

Overloaded Facility	Contingency (All and Worst P6)	Category	Category Description	Loading % (Baseline Scenarios)						Loading % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				B1_2028-SmrPk	B2_2031-SmrPk	B3_2036-SmrPk	B5_2036-SmrOP	B7_2028-SprOP	B8_2031-SprOP	S1_2031-SP	S2_2028-SP	S3_2028-SprOP	
25401 EAGLEMTN 230 25405 IRON MTN 230 1 1	P1_27_P1.2 Loss of J.Hinds-Mirage No.1 230 kV line	P1	N-1	< 100	< 100	< 100	< 100	110.9	< 100	< 100	< 100	< 100	
	P4_04_P4 Julian Hinds- Mirage 230 kV Line & Mirage-Ramon 230 kV Line	P4	Internal Breaker Fault /stuck breaker	< 100	< 100	< 100	< 100	111.1	< 100	< 100	< 100	< 100	
	P6_1053_P6.1.1 Loss of J.Hinds-Mirage No.1 230 kV line and Palovrde-Westwing No.2 500 kV line	P6	N-1-1	< 100	< 100	< 100	< 100	111.3	< 100	< 100	< 100	< 100	
	P6_291_P6.1.1 Loss of Blythesc-Eaglemtn No.1 161 kV line and J.Hinds-Mirage No.1 230 kV line	P6	N-1-1	109.5	< 100	119.9	< 100	NotConv	< 100	< 100	< 100	< 100	
25405 IRON MTN 230 24019 CAMINO 230 1 1	P1_27_P1.2 Loss of J.Hinds-Mirage No.1 230 kV line	P1	N-1	< 100	< 100	< 100	< 100	110.3	< 100	< 100	< 100	< 100	
	P4_04_P4 Julian Hinds- Mirage 230 kV Line & Mirage-Ramon 230 kV Line	P4	Internal Breaker Fault /stuck breaker	< 100	< 100	< 100	< 100	110.5	< 100	< 100	< 100	< 100	
	P6_1053_P6.1.1 Loss of J.Hinds-Mirage No.1 230 kV line and Palovrde-Westwing No.2 500 kV line	P6	N-1-1	< 100	< 100	< 100	< 100	110.7	< 100	< 100	< 100	< 100	
25406 J.HINDS 230 24806 MIRAGE 230 1 1	P1_28_P1.2 Loss of Jhindmwd-Eaglemtn No.1 230 kV line	P1	N-1	130.4	< 100	138.4	< 100	137.4	< 100	< 100	< 100	< 100	
	P1_29_P1.2 Loss of Jhindmwd-J.Hinds No.r1 230 kV line	P1	N-1	130.4	< 100	138.4	< 100	137.4	< 100	< 100	< 100	< 100	
	EST_MWD_Line_35_CB407-EagleMTN loss EagleMTN sub and EagleMT-IronMTN Jh & Eagle Shunt Reactor	P2	Internal Breaker Fault /stuck breaker	< 100	< 100	< 100	< 100	137.1	< 100	< 100	< 100	< 100	
	EST_MWD_Line_32_CBs-J.HindsMWD. J.HindMWD portion & EagleMTN-J.Hinds Jh & Eagle Shunt Reactor	P2	Internal Breaker Fault /stuck breaker	130.4	< 100	138.4	< 100	137.4	< 100	< 100	< 100	< 100	
	EST_MWD_Line_5_Line JHINDMWD - EAGLEMTN 230 kV	P2	Internal Breaker Fault /stuck breaker	130.4	< 100	138.4	< 100	137.4	< 100	< 100	< 100	< 100	
	EST_MWD_Line_34_CB405-EagleMTN loss EagleMTN sub and J.Hind MWD portion Jh & Eagle Shunt Reactor	P2	Internal Breaker Fault /stuck breaker	130.4	< 100	138.4	< 100	< 100	< 100	< 100	< 100	< 100	
	P3_57_P3.2 Loss of Mountainview Block and Jhindmwd-J.Hinds No.r1 230 kV line	P3	G-1 / N-1	< 100	< 100	138.8	< 100	< 100	< 100	< 100	< 100	< 100	
	P6_759_P6.1.1 Loss of Devers-Mirage No.2 230 kV line and Jhindmwd-J.Hinds No.r1 230 kV line	P6	N-1-1	< 100	< 100	< 100	< 100	137.6	< 100	< 100	< 100	< 100	
	P6_1196_P6.1.1 Loss of Jhindmwd-J.Hinds No.r1 230 kV line and Alberhil-Valleysc No.1 500 kV line	P6	N-1-1	< 100	< 100	139.1	< 100	< 100	< 100	< 100	< 100	< 100	
	P6_493_P6.1.1 Loss of Serrano-Valleysc No.1 500 kV line and Jhindmwd-J.Hinds No.r1 230 kV line	P6	N-1-1	130.8	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	
	P1_27_P1.2 Loss of J.Hinds-Mirage No.1 230 kV line	P1	N-1	134.4	< 100	144.6	< 100	177.1	< 100	< 100	< 100	< 100	
	P4_04_P4 Julian Hinds- Mirage 230 kV Line & Mirage-Ramon 230 kV Line	P4	Internal Breaker Fault /stuck breaker	134.4	< 100	144.6	< 100	177.1	< 100	< 100	< 100	< 100	
	P5P4-51_MrgJh-stkM-1CT_1ph&stuckCB@Mirage Loss of Julian Hinds-Mirage 230kV Blythe RAS	P5	Non-Redundant Relay	< 100	< 100	< 100	< 100	108.6	< 100	< 100	< 100	< 100	

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				B1_2028-SmrPk	B2_2031-SmrPk	B3_2036-SmrPk	B5_2036-SmrOP	B7_2028-SprOP	B8_2031-SprOP	S1_2031-SP	S2_2028-SP	S3_2028-SprOP	
25512 JHINDMWD 230 25401 EAGLEMTN 230 1 1	P5P4-54_JhMrg-stkJ-1CT_1ph&stuckCB@JHinds Loss of Julian Hinds-Mirage 230kV Blythe RAS	P5	Non-Redundant Relay	< 100	< 100	< 100	< 100	108.6	< 100	< 100	< 100	< 100	Blythe Energy RAS (Gen Drop)
	P6_777_P6.1.1 Loss of Devers-Mirage No.1 230 kV line and Devers-Mirage No.2 230 kV line	P6	N-1-1	< 100	< 100	150.6	< 100	< 100	< 100	< 100	< 100	< 100	
	P6_176_P6.1.1 Loss of Blythesc-Eaglemtn No.1 161 kV line and J.Hinds-Mirage No.1 230 kV line	P6	N-1-1	138.2	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	
	P7_03_P7 Line DEVERS - MIRAGE 230.00 kV No.1 & No.2	P7	DCTL	108.0	< 100	150.6	< 100	107.1	< 100	< 100	< 100	< 100	
25512 JHINDMWD 230 25406 J.HINDS 230 r1 1	P1_27_P1.2 Loss of J.Hinds-Mirage No.1 230 kV line	P1	N-1	160.6	< 100	171.6	< 100	177.1	< 100	< 100	< 100	< 100	
	P1_34_P1.2 Loss of Alberhil-Serrano No.1 500 kV line	P1	N-1	< 100	< 100	105.7	< 100	< 100	< 100	< 100	< 100	< 100	
	P1_35_P1.2 Loss of Alberhil-Valleysc No.1 500 kV line	P1	N-1	< 100	< 100	112.2	< 100	< 100	< 100	< 100	< 100	< 100	
	P1_11_P1.2 Loss of Serrano-Valleysc No.1 500 kV line	P1	N-1	110.3	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	
	P4_04_P4 Julian Hinds- Mirage 230 kV Line & Mirage-Ramon 230 kV Line	P4	Internal Breaker Fault /stuck breaker	160.6	< 100	171.6	< 100	177.1	< 100	< 100	< 100	< 100	
	P5P4-51_MrgJh-stkM-1CT_1ph&stuckCB@Mirage Loss of Julian Hinds-Mirage 230kV Blythe RAS	P5	Non-Redundant Relay	< 100	< 100	108.7	< 100	108.6	< 100	< 100	< 100	< 100	
	P5P4-54_JhMrg-stkJ-1CT_1ph&stuckCB@JHinds Loss of Julian Hinds-Mirage 230kV Blythe RAS	P5	Non-Redundant Relay	< 100	< 100	108.7	< 100	108.6	< 100	< 100	< 100	< 100	
	P5P4-46A_VlySr-stkV_1ph&stuckCB@Valley Loss of SERRANO-ALB 500 #1	P5	Non-Redundant Relay	< 100	< 100	105.7	< 100	< 100	< 100	< 100	< 100	< 100	
	P5P4-46B_VlySr-stkV_1ph&stuckCB@Valley Loss of ALB-VALLEYSC 500 #1	P5	Non-Redundant Relay	< 100	< 100	112.2	< 100	< 100	< 100	< 100	< 100	< 100	
	P5P4-29_DevVs2-stkD_1ph&stuckCB@Devers Loss of DEVERS-Vista 230 #2	P5	Non-Redundant Relay	102.3	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	
	P5P4-39_VsDv1-stkV_1ph&stuckCB@Vista Loss of San Bernardino - Vista 230 #1	P5	Non-Redundant Relay	102.3	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	
	P5P4-23_DevVly1-stkD_1ph&stuckCB@Devers Loss of DEVERS-VALLEYSC 500 #1	P5	Non-Redundant Relay	103.1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	
	P5P4-45_VlyDev1-stkV_1ph&stuckCB@Valley Loss of DEVERS-VALLEYSC 500 #1	P5	Non-Redundant Relay	103.1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	
	P5P4-46_VlySr-stkV_1ph&stuckCB@Valley Loss of SERRANO-VALLEYSC 500 #1	P5	Non-Redundant Relay	110.3	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	
	P6_291_P6.1.1 Loss of Blythesc-Eaglemtn No.1 161 kV line and J.Hinds-Mirage No.1 230 kV line	P6	N-1-1	165.8	< 100	177.8	< 100	< 100	< 100	< 100	< 100	< 100	

