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Fault ID	Fault Name	Fault Location	Description	Clearing Time (Cycles)	Observation	Load Shed
No Fault						
System Stable						
Category B						
B03	CHPR_XFMR500	Chapel Rock 500/240 kV Transformer	3ph fault at Chapel Rock 500/240 kV Transformer		System Stable	
			trip Chapel Rock 500 kV breaker	4		
			trip Chapel Rock 240 kV breaker	5		
B04	CHPR_CRW1	Chapel Rock - Castle Rock Ridge 240 kV	3ph fault at Chapel Rock on Chapel Rock - Castle Rock Ridge 240 kV line		System Stable	
			trip Chapel Rock 240 kV breaker	5		
			trip Castle Rock Ridge 240 kV breaker	6		
B05	CHPR_CRW1	Chapel Rock - Castle Rock Ridge 240 kV	3ph fault at Castle Rock Ridge on Chapel Rock - Castle Rock Ridge 240 kV line		System Stable	
			trip Castle Rock Ridge 240 kV breaker	5		
			trip Chapel Rock 240 kV breaker	6		
B06	CHPR_LAND	Chapel Rock - LANGDON 500 kV	3ph fault at Chapel Rock on Chapel Rock - LANGDON 500 kV line		Extreme Low voltages at Chapel Rock, Peigan, Windyflat.	
			trip Chapel Rock 500 kV breaker	4		
			trip LANGDON 500 kV breaker	5		
B07	CHPR_LAND	Chapel Rock - LANGDON 500 kV	3ph fault at LANGDON on Chapel Rock - LANGDON 500 kV line		Extreme Low voltages at Chapel Rock, Peigan, Windyflat.	
			trip LANGDON 500 kV breaker	4		
			trip Chapel Rock 500 kV breaker	5		
B08	LAND_XFMR500	LANGDON 500/240 kV Transformer	3ph fault at LANGDON 500/240 kV Transformer		Extreme Low voltages at Chapel Rock, Peigan, Windyflat.	
			trip LANGDON 500 kV breaker	4		
			trip LANGDON 240 kV breaker	5		
B09	LAND_XFMR240	LANGDON 500/240 kV Transformer	3ph fault at LANGDON 500/240 kV Transformer		Extreme Low voltages at Chapel Rock, Peigan, Windyflat.	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip LANGDON 240 kV breaker	4		
			trip LANGDON 500 kV breaker	5		
B10	PEIG_GOLK	PEIGAN - Goose Lake 240 kV	3ph fault at PEIGAN on PEIGAN - Goose Lake 240 kV line		System Stable	
			trip PEIGAN 240 kV breaker	5		
			trip Goose Lake 240 kV breaker	6		
B11	PEIG_WIDF	PEIGAN - WINDY FLATS 240 kV	3ph fault at PEIGAN on PEIGAN - WINDY FLATS 240 kV line		System Stable	
			trip PEIGAN 240 kV breaker	5		
			trip WINDY FLATS 240 kV breaker	6		
B12	PEIG_WIDF	PEIGAN - WINDY FLATS 240 kV	3ph fault at WINDY FLATS on PEIGAN - WINDY FLATS 240 kV line		System Stable	
			trip WINDY FLATS 240 kV breaker	5		
			trip PEIGAN 240 kV breaker	6		
B13	WIDF_KAIY	WINDY FLATS - KAIYA 240 kV	3ph fault at WINDY FLATS on WINDY FLATS - KAIYA 240 kV line		System Stable	
			trip WINDY FLATS 240 kV breaker	5		
			trip KAIYA 240 kV breaker	6		
B14	WIDF_KAIY	WINDY FLATS - KAIYA 240 kV	3ph fault at KAIYA on WINDY FLATS - KAIYA 240 kV line		System Stable	
			trip KAIYA 240 kV breaker	5		
			trip WINDY FLATS 240 kV breaker	6		
B15	KAIY_NLEB	KAIYA - North Lethbridge 240 kV	3ph fault at KAIYA on KAIYA - North Lethbridge 240 kV line		System Stable	
			trip KAIYA 240 kV breaker	5		
			trip North Lethbridge 240 kV breaker	6		
B16	KAIY_NLEB	KAIYA - North Lethbridge 240 kV	3ph fault at North Lethbridge on KAIYA - North Lethbridge 240 kV line		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip North Lethbridge 240 kV breaker	5		
			trip KAIYA 240 kV breaker	6		
B17	WIDF_XFMR240	WINDY FLATS 240/138 kV Transformer	3ph fault at WINDY FLATS 240/138 kV Transformer		System Stable	
			trip WINDY FLATS 240 kV breaker	5		
