1355.88
34020 HAZL S 5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345 1	0.10	167.00	2.58	-2213.40
61984 AUSTIN 5 161 63070 PL VLLY5 161 1	63032 PL VLLY3 345 63070 PL VLLY5 161 1	1.00	473.00	2.57	-295.39
69543 ALMA__5 161 69549 WABACO 5 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	-0.13	-223.00	2.25	-1688.08
34129 LIBERTY5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345 1	-0.06	-167.00	2.06	-2488.83
61984 AUSTIN 5 161 34010 HAYWARD5 161 1	63032 PL VLLY3 345 63070 PL VLLY5 161 1	0.44	279.00	1.75	-32.27
61906 MAPLE LF 161 61948 BYRON 5 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	-0.11	-302.00	1.70	-1458.00
61906 MAPLE LF 161 63430 CASCADE 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	0.11	302.00	1.65	-1327.64
34000 NIW 5 161 34015 LIME CK5 161 1	63032 PL VLLY3 345 63070 PL VLLY5 161 1	0.16	202.00	1.54	-231.63
34572 ADAMS_S5 161 69526 BVR CRK5 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	0.10	223.00	1.37	-385.40
34572 ADAMS_S5 161 34010 HAYWARD5 161 1	63032 PL VLLY3 345 63070 PL VLLY5 161 1	-0.10	-223.00	1.37	-372.10
34570 ADAMS_N5 161 69547 ROCHSTR5 161 1	61948 BYRON 5 161 61950 BYRON 3 345 1	0.06	200.00	1.35	-764.00
61950 BYRON 3 345 63032 PL VLLY3 345 1	34018 HAZLTON3 345 60102 ADAMS 3 345 1	-0.60	-1165.00	1.21	36.25
34572 ADAMS_S5 161 34014 ADAMS 5 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	-0.17	-330.00	1.08	296.18

34570 ADAMS_N5 161 34014 ADAMS 5 161 1	63032 PL VLLY3 345 63070 PL VLLY5 161 1	0.42	335.00	1.02	432.17
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G908		150 MW		DPP			
Limiting Constraint		Contingency		DF	Rating	PU Overload	FCITC
32407 HAVANA 138 32417 CUBA 138 1	HAV-IPVS-1			0.06	276.00	1.00	132.86
64350 HILLS 3 345 64408 SUB T 3 345 1	947			-0.05	-956.00	1.19	-3436.92
33141 TAZEWELL 138 33175 MASON 138 1	LINE 4563			-0.10	-253.00	1.18	-281.30
30789 IPAFA 138 32407 HAVANA 138 1	32407 HAVANA 138 32417 CUBA 138 1			-0.08	-382.00	1.03	-5.20

G909		150 MW		DPP			
Limiting Constraint		Contingency		DF	Rating	PU Overload	FCITC
64350 HILLS 3 345 64408 SUB T 3 345 1	947			-0.05	-956.00	1.20	-3389.69
33141 TAZEWELL 138 33175 MASON 138 1	LINE 4563			-0.06	-253.00	1.15	-481.30
31559 QUINCY S 138 31698 S.QUINCY 138 1	31435 PALM TAP 345 31992 SPENCER 345 1			-0.05	-308.00	1.10	-444.00
31015 MARBHD N 138 31559 QUINCY S 138 1	31435 PALM TAP 345 31992 SPENCER 345 1			-0.09	-287.00	1.10	-179.20

G910	99 MW	SPA			
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Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
69547 ROCHSTR5 161 69549 WABACO 5 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	0.14	201.00	3.13	-2949.00
34020 HAZL S 5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345 1	0.10	167.00	2.64	-2645.30
69543 ALMA___5 161 69549 WABACO 5 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	-0.14	-223.00	2.31	-1991.93
34129 LIBERTY5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345 1	-0.06	-167.00	2.10	-2953.00
61906 MAPLE LF 161 61948 BYRON 5 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	-0.14	-302.00	1.75	-1513.57
61906 MAPLE LF 161 63430 CASCADE 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	0.14	302.00	1.70	-1411.14
34572 ADAMS_S5 161 69526 BVR CRK5 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	0.09	223.00	1.41	-917.33
61950 BYRON 3 345 63032 PL VLLY3 345 1	34018 HAZLTON3 345 60102 ADAMS 3 345 1	-0.66	-1165.00	1.27	-373.59
34572 ADAMS_S5 161 34014 ADAMS 5 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	-0.18	-330.00	1.13	-146.22
61984 AUSTIN 5 161 63070 PL VLLY5 161 1	60102 ADAMS 3 345 63032 PL VLLY3 345 1	0.22	473.00	1.01	73.00

G911	99 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
69547 ROCHSTR5 161 69549 WABACO 5 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	0.14	201.00	3.20	-3051.07
34020 HAZL S 5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345 1	0.10	167.00	2.70	-2742.50
69543 ALMA___5 161 69549 WABACO 5 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	-0.14	-223.00	2.37	-2089.57
34129 LIBERTY5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345 1	-0.06	-167.00	2.14	-3057.17
61906 MAPLE LF 161 61948 BYRON 5 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	-0.14	-302.00	1.80	-1614.36

61906 MAPLE LF 161 63430 CASCADE 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	0.14	302.00	1.75	-1511.93
34572 ADAMS_S5 161 69526 BVR CRK5 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	0.09	223.00	1.45	-1014.89
61950 BYRON 3 345 63032 PL VLLY3 345 1	34018 HAZLTON3 345 60102 ADAMS 3 345 1	-0.66	-1165.00	1.32	-473.32
34572 ADAMS_S5 161 34014 ADAMS 5 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	-0.18	-330.00	1.19	-247.33
61984 AUSTIN 5 161 63070 PL VLLY5 161 1	60102 ADAMS 3 345 63032 PL VLLY3 345 1	0.22	473.00	1.06	-24.18

G912	99 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
69547 ROCHSTR5 161 69549 WABACO 5 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	0.14	201.00	3.27	-3153.07
34020 HAZL S 5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345 1	0.10	167.00	2.76	-2839.70
69543 ALMA__5 161 69549 WABACO 5 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	-0.14	-223.00	2.43	-2187.21
34129 LIBERTY5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345 1	-0.06	-167.00	2.17	-3161.33
61906 MAPLE LF 161 61948 BYRON 5 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	-0.14	-302.00	1.84	-1715.07
61906 MAPLE LF 161 63430 CASCADE 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	0.14	302.00	1.79	-1612.64
34572 ADAMS_S5 161 69526 BVR CRK5 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	0.09	223.00	1.49	-1112.56
61950 BYRON 3 345 63032 PL VLLY3 345 1	34018 HAZLTON3 345 60102 ADAMS 3 345 1	-0.66	-1165.00	1.38	-573.05
34572 ADAMS_S5 161 34014 ADAMS 5 161 1	60105 PR ISLD3 345 61950 BYRON 3 345 1	-0.18	-330.00	1.25	-348.44
61984 AUSTIN 5 161 63070 PL VLLY5 161 1	60102 ADAMS 3 345 63032 PL VLLY3 345 1	0.22	473.00	1.10	-121.32

G913	201 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
66754 MAPLE R4 230 60133 SHEYNNE4 230 1	63314 BIGSTON4 230 63320 ORTNVLE4 230 1	0.12	318.00	3.69	-7027.65
63336 AUDUBON4 230 91982 G821_TAP 230 1	63331 FERGSFL4 230 91568 G913_tp 230 1	-0.12	-318.00	3.03	-5133.54
63331 FERGSFL4 230 91568 G913_tp 230 1	63314 BIGSTON4 230 63320 ORTNVLE4 230 1	-0.41	-320.00	3.00	-1345.63
91982 G821_TAP 230 60133 SHEYNNE4 230 1	63331 FERGSFL4 230 91568 G913_tp 230 1	-0.12	-318.00	2.83	-4612.79
66550 GRANITF4 230 60150 MNVLTAP4 230 1	63337 JHNSNJT4 230 63335 JHNSNJTY 230 1	0.07	387.00	2.75	-9669.66
99988 G555_TAP 116 66555 MORRIS 7 115 1	63314 BIGSTON4 230 63320 ORTNVLE4 230 1	0.06	96.00	2.63	-2334.03
63314 BIGSTON4 230 91541 G804_tp 230 1	63314 BIGSTON4 230 63320 ORTNVLE4 230 1	0.11	480.00	2.63	-6844.92
66503 BLAIR 4 230 91541 G804_tp 230 1	63314 BIGSTON4 230 63320 ORTNVLE4 230 1	-0.11	-480.00	2.63	-6844.02
63223 HOOT LK7 115 63231 FERGSFL7 115 1	63331 FERGSFL4 230 63366 SILVRLK4 230 1	-0.22	-96.00	2.20	-312.58
63331 FERGSFL4 230 63366 SILVRLK4 230 1	63337 JHNSNJT4 230 63335 JHNSNJTY 230 1	0.29	320.00	2.05	-954.47
63051 HENNING4 230 63366 SILVRLK4 230 1	63337 JHNSNJT4 230 63335 JHNSNJTY 230 1	-0.29	-320.00	1.96	-857.69
63219 GRANTCO7 115 63223 HOOT LK7 115 1	63314 BIGSTON4 230 63320 ORTNVLE4 230 1	-0.08	-96.60	1.94	-994.85
62528 TAMARAC7 115 62533 CORMRNT7 115 1	63331 FERGSFL4 230 63366 SILVRLK4 230 1	0.09	98.00	1.89	-718.53
63194 FERGSFLY 230 63331 FERGSFL4 230 1	63331 FERGSFL4 230 63366 SILVRLK4 230 1	-0.22	-112.00	1.89	-241.28
62529 CMRTJCT7 115 62533 CORMRNT7 115 1	63331 FERGSFL4 230 63366 SILVRLK4 230 1	-0.09	-98.00	1.85	-679.47
62528 TAMARAC7 115 63234 PEL RPD7 115 1	63331 FERGSFL4 230 63366 SILVRLK4 230 1	-0.09	-98.00	1.60	-417.08
63223 HOOT LK7 115 63233 EDGETAP7 115 1	63331 FERGSFL4 230 63366 SILVRLK4 230 1	0.09	96.00	1.15	51.39