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				B1_2028-SmrPk	B2_2031-SmrPk	B3_2036-SmrPk	B5_2036-SmrOP	B7_2028-SprOP	B8_2031-SprOP	S1_2031-SP	S2_2028-SP	S3_2028-SprOP	
	P7_03_P7 Line DEVERS - MIRAGE 230.00 kV No.1 & No.2	P7	DCTL	133.1	< 100	176.6	< 100	107.1	< 100	< 100	< 100	< 100	Blythe Energy RAS (Gen Drop) / OP7720 (Open Blythe - Eagle Mtn. 161 kV line)
System	P6_1033_P6.1.1 Loss of J.Hinds-Mirage No.1 230 kV line and Blythe-Blythesc No.1 161 kV line	P6	N-1-1	< 100	< 100	< 100	< 100	NotConv	< 100	< 100	< 100	< 100	
25401 EAGLEMTN 230 25405 IRON MTN 230 1 1	P6_83_P6.1.1 Loss of Blythe-Blythesc No.1 161 kV line and Jhindmwd-J.Hinds No.r1 230 kV line	P6	N-1-1	< 100	< 100	100.4	< 100	< 100	< 100	100.9	< 100	< 100	
25405 IRON MTN 230 24019 CAMINO 230 1 1	P6_83_P6.1.1 Loss of Blythe-Blythesc No.1 161 kV line and Jhindmwd-J.Hinds No.r1 230 kV line	P6	N-1-1	< 100	< 100	110.5	< 100	< 100	< 100	111.1	< 100	< 100	Further investigation needed
System	P1_70_P1.2 Loss of Hassyamp-Hdwsh No.1 500 kV line	P1	N-1	< 100	< 100	< 100	NotConv	< 100	< 100	< 100	< 100	< 100	
24801 DEVERS 500 24151 VALLEYSC 500 1 1	P1LLT_201_P1LLT Loss of Devers-Valleysc No.2 500 kV line and Devers SVD ID SV	LLT	LLT	< 100	< 100	< 100	< 100	< 100	< 100	< 100	100.3	< 100	IDE CRAS
	P6_595_P6.1.1 Loss of Devers-Valleysc No.2 500 kV line and N.Gila-Imprlvly No.1 500 kV line	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	106.8	< 100	
19020 BLYTHE 161 21047 NILAND161 161 1 1	P6_53_P6.1.1 Loss of Cvsub230-Mirage No.1 230 kV line and Ramon230-Mirage No.1 230 kV line	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	101.1	< 100	Path 42 RAS
21279 CVSUB92 92.0 21808 CVSUB161 161 1 1	P6_53_P6.1.1 Loss of Cvsub230-Mirage No.1 230 kV line and Ramon230-Mirage No.1 230 kV line	P6	N-1-1	112.3	< 100	< 100	< 100	< 100	< 100	< 100	112.9	< 100	
21319 DIXIELAN 92.0 21974 RTP1SPSTN 92.0 1 1	P6_53_P6.1.1 Loss of Cvsub230-Mirage No.1 230 kV line and Ramon230-Mirage No.1 230 kV line	P6	N-1-1	164.6	< 100	< 100	< 100	< 100	< 100	< 100	164.5	< 100	
21376 RTP2SFLP 92.0 21974 RTP1SPSTN 92.0 1 1	P6_53_P6.1.1 Loss of Cvsub230-Mirage No.1 230 kV line and Ramon230-Mirage No.1 230 kV line	P6	N-1-1	166.2	< 100	< 100	< 100	< 100	< 100	< 100	166.1	< 100	
21652 HL1_TAP 92.0 21691 HIGHLINE 92.0 1 1	P7_03_P7 Line DEVERS - MIRAGE 230.00 kV No.1 & No.2	P7	DCTL	< 100	< 100	< 100	< 100	< 100	134.8	< 100	< 100	< 100	
21900 PW_TAP 92.0 21652 HL1_TAP 92.0 1 1	P7_03_P7 Line DEVERS - MIRAGE 230.00 kV No.1 & No.2	P7	DCTL	< 100	< 100	< 100	< 100	< 100	129.6	< 100	< 100	< 100	
15021 PALOVRDE 500 29250 PV_CLRVR_11 500 1 1	P3_63_P3.2 Loss of Mountainview Block and Cielo Azul-Colriver No.1 500 kV line	P3	G-1 / N-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	102.9	Reduce BESS Charging
	P3_64_P3.2 Loss of Sentinel Block and Cielo Azul-Colriver No.1 500 kV line	P3	G-1 / N-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	104.3	
	P6_515_P6.1.1 Loss of Serrano-Valleysc No.1 500 kV line and Palovrde-Delaney No.1 500 kV line	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	114.7	
21319 DIXIELAN 92.0 21974 RTP1SPSTN 92.0 1 1	P1LLT_167_P1LLT Loss of Serrano-Valleysc No.1 500 kV line and Valleysc SVD ID ei (24151)	LLT	LLT	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	100.1	
	P1LLT_169_P1LLT Loss of Serrano-Valleysc No.1 500 kV line and Devers SVD ID SV	LLT	LLT	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	100.1	
	P1LLT_171_P1LLT Loss of Serrano-Valleysc No.1 500 kV line and Vsta SVD ID ei	LLT	LLT	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	100.1	