			trip WINDY FLATS 138 kV breaker	6		

Out-of-Step (Isolated by Fault):
 [5329] McLeod D1, [12358, 13358] Soderglen
 1+2, [4735, 4740] Ardenville, [66328, 67328]
 Macleod G1+G2

Fault ID	Fault Name	Fault Location	Description	Clearing Time (Cycles)	Observation	Load Shed
B18	WIDF_TURP	WINDY FLATS - Turnip 240 kV	3ph fault at WINDY FLATS on WINDY FLATS - Turnip 240 kV line		System Stable	
			trip WINDY FLATS 240 kV breaker	5		
			trip Turnip 240 kV breaker	6		
B19	NLEB_TURP	North Lethbridge - Turnip 240 kV	3ph fault at North Lethbridge on North Lethbridge - Turnip 240 kV line		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip North Lethbridge 240 kV breaker	5		
			trip Turnip 240 kV breaker	6		
B20	WIDF_SCPA	WINDY FLATS - Series Compensator A 240 kV	3ph fault at WINDY FLATS on WINDY FLATS - Series Compensator A 240 kV line		System Stable	
			trip WINDY FLATS 240 kV breaker	5		
			trip Series Compensator A 240 kV breaker	6		
B21	FHIL_SCPB	FOOTHLL - Series Compensator B 240 kV	3ph fault at FOOTHLL on FOOTHLL - Series Compensator B 240 kV line		System Stable	
			trip FOOTHLL 240 kV breaker	5		
			trip Series Compensator B 240 kV breaker	6		
B22	WIDF_SCPD	WINDY FLATS - Series Compensator C 240 kV	3ph fault at WINDY FLATS on WINDY FLATS - Series Compensator C 240 kV line		System Stable	
			trip WINDY FLATS 240 kV breaker	5		
			trip Series Compensator C 240 kV breaker	6		
B23	FHIL_SCPD	FOOTHLL - Series Compensator D 240 kV	3ph fault at FOOTHLL on FOOTHLL - Series Compensator D 240 kV line		System Stable	
			trip FOOTHLL 240 kV breaker	5		
			trip Series Compensator D 240 kV breaker	6		
B24	MATL_SUBC	Matl - Sub C 240 kV	3ph fault at Matl on Matl - Sub C 240 kV line		System Stable	
			trip Matl 240 kV breaker	5		
			trip Sub C 240 kV breaker	6		
B25	MATL_SUBC	Matl - Sub C 240 kV	3ph fault at Sub C on Matl - Sub C 240 kV line		System Stable	
			trip Sub C 240 kV breaker	5		
			trip Matl 240 kV breaker	6		
B26	SUBC_OLMH	Sub C - Old Medicine Hat 240 kV	3ph fault at Sub C on Sub C - Old Medicine Hat 240 kV line		System Stable	
			trip Sub C 240 kV breaker	5		
			trip Old Medicine Hat 240 kV breaker	6		
B27	SUBC_OLMH	Sub C - Old Medicine Hat 240 kV	3ph fault at Old Medicine Hat on Sub C - Old Medicine Hat 240 kV line		System Stable	
			trip Old Medicine Hat 240 kV breaker	5		
			trip Sub C 240 kV breaker	6		
B28	OLMH_GOLK	Old Medicine Hat - Goose Lake 240 kV	3ph fault at Old Medicine Hat on Old Medicine Hat - Goose Lake 240 kV line		System Stable	
			trip Old Medicine Hat 240 kV breaker	5		
			trip Goose Lake 240 kV breaker	6		
B29	SUBC_SUBD	Sub C - Sub D 240 kV	3ph fault at Sub C on Sub C - Sub D 240 kV line		System Stable	
			trip Sub C 240 kV breaker	5		
			trip Sub D 240 kV breaker	6		
B30	SUBC_SUBD	Sub C - Sub D 240 kV	3ph fault at Sub D on Sub C - Sub D 240 kV line		System Stable	
			trip Sub D 240 kV breaker	5		
			trip Sub C 240 kV breaker	6		
B31	SUBD_STBU	Sub D - STBUTTE3 240 kV	3ph fault at Sub D on Sub D - STBUTTE3 240 kV line		System Stable	
			trip Sub D 240 kV breaker	5		
			trip STBUTTE3 240 kV breaker	6		
B34	CYPR_JENN	Cypress - JENNER 240 kV	3ph fault at Cypress on Cypress - JENNER 240 kV line		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip Cypress 240 kV breaker	5		
			trip JENNER 240 kV breaker	6		