63219 GRANTCO7 115 63220 ELBOWLK7 115 1	63331 FERGSFL4 230 63366 SILVRLK4 230 1	0.06	170.00	1.13	-167.24
63221 BRANDN 7 115 92028 G817_TAP 115 1	63331 FERGSFL4 230 63366 SILVRLK4 230 1	-0.06	-170.00	1.10	-66.95
63220 ELBOWLK7 115 92028 G817_TAP 115 1	63331 FERGSFL4 230 63366 SILVRLK4 230 1	0.06	170.00	1.05	62.68

G914	136.5 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
36969 MAZON; R 138 37085 OGLES; T 138 1	36032 DRES;1M 138 36302 DRES; B 345 1	-0.05	-115.00	1.45	-801.50
32418 HENNEPIN 138 32432 OTTAWA T 138 1	32418 HENNEPIN 138 32433 ESK TAP 138 1	0.12	191.00	1.09	-0.70
32428 1556A TP 138 32433 ESK TAP 138 1	32418 HENNEPIN 138 32432 OTTAWA T 138 1	-0.13	-202.00	1.00	135.40
36217 KEWAN; 5 138 36890 KEWAN; 1 138 1	36891 KEWAN; 138 37051 NORMA; R 138 1	0.05	244.00	1.02	52.90
37051 NORMA; R 138 900090 O09COP1 138 1	Base Case	0.05	140.00	1.05	-10.70
37171 R FAL; R 138 900090 O09COP1 138 1	Base Case	-0.05	-140.00	1.07	-51.70

G915	150 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
36276 BLUEM; B 345 36344 PONTI; B 345 1	36277 BROKA; T 345 36345 PONTI; R 345 1	0.17	1356.00	1.16	-1120.80
30840 KANSAS 345 32387 SIDNEY 345 1	22653 05BREED 345 30309 CASEY 345 1	0.11	956.00	1.02	-38.20
36276 BLUEM; B 345 36348 LATHA; T 345 1	36277 BROKA; T 345 36345 PONTI; R 345 1	-0.17	-1356.00	1.10	-696.80

36342 KINCA; B 345 36348 LATHA; T 345 1	345-L8001-S1	0.26	1356.00	1.01	72.10
36344 PONTI; B 345 900510 O51 C 345 1	22667 05JEFRSO 765 22671 05ROCKPT 765 1	0.11	1234.00	1.00	149.80
36414 WILTO; B 345 900510 O51 C 345 1	22667 05JEFRSO 765 22671 05ROCKPT 765 1	-0.11	-1234.00	1.07	-642.80

G916	52.8 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
66550 GRANITF4 230 60150 MNVLTAP4 230 1	500	0.06	387.00	2.46	-9715.31
67204 BRDLNDTY 345 67120 BRDLAND3 345 1 67204 BRDLNDTY 345 67205 BRDLAND4 230 1	67105 LELANDO3 345 67160 GROTON 3 345 1	-0.11	-400.00	2.21	-4488.78
67205 BRDLAND4 230 66514 HURON 4 230 1	67105 LELANDO3 345 67160 GROTON 3 345 1	0.11	400.00	2.21	-4484.10
63362 OAKES 4 230 67326 ELLENDL4 230 1	63369 JAMESTN3 345 66791 CENTER 3 345 1	-0.05	-240.00	5.34	-20715.85
66754 MAPLE R4 230 60133 SHEYNNE4 230 1	60133 SHEYNNE4 230 66435 FARGO 4 230 1	0.05	318.00	2.27	-7481.46
63190 MAPLER2Y 345 66792 MAPLE R3 345 1 63190 MAPLER2Y 345 66754 MAPLE R4 230 1	63189 MAPLER1Y 345 66792 MAPLE R3 345 1	0.11	336.00	5.57	-13664.02
67342 HESKETT4 230 66751 CENTER 4 230 1	63369 JAMESTN3 345 66791 CENTER 3 345 1	-0.25	-428.00	3.60	-4376.36
63189 MAPLER1Y 345 66792 MAPLE R3 345 1 63189 MAPLER1Y 345 66754 MAPLE R4 230 1	63190 MAPLER2Y 345 66792 MAPLE R3 345 1	0.11	336.00	6.92	-17700.64

G918	120 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
28601 18BEGO 138 28533 18TITB 138 1	28601 18BEGO 138 28533 18TITB 138 1	-1.00	-209.90	1.53	9.60

28601 18BEGO 138 29931 18CHEENJ 138 1	28601 18BEGO 138 28533 18TITB 138 1	0.88	209.90	1.21	69.37
28199 18ALMA 138 29931 18CHEENJ 138 1	28601 18BEGO 138 28533 18TITB 138 1	-0.88	-209.90	1.16	80.85

G922	119.51 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
NO CONSTRAINTS					

G923	200 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
25473 08DELCO 138 25483 08DELBK2 138 1	25408 08WEBSTE 230 25411 08NEWLON 230 1	-0.14	146.00	2.03	-2979.86
25471 08MAPLE 138 26461 08CHRYS2 138 1	25408 08WEBSTE 230 25411 08NEWLON 230 1	-0.13	146.00	1.81	-2880.45
25478 08KOKOMO 138 26462 08CHRYS3 138 1	25408 08WEBSTE 230 25411 08NEWLON 230 1	0.14	179.00	1.75	-791.11
25473 08DELCO 138 25475 08GRTOW2 138 1	25408 08WEBSTE 230 25411 08NEWLON 230 1	0.13	146.00	1.74	-604.48
25396 08KO IN5 138 25416 08KOK HP 230 1	25416 08KOK HP 230 25478 08KOKOMO 138 1	-0.06	75.00	1.73	-3451.79
25395 08KO IN4 138 25416 08KOK HP 230 1	25416 08KOK HP 230 25478 08KOKOMO 138 1	-0.06	75.00	1.71	-3437.50
25397 08KO IN6 138 25416 08KOK HP 230 1	25416 08KOK HP 230 25478 08KOKOMO 138 1	-0.06	75.00	1.71	-3433.93
25478 08KOKOMO 138 25483 08DELBK2 138 2	25408 08WEBSTE 230 25411 08NEWLON 230 1	0.14	179.00	1.68	-658.87
25396 08KO IN5 138 25478 08KOKOMO 138 1	25416 08KOK HP 230 25478 08KOKOMO 138 1	0.06	75.00	1.64	-658.93

25395 08KO IN4 138 25478 08KOKOMO 138 1	25416 08KOK HP 230 25478 08KOKOMO 138 1	0.06	75.00	1.63	-644.64
25397 08KO IN6 138 25478 08KOKOMO 138 1	25416 08KOK HP 230 25478 08KOKOMO 138 1	0.06	75.00	1.63	-641.07
25471 08MAPLE 138 25475 08GRTOW2 138 1	25408 08WEBSTE 230 25411 08NEWLON 230 1	0.13	146.00	1.56	-428.46
25416 08KOK HP 230 25478 08KOKOMO 138 1	Kokomo 3 winding xfr 230/138/69. 69 windi	0.17	278.10	1.38	-413.79
25373 08WALTON 345 25407 08WALTON 230 1	AEP14	-0.10	637.40	1.14	-13054.37
25408 08WEBSTE 230 25411 08NEWLON 230 1	AEP20	-0.20	797.00	1.12	-8481.03
36335 GOODI;2R 345 36355 LOCKP; R 345 1	10805_10806	0.05	1542.00	1.07	-1908.00
36336 GOODI;4B 345 36354 LOCKP; B 345 1	10805_10806	0.05	1542.00	1.07	-1803.92
25407 08WALTON 230 25408 08WEBSTE 230 1	25409 08GRNTWN 230 25410 08PER SE 230 1	-0.08	478.00	1.04	-12613.16

G924	300 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
62234 LKMARN 7 115 62237 KENRICK7 115 1	CAPX9	0.25	144.00	1.73	-118.00
62232 DKTAHGT7 115 62237 KENRICK7 115 1	CAPX9	-0.25	-144.00	1.66	-74.40
62225 BURNVIL7 115 62232 DKTAHGT7 115 1	CAPX9	-0.25	-139.00	1.49	30.80
34014 ADAMS 5 161 60102 ADAMS 3 345 1	60102 ADAMS 3 345 63032 PL VLLY3 345 1	0.09	300.00	1.46	-1217.78
34020 HAZL S 5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345 1	0.06	167.00	1.42	-893.33
61906 MAPLE LF 161 61948 BYRON 5 161 1	60186 AS KING3 345 60304 EAU CL 3 345 1	-0.09	-302.00	1.30	-713.33
61906 MAPLE LF 161 63430 CASCADE 161 1	60186 AS KING3 345 60304 EAU CL 3 345 1	0.09	302.00	1.26	-566.67

60108 WILMART3 345 60192 BLUE LK3 345 1	60384 FEPTP 7 115 62234 LKMARN 7 115 1	0.09	1166.00	1.09	-925.56
69547 ROCHSTR5 161 69549 WABACO 5 161 1	34018 HAZLTON3 345 60102 ADAMS 3 345 1	0.05	201.00	1.08	-2.00
60384 FEPTP 7 115 62234 LKMARN 7 115 1	910_MN	0.61	310.00	1.07	262.79