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				B1_2028-SmrPk	B2_2031-SmrPk	B3_2036-SmrPk	B5_2036-SmrOP	B7_2028-SprOP	B8_2031-SprOP	S1_2031-SP	S2_2028-SP	S3_2028-SprOP	
System	P1LLT_172_P1LLT Loss of Serrano-Valleysc No.1 500 kV line and Miraloma SVD ID ei	LLT	LLT	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	100.2	
	P1LLT_173_P1LLT Loss of Serrano-Valleysc No.1 500 kV line and Miralomw SVD ID ei	LLT	LLT	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	100.1	
	P6_10_P6.1.1 Loss of Palovrde-Colriver No.1 500 kV line and Serrano-Valleysc No.1 500 kV line	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	NotConv	
	P6_31_P6.1.1 Loss of Palovrde-Colriver No.1 500 kV line and Cielo Azul-Colriver No.1 500 kV line	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	NotConv	
	P6_496_P6.1.1 Loss of Serrano-Valleysc No.1 500 kV line and Cielo Azul-Colriver No.1 500 kV line	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	NotConv	
19020 BLYTHE 161 24017 BLYTHESC 161 1 1	P6_651_P6.1.1 Loss of Devers-Redbluff No.1 500 kV line and Devers-Redbluff No.2 500 kV line	P6	N-1-1	NotConv	< 100	NotConv	100.7	< 100	< 100	107.9	NotConv	< 100	System adjustments after the first contingency
21047 NILAND161 161 21808 CVSUB161 161 1 1	P6_651_P6.1.1 Loss of Devers-Redbluff No.1 500 kV line and Devers-Redbluff No.2 500 kV line	P6	N-1-1	NotConv	< 100	NotConv	106.3	< 100	< 100	108.2	NotConv	< 100	
21279 CVSUB92 92.0 21808 CVSUB161 161 1 1	P6_651_P6.1.1 Loss of Devers-Redbluff No.1 500 kV line and Devers-Redbluff No.2 500 kV line	P6	N-1-1	NotConv	< 100	NotConv	119.0	< 100	< 100	< 100	NotConv	< 100	
21281 AVE58 92.0 21380 OASIS_RTAP 92.0 1 1	P6_651_P6.1.1 Loss of Devers-Redbluff No.1 500 kV line and Devers-Redbluff No.2 500 kV line	P6	N-1-1	NotConv	< 100	NotConv	< 100	< 100	< 100	100.3	NotConv	< 100	
21355 NEW_MECCA 92.0 21393 KTP2 92.0 1 1	P6_651_P6.1.1 Loss of Devers-Redbluff No.1 500 kV line and Devers-Redbluff No.2 500 kV line	P6	N-1-1	NotConv	< 100	NotConv	100.5	< 100	< 100	< 100	NotConv	< 100	
21355 NEW_MECCA 92.0 21457 COLGREEN_TAP 92.0 1 1	P6_651_P6.1.1 Loss of Devers-Redbluff No.1 500 kV line and Devers-Redbluff No.2 500 kV line	P6	N-1-1	NotConv	< 100	NotConv	107.2	< 100	< 100	< 100	NotConv	< 100	
21376 RTP2SFLP 92.0 21974 RTP1SPSTN 92.0 1 1	P6_50_P6.1.1 Loss of Palovrde-Colriver No.1 500 kV line and Palovrde-Delaney No.1 500 kV line	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100	112.8	
21377 ANZA 92.0 21378 SALTON_CITY 92.0 1 1	P6_651_P6.1.1 Loss of Devers-Redbluff No.1 500 kV line and Devers-Redbluff No.2 500 kV line	P6	N-1-1	NotConv	113.6	NotConv	< 100	< 100	< 100	119.7	NotConv	< 100	
21378 SALTON_CITY 92.0 21379 DSERT_SHORES 92.0 1 1	P6_651_P6.1.1 Loss of Devers-Redbluff No.1 500 kV line and Devers-Redbluff No.2 500 kV line	P6	N-1-1	NotConv	109.4	NotConv	< 100	< 100	< 100	115.4	NotConv	< 100	
21379 DSERT_SHORES 92.0 21380 OASIS_RTAP 92.0 1 1	P6_651_P6.1.1 Loss of Devers-Redbluff No.1 500 kV line and Devers-Redbluff No.2 500 kV line	P6	N-1-1	NotConv	102.1	NotConv	< 100	< 100	< 100	108.0	NotConv	< 100	
21385 THERMAL 92.0 21393 KTP2 92.0 1 1	P6_651_P6.1.1 Loss of Devers-Redbluff No.1 500 kV line and Devers-Redbluff No.2 500 kV line	P6	N-1-1	NotConv	< 100	NotConv	100.5	< 100	< 100	< 100	NotConv	< 100	
25405 IRON MTN 230 24019 CAMINO 230 1 1	P6_651_P6.1.1 Loss of Devers-Redbluff No.1 500 kV line and Devers-Redbluff No.2 500 kV line	P6	N-1-1	NotConv	< 100	NotConv	108.7	< 100	< 100	< 100	NotConv	< 100	
25512 JHINDMWD 230 25401 EAGLEMTN 230 1 1	P6_651_P6.1.1 Loss of Devers-Redbluff No.1 500 kV line and Devers-Redbluff No.2 500 kV line	P6	N-1-1	NotConv	< 100	NotConv	116.0	< 100	< 100	< 100	NotConv	< 100	
Devers No. 1 or No. 2 500/230 kV transformer	P3_82_P3.3 Loss of Sentinel Block and Devers No. 1 or No. 2 500/230 kV transformer	P3	G-1 / N-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	103.9	< 100	

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				B1_2028-SmrPk	B2_2031-SmrPk	B3_2036-SmrPk	B5_2036-SmrOP	B7_2028-SprOP	B8_2031-SprOP	S1_2031-SP	S2_2028-SP	S3_2028-SprOP	
Devers No. 1 or No. 2 500/230 kV transformer	P6_505_P6.1.2 Loss of Serrano-Valleysc No.1 500 kV line and Devers No. 1 or No. 2 500/230 kV transformer	P6	N-1-1	118.3	< 100	< 100	< 100	< 100	< 100	< 100	139.8	161.5	
Devers No. 1 or No. 2 500/230 kV transformer	P6_1354_P6.1.2 Loss of Alberhil-Valleysc No.1 500 kV line and Devers No. 1 or No. 2 500/230 kV transformer	P6	N-1-1	< 100	127.1	116.0	< 100	< 100	< 100	131.3	< 100	< 100	
24374 REDBLUFF 500 24379 redblf1i 13.8 1 1	P5P4-15_RB-T1-stk500_1ph&stuckCB@CR500 loss Tran REDBLUFF 1AA	P5	Non-Redundant Relay	132.7	140.1	130.4	< 100	< 100	< 100	140.0	166.4	< 100	WOCR CRAS
24801 DEVERS 500 29252 DVRS_RB_11 500 1 1	P6_731_P6.1.1 Loss of Devers-Redbluff No.2 500 kV line and N.Gila-Hdwsh No.1 500 kV line	P6	N-1-1	< 100	< 100	112.6	< 100	< 100	< 100	< 100	< 100	< 100	
24957 COLRIVER 230 24959 colrvr2i 13.8 2 1	P5P4-4_CR-T1-stk500_1ph&stuckCB@CR loss Tran COLRIVER 1AA	P5	Non-Redundant Relay	155.1	155.3	150.7	116.4	< 100	< 100	155.4	162.6	162.8	
29252 DVRS_RB_11 500 29253 DVRS_RB_12 500 1 1	P4_02_P4 Devers-Red Bluff No.2 500 kV Line & Devers 500/230 kV 1AA Bank	P4	Internal Breaker Fault /stuck breaker	< 100	< 100	103.6	< 100	< 100	< 100	< 100	104.0	< 100	
29255 DVRS_RB_22 500 24374 REDBLUFF 500 2 1	P6_689_P6.1.1 Loss of Devers-Redbluff No.1 500 kV line and N.Gila-Hdwsh No.1 500 kV line	P6	N-1-1	< 100	< 100	112.5	< 100	< 100	< 100	< 100	< 100	< 100	
Colriver No. 1 or No. 2 500/230 kV transformer	P1_43_P1.3 Loss of Colriver No. 1 or No. 2 500/230 kV transformer	P1	N-1	156.0	155.3	150.6	116.4	< 100	< 100	155.3	162.7	162.3	
	P3_93_P3.3 Loss of Mountainview Block and Colriver No. 1 or No. 2 500/230 kV transformer	P3	G-1 / N-1	< 100	< 100	< 100	116.7	< 100	< 100	< 100	< 100	< 100	
	P3_94_P3.3 Loss of Sentinel Block and Colriver No. 1 or No. 2 500/230 kV transformer	P3	G-1 / N-1	< 100	< 100	151.1	116.7	< 100	< 100	< 100	< 100	< 100	
	P6_1157_P6.1.2 Loss of Cielo Azul-Colriver No.1 500 kV line and Colriver No.1 or No. 2 500/230 kV transformer	P6	N-1-1	155.3	< 100	< 100	< 100	< 100	< 100	< 100	163.2	164.8	
	P6_664_P6.1.2 Loss of Devers-Redbluff No.2 500 kV line and Colriver No.1 or No. 2 500/230 kV transformer	P6	N-1-1	155.7	< 100	< 100	< 100	< 100	< 100	< 100	163.8	163.3	
	P6_506_P6.1.2 Loss of Serrano-Valleysc No.1 500 kV line and Colriver No.1 or No. 2 500/230 kV transformer	P6	N-1-1	156.2	< 100	< 100	< 100	< 100	< 100	< 100	162.9	< 100	
	P6_725_P6.1.2 Loss of Devers-Redbluff No.2 500 kV line and Colriver No.1 or No. 2 500/230 kV transformer	P6	N-1-1	< 100	155.6	151.5	116.6	< 100	< 100	155.7	< 100	< 100	
	P6_1333_P6.1.2 Loss of Alberhil-Serrano No.1 500 kV line and Colriver No.1 or No. 2 500/230 kV transformer	P6	N-1-1	< 100	155.8	148.5	< 100	< 100	< 100	155.7	< 100	< 100	
	P6_1025_P6.1.2 Loss of Colriver-Redbluff No.2 500 kV line and Colriver No.1 or No. 2 500/230 kV transformer	P6	N-1-1	< 100	< 100	< 100	116.8	< 100	< 100	155.6	< 100	< 100	
Redbluff No.1 or No. 2 500/230 kV transformer	P1_38_P1.3 Loss of Redbluff No.1 500/230 kV transformer	P1	N-1	132.7	140.1	130.4	< 100	< 100	< 100	140.0	166.4	< 100	
	P6_660_P6.1.2 Loss of Devers-Redbluff No.2 500 kV line and Redbluff No.1 or No. 2 500/230 kV transformer	P6	N-1-1	131.3	137.6	130.7	< 100	< 100	< 100	137.7	164.9	< 100	
	P6_502_P6.1.2 Loss of Serrano-Valleysc No.1 500 kV line and Redbluff No.1 or No. 2 500/230 kV transformer	P6	N-1-1	132.8	< 100	< 100	< 100	< 100	< 100	< 100	166.9	< 100	