G925		300 MW		SPA			
Limiting Constraint		Contingency		DF	Rating	PU Overload	FCITC
36276 BLUEM; B 345 36344 PONTI; B 345 1		36277 BROKA; T 345 36345 PONTI; R 345 1		0.26	1356.00	1.20	-717.50
32347 BROKAW1 345 32447 BROKAW2 345 1		36277 BROKA; T 345 33200 LANSVLAM 345 1		-0.45	-1195.00	1.05	157.80
32347 BROKAW1 345 36277 BROKA; T 345 1		36277 BROKA; T 345 33200 LANSVLAM 345 1		0.39	1102.00	1.08	67.30
36276 BLUEM; B 345 36348 LATHA; T 345 1		36277 BROKA; T 345 36345 PONTI; R 345 1		-0.26	-1356.00	1.14	-446.50
36277 BROKA; T 345 36345 PONTI; R 345 1		Base Case		0.35	1339.00	1.05	117.80
36344 PONTI; B 345 900510 O51 C 345 1		22667 05JEFRSO 765 22671 05ROCKPT 765 1		0.21	1234.00	1.04	80.10
36414 WILTO; B 345 900510 O51 C 345 1		22667 05JEFRSO 765 22671 05ROCKPT 765 1		-0.21	-1234.00	1.11	-342.90

G929		60.8 MW		DPP			
Limiting Constraint		Contingency		DF	Rating	PU Overload	FCITC
34020 HAZL S 5 161 34135 DUNDEE 5 161 1		34018 HAZLTON3 345 34093 ARNOLD 3 345 1		0.05	167.00	1.51	-1489.78

G930	120 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
34018 HAZLTON3 345 34093 ARNOLD 3 345 1	ALTW-13A	0.14	717.00	1.28	-1350.36
34093 ARNOLD 3 345 64352 TIFFIN 3 345 1	050 3	0.13	717.00	1.21	-1079.34
34014 ADAMS 5 161 60102 ADAMS 3 345 1	MAPP-9	0.06	300.00	1.17	-667.19
38849 PLS PR2 345 36421 ZION ; R 345 1	Base Case	0.07	1096.00	1.06	-822.70
63875 RAUN 3 345 65351 S3451 3 345 1	NSP_Wilm	0.06	956.00	1.02	-255.54
60202 COON CK3 345 60272 MPLEGV23 345 1	670 1	-0.34	-1064.80	1.01	73.99

G931	150 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
28028 17EWINMC 138 28058 17MONTCL 138 1	Buroak 345-138 & Plymouth-Stilwell 138	-0.06	-137.00	1.43	-879.20
28023 17BUROAK 138 28028 17EWINMC 138 1	Buroak 345-138 & Plymouth-Stilwell 138	-0.06	-137.00	1.01	119.57
25375 08NUCOR 345 25380 08WHITST 345 1	22667 05JEFRSO 765 22671 05ROCKPT 765 1	0.06	956.00	1.19	-2772.10
28028 17EWINMC 138 28059 17MONTCL 138 1	NIPSCO_31	-0.07	-137.00	1.75	-1330.10

G932	56.1 MW	SPA			

Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
66550 GRANITF4 230 60150 MNVLTAP4 230 1	63337 JHNSNJT4 230 63335 JHNSNJTY 230 1	0.07	387.00	2.76	-9583.96
62005 KERKHOT7 115 62006 KERKHO 7 115 1	63337 JHNSNJT4 230 63335 JHNSNJTY 230 1	-0.37	-44.80	1.79	-39.30
63054 PANTHER4 230 60150 MNVLTAP4 230 1	63337 JHNSNJT4 230 63335 JHNSNJTY 230 1	-0.11	-426.80	1.35	-1290.34
66550 GRANITF4 230 66554 MORRIS 4 230 1	63337 JHNSNJT4 230 63335 JHNSNJTY 230 1	-0.12	-239.00	1.15	-248.51
62001 BENSON 7 115 62006 KERKHO 7 115 1	63337 JHNSNJT4 230 63335 JHNSNJTY 230 1	0.37	79.70	1.06	44.09

G934	300 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
28511 GOSS 138 28512 GOSS M 138 1	28200 GOSS 345 28224 THETFD 345 1	0.44	549.40	1.04	249.30

G935	201 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
25478 08KOKOMO 138 25483 08DELBK2 138 2	25408 08WEBSTE 230 25411 08NEWLON 230 1	0.11	179.00	1.81	-1128.18
25473 08DELCO 138 25475 08GRTOW2 138 1	25476 08CHRYS1 138 26462 08CHRYS3 138 1	0.09	146.00	1.68	-886.67
25471 08MAPLE 138 25475 08GRTOW2 138 1	25408 08WEBSTE 230 25411 08NEWLON 230 1	0.10	146.00	1.64	-727.00
25478 08KOKOMO 138 26462 08CHRYS3 138 1	08DELCO-08GRTOW2-08DELBK2-138	0.10	179.00	1.64	-949.00
22656 05DEQUIN 345 94940 Q01COP1 345 1	NIPS1	0.07	848.00	1.34	-3872.86

25416 08KOK HP 230 25478 08KOKOMO 138 1	25408 08WEBSTE 230 25411 08NEWLON 230 1	0.12	278.10	1.33	-579.17
25473 08DELCO 138 25483 08DELBK2 138 1	Base Case	0.07	146.00	1.21	-248.57
25408 08WEBSTE 230 25411 08NEWLON 230 1	AEP23	0.27	797.00	1.14	-225.19
22603 05E LIMA 345 22606 05FOSTOR 345 1	AEP_TOWER35_NEW	0.07	848.00	1.14	-1510.00
25411 08NEWLON 230 93935 G935 230 1	AEP23	0.48	637.00	1.11	56.46
25373 08WALTON 345 25407 08WALTON 230 1	AEP14	0.11	637.40	1.10	-370.91
22656 05DEQUIN 345 22669 05REYNOL 345 1	22656 05DEQUIN 345 94940 Q01COP1 345 1	0.07	932.00	1.09	-1034.29
25380 08WHITST 345 27821 16GUION 345 1	AEP84	0.06	936.90	1.06	-798.33
27821 16GUION 345 25380 08WHITST 345 1	AEP84	0.06	936.90	1.06	-798.33
22675 05TWIN B 345 28206 18ARGENT 345 1	AEP_TOWER11	0.10	1409.00	1.05	-458.00
25379 08NOBLSV 345 22664 05FALL C 345 1	08WHITST-16GUION-16WSTLAN-345-138	0.15	956.00	1.04	-76.00
22619 05SCANTO 345 22620 05SCANTO 765 3	Base Case	0.06	1954.00	1.04	-1051.67
25407 08WALTON 230 25408 08WEBSTE 230 1	25402 08KOEAST 230 25408 08WEBSTE 230 1	0.17	478.00	1.03	107.06
25471 08MAPLE 138 26461 08CHRYS2 138 1	Base Case	0.06	146.00	1.02	160.00
25402 08KOEAST 230 25408 08WEBSTE 230 1	25407 08WALTON 230 25408 08WEBSTE 230 1	0.22	478.00	1.00	198.18

G937	200 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
NO CONSTRAINTS					

G939	250 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
66550 GRANITF4 230 60150 MNVLTAP4 230 1	500	0.09	387.00	2.85	-7848.69
63314 BIGSTON4 230 66503 BLAIR 4 230 1	63314 BIGSTON4 230 63320 ORTNVLE4 230 1	0.23	480.00	2.81	-3511.70
66503 BLAIR 4 230 66550 GRANITF4 230 1	66550 GRANITF4 230 63311 CANBY 4 230 1	0.08	398.00	1.83	-4124.67
63050 WILLMAR4 230 66550 GRANITF4 230 1	795	-0.05	-382.00	1.95	-6974.08
62980 MCLEOD 4 230 63054 PANTHER4 230 1	500	-0.07	-426.00	1.63	-3684.56
66537 WHITE 3 345 60130 SPLTRTA3 345 1	60362 CHANRMB7 115 60369 FENTON 115 C1	0.10	720.00	2.10	-7689.95

G940	105 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
NO CONSTRAINTS					

G941	67 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
22620 05SCANTO 765 22619 05SCANTO 345 3	AEP_TOWER14	0.06	2402.00	1.01	-223.33

G942	24 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
NO CONSTRAINTS					

G943	150 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
NO CONSTRAINTS					

G944	150 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
NO CONSTRAINTS					

G947	201 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
34570 ADAMS_N5 161 69547 ROCHSTR5 161 1	61950 BYRON 3 345 91482 G762 345	0.05	196.80	3.91	-10508.94

34072 FRNKLIN7 115 34077 IA FALS7 115 1	34072 FRNKLIN7 115 64239 FRANKLN5 161	1.00	106.00	3.79	-94.50
64239 FRANKLN5 161 34072 FRNKLIN7 115 1	34072 FRNKLIN7 115 34077 IA FALS7 115	-1.00	-110.60	3.63	-89.90
64269 WASHBRN5 161 34020 HAZL S 5 161 1	34018 HAZLTON3 345 64616 bhawkt3 345	0.13	209.60	2.77	-2672.23
64258 LUNDQST5 161 64261 DR NE 5 161 1	34018 HAZLTON3 345 64616 bhawkt3 345	0.08	194.40	2.57	-3580.38
64261 DR NE 5 161 64269 WASHBRN5 161 1	34018 HAZLTON3 345 64616 bhawkt3 345	0.08	194.00	2.39	-3149.48
64267 EL FARM5 161 64269 WASHBRN5 161 1	34018 HAZLTON3 345 64616 bhawkt3 345	0.10	222.20	1.70	-1323.22
64201 WEBSTER5 161 64220 WRIGHT 5 161 1	34018 HAZLTON3 345 64616 bhawkt3 345	-0.27	-211.30	1.68	-333.20
64260 DR ENG 5 161 64267 EL FARM5 161 1	34018 HAZLTON3 345 64616 bhawkt3 345	0.10	259.80	1.61	-1325.44