Overloaded Facility	Contingency (All and Worst P6)	Category	Category Description	Loading % (Baseline Scenarios)						Loading % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				B1_2028-SmrPk	B2_2031-SmrPk	B3_2036-SmrPk	B5_2036-SmrOP	B7_2028-SprOP	B8_2031-SprOP	S1_2031-SP	S2_2028-SP	S3_2028-SprOP	
	P6_1351_P6.1.2 Loss of Alberhil-Valleysc No.1 500 kV line and Redbluff No.1 or No. 2 500/230 kV transformer	P6	N-1-1	< 100	140.3	131.3	98.8	< 100	< 100	140.3	< 100	< 100	
Redbluff No.2 500/230 kV transformer	P4_05_P4 Colorado River-Red Bluff No.2 500 kV & Red Bluff 500/220 kV 1AA Bank	P4	Internal Breaker Fault /stuck breaker	132.5	139.9	130.2	< 100	< 100	< 100	139.8	166.1	< 100	
System	Loss of Redbluff No.1 & No. 2 500/230 kV transformer	P6	N-1-1	< 100	< 100	< 100	< 100	< 100	< 100	< 100	NotConv	< 100	
	Loss of Colriver No. 1 & No. 2 500/230 kV transformer	P6	N-1-1	NotConv	< 100	< 100	< 100	< 100	< 100	NotConv	NotConv	< 100	
24801 DEVERS 500 29252 DVRS_RB_11 500 1 1	P1_15_P1.2 Loss of Devers-Redbluff No.2 500 kV line	P1	N-1	130.3	< 100	106.0	< 100	< 100	< 100	< 100	146.9	< 100	WOCR CRAS - Congestion Management
	P3_30_P3.2 Loss of Sentinel Block and Devers-Redbluff No.2 500 kV line	P3	G-1 / N-1	134.2	< 100	111.9	< 100	< 100	< 100	< 100	155.3	< 100	
	P4_02_P4 Devers-Red Bluff No.2 500 kV Line & Devers 500/230 kV 1AA Bank	P4	Internal Breaker Fault /stuck breaker	128.6	< 100	105.6	< 100	< 100	< 100	< 100	145.2	< 100	
	P5P4-16_DevRB2-stkR_1ph&stuckCB@RB Loss of DEVERS-REDBLUFF 500 #2	P5	Non-Redundant Relay	130.3	< 100	106.0	< 100	< 100	< 100	< 100	146.9	< 100	
	P5P4-22_DevRB2-stkD_1ph&stuckCB@Devers Loss of DEVERS-REDBLUFF 500 #2	P5	Non-Redundant Relay	130.3	< 100	106.0	< 100	< 100	< 100	< 100	146.9	< 100	
	P6_672_P6.1.1 Loss of Devers-Redbluff No.2 500 kV line and N.Gila-Imprlvly No.1 500 kV line	P6	N-1-1	144.9	< 100	< 100	< 100	< 100	< 100	< 100	164.0	< 100	
24801 DEVERS 500 29254 DVRS_RB_21 500 2 1	P1_14_P1.2 Loss of Devers-Redbluff No.1 500 kV line	P1	N-1	126.5	< 100	106.0	< 100	< 100	< 100	< 100	142.6	< 100	
	P3_28_P3.2 Loss of Sentinel Block and Devers-Redbluff No.1 500 kV line	P3	G-1 / N-1	130.2	< 100	111.9	< 100	< 100	< 100	< 100	150.9	< 100	
	P4_01_P4 Devers- Red Bluff No.1 500 kV Line & Devers-Valley No. 1 500 kV Line	P4	Internal Breaker Fault /stuck breaker	121.6	< 100	100.6	< 100	< 100	< 100	< 100	137.5	< 100	
	P6_634_P6.1.1 Loss of Devers-Redbluff No.1 500 kV line and N.Gila-Imprlvly No.1 500 kV line	P6	N-1-1	140.6	< 100	< 100	< 100	< 100	< 100	< 100	159.5	< 100	

Overloaded Facility	Contingency (All and Worst P6)	Category	Category Description	Voltage PU (Baseline Scenarios)						Voltage PU (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				B1_2028-SmrPk	B2_2031-SmrPk	B3_2036-SmrPk	B5_2036-SmrOP	B7_2028-SprOP	B8_2031-SprOP	S1_2031-SP	S2_2028-SP	S3_2028-SprOP	
25401 EAGLEMTN 230 kV	P6_1034_P6.1.1 Loss of J.Hinds-Mirage No.1 230 kV line and Parker-Gene No.1 230 kV line	P6	N-1-1	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.89	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	Blythe Energy RAS (Gen Drop)
System	P6_1046_P6.1.2 Loss of J.Hinds-Mirage No.1 230 kV line and Eaglemtn No.5 161/230 kV transformer	P6	N-1-1	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	NotConv	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	
25401 EAGLEMTN 230 kV	P1_27_P1.2 Loss of J.Hinds-Mirage No.1 230 kV line	P1	N-1	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.90	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	Blythe Energy RAS (Gen Drop) / OP7720 - Close in Eagle Mtn and/or Julian Hinds Shunt Reactors
25427 EM LX1 230 kV	P1_27_P1.2 Loss of J.Hinds-Mirage No.1 230 kV line	P1	N-1	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.90	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25428 EM LX2 230 kV	P1_27_P1.2 Loss of J.Hinds-Mirage No.1 230 kV line	P1	N-1	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.90	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25401 EAGLEMTN 230 kV	P4_04_P4 Julian Hinds- Mirage 230 kV Line & Mirage-Ramon 230 kV Line	P4	Internal Breaker Fault /stuck breaker	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.90	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25427 EM LX1 230 kV	P4_04_P4 Julian Hinds- Mirage 230 kV Line & Mirage-Ramon 230 kV Line	P4	Internal Breaker Fault /stuck breaker	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.90	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25428 EM LX2 230 kV	P4_04_P4 Julian Hinds- Mirage 230 kV Line & Mirage-Ramon 230 kV Line	P4	Internal Breaker Fault /stuck breaker	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.90	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25427 EM LX1 230 kV	P1_25_P1.2 Loss of Eaglemtn-Iron Mtn No.1 230 kV line AND P1_27_P1.2 Loss of J.Hinds-Mirage No.1 230 kV line	P6	N-1-1	NotConv	NotConv	NotConv	NotConv	NotConv	0.81	NotConv	NotConv	1.15	OP7720 - Blythe Energy Gen dispatch adjustments
25429 JH LX1 230 kV	P1_5_P1.2 Loss of Camino-Gene-Iron Mtn-Mead 230 kV line AND P1_27_P1.2 Loss of J.Hinds-Mirage No.1 230 kV line	P6	N-1-1	NotConv	NotConv	NotConv	NotConv	NotConv	0.82	NotConv	NotConv	1.19	
25429 JH LX1 230 kV	P6_83_P6.1.1 Loss of Blythe-Blythesc No.1 161 kV line and Jhindmwd-J.Hinds No.r1 230 kV line	P6	N-1-1	0.88	0.82	0.72	0.85	0.9 < V < 1.05	0.9 < V < 1.05	0.74	0.89	0.9 < V < 1.05	OP7720 - Open Blythe - Eagle Mtn. 161 kV line
24017 BLYTHESC 161 kV	P6_83_P6.1.1 Loss of Blythe-Blythesc No.1 161 kV line and Jhindmwd-J.Hinds No.r1 230 kV line	P6	N-1-1	0.9 < V < 1.05	0.90	0.76	0.79	0.9 < V < 1.05	0.9 < V < 1.05	0.79	0.9 < V < 1.05	0.9 < V < 1.05	
25429 JH LX1 230 kV	P1_25_P1.2 Loss of Eaglemtn-Iron Mtn No.1 230 kV line AND P1_29_P1.2 Loss of Jhindmwd-J.Hinds No.r1 230 kV line	P6	N-1-1	NotConv	NotConv	NotConv	NotConv	1.10	0.78	NotConv	NotConv	1.10	
25429 JH LX1 230 kV	P1_5_P1.2 Loss of Camino-Gene-Iron Mtn-Mead 230 kV line AND P1_29_P1.2 Loss of Jhindmwd-J.Hinds No.r1 230 kV line	P6	N-1-1	NotConv	NotConv	NotConv	NotConv	1.12	0.79	NotConv	NotConv	NotConv	
25406 J.HINDS 230 kV	P1LLT_428_P1LLT Loss of J.Hinds-Mirage No.1 230 kV line and Miraloma SVD ID ei	LLT	LLT	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25406 J.HINDS 230 kV	P1LLT_429_P1LLT Loss of J.Hinds-Mirage No.1 230 kV line and Miralomw SVD ID ei	LLT	LLT	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25406 J.HINDS 230 kV	P1LLT_431_P1LLT Loss of J.Hinds-Mirage No.1 230 kV line and Sanbrdno SVD ID ei	LLT	LLT	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25427 EM LX1 230 kV	P1_29_P1.2 Loss of Jhindmwd-J.Hinds No.r1 230 kV line	P1	N-1	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.05	
25428 EM LX2 230 kV	P1_29_P1.2 Loss of Jhindmwd-J.Hinds No.r1 230 kV line	P1	N-1	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.05	
25429 JH LX1 230 kV	P1_29_P1.2 Loss of Jhindmwd-J.Hinds No.r1 230 kV line	P1	N-1	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.05	
25430 JH LX2 230 kV	P1_29_P1.2 Loss of Jhindmwd-J.Hinds No.r1 230 kV line	P1	N-1	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.05	

Overloaded Facility	Contingency (All and Worst P6)	Category	Category Description	Voltage PU (Baseline Scenarios)						Voltage PU (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				B1_2028-SmrPk	B2_2031-SmrPk	B3_2036-SmrPk	B5_2036-SmrOP	B7_2028-SprOP	B8_2031-SprOP	S1_2031-SP	S2_2028-SP	S3_2028-SprOP	
25512 JHINDMWD 230 kV	P1_29_P1.2 Loss of Jhindmwd-J.Hinds No.r1 230 kV line	P1	N-1	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.05	OP7720 - Close in Eagle Mtn and/or Julian Hinds Shunt Reactors
25429 JH LX1 230 kV	P3_58_P3.2 Loss of Sentinel Block and Jhindmwd-J.Hinds No.r1 230 kV line	P3	G-1 / N-1	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.05	
25430 JH LX2 230 kV	P3_58_P3.2 Loss of Sentinel Block and Jhindmwd-J.Hinds No.r1 230 kV line	P3	G-1 / N-1	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.05	
25512 JHINDMWD 230 kV	P3_58_P3.2 Loss of Sentinel Block and Jhindmwd-J.Hinds No.r1 230 kV line	P3	G-1 / N-1	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.05	
25427 EM LX1 230 kV	P5P4-56_JhEag-stkJ-1CT_1ph&stuckCB@JHinds513 Loss of Julian Hinds	P5	Non-Redundant Relay	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	
25428 EM LX2 230 kV	P5P4-56_JhEag-stkJ-1CT_1ph&stuckCB@JHinds513 Loss of Julian Hinds	P5	Non-Redundant Relay	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	
25405 IRON MTN 230 kV	P5P4-51_MrgJh-stkM-1CT_1ph&stuckCB@Mirage Loss of Julian Hinds-Mirage 230kV Blythe RAS	P5	Non-Redundant Relay	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	
25405 IRON MTN 230 kV	P5P4-54_JhMrg-stkJ-1CT_1ph&stuckCB@JHinds Loss of Julian Hinds-Mirage 230kV Blythe RAS	P5	Non-Redundant Relay	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	
25401 EAGLEMTN 230 kV	P5P4-51_MrgJh-stkM-1CT_1ph&stuckCB@Mirage Loss of Julian Hinds-Mirage 230kV Blythe RAS	P5	Non-Redundant Relay	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25401 EAGLEMTN 230 kV	P5P4-54_JhMrg-stkJ-1CT_1ph&stuckCB@JHinds Loss of Julian Hinds-Mirage 230kV Blythe RAS	P5	Non-Redundant Relay	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25427 EM LX1 230 kV	P5P4-51_MrgJh-stkM-1CT_1ph&stuckCB@Mirage Loss of Julian Hinds-Mirage 230kV Blythe RAS	P5	Non-Redundant Relay	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25427 EM LX1 230 kV	P5P4-54_JhMrg-stkJ-1CT_1ph&stuckCB@JHinds Loss of Julian Hinds-Mirage 230kV Blythe RAS	P5	Non-Redundant Relay	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25428 EM LX2 230 kV	P5P4-51_MrgJh-stkM-1CT_1ph&stuckCB@Mirage Loss of Julian Hinds-Mirage 230kV Blythe RAS	P5	Non-Redundant Relay	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25428 EM LX2 230 kV	P5P4-54_JhMrg-stkJ-1CT_1ph&stuckCB@JHinds Loss of Julian Hinds-Mirage 230kV Blythe RAS	P5	Non-Redundant Relay	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25429 JH LX1 230 kV	P5P4-51_MrgJh-stkM-1CT_1ph&stuckCB@Mirage Loss of Julian Hinds-Mirage 230kV Blythe RAS	P5	Non-Redundant Relay	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25429 JH LX1 230 kV	P5P4-54_JhMrg-stkJ-1CT_1ph&stuckCB@JHinds Loss of Julian Hinds-Mirage 230kV Blythe RAS	P5	Non-Redundant Relay	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25430 JH LX2 230 kV	P5P4-51_MrgJh-stkM-1CT_1ph&stuckCB@Mirage Loss of Julian Hinds-Mirage 230kV Blythe RAS	P5	Non-Redundant Relay	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25430 JH LX2 230 kV	P5P4-54_JhMrg-stkJ-1CT_1ph&stuckCB@JHinds Loss of Julian Hinds-Mirage 230kV Blythe RAS	P5	Non-Redundant Relay	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25512 JHINDMWD 230 kV	P5P4-51_MrgJh-stkM-1CT_1ph&stuckCB@Mirage Loss of Julian Hinds-Mirage 230kV Blythe RAS	P5	Non-Redundant Relay	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25512 JHINDMWD 230 kV	P5P4-54_JhMrg-stkJ-1CT_1ph&stuckCB@JHinds Loss of Julian Hinds-Mirage 230kV Blythe RAS	P5	Non-Redundant Relay	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25406 J.HINDS 230 kV	P5P4-51_MrgJh-stkM-1CT_1ph&stuckCB@Mirage Loss of Julian Hinds-Mirage 230kV Blythe RAS	P5	Non-Redundant Relay	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	