G948	250 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
34137 TRIBOJI5 161 66563 SPENCER5 161 1	NSP-GRE SPS 3-4 COMBO	0.07	195.00	1.54	-1225.30
34009 WINBAGO5 161 34013 WNBAGOS5 161 1	60108 WILMART3 345 60192 BLUE LK3 345 1	0.07	167.00	1.43	-820.70
63876 RAUN 5 161 64987 TEKAMAH5 161 1	RAUN-FTCAL-H	0.06	217.00	1.40	-1079.50
66565 SIOUXCY4 230 64994 TWIN CH4 230 1	RAUN-FTCAL-H	0.05	319.00	1.22	-1067.60
34010 HAYWARD5 161 34013 WNBAGOS5 161 1	60108 WILMART3 345 60192 BLUE LK3 345 1	-0.05	-167.00	1.16	-250.00
60108 WILMART3 345 60331 LKFLDXL3 345 1	Base Case	-0.24	-1165.00	1.12	-303.50
60265 LOONLKTP 115 60830 EASTWD18 115 1	60108 WILMART3 345 60192 BLUE LK3 345 1	-0.05	-318.00	1.12	-428.00
60108 WILMART3 345 60192 BLUE LK3 345 1	Base Case	0.20	1166.00	1.07	-137.00

66303 SIOUXC1T 345 66565 SIOUXCY4 230 1	RAUN-FTCAL-H	0.07	250.00	1.06	40.60
66306 SIOUXC2T 345 66565 SIOUXCY4 230 1	RAUN-FTCAL-H	0.07	250.00	1.04	99.00

G949	200 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
25456 08GFDFJT 138 25457 08LAF SE 138 1	25439 08SUBARU 138 25457 08LAF SE 138 1	-0.77	-120.00	1.67	95.64
25457 08LAF SE 138 25802 08TIPC NJ 138 1	22656 05DEQUIN 345 22663 05EUGENE 345 1	-0.79	-146.00	1.60	88.30
25455 08AESTLE 138 25456 08GFDFJT 138 1	25439 08SUBARU 138 25457 08LAF SE 138 1	-0.77	-146.00	1.38	129.20
25586 08CRAWF 138 25802 08TIPC NJ 138 1	25457 08LAF SE 138 25802 08TIPC NJ 138 1	-1.00	-146.00	1.37	145.80
25451 08SOUTHJ 138 25454 08LAFGFD 138 1	25439 08SUBARU 138 25457 08LAF SE 138 1	-0.77	-146.00	1.08	184.45

G950	25 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
69561 WASHCO 5 161 60290 ST LAKE5 161 1	39450 ST LAKE 345 39676 GARDR PK 345 1	-0.06	-120.00	1.66	-1264.45
61702 LASKIN 7 115 61704 34L TAP7 115 1	61691 SLVRBYH7 115 61692 SLVRBAY7 115 1	0.35	99.00	1.36	-78.73
61702 LASKIN 7 115 62451 LAKELND7 115 1	61702 LASKIN 7 115 61704 34L TAP7 115 1	0.45	107.00	1.25	-34.84
69557 BARRON 5 161 69561 WASHCO 5 161 1	39450 ST LAKE 345 39676 GARDR PK 345 1	-0.06	-120.00	1.19	-390.78
61691 SLVRBYH7 115 61692 SLVRBAY7 115 1	61696 TAC HBR6 138 61698 HOYT LK6 138 2	-0.08	-112.00	1.04	-36.84

G951	99 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
66550 GRANITF4 230 60150 MNVLTAP4 230 1	500	0.06	387.00	2.47	-9461.52
67204 BRDLNDTY 345 67120 BRDLAND3 345 1 67204 BRDLNDTY 345 67205 BRDLAND4 230 1	67105 LELANDO3 345 67160 GROTON 3 345 1	-0.11	-400.00	2.24	-4398.83
66435 FARGO 4 230 60133 SHEYNNE4 230 1	63369 JAMESTN3 345 66791 CENTER 3 345 1	0.08	391.00	2.31	-6563.92
67205 BRDLAND4 230 66514 HURON 4 230 1	67105 LELANDO3 345 67160 GROTON 3 345 1	0.11	400.00	2.24	-4394.30
63362 OAKES 4 230 67326 ELLENDL4 230 1	63369 JAMESTN3 345 66791 CENTER 3 345 1	-0.05	-240.00	5.36	-19171.06
63189 MAPLER1Y 345 66792 MAPLE R3 345 1 63189 MAPLER1Y 345 66754 MAPLE R4 230 1	63190 MAPLER2Y 345 66792 MAPLE R3 345 1	0.12	336.00	6.96	-16211.05
63190 MAPLER2Y 345 66792 MAPLE R3 345 1 63190 MAPLER2Y 345 66754 MAPLE R4 230 1	63189 MAPLER1Y 345 66792 MAPLE R3 345 1	0.12	336.00	5.61	-12525.12
66754 MAPLE R4 230 60133 SHEYNNE4 230 1	60133 SHEYNNE4 230 66435 FARGO 4 230 1	0.06	318.00	2.29	-7212.42
67342 HESKETT4 230 66751 CENTER 4 230 1	63369 JAMESTN3 345 66791 CENTER 3 345 1	-0.28	-428.00	3.67	-4040.68
66756 SQBUTTE4 230 66791 CENTER 3 345 1	66791 CENTER 3 345 67316 COYOTE 3 345 1	0.14	336.00	1.13	-218.52

G952	100 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
25478 08KOKOMO 138 25483 08DELBK2 138 2	25408 08WEBSTE 230 25411 08NEWLON 230 1	0.11	179.00	1.87	-1323.64
25473 08DELCO 138 25475 08GRTOW2 138 1	25476 08CHRYS1 138 26462 08CHRYS3 138 1	0.09	146.00	1.74	-1096.67

25471 08MAPLE 138 25475 08GRTOW2 138 1	25408 08WEBSTE 230 25411 08NEWLON 230 1	0.10	146.00	1.71	-935.00
25478 08KOKOMO 138 26462 08CHRYS3 138 1	08DELCO-08GRTOW2-08DELBK2-138	0.10	179.00	1.69	-1141.00
25416 08KOK HP 230 25478 08KOKOMO 138 1	25408 08WEBSTE 230 25411 08NEWLON 230 1	0.12	278.10	1.38	-772.50
22656 05DEQUIN 345 94940 Q01COP1 345 1	NIPS1	0.07	848.00	1.35	-4077.14
22668 05OLIVE 345 94940 Q01COP1 345 1	NIPS1	0.07	848.00	1.32	-3781.43
25473 08DELCO 138 25483 08DELBK2 138 1	Base Case	0.07	146.00	1.26	-441.43
22668 05OLIVE 345 22669 05REYNOL 345 1	22656 05DEQUIN 345 94940 Q01COP1 345 1	0.07	961.00	1.22	-2865.71
22603 05E LIMA 345 22606 05FOSTOR 345 1	AEP_TOWER35_NEW	0.07	848.00	1.15	-1704.29
25408 08WEBSTE 230 25411 08NEWLON 230 1	AEP20	0.13	797.00	1.15	-794.62
25373 08WALTON 345 25407 08WALTON 230 1	AEP14	0.11	637.40	1.12	-578.18
22656 05DEQUIN 345 22669 05REYNOL 345 1	22656 05DEQUIN 345 94940 Q01COP1 345 1	0.07	932.00	1.10	-1222.86
25402 08KOEAST 230 25408 08WEBSTE 230 1	25407 08WALTON 230 25408 08WEBSTE 230 1	0.09	478.00	1.08	-327.78
25380 08WHITST 345 27821 16GUION 345 1	AEP84	0.06	936.90	1.07	-985.00
27821 16GUION 345 25380 08WHITST 345 1	AEP84	0.06	936.90	1.07	-985.00
25407 08WALTON 230 25408 08WEBSTE 230 1	25402 08KOEAST 230 25408 08WEBSTE 230 1	0.17	478.00	1.07	-90.00
22664 05FALL C 345 25379 08NOBLSV 345 1	08WHITST-16GUION-16WSTLAN-345-138	0.15	956.00	1.06	-273.33
25379 08NOBLSV 345 22664 05FALL C 345 1	08WHITST-16GUION-16WSTLAN-345-138	0.15	956.00	1.06	-273.33
22675 05TWIN B 345 28206 18ARGENT 345 1	AEP_TOWER11	0.10	1409.00	1.05	-661.00
22619 05SCANTO 345 22620 05SCANTO 765 3	Base Case	0.06	1954.00	1.04	-1238.33

G955	98.6 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
NO CONSTRAINTS					

G956	49.5 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
NO CONSTRAINTS					

G957	300 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
34013 WNBAGOS5 161 69529 WINNCO 5 161 1	Base Case	-0.77	-71.50	5.57	-124.39
34570 ADAMS_N5 161 61984 AUSTIN 5 161 1	63032 PL VLLY3 345 63070 PL VLLY5 161	-0.12	-279.00	3.50	-5762.65
34009 WINBAGO5 161 34013 WNBAGOS5 161 1	61950 BYRON 3 345 91482 G762 345	-0.54	-166.90	3.22	-379.72
34010 HAYWARD5 161 34013 WNBAGOS5 161 1	34009 WINBAGO5 161 34013 WNBAGOS5 161	-0.60	-167.00	2.83	-209.34
34017 CGORDO_5 161 34139 HANCOCK5 161 1	ALTW-C103	0.05	222.20	1.91	-3413.20
34016 EMERY 5 161 34017 CGORDO_5 161 1	ALTW-C103	0.05	238.40	1.77	-3047.44
34007 LAKEFLD5 161 34008 FOX LK 5 161 1	34007 LAKEFLD5 161 990 JACKN 5 161	-0.25	-159.90	1.57	-61.79

G958	120 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
NO CONSTRAINTS					

G959	200 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
34020 HAZL S 5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345 1	0.05	167.00	3.07	-6700.00
34014 ADAMS 5 161 60102 ADAMS 3 345 1	60102 ADAMS 3 345 63032 PL VLLY3 345 1	0.08	300.00	1.42	-1368.75
61906 MAPLE LF 161 61948 BYRON 5 161 1	60102 ADAMS 3 345 63032 PL VLLY3 345 1	-0.07	-302.00	1.35	-1289.00
61906 MAPLE LF 161 63430 CASCADE 161 1	60102 ADAMS 3 345 63032 PL VLLY3 345 1	0.07	302.00	1.30	-1100.43