Overloaded Facility	Contingency (All and Worst P6)	Category	Category Description	Voltage PU (Baseline Scenarios)						Voltage PU (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				B1_2028-SmrPk	B2_2031-SmrPk	B3_2036-SmrPk	B5_2036-SmrOP	B7_2028-SprOP	B8_2031-SprOP	S1_2031-SP	S2_2028-SP	S3_2028-SprOP	
25406 J.HINDS 230 kV	P5P4-54_JhMrg-stkJ-1CT_1ph&stuckCB@JHinds Loss of Julian Hinds-Mirage 230kV Blythe RAS	P5	Non-Redundant Relay	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.08	
25401 EAGLEMTN 230 kV	EST_MWD_Line_31_CBs-J.HindsSCE. J-Mirage GenTie-Buck Blvd Jh & Eagle Shunt Reactor	P2	Internal Breaker Fault /stuck breaker	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.07	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	Continue to monitor high voltage
25406 J.HINDS 230 kV	EST_MWD_Line_31_CBs-J.HindsSCE. J-Mirage GenTie-Buck Blvd Jh & Eagle Shunt Reactor	P2	Internal Breaker Fault /stuck breaker	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	1.07	0.9 < V < 1.05	0.9 < V < 1.05	1.05	
25427 EM LX1 230 kV	EST_MWD_Line_39_CB513-J.Hind. loss J.Hind sub Jh & Eagle Shunt Reactor	P2	Internal Breaker Fault /stuck breaker	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	1.06	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	
25427 EM LX1 230 kV	EST_MWD_Line_31_CBs-J.HindsSCE. J-Mirage GenTie-Buck Blvd Jh & Eagle Shunt Reactor	P2	Internal Breaker Fault /stuck breaker	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	1.07	0.9 < V < 1.05	0.9 < V < 1.05	1.05	
25427 EM LX1 230 kV	EST_MWD_Line_32_CBs-J.HindsMWD. J.HindMWD portion & EagleMTN-J.Hinds Jh & Eagle Shunt Reactor	P2	Internal Breaker Fault /stuck breaker	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	
25428 EM LX2 230 kV	EST_MWD_Line_39_CB513-J.Hind. loss J.Hind sub Jh & Eagle Shunt Reactor	P2	Internal Breaker Fault /stuck breaker	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	1.06	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	
25428 EM LX2 230 kV	EST_MWD_Line_31_CBs-J.HindsSCE. J-Mirage GenTie-Buck Blvd Jh & Eagle Shunt Reactor	P2	Internal Breaker Fault /stuck breaker	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	1.07	0.9 < V < 1.05	0.9 < V < 1.05	1.05	
25428 EM LX2 230 kV	EST_MWD_Line_32_CBs-J.HindsMWD. J.HindMWD portion & EagleMTN-J.Hinds Jh & Eagle Shunt Reactor	P2	Internal Breaker Fault /stuck breaker	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	
25429 JH LX1 230 kV	EST_MWD_Line_31_CBs-J.HindsSCE. J-Mirage GenTie-Buck Blvd Jh & Eagle Shunt Reactor	P2	Internal Breaker Fault /stuck breaker	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	1.07	0.9 < V < 1.05	0.9 < V < 1.05	1.05	
25430 JH LX2 230 kV	EST_MWD_Line_31_CBs-J.HindsSCE. J-Mirage GenTie-Buck Blvd Jh & Eagle Shunt Reactor	P2	Internal Breaker Fault /stuck breaker	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	1.07	0.9 < V < 1.05	0.9 < V < 1.05	1.05	
25512 JHINDMWD 230 kV	EST_MWD_Line_31_CBs-J.HindsSCE. J-Mirage GenTie-Buck Blvd Jh & Eagle Shunt Reactor	P2	Internal Breaker Fault /stuck breaker	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	1.07	0.9 < V < 1.05	0.9 < V < 1.05	1.05	
24806 MIRAGE 230 kV	P7_03_P7 Line DEVERS - MIRAGE 230.00 kV No.1 & No.2	P7	DCTL	1.06	1.07	1.06	1.06	0.9 < V < 1.05	1.06	1.06	1.07	1.05	
25427 EM LX1 230 kV	P7_03_P7 Line DEVERS - MIRAGE 230.00 kV No.1 & No.2	P7	DCTL	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	
25428 EM LX2 230 kV	P7_03_P7 Line DEVERS - MIRAGE 230.00 kV No.1 & No.2	P7	DCTL	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	
25429 JH LX1 230 kV	P7_03_P7 Line DEVERS - MIRAGE 230.00 kV No.1 & No.2	P7	DCTL	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	
25430 JH LX2 230 kV	P7_03_P7 Line DEVERS - MIRAGE 230.00 kV No.1 & No.2	P7	DCTL	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.06	
25568 RP_Mirage_H 230 kV	P7_03_P7 Line DEVERS - MIRAGE 230.00 kV No.1 & No.2	P7	DCTL	0.9 < V < 1.05	0.9 < V < 1.05	1.06	1.06	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	0.9 < V < 1.05	
29206 BUCK230 230 kV	P7_03_P7 Line DEVERS - MIRAGE 230.00 kV No.1 & No.2	P7	DCTL	0.9 < V < 1.05	1.06	0.9 < V < 1.05	1.05	0.9 < V < 1.05	0.9 < V < 1.05	1.05	1.06	1.07	
240020 OBERON 500 kV	Base Case	Base Case	Base Case	1.04 < V < 1.08	1.04 < V < 1.08	1.04	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	
24138 SERRANO 500 kV	Base Case	Base Case	Base Case	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04	



Overloaded Facility	Contingency (All and Worst P6)	Category	Category Description	Voltage PU (Baseline Scenarios)						Voltage PU (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				B1_2028-SmrPk	B2_2031-SmrPk	B3_2036-SmrPk	B5_2036-SmrOP	B7_2028-SprOP	B8_2031-SprOP	S1_2031-SP	S2_2028-SP	S3_2028-SprOP	
24230 WILDLIFE 230 kV	Base Case	Base Case	Base Case	0.95 < V < 1.05	0.95 < V < 1.05	0.95	0.95 < V < 1.05	0.95 < V < 1.05	0.95 < V < 1.05	0.95 < V < 1.05	0.95 < V < 1.05	0.95 < V < 1.05	Further Evaluation Needed
24374 REDBLUFF 500 kV	Base Case	Base Case	Base Case	1.04 < V < 1.08	1.04 < V < 1.08	1.04	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	
24801 DEVERS 500 kV	Base Case	Base Case	Base Case	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04	1.04 < V < 1.08	
29253 DVRS_RB_12 500 kV	Base Case	Base Case	Base Case	1.04 < V < 1.08	1.04 < V < 1.08	1.04	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	
29255 DVRS_RB_22 500 kV	Base Case	Base Case	Base Case	1.04 < V < 1.08	1.04 < V < 1.08	1.04	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	1.04 < V < 1.08	



Overloaded Facility	Contingency (All and Worst P6)	Category	Category Description	Post Cont. Voltage Deviation % (Baseline Scenarios)						Post Cont. Voltage Deviation % (Sensitivity Scenarios)			Project & Potential Mitigation Solutions
				B1_2028-SmrPk	B2_2031-SmrPk	B3_2036-SmrPk	B5_2036-SmrOP	B7_2028-SprOP	B8_2031-SprOP	S1_2031-SP	S2_2028-SP	S3_2028-SprOP	
25401 EAGLEMTN 230 kV	P1_27_P1.2 Loss of J.Hinds-Mirage No.1 230 kV line	P1	N-1	< 8	< 8	< 8	< 8	10.28	< 8	< 8	< 8	< 8	Blythe Energy RAS (Gen Drop)
25405 IRON MTN 230 kV	P1_27_P1.2 Loss of J.Hinds-Mirage No.1 230 kV line	P1	N-1	< 8	< 8	< 8	< 8	9.70	< 8	< 8	< 8	< 8	
25406 J.HINDS 230 kV	P1_27_P1.2 Loss of J.Hinds-Mirage No.1 230 kV line	P1	N-1	< 8	< 8	< 8	< 8	8.88	< 8	< 8	< 8	< 8	
25427 EM LX1 230 kV	P1_27_P1.2 Loss of J.Hinds-Mirage No.1 230 kV line	P1	N-1	< 8	< 8	< 8	< 8	10.28	< 8	< 8	< 8	< 8	
25428 EM LX2 230 kV	P1_27_P1.2 Loss of J.Hinds-Mirage No.1 230 kV line	P1	N-1	< 8	< 8	< 8	< 8	10.28	< 8	< 8	< 8	< 8	
25429 JH LX1 230 kV	P1_27_P1.2 Loss of J.Hinds-Mirage No.1 230 kV line	P1	N-1	< 8	< 8	< 8	< 8	8.90	< 8	< 8	< 8	< 8	
25430 JH LX2 230 kV	P1_27_P1.2 Loss of J.Hinds-Mirage No.1 230 kV line	P1	N-1	< 8	< 8	< 8	< 8	8.90	< 8	< 8	< 8	< 8	
25512 JHINDMWD 230 kV	P1_27_P1.2 Loss of J.Hinds-Mirage No.1 230 kV line	P1	N-1	< 8	< 8	< 8	< 8	8.90	< 8	< 8	< 8	< 8	
25406 J.HINDS 230 kV	P3_54_P3.2 Loss of Sentinel Block and J.Hinds-Mirage No.1 230 kV line	P3	G-1 / N-1	< 8	< 8	< 8	< 8	8.87	< 8	< 8	< 8	< 8	