G960	200 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
34020 HAZL S 5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345 1	0.05	167.00	3.14	-6918.00
34014 ADAMS 5 161 60102 ADAMS 3 345 1	60102 ADAMS 3 345 63032 PL VLLY3 345 1	0.08	300.00	1.48	-1576.25
61906 MAPLE LF 161 61948 BYRON 5 161 1	60102 ADAMS 3 345 63032 PL VLLY3 345 1	-0.07	-302.00	1.40	-1498.57

61906 MAPLE LF 161 63430 CASCADE 161 1	60102 ADAMS 3 345 63032 PL VLLY3 345 1	0.07	302.00	1.35	-1310.00
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G961	200 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
34020 HAZL S 5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345 1	0.05	167.00	3.20	-7138.00
34014 ADAMS 5 161 60102 ADAMS 3 345 1	60102 ADAMS 3 345 63032 PL VLLY3 345 1	0.08	300.00	1.53	-1783.75
61906 MAPLE LF 161 61948 BYRON 5 161 1	60102 ADAMS 3 345 63032 PL VLLY3 345 1	-0.07	-302.00	1.44	-1708.57
61906 MAPLE LF 161 63430 CASCADE 161 1	60102 ADAMS 3 345 63032 PL VLLY3 345 1	0.07	302.00	1.40	-1520.00
60223 KOCHREF7 115 60341 ROSEMON7 115 1	60218 INVRHLS7 115 60271 RICHVLY7 115 1	0.17	191.00	1.03	159.29
60218 INVRHLS7 115 60223 KOCHREF7 115 1	60218 INVRHLS7 115 60223 KOCHREF7 115 P2	0.20	371.00	1.01	169.00
60218 INVRHLS7 115 60223 KOCHREF7 115 P2	60218 INVRHLS7 115 60223 KOCHREF7 115 1	0.20	371.00	1.01	169.00

G962	100 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
34570 ADAMS_N5 161 69547 ROCHSTR5 161 1	61950 BYRON 3 345 91482 G762 345	0.12	196.80	3.97	-4734.19
34129 LIBERTY5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345	-0.08	-166.20	2.27	-2399.15
34020 HAZL S 5 161 34135 DUNDEE 5 161 1	34036 ROCK CK3 345 36382 QUAD ; 345	0.06	164.90	1.71	-1885.32
34091 ARNOLD 5 161 34111 FAIRFAX5 161 1	34093 ARNOLD 3 345 34555 BEV345T 345	0.10	301.60	1.27	-691.81

G963	200 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
34570 ADAMS_N5 161 69547 ROCHSTR5 161 1	61950 BYRON 3 345 91482 G762 345	0.12	196.80	4.09	-4834.19
34129 LIBERTY5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345	-0.08	-166.20	2.37	-2499.15
34020 HAZL S 5 161 34135 DUNDEE 5 161 1	34036 ROCK CK3 345 36382 QUAD ; 345	0.06	164.90	1.78	-1985.32
34091 ARNOLD 5 161 34111 FAIRFAX5 161 1	34093 ARNOLD 3 345 34555 BEV345T 345	0.10	301.60	1.34	-791.81

G964	300 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
34570 ADAMS_N5 161 69547 ROCHSTR5 161 1	61950 BYRON 3 345 91482 G762 345	0.12	196.80	4.28	-5034.19
34129 LIBERTY5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345	-0.08	-166.20	2.52	-2699.15
34020 HAZL S 5 161 34135 DUNDEE 5 161 1	34036 ROCK CK3 345 36382 QUAD ; 345	0.06	164.90	1.89	-2185.32
34091 ARNOLD 5 161 34111 FAIRFAX5 161 1	34093 ARNOLD 3 345 34555 BEV345T 345	0.10	301.60	1.45	-991.81

G965	300 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC

34570 ADAMS_N5 161 69547 ROCHSTR5 161 1	61950 BYRON 3 345 91482 G762 345	0.12	196.80	4.46	-5334.19
34129 LIBERTY5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345	-0.08	-166.20	2.67	-2999.15
34020 HAZL S 5 161 34135 DUNDEE 5 161 1	34036 ROCK CK3 345 36382 QUAD ; 345	0.06	164.90	2.00	-2485.32
34091 ARNOLD 5 161 34111 FAIRFAX5 161 1	34093 ARNOLD 3 345 34555 BEV345T 345	0.10	301.60	1.55	-1291.81
34572 ADAMS_S5 161 34014 ADAMS 5 161 1	34018 HAZLTON3 345 91468 G740 345	-0.26	-327.80	1.16	100.93
34572 ADAMS_S5 161 69526 BVR CRK5 161 1	34018 HAZLTON3 345 91468 G740 345	0.12	219.80	1.12	67.99

G966	160 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
30614 GIBSON C 138 32348 BROKAW 138 1	31471 PAXTON 138 31472 PAXTON E 138 1	1.00	160.00	1.59	65.41
25375 08NUCOR 345 25380 08WHITST 345 1	22667 05JEFRSO 765 22671 05ROCKPT 765 1	0.07	956.00	1.20	-2530.30
28030 17GODLND 138 28072 17RYNLDS 138 1	22656 05DEQUIN 345 22669 05REYNOL 345 1	0.08	191.00	1.26	-327.10
31739 SIDNYCPS 138 32388 SIDNEY 138 1	kansas	0.15	287.00	1.17	-11.00

G967	100.8 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
22675 05TWIN B 345 28206 18ARGENT 345 1	AEP_TOWER11	0.06	1409.00	1.04	-715.00

G968	100 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
NO CONSTRAINTS					

G970	100 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
34570 ADAMS_N5 161 69547 ROCHSTR5 161 1	61950 BYRON 3 345 63032 PL VLLYL3345 1	0.12	196.80	4.52	-5634.19
34129 LIBERTY5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345	-0.08	-166.20	2.72	-3299.15
34020 HAZL S 5 161 34135 DUNDEE 5 161 1	34036 ROCK CK3 345 36382 QUAD ; 345	0.06	164.90	2.03	-2785.32
34091 ARNOLD 5 161 34111 FAIRFAX5 161 1	34093 ARNOLD 3 345 34555 BEV345T 345	0.10	301.60	1.59	-1591.81
34572 ADAMS_S5 161 34014 ADAMS 5 161 1	34018 HAZLTON3 345 60102 ADAMS 3 345	-0.26	-327.80	1.23	-199.07
34572 ADAMS_S5 161 69526 BVR CRK5 161 1	34018 HAZLTON3 345 60102 ADAMS 3 345	0.12	219.80	1.18	-232.01

G971	20 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
34018 HAZLTON3 345 34093 ARNOLD 3 345 1	ALTW-13A	0.12	717.00	1.28	-1719.90
34093 ARNOLD 3 345 64352 TIFFIN 3 345 1	050 3	0.11	717.00	1.22	-1398.35

34014 ADAMS 5 161 60102 ADAMS 3 345 1	MAPP-9	0.06	300.00	1.17	-898.40
38849 PLS PR2 345 36421 ZION ; R 345 1	Base Case	0.06	1096.00	1.06	-1179.40
63875 RAUN 3 345 65351 S3451 3 345 1	NSP	0.09	956.00	1.02	-243.36
60159 STCTPW 7 115 60162 WAKEFLD7 115 1	NSP	-0.08	-113.00	1.01	0.00
62980 MCLEOD 4 230 63054 PANTHER4 230 1	NSP 1A	-0.11	-382.00	1.01	2.61

G972	500 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
34570 ADAMS_N5 161 69547 ROCHSTR5 161 1	61950 BYRON 3 345 63032 PL VLLYL3345 1	0.07	196.80	4.70	-9849.36
34129 LIBERTY5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345	-0.12	-166.20	3.08	-2382.86
34020 HAZL S 5 161 34135 DUNDEE 5 161 1	34036 ROCK CK3 345 36382 QUAD ; 345	0.09	164.90	2.30	-1957.36
34091 ARNOLD 5 161 34111 FAIRFAX5 161 1	34093 ARNOLD 3 345 34555 BEV345T 345	0.14	301.60	1.83	-1222.00
34106 PCI 5 161 34107 BEVERLY5 161 1	64352 TIFFIN 3 345 34555 BEV345T 345	-0.14	-239.80	1.06	402.99
34107 BEVERLY5 161 34111 FAIRFAX5 161 1	34093 ARNOLD 3 345 34555 BEV345T 345	-0.15	-237.40	1.03	456.47

G973	501 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
36362 NELSO; B 345 94490 P20C 345 1	36280 BYRON; B 345 37632 LEECO;BP 345 1	0.17	1234.00	1.46	-2769.66

36310 ELECT; B 345 94490 P20C 345 1	36280 BYRON; B 345 37632 LEECO;BP 345 1	0.16	1234.00	1.45	-2987.30
36280 BYRON; B 345 36289 CHERR; B 345 1	36280 BYRON; B 345 36281 BYRON; R 345 1	0.09	1530.00	1.26	-4001.18
36280 BYRON; R 345 36289 CHERR; R 345 1	36280 BYRON; B 345 36289 CHERR; B 345 1	0.06	1530.00	1.13	-2699.47
36284 CORDO; B 345 36362 NELSO; B 345 1	36368 H471 ; 345 36382 QUAD ; 345 1	0.26	1530.00	1.11	-164.01
36280 BYRON; B 345 37632 LEECO;BP 345 1	36310 ELECT; B 345 94490 P20C 345 1	0.16	1739.00	1.03	171.40
36289 CHERR; R 345 36389 SILVE; R 345 1	36362 NELSO; B 345 94490 P20C 345 1	0.11	1530.00	1.02	207.09