Contingency	Category	Category Description	Transient Stability Performance						Potential Mitigation Solutions
			Baseline Scenarios				Sensitivity Scenarios		
			B2_2031-SmrPk	B3_2036-SmrPk	B5_2036-SmrOP	B7_2028-SprOP	S1_2031-SP	S3_2028-SprOP	
3ph fault@BlytheSC, loss BLYTHESC-EAGLEMTN 161kV and EagleMt 5A bank	P1	N-1	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
3ph fault@BlytheSC, loss BLYTHESC-EAGLEMTN 161kV and EagleMt 5A bank, Blythe RAS trip 1CT	P1	N-1	No Issues	No Issues	N/A	No Issues	No Issues	No Issues	
3ph fault@EagleM, loss EAGLEMTN-IRON MTN 230kV	P1	N-1	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
3ph fault@Jhind, loss J.Hinds-Mirage 230kV	P1	N-1	No Issues	No Issues	No Issues	Diverge	No Issues	No Issues	Blythe Energy RAS
3ph fault@Jhind, loss J.Hinds-Mirage 230kV, Blythe RAS trip 1CT	P1	N-1	No Issues	No Issues	N/A	No Issues	No Issues	No Issues	
3ph fault@Jhind, loss JHINDMWD-EAGLEMTN 230kV	P1	N-1	No Issues	No Issues	No Issues	Diverge	No Issues	No Issues	Blythe Energy RAS
3ph fault@Jhind, loss JHINDMWD-EAGLEMTN 230kV, Blythe RAS trip 1CT	P1	N-1	No Issues	No Issues	N/A	No Issues	No Issues	No Issues	
3ph@Gila, Loss IMPRLVLY-N.GILA 500.0 #1	P1	N-1	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
no Devers SVC, 3ph@CR, loss CIELO AZUL-COLRIVER 500	P1	N-1	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
no Devers SVC, 3ph@CR, loss PALOVRDE-COLRIVER 500	P1	N-1	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
no Devers SVC, 3ph@Devers, loss DEVERS-REDBLUFF 500 #1	P1	N-1	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
no Devers SVC, 3ph@Devers, loss Tran DEVERS AA #2	P1	N-1	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
no Devers SVC, 3ph@Gila, Loss IMPRLVLY-N.GILA 500.0 #1	P1	N-1	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
no Devers SVC, 3ph@Red Bluff, loss COLRIVER-REDBLUFF 500 #1	P1	N-1	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
no Devers SVC, 3ph@Valley, loss ALBERHILL-VALLEYSC 500 #1	P1	N-1	No Issues	No Issues	No Issues	N/A	No Issues	N/A	
no Devers SVC, 3ph@Valley, loss DEVERS-VALLEYSC 500 #1	P1	N-1	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
no Devers SVC, 3ph@Valley, loss SERRANO-ALBERHILL 500 #1	P1	N-1	No Issues	No Issues	No Issues	N/A	No Issues	N/A	
no Devers SVC, 3ph@Valley, loss SERRANO-VALLEYSC 500 #1	P1	N-1	N/A	N/A	N/A	No Issues	N/A	No Issues	
1ph fault@Bus Tie CB, loss J.Hinds	P2	Breaker Fault	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
no Devers SVC, SLG@DEVERS-middleCB, Loss of DEVERS-REDBLUFF 500 #1 & DEVERS-Valley 500 #1 lines	P2	Breaker Fault	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG@DEVERS-middleCB, Loss of DEVERS-REDBLUFF 500 #2 & DEVERS 1AA Bank	P2	Breaker Fault	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG&CBstuck@Blythe, lose BlytheSC-EagleMTN, EagleMTN 5A Bank and BlytheSC-BlytheWalc 161 kV	P4	Stuck Breaker	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG&CBstuck@Blythe, lose BlytheSC-EagleMTN, EagleMTN 5A Bank and BlytheSC-BlytheWalc 161 kV, Blythe RAS	P4	Stuck Breaker	No Issues	No Issues	N/A	No Issues	No Issues	No Issues	
SLG&CBstuck@CB307@IronMTN, lose IronMTN 230kV Sub station, Gene-Parker and CAMINO-GENE-IRON MTN-MEAD 230 KV	P4	Stuck Breaker	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG&CBstuck@CB407@EagleMTN, lose EagleMtn & IronMtn Sub	P4	Stuck Breaker	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG&CBstuck@CB407@EagleMTN, lose EagleMtn & IronMtn Sub, Blythe RAS	P4	Stuck Breaker	No Issues	No Issues	N/A	No Issues	No Issues	No Issues	
SLG&CBstuck@CB70@EagleMTN161, lose BlytheSC-EagleMTN 161 kV and EagleMTN 230/161 Bank	P4	Stuck Breaker	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG&CBstuck@CB70@EagleMTN161, lose BlytheSC-EagleMTN 161 kV and EagleMTN 230/161 Bank, Blythe RAS	P4	Stuck Breaker	No Issues	No Issues	N/A	No Issues	No Issues	No Issues	
SLG&CBstuck@Devers, Loss Devers-Vista #2 & Devers 1AA bank	P4	Stuck Breaker	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG&CBstuck@DEVERS, Loss of DEVERS-REDBLUFF 500 #1 & DEVERS-Valley 500 #1 lines	P4	Stuck Breaker	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG&CBstuck@DEVERS, Loss of DEVERS-REDBLUFF 500 #2 & DEVERS 1AA Bank	P4	Stuck Breaker	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG&CBstuck@Devers, Loss of Devers-Vista #1 & Devers 3A	P4	Stuck Breaker	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG&CBstuck@EagleMTN, stuck breaker CB405@EagleMTN, loss EagleMTN-J.Hinds, J.Hinds MWD portion and EAGLEMTN sub	P4	Stuck Breaker	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG&CBstuck@EagleMTN, stuck breaker CB405@EagleMTN, loss EagleMTN-J.Hinds, J.Hinds MWD portion and EAGLEMTN sub, Blythe RAS	P4	Stuck Breaker	No Issues	No Issues	N/A	No Issues	No Issues	No Issues	
SLG&CBstuck@El Casco Loss of Devers-El Casco 230kV & El Casco 3A Bank	P4	Stuck Breaker	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG&CBstuck@J.Hinds, loss J.Hinds-Mirage 230 kV, stuck CB509@J.Hinds, loss J.Hinds portion (include Blythe Gen) by LBFB	P4	Stuck Breaker	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG&CBstuck@Mirage , Loss J.Hinds-Mirage & Mirage-Ramon 230 kV Lines	P4	Stuck Breaker	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG&CBstuck@Mirage , Loss J.Hinds-Mirage & Mirage-Ramon 230 kV Lines, Blythe RAS	P4	Stuck Breaker	No Issues	No Issues	N/A	No Issues	No Issues	No Issues	
SLG&CBstuck@Mirage, Loss of Devers - Mirage 230 kV #2 & CVSUB230 - Mirage 230 kV lines	P4	Stuck Breaker	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG&StuckCB@Valley, loss ALBERHILL-VALLEYSC & Valley 4AA Bank	P4	Stuck Breaker	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG&StuckCB@Valley, loss SERRANO-VALLEYSC & Valley 4AA Bank	P4	Stuck Breaker	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG@230kV, Stuck CB432@EagleMtn230, loss EagleMTN sub by LBFB	P4	Stuck Breaker	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG@230kV, Stuck CB432@EagleMtn230, loss EagleMTN sub by LBFB, Blythe RAS	P4	Stuck Breaker	No Issues	No Issues	N/A	No Issues	No Issues	No Issues	
SLG near BlytheSC, pilot relay fail, lose BlytheSC - EagleMTN 161kV Line	P5	Non-Redundant Relay	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG near EagleMtn, pilot relay fail, lose BlytheSC - EagleMTN 161kV Line	P5	Non-Redundant Relay	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG near EagleMTN, pilot relay fail, lose EagleMTN-IronMTN 230kV Line	P5	Non-Redundant Relay	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG near IronMtn, pilot relay fail, lose EagleMTN-IronMTN 230kV Line	P5	Non-Redundant Relay	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG near J.Hinds, Loss Julian Hinds-Mirage 230 kV line	P5	Non-Redundant Relay	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG near J.Hinds, Loss Julian Hinds-Mirage 230kV, Blythe RAS	P5	Non-Redundant Relay	No Issues	No Issues	N/A	No Issues	No Issues	No Issues	
SLG near J.HindsMWD, pilot relay fail, lose J.hinds-EagleMTN 230kV Line and J.Hinds MWD portion	P5	Non-Redundant Relay	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG near J.HindsMWD, pilot relay fail, lose J.hinds-EagleMTN 230kV Line and J.Hinds MWD portion, Blythe RAS	P5	Non-Redundant Relay	No Issues	No Issues	N/A	No Issues	No Issues	No Issues	
SLG@near EagleMTN, pilot relay fail, lose J.hinds-EagleMTN 230kV Line and J.Hinds MWD portion	P5	Non-Redundant Relay	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG@near EagleMTN, pilot relay fail, lose J.hinds-EagleMTN 230kV Line and J.Hinds MWD portion, Blythe RAS	P5	Non-Redundant Relay	No Issues	No Issues	N/A	No Issues	No Issues	No Issues	
SLG near Mirage, Loss Julian Hinds-Mirage 230 kV line	P5	Non-Redundant Relay	No Issues	No Issues	No Issues	Diverge	No Issues	No Issues	Blythe Energy RAS
SLG near Mirage, Loss Julian Hinds-Mirage 230kV, Blythe RAS	P5	Non-Redundant Relay	No Issues	No Issues	N/A	No Issues	No Issues	No Issues	
SLG&CBstuck@DEVERS500, Loss of DEVERS 1AA Bank	P5	Non-Redundant Relay	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
SLG@DV500Bus, Devers DC sytem fail, persistent fault	P5	Non-Redundant Relay	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	Add redundant relay
SLG@EagleMTN230Bus, EagleMTN DC sytem fail, persistent fault	P5	Non-Redundant Relay	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	Add redundant relay
SLG@ElCascoBus, ElCasco DC sytem fail, persistent fault	P5	Non-Redundant Relay	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	Add redundant relay
SLG@Etiwanda230Bus, Etiwanda DC sytem fail, persistent fault	P5	Non-Redundant Relay	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	Add redundant relay
SLG@JHinds230Bus, JHinds DC sytem fail, persistent fault	P5	Non-Redundant Relay	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	Add redundant relay
SLG@SanBernardinoBus, SanBernardino DC sytem fail, persistent fault	P5	Non-Redundant Relay	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	Add redundant relay