G975	855 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
34014 ADAMS 5 161 60102 ADAMS 3 345 1	MAPP-9	0.06	300.00	1.87	-3367.10
34020 HAZL S 5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345 1	0.05	167.00	1.55	-1051.60
61906 MAPLE LF 161 61948 BYRON 5 161 1	60102 ADAMS 3 345 63032 PL VLLY3 345 1	-0.06	-302.00	1.26	-538.90
61906 MAPLE LF 161 63430 CASCADE 161 1	60102 ADAMS 3 345 63032 PL VLLY3 345 1	0.06	302.00	1.21	-315.00
60251 TERMINL3 345 61491 TERMID2Y 110 9	NSPf	0.06	672.00	1.09	-220.50
39449 ARROWHD 345 61615 ARROWHD4 230 1	NSP 1D	-0.16	-800.00	1.09	335.80
60186 AS KING3 345 60199 CHIS CO3 345 1	60199 CHIS CO3 345 60221 KOLMNLK3 345 1	-0.63	-1166.00	1.05	684.10
69507 SENECA 5 161 69523 GENOA 5 161 1	WPL-ARP3e	-0.05	-304.00	1.04	567.10
60199 CHIS CO3 345 60221 KOLMNLK3 345 1	60186 AS KING3 345 60199 CHIS CO3 345 1	0.63	1166.00	1.03	725.30

G976	18 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
NO CONSTRAINTS					

G977	100.5 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
39371 OC CRK-2 138 39481 ST RITA 138 1	38868 RACINE6 138 39371 OC CRK-2 138 1	0.05	241.00	1.23	-1005.11
39371 OC CRK-2 138 38868 RACINE6 138 1	39371 OC CRK-2 138 39481 ST RITA 138 1	0.05	230.00	1.25	-983.95
39345 KENOSH45 138 38852 BAIN 5 138 1	38849 PLS PR2 345 36421 ZION ; R 345 1	-0.05	-392.00	1.06	-360.58
38894 N APP 3 345 39556 FOXENER 345 1	39359 N APP 1 345 39630 KEWAUNEE 345 1	-0.22	-1096.00	1.08	-295.94

G978	100 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
32447 BROKAW2 345 32346 CLINTON 345 1	36344 PONTI; B 345 36348 LATHA; T 345 1	-0.06	-1195.00	1.17	-3041.96

G979	100 MW	DPP			
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Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
25375 08NUCOR 345 25380 08WHITST 345 1	22667 05JEFRSO 765 22671 05ROCKPT 765 1	-0.10	-956.00	1.01	48.70

G980	60 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
66550 GRANITF4 230 60150 MNVLTAP4 230 1	500	0.06	387.00	2.48	-9047.27
67204 BRDLNDTY 345 67120 BRDLAND3 345 1 67204 BRDLNDTY 345 67205 BRDLAND4 230 1	67105 LELANDO3 345 67160 GROTON 3 345 1	-0.11	-400.00	2.26	-4366.90
66435 FARGO 4 230 60133 SHEYNNE4 230 1	63369 JAMESTN3 345 66791 CENTER 3 345 1	0.08	391.00	2.32	-6549.30
67205 BRDLAND4 230 66514 HURON 4 230 1	67105 LELANDO3 345 67160 GROTON 3 345 1	0.11	400.00	2.26	-4362.50
63362 OAKES 4 230 67326 ELLENDL4 230 1	63369 JAMESTN3 345 66791 CENTER 3 345 1	-0.06	-240.00	5.38	-18226.89
66246 MAURIN1T 230 66497 MAURINE4 230 1	66484 NUNDRWD4 230 66497 MAURINE4 230 1	-0.15	-100.00	5.31	-2818.13
63190 MAPLER2Y 345 66792 MAPLE R3 345 1 63190 MAPLER2Y 345 66754 MAPLE R4 230 1	63189 MAPLER1Y 345 66792 MAPLE R3 345 1	0.11	336.00	5.63	-14624.05
63189 MAPLER1Y 345 66792 MAPLE R3 345 1 63189 MAPLER1Y 345 66754 MAPLE R4 230 1	63190 MAPLER2Y 345 66792 MAPLE R3 345 1	0.11	336.00	6.97	-18893.91
66756 SQBUTTE4 230 66791 CENTER 3 345 1	66791 CENTER 3 345 67316 COYOTE 3 345 1	0.08	336.00	1.10	-385.70
67303 KNIFERIV 115 67308 BEULAH 7 115 1	66791 CENTER 3 345 67316 COYOTE 3 345 1	-0.05	-88.00	1.43	-640.86
67303 KNIFERIV 115 67343 HESKETT7 115 1	66791 CENTER 3 345 67316 COYOTE 3 345 1	0.05	88.00	1.42	-627.95
67308 BEULAH 7 115 67318 COYOTE 7 115 1	66791 CENTER 3 345 67316 COYOTE 3 345 1	-0.17	-101.40	4.50	-2023.81
67262 ELKCRK 7 115 66490 RAPIDCY7 115 1	66484 NUNDRWD4 230 66497 MAURINE4 230 1	0.09	60.00	4.85	-2645.32
66480 MAURINE7 115 66483 NEWELL 7 115 1	66484 NUNDRWD4 230 66497 MAURINE4 230 1	0.09	80.00	3.75	-2514.08

67308 BEULAH 7 115 66442 GARRISN7 115 1	66791 CENTER 3 345 67316 COYOTE 3 345 1	0.10	120.00	1.68	-725.64
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G981	20 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
66550 GRANITF4 230 60150 MNVLTAP4 230 1	500	0.06	387.00	2.48	-9606.19
66435 FARGO 4 230 60133 SHEYNNE4 230 1	63369 JAMESTN3 345 66791 CENTER 3 345 1	0.07	391.00	2.32	-7526.05
66246 MAURIN1T 230 66497 MAURINE4 230 1	66484 NUNDRWD4 230 66497 MAURINE4 230 1	-0.26	-100.00	5.36	-1688.77
66266 NUNDRWDT 230 66484 NUNDRWD4 230 1	66246 MAURIN1T 230 66497 MAURINE4 230 1	-0.06	-100.00	1.87	-1521.28
63190 MAPLER2Y 345 66792 MAPLE R3 345 1 63190 MAPLER2Y 345 66754 MAPLE R4 230 1	63189 MAPLER1Y 345 66792 MAPLE R3 345 1	0.08	336.00	5.63	-18384.58
63189 MAPLER1Y 345 66792 MAPLE R3 345 1 63189 MAPLER1Y 345 66754 MAPLE R4 230 1	63190 MAPLER2Y 345 66792 MAPLE R3 345 1	0.08	336.00	6.98	-23730.47
66756 SQBUTTE4 230 66791 CENTER 3 345 1	66791 CENTER 3 345 67316 COYOTE 3 345 1	0.07	336.00	1.09	-457.58
67308 BEULAH 7 115 67318 COYOTE 7 115 1	66791 CENTER 3 345 67316 COYOTE 3 345 1	-0.11	-101.40	4.52	-3376.05
67262 ELKCRK 7 115 66490 RAPIDCY7 115 1	66484 NUNDRWD4 230 66497 MAURINE4 230 1	0.14	60.00	4.90	-1609.88
66480 MAURINE7 115 66483 NEWELL 7 115 1	66484 NUNDRWD4 230 66497 MAURINE4 230 1	0.14	80.00	3.72	-1496.07
67262 ELKCRK 7 115 66483 NEWELL 7 115 1	66484 NUNDRWD4 230 66497 MAURINE4 230 1	-0.14	-80.00	3.63	-1445.87
66476 EAGLEBT7 115 66480 MAURINE7 115 1	66484 NUNDRWD4 230 66497 MAURINE4 230 1	-0.11	-60.00	3.77	-1467.43
66490 RAPIDCY7 115 66496 RUSHMRE7 115 1	66484 NUNDRWD4 230 66497 MAURINE4 230 1	0.09	60.00	2.33	-885.32
67308 BEULAH 7 115 66442 GARRISN7 115 1	66791 CENTER 3 345 67316 COYOTE 3 345 1	0.07	120.00	1.69	-1162.47
60108 WILMART3 345 60331 LKFLDXL3 345 1	RAUN-LAKE-LE	-0.05	-1281.00	1.07	-1671.90

60108 WILMART3 345 60192 BLUE LK3 345 1	910_MN		0.05	1195.00	1.07	-1569.30
63327 HANKSON4 230 63363 FORMAN 4 230 1		220	-0.05	-320.00	1.23	-1433.60
67342 HESKETT4 230 99969 WARD 4 230 1	105 1		0.07	320.00	1.30	-1412.10
66426 BISMARCK4 230 99969 WARD 4 230 1		230	-0.08	-320.00	1.18	-669.10
60133 SHEYNNE4 230 63336 AUDUBON4 230 1	610 1		0.06	318.00	1.06	-274.80
63329 WAHPETN4 230 63331 FERGSFL4 230 1	110 2		0.05	320.00	1.02	-95.70
60150 MNVLTAP4 230 63054 PANTHER4 230 1	NSP-GRE SPS 3-4 COMBO		0.05	427.00	1.00	12.70

G982	300 MW	SPA				
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC	
66550 GRANITF4 230 60150 MNVLTAP4 230 1		500	0.15	387.00	2.97	-4831.81
63311 CANBY 4 230 63312 CANBY Y4 230 1	63314 BIGSTON4 230 63311 CANBY 4 230 1		-0.08	-125.00	5.52	-7217.41
63314 BIGSTON4 230 66503 BLAIR 4 230 1	63314 BIGSTON4 230 63320 ORTNVLE4 230 1		0.36	480.00	3.04	-2412.77
63329 WAHPETN4 230 63331 FERGSFL4 230 1	63336 AUDUBON4 230 60133 SHEYNNE4 230 1		0.13	320.00	1.63	-1196.32
66564 SIOUXCY3 345 60131 SPLTRTB3 345 1	34006 LAKEFLD3 345 60286 NOBLES 3 345 C1		-0.15	-720.00	4.25	-15259.99
63331 FERGSFL4 230 63366 SILVRLK4 230 1	63219 GRANTCO7 115 63220 ELBOWLK7 115 1		0.11	320.00	1.60	-1375.81
63336 AUDUBON4 230 60133 SHEYNNE4 230 1	63329 WAHPETN4 230 63331 FERGSFL4 230 1		-0.07	-318.00	1.24	-766.79
63051 HENNING4 230 63366 SILVRLK4 230 1	63219 GRANTCO7 115 63220 ELBOWLK7 115 1		-0.11	-320.00	1.56	-1274.51
60126 SPLT RK3 345 60131 SPLTRTB3 345 1	34006 LAKEFLD3 345 60286 NOBLES 3 345 C1		0.15	789.00	3.88	-14802.09

66503 BLAIR 4 230 66550 GRANITF4 230 1	66550 GRANITF4 230 63311 CANBY 4 230 1	0.12	398.00	1.92	-2755.89
66296 GRANITFT 230 66550 GRANITF4 230 1	60150 MNVLTAP4 230 66550 GRANITF4 230 1	-0.08	-200.00	2.21	-2825.44
63050 WILLMAR4 230 66550 GRANITF4 230 1	795	-0.08	-382.00	2.02	-4478.66
62980 MCLEOD 4 230 63054 PANTHER4 230 1	500	-0.11	-426.00	1.71	-2354.09
66537 WHITE 3 345 60130 SPLTRTA3 345 1	60362 CHANRMB7 115 60369 FENTON 115 C1	0.19	720.00	2.18	-4165.00
66550 GRANITF4 230 60147 MINVALY4 230 1	60150 MNVLTAP4 230 66550 GRANITF4 230 1	0.07	239.00	1.81	-2346.16
60126 SPLT RK3 345 60131 SPLTRTB3 345 1	60362 CHANRMB7 115 60369 FENTON 115 C1	0.19	789.00	1.81	-3063.78
66555 MORRIS 7 115 63219 GRANTCO7 115 1	610 1	-0.06	-96.00	3.12	-3292.18
63889 PLYMOTH5 161 66566 SIOUXCY5 161 1	63875 RAUN 3 345 66564 SIOUXCY3 345 1	-0.08	-335.00	4.59	-15412.01
66551 GRANITF7 115 60148 MINVALY7 115 1	60150 MNVLTAP4 230 66550 GRANITF4 230 1	0.05	209.00	1.62	-2091.01
63263 FORMN 7 115 66438 FORMAN 7 115 1	610 2	0.10	120.00	1.04	250.58
34020 HAZL S 5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345 1	0.05	167.00	1.01	273.24

G983	42 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
NO CONSTRAINTS					

G984	42 MW	DPP			
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Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
NO CONSTRAINTS					

G985	200 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
34570 ADAMS_N5 161 69547 ROCHSTR5 161 1	61950 BYRON 3 345 63032 PL VLLYL3345 1	0.06	196.80	4.76	-12034.65
69527 HARMONY5 161 34021 LANSINGW 161 1	34021 LANSINGW 161 69523 GENOA 5 161	0.10	167.00	2.65	-2567.33
34020 HAZL S 5 161 34135 DUNDEE 5 161 1	34036 ROCK CK3 345 36382 QUAD ; 345	0.12	164.90	2.44	-1808.73
34091 ARNOLD 5 161 34111 FAIRFAX5 161 1	34093 ARNOLD 3 345 34555 BEV345T 345	0.12	301.60	1.91	-2099.17

G986	99 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
36276 BLUEM; B 345 36344 PONTI; B 345 1	36277 BROKA; T 345 36345 PONTI; R 345 1	0.14	1356.00	1.15	-1308.50
36216 KEWAN; 4 138 36217 KEWAN; 5 138 1	37085 OGLES; T 138 32426 OGLESBY 138 1	0.08	244.00	1.02	44.80
36276 BLUEM; B 345 36348 LATHA; T 345 1	36277 BROKA; T 345 36345 PONTI; R 345 1	-0.14	-1356.00	1.10	-813.10
36414 WILTO; B 345 900510 O51 C 345 1	22667 05JEFRSO 765 22671 05ROCKPT 765 1	-0.13	-1234.00	1.12	-561.00
36969 MAZON; R 138 37085 OGLES; T 138 1	36032 DRES;1M 138 36302 DRES; B 345 1	-0.07	-115.00	1.44	-623.80

G987	400 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
33580 CYPRESS 345 39247 ARCADN3 345 1	38870 GRANVL2 345 39865 SEC 345 1	0.23	486.80	1.55	-788.10
33580 CYPRESS 345 39304 FORST JT 345 1	38870 GRANVL2 345 39865 SEC 345 1	-0.23	-486.60	1.57	-822.40
38849 PLS PR2 345 36421 ZION ; R 345 1	ATC-Z5-7G	0.43	1095.50	1.49	-845.50
38852 BAIN 5 138 39345 KENOSH45 138 1	36421 ZION ; R 345 38849 PLS PR2 345 1	0.07	382.10	1.19	-663.10
38852 BAIN 5 138 39423 BAIN 2 345 2	38849 PLS PR2 345 38850 PLS PR3 345 1	-0.07	-375.30	1.27	-1071.20
38871 GRANVL3 345 39328 GRANVL 6 138 1	38870 GRANVL2 345 39329 GRANVL1 345 1	0.15	476.50	1.63	-1618.60
38931 QUARRYRN 138 39551 NEEVIN 138 1	ATC-Z4-1	-0.06	-317.40	1.09	-29.10
38931 QUARRYRN 138 39578 WODENSHO 138 1	ATC-Z4-1	0.06	317.60	1.05	141.00
39214 EDG 345 345 39396 CEDRSAUK 345 1	38870 GRANVL2 345 39865 SEC 345 1	0.10	649.70	1.32	-1670.80
39247 ARCADN3 345 36420 ZION ; B 345 1	ATC-Z5-6G	0.34	1090.00	1.06	218.80
39259 BAIN 4 138 39420 BAIN 1 345 1	38849 PLS PR2 345 39432 PLS PR1 345 1	-0.06	-375.50	1.05	90.30
39327 GRANVL 5 138 39328 GRANVL 6 138 1	38870 GRANVL2 345 39329 GRANVL1 345 1	-0.19	-536.80	1.32	-521.00
39327 GRANVL 5 138 39331 GRANVL 4 138 1	38870 GRANVL2 345 39329 GRANVL1 345 1	0.14	388.00	1.01	380.10
39330 GVL1 NEU 345 39331 GRANVL 4 138 1	39253 ARCADN1 345 39329 GRANVL1 345 1	0.09	476.30	1.02	293.90
39345 KENOSH45 138 39362 LAKEVIEW 138 1	36421 ZION ; R 345 38849 PLS PR2 345 1	0.08	287.30	1.15	-123.90
39362 LAKEVIEW 138 37384 ZION ; 138 1	36421 ZION ; R 345 38849 PLS PR2 345 1	0.08	258.00	1.16	-99.60
39433 PT BCH1 345 39865 SEC 345 1	33580 CYPRESS 345 39304 FORST JT 345 1	0.26	487.20	1.27	-104.40

G988	200 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
66550 GRANITF4 230 60150 MNVLTAP4 230 1	500	0.08	387.00	2.53	-6984.17
63362 OAKES 4 230 67326 ELLENDL4 230 1	63369 JAMESTN3 345 66791 CENTER 3 345 1	-0.38	-240.00	5.70	-2737.60
63193 FORMAN Y 230 63363 FORMAN 4 230 1	63327 HANKSON4 230 63363 FORMAN 4 230 1	-0.21	-140.00	4.16	-1952.72
63329 WAHPETN4 230 63331 FERGSFL4 230 1	63336 AUDUBON4 230 60133 SHEYNNE4 230 1	0.12	320.00	2.71	-4190.94
63336 AUDUBON4 230 60133 SHEYNNE4 230 1	63329 WAHPETN4 230 63331 FERGSFL4 230 1	-0.09	-318.00	2.72	-6011.48
63189 MAPLER1Y 345 66792 MAPLE R3 345 1 63189 MAPLER1Y 345 66754 MAPLE R4 230 1	63190 MAPLER2Y 345 66792 MAPLE R3 345 1	0.05	336.00	7.01	-37620.11
63190 MAPLER2Y 345 66792 MAPLE R3 345 1 63190 MAPLER2Y 345 66754 MAPLE R4 230 1	63189 MAPLER1Y 345 66792 MAPLE R3 345 1	0.05	336.00	5.67	-29152.35
66754 MAPLE R4 230 60133 SHEYNNE4 230 1	60133 SHEYNNE4 230 66435 FARGO 4 230 1	0.05	318.00	2.32	-7888.05
99969 WARD 4 230 67342 HESKETT4 230 1	63369 JAMESTN3 345 66791 CENTER 3 345 1	-0.25	-320.00	3.52	-3056.59
66756 SQBUTTE4 230 66791 CENTER 3 345 1	66791 CENTER 3 345 67316 COYOTE 3 345 1	0.05	336.00	1.12	-591.00
67327 ELLENDL7 115 67401 ABDNJCT7 115 1	67326 ELLENDL4 230 92209 G853_Tap 230 1	0.24	80.00	5.83	-1396.38
63263 FORMN 7 115 66438 FORMAN 7 115 1	63327 HANKSON4 230 63363 FORMAN 4 230 1	0.21	120.00	4.61	-1908.46
66438 FORMAN 7 115 66522 SUMMIT-7 115 1	63327 HANKSON4 230 63363 FORMAN 4 230 1	0.11	80.00	3.48	-1687.16
67307 BISM NW7 115 67115 CENTURY7 115 1	67342 HESKETT4 230 99969 WARD 4 230 1	0.07	119.50	2.47	-2347.50
67401 ABDNJCT7 115 67402 ABDNSBT7 115 1	67326 ELLENDL4 230 92209 G853_Tap 230 1	0.24	80.00	1.42	60.38