Contingency	Category	Category Description	Transient Stability Performance						Potential Mitigation Solutions
			Baseline Scenarios				Sensitivity Scenarios		
			B2_2031-SmrPk	B3_2036-SmrPk	B5_2036-SmrOP	B7_2028-SprOP	S1_2031-SP	S3_2028-SprOP	
SLG@Valley500Bus, Valley DC sytem fail, persistent fault	P5	Non-Redundant Relay	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	Add redundant relay
SLG@VistaBus, Vista DC sytem fail, persistent fault	P5	Non-Redundant Relay	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	WECC Criteria Not Met	Add redundant relay
1ph&stuckCB@CR, loss COLRIVER-Black Creek 230	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@CR, loss COLRIVER-Centipede 230	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@CR, loss COLRIVER-CIELO AZUL 500	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@CR, loss COLRIVER-Cobalt 230	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@CR, loss COLRIVER-Crimson 230	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@CR, loss COLRIVER-DRACKER 230	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@CR, loss COLRIVER-Filippi 230	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@CR, loss COLRIVER-Genesis 230	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@CR, loss COLRIVER-Grace 230	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@CR, loss COLRIVER-PALOVRDE 500	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@CR, loss COLRIVER-Suncatcher 230	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@CR, loss Tran COLRIVER 1AA	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@CR500, loss COLRIVER-REDBLUFF 500	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@CR500, loss Tran REDBLUFF 1AA	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Devers, Loss of DEVERS-EI Casco 230 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Devers, Loss of DEVERS-Marvel 230	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Devers, Loss of DEVERS-Mirage 230 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Devers, Loss of DEVERS-REDBLUFF 500 #2	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Devers, Loss of DEVERS-San Bernardino 230 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Devers, Loss of DEVERS-Sentinel 230 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Devers, Loss of DEVERS-VALLEYSC 500 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Devers, Loss of DEVERS-Vista 230 #2	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@EI, Loss of DEVERS-EI Casco 230 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@EI, Loss of EI Casco - San Bernardino 230 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Etw, Loss of Etiwanda - San Bernardino 230 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Etw, Loss of Etiwanda - Vista 230 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@JHinds, Loss of Julian Hinds-Buck Blvd 230kV, Blythe RAS	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@JHinds, Loss of Julian Hinds-Mirage 230kV, Blythe RAS	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@JHinds513, Loss of Julian Hinds	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Mirage, Loss of CVSUB230-MIRAGE 230 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Mirage, Loss of DEVERS-Mirage 230 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Mirage, Loss of Julian Hinds-Mirage 230kV, Blythe RAS	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Mirage, Loss of RAMON-MIRAGE 230 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@RB, loss COLRIVER-REDBLUFF 500	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@RB, Loss of DEVERS-REDBLUFF 500 #2	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@RB, loss REDBLUFF-Almasol 230	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@RB, loss REDBLUFF-Athos 230	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@RB, loss REDBLUFF-DSRTSunlight 230	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@RB, loss REDBLUFF-Oberon 500	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@RB, loss REDBLUFF-SAPPHIRE 230	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@RB, loss REDBLUFF-Victory_Pass 230	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@SanB, Loss of Devers - San Bernardino 230 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@SanB, Loss of EI Casco - San Bernardino 230 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@SanB, Loss of Etiwanda - San Bernardino 230 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@SanB, Loss of MNTVIEW3 - San Bernardino 230 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@SanB, Loss of San Bernardino - Vista 230 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Valley, Loss of ALB-VALLEYSC 500 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	N/A	No Issues	N/A	
1ph&stuckCB@Valley, Loss of DEVERS-VALLEYSC 500 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Valley, Loss of SERRANO-ALB 500 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	N/A	No Issues	N/A	
1ph&stuckCB@Valley, Loss of SERRANO-VALLEYSC 500 #1	P5-13d	Trip Coil Fail	N/A	N/A	N/A	No Issues	N/A	No Issues	
1ph&stuckCB@Valley, Loss of VALLEY-S 4AA	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Valley, Loss of VALLEYSC 1AA	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Valley, Loss of VALLEYSC-ROMOLA 500	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Vista, Loss of Etiwanda - Vista 230 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Vista, Loss of Mira Loma - Vista 230 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Vista, Loss of Mira Loma - Vista 230 #2	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Vista, Loss of San Bernardino - Vista 230 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph&stuckCB@Vista, Loss of San Bernardino - Vista 230 #1	P5-13d	Trip Coil Fail	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
3ph fault@CR, loss PALOVRDE-COLRIVER & COLRIVER-CIELO AZUL 500kV lines	P6	N-1-1	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
3ph@Devers, Loss DEVERS-REDBLUFF 500.0 #1 & #2	P6	N-1-1	No Issues	Diverge	No Issues	No Issues	No Issues	No Issues	System adjustments after the first contingency

Contingency	Category	Category Description	Transient Stability Performance						Potential Mitigation Solutions
			Baseline Scenarios				Sensitivity Scenarios		
			B2_2031-SmrPk	B3_2036-SmrPk	B5_2036-SmrOP	B7_2028-SprOP	S1_2031-SP	S3_2028-SprOP	
3ph@Mirge, Loss RAMON-MIRAGE & CVSUB230-MIRAGE 230.0 Lines	P6	N-1-1	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
3ph@Mirge, Loss RAMON-MIRAGE & CVSUB230-MIRAGE 230.0 Lines, Path42 and Blythe RAS	P6	N-1-1	No Issues	No Issues	N/A	No Issues	No Issues	No Issues	
3ph@RB, Loss COLRIVER- REDBLUFF 500.0 #1 & #2	P6	N-1-1	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
3ph@San Bernardino, Loss Etiwanda-San Bernardino & EL Casco -San Bernardino 230kV lines	P6	N-1-1	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
3ph@San Bernardino, Loss San Bernardino-Vista & Devers-San Bernardino 230kV lines	P6	N-1-1	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
3ph@Valley, Loss DEVERS-VALLEYSC 500.0 #1 & #2	P6	N-1-1	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
EagleMTN-IronMTN line outage followed by 3ph@J.Hinds, lose J.Hinds-Mirage 230 kV line	P6	N-1-1	Diverge	Diverge	Diverge	Diverge	Diverge	No Issues	OP 7720 / Blythe Energy RAS
EagleMTN-IronMTN line outage followed by 3ph@J.Hinds, lose J.Hinds-Mirage 230 kV line, ISO7720	P6	N-1-1	Diverge	No Issues	Diverge	No Issues	Diverge	No Issues	OP 7720 / Blythe Energy RAS
1ph@ Devers, Loss of Devers-Mirage 230-kV #1 & #2	P7	DCTL	No Issues	Diverge	No Issues	No Issues	No Issues	No Issues	Path 42 RAS & Blythe Energy RAS
1ph@ Devers, Loss of Devers-Mirage 230-kV #1 & #2, Path 42 RAS & Blythe RAS	P7	DCTL	No Issues	No Issues	N/A	No Issues	No Issues	No Issues	
1ph@Devers, Loss Devers-San Bernardino & Devers-El Casco 230kV lines	P7	DCTL	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph@SB, Loss Devers-San Bernardino & San Bernardino-El Casco 230kV lines	P7	DCTL	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph@SB, Loss Etiwanda-San Bernardino & San Bernardino-Vista 230kV lines	P7	DCTL	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
1ph@Vista, Loss of Devers - Vista 230kV line #1 & #2	P7	DCTL	No Issues	No Issues	No Issues	No Issues	No Issues	No Issues	
3ph@CV, Loss CVSUB230-RAMON & CVSUB230-MIRAGE 230.0 Lines	P7	DCTL	Oscillations	No Issues	No Issues	No Issues	No Issues	No Issues	Path 42 RAS
3ph@CV, Loss CVSUB230-RAMON & CVSUB230-MIRAGE 230.0 Lines, Path42 and Blythe RAS	P7	DCTL	Oscillations	No Issues	No Issues	No Issues	No Issues	No Issues	Path 42 RAS



Worst Contingency	Category	Category Description	Amount of Load Drop (MW)									Potential Mitigation Solutions
			B1_2028-SmrPk	B2_2031-SmrPk	B3_2036-SmrPk	B5_2036-SmrOP	B7_2028-SprOP	B8_2031-SprOP	S1_2031-SP	S2_2028-SP	S3_2028-SprOP	

No single contingency resulted in total load drop of more than 250 MW

Study Area: **SCE Eastern Area**

Single Source Substation with more than 100 MW Load



Substation	Load Served (MW)									Potential Mitigation Solutions
	B1_2028-SmrPk	B2_2031-SmrPk	B3_2036-SmrPk	B5_2036-SmrOP	B7_2028-SprOP	B8_2031-SprOP	S1_2031-SP	S2_2028-SP	S3_2028-SprOP	

No single source substation with more than 100 MW