G991	200 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
34020 HAZL S 5 161 34135 DUNDEE 5 161 1	34018 HAZLTON3 345 34093 ARNOLD 3 345 1	0.07	167.00	4.04	-7056.71
69527 HARMONY5 161 34021 LANSINGW 161 1	34021 LANSINGW 161 69523 GENOA 5 161 1	-0.75	-167.00	2.99	-242.61
69523 GENOA 5 161 34021 LANSINGW 161 1	34021 LANSINGW 161 34022 LANSING5 161 1	-0.26	-223.00	1.91	-579.23
69523 GENOA 5 161 69535 LAC TAP5 161 1	60302 COULEE 5 161 69523 GENOA 5 161 1	0.16	279.00	1.30	-324.94
69523 GENOA 5 161 69527 HARMONY5 161 1	34021 LANSINGW 161 69523 GENOA 5 161 1	-0.28	-223.00	1.27	-15.93
34022 LANSING5 161 69531 POSTVIL5 161 1	Base Case	-0.50	-80.00	1.25	159.80
60302 COULEE 5 161 60308 LACROSS5 161 1	69523 GENOA 5 161 69535 LAC TAP5 161 1	0.14	195.00	1.22	-108.93
34570 ADAMS_N5 161 69547 ROCHSTR5 161 1	63032 PL VLLY3 345 63070 PL VLLY5 161 1	0.05	200.00	1.17	-488.00
69543 ALMA___5 161 69551 ELK MND5 161 1	69543 ALMA___5 161 69545 RCK ELM5 161 1	0.06	173.00	1.12	-144.83
69523 GENOA 5 161 60302 COULEE 5 161 1	69523 GENOA 5 161 69535 LAC TAP5 161 1	0.15	335.00	1.08	27.27
69531 POSTVIL5 161 34022 LANSING5 161 1	34021 LANSINGW 161 69523 GENOA 5 161 1	-0.19	-218.00	1.07	112.95
69507 SENECA 5 161 69511 BELLCTR5 161 1	69507 SENECA 5 161 69508 GRANGRAE 161 1	0.09	189.00	1.04	119.89

G994	20 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
66550 GRANITF4 230 60150 MNVLTAP4 230 1	500	0.06	387.00	2.53	-9288.72

67204 BRDLNDTY 345 67120 BRDLAND3 345 1 67204 BRDLNDTY 345 67205 BRDLAND4 230 1	67105 LELANDO3 345 67160 GROTON 3 345 1	-0.14	-400.00	2.27	-3713.08
66435 FARGO 4 230 60133 SHEYNNE4 230 1	63369 JAMESTN3 345 66791 CENTER 3 345 1	0.08	391.00	2.33	-6637.93
67205 BRDLAND4 230 66514 HURON 4 230 1	67105 LELANDO3 345 67160 GROTON 3 345 1	0.14	400.00	2.26	-3709.40
63362 OAKES 4 230 67326 ELLENDL4 230 1	63369 JAMESTN3 345 66791 CENTER 3 345 1	-0.06	-240.00	5.70	-20138.15
63189 MAPLER1Y 345 66792 MAPLE R3 345 1 63189 MAPLER1Y 345 66754 MAPLE R4 230 1	63190 MAPLER2Y 345 66792 MAPLE R3 345 1	0.09	336.00	7.02	-21713.12
63190 MAPLER2Y 345 66792 MAPLE R3 345 1 63190 MAPLER2Y 345 66754 MAPLE R4 230 1	63189 MAPLER1Y 345 66792 MAPLE R3 345 1	0.09	336.00	5.67	-16851.65
66756 SQBUTTE4 230 66791 CENTER 3 345 1	66791 CENTER 3 345 67316 COYOTE 3 345 1	0.08	336.00	1.09	-382.76
67308 BEULAH 7 115 67318 COYOTE 7 115 1	66791 CENTER 3 345 67316 COYOTE 3 345 1	-0.05	-101.40	4.53	-6677.10
67308 BEULAH 7 115 66442 GARRISN7 115 1	66791 CENTER 3 345 67316 COYOTE 3 345 1	0.06	120.00	1.70	-1464.65
63362 OAKES 4 230 63363 FORMAN 4 230 1	220	0.06	320.00	1.52	-2955.20
63327 HANKSON4 230 63363 FORMAN 4 230 1	220	-0.06	-320.00	1.23	-1245.90
62980 MCLEOD 4 230 63054 PANTHER4 230 1	NSP-GRE SPS 3-4 COMBO	-0.05	-319.00	1.19	-1152.90
60108 WILMART3 345 60331 LKFLDXL3 345 1	RAUN-FTCAL-H	-0.05	-1281.00	1.05	-1149.80
67342 HESKETT4 230 99969 WARD 4 230 1	230	0.12	320.00	1.36	-941.40
66426 BISMARCK4 230 99969 WARD 4 230 1	230	-0.11	-320.00	1.18	-493.10
60133 SHEYNNE4 230 63336 AUDUBON4 230 1	610 1	0.07	318.00	1.06	-239.60
63329 WAHPETN4 230 63331 FERGSFL4 230 1	110 2	0.06	320.00	1.02	-86.60
60150 MNVLTAP4 230 63054 PANTHER4 230 1	NSP-GRE SPS 3-4 COMBO	0.05	427.00	1.00	12.40

G995	99 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
39267 BRLGTN1 138 39360 NLK GV T 138 1	38883 WHTWTR5 138 38937 WALWORTH 138 1	-0.05	-238.00	1.02	13.81

G996	150 MW	DPP			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
30614 GIBSON C 138 32348 BROKAW 138 1	PAXE-WATK-1	0.28	160.00	1.86	-332.66
25375 08NUCOR 345 25380 08WHITST 345 1	22667 05JEFRSO 765 22671 05ROCKPT 765 1	0.07	956.00	1.20	-2530.30
28030 17GODLND 138 28072 17RYNLDS 138 1	22656 05DEQUIN 345 22669 05REYNOL 345 1	0.08	191.00	1.26	-327.10
31739 SIDNYCPS 138 32388 SIDNEY 138 1	kansas	0.15	287.00	1.17	-11.00

G997	200 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
28717 19BADAX 120 29094 19WYATT 120 1	28851 19SANDU 120 29094 19WYATT 120 1	-0.89	-150.00	2.58	-64.95
28851 19SANDU 120 29094 19WYATT 120 1	28717 19BADAX 120 29094 19WYATT 120 1	-0.77	-137.00	2.48	-63.70
28717 19BADAX 120 28983 19COSTP 120 1	28851 19SANDU 120 29094 19WYATT 120 1	0.75	150.00	2.25	-50.40
28715 19ARWHD 120 28983 19COSTP 120 1	28851 19SANDU 120 29094 19WYATT 120 1	-0.75	-222.00	1.46	63.47
28715 19ARWHD 120 28871 19TCOLA 120 1	28851 19SANDU 120 29094 19WYATT 120 1	0.71	200.00	1.42	81.52

G998	200 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
25473 08DELCO 138 25483 08DELBK2 138 1	25408 08WEBSTE 230 25411 08NEWLON 230 1	-0.10	-146.00	1.55	-616.19
25478 08KOKOMO 138 25483 08DELBK2 138 2	22665 05GRNTWN 765 22667 05JEFRSO 765 1	0.05	146.00	1.49	-1162.52
25478 08KOKOMO 138 26462 08CHRYS3 138 1	22665 05GRNTWN 765 22667 05JEFRSO 765 1	0.05	179.00	1.31	-887.22
25473 08DELCO 138 25475 08GRTOW2 138 1	25408 08WEBSTE 230 25411 08NEWLON 230 1	0.10	146.00	1.29	-231.72
25411 08NEWLON 230 25416 08KOK HP 230 1	25408 08WEBSTE 230 25411 08NEWLON 230 1	0.41	478.00	1.07	118.18

G999	200 MW	SPA			
Limiting Constraint	Contingency	DF	Rating	PU Overload	FCITC
25478 08KOKOMO 138 25483 08DELBK2 138 2	25478 08KOKOMO 138 26462 08CHRYS3 138 1	0.10	146.00	1.93	-1204.80
25473 08DELCO 138 25483 08DELBK2 138 1	25478 08KOKOMO 138 26462 08CHRYS3 138 1	-0.10	-146.00	1.78	-978.50
25473 08DELCO 138 25475 08GRTOW2 138 1	25408 08WEBSTE 230 25411 08NEWLON 230 1	0.12	146.00	1.74	-706.80
25471 08MAPLE 138 26461 08CHRYS2 138 1	25408 08WEBSTE 230 25411 08NEWLON 230 1	-0.11	-146.00	1.68	-669.30
25478 08KOKOMO 138 26462 08CHRYS3 138 1	25478 08KOKOMO 138 25483 08DELBK2 138 2	0.09	179.00	1.61	-966.70
25471 08MAPLE 138 25475 08GRTOW2 138 1	25408 08WEBSTE 230 25411 08NEWLON 230 1	0.11	146.00	1.56	-516.60
25416 08KOK HP 230 25478 08KOKOMO 138 1	Kokomo 3 winding xfr 230/138/69. 69 windiCayuga G	0.11	278.10	1.34	-678.30

25415 08FRNKFT 230 25411 08NEWLON 230 1	22667 05JEFRSO 765 22671 05ROCKPT 765 1	0.78	637.00	1.18	56.10
25408 08WEBSTE 230 25411 08NEWLON 230 1	22667 05JEFRSO 765 22671 05ROCKPT 765 1	-0.32	-797.00	1.11	-66.60
25373 08WALTON 345 25407 08WALTON 230 1	22660 05DUMONT 765 22665 05GRNTWN 765 1	-0.12	-637.40	1.08	-222.50
25407 08WALTON 230 25408 08WEBSTE 230 1	25402 08KOEAST 230 25408 08WEBSTE 230 1	-0.21	-478.00	1.03	135.30
25411 08NEWLON 230 25416 08KOK HP 230 1	25408 08WEBSTE 230 25411 08NEWLON 230 1	0.51	478.00	1.00	199.00