B35	CYPR_JENN	Cypress - JENNER 240 kV	3ph fault at JENNER on Cypress - JENNER 240 kV line		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459 and 2716
			trip JENNER 240 kV breaker	5		
			trip Cypress 240 kV breaker	6		
B36	JENN_DOME	JENNER - Dome Empress 240 kV	3ph fault at JENNER on JENNER - Dome Empress 240 kV line		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459 and 2716
			trip JENNER 240 kV breaker	5		
			trip Dome Empress 240 kV breaker	6		

Fault ID	Fault Name	Fault Location	Description	Clearing Time (Cycles)	Observation	Load Shed
B37	JENN_DOME	JENNER - Dome Empress 240 kV	3ph fault at Dome Empress on JENNER - Dome Empress 240 kV line		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip Dome Empress 240 kV breaker	5		
			trip JENNER 240 kV breaker	6		
B38	CYPR_DOME	Cypress - Dome Empress 240 kV	3ph fault at Cypress on Cypress - Dome Empress 240 kV line		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip Cypress 240 kV breaker	5		
			trip Dome Empress 240 kV breaker	6		
B39	CYPR_DOME	Cypress - Dome Empress 240 kV	3ph fault at Dome Empress on Cypress - Dome Empress 240 kV line		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip Dome Empress 240 kV breaker	5		
			trip Cypress 240 kV breaker	6		
B40	CYPR_XFMR240	Cypress 240/138 kV Transformer	3ph fault at Cypress 240/138 kV Transformer		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip Cypress 240 kV breaker	5		
			trip Cypress 138 kV breaker	6		
B41	DOME_XFMR240	Dome Empress 240/138 kV Transformer	3ph fault at Dome Empress 240/138 kV Transformer		System Stable Out-of-Step (Isolated by fault): [289] DOME EM9 1+2, [288] DOME EC9 1	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip Dome Empress 240 kV breaker	5		
			trip Dome Empress 138 kV breaker	6		
B42	CYPR_MCNL	Cypress - Mc Neil 138 kV	3ph fault at Cypress on Cypress - Mc Neil 138 kV line		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip Cypress 138 kV breaker	6		
			trip Mc Neil 138 kV breaker	24		
B43	CYPR_MCNL	Cypress - Mc Neil 138 kV	3ph fault at Mc Neil on Cypress - Mc Neil 138 kV line		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip Mc Neil 138 kV breaker	6		
			trip Cypress 138 kV breaker	24		
B44	CYPR_DOME	Cypress - Dome Empress 138 kV	3ph fault at Cypress on Cypress - Dome Empress 138 kV line		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip Cypress 138 kV breaker	6		
			trip Dome Empress 138 kV breaker	24		
B45	CYPR_DOME	Cypress - Dome Empress 138 kV	3ph fault at Dome Empress on Cypress - Dome Empress 138 kV line		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip Dome Empress 138 kV breaker	6		
			trip Cypress 138 kV breaker	24		
B46	CYPR_EMPR	Cypress - Empress 138 kV	3ph fault at Cypress on Cypress - Empress 138 kV line		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip Cypress 138 kV breaker	6		
			trip Empress 138 kV breaker	24		
B47	CYPR_EMPR	Cypress - Empress 138 kV	3ph fault at Empress on Cypress - Empress 138 kV line		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip Empress 138 kV breaker	6		
			trip Cypress 138 kV breaker	24		
B48	CYPR_658L	Cypress - 658L_TAP 138 kV	3ph fault at Cypress on Cypress - 658L_TAP 138 kV line		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip Cypress 138 kV breaker	6		
			trip 658L_TAP 138 kV breaker	24		
B49	GLEN_658L	Glenridge - 658L_TAP 138 kV	3ph fault at Glenridge on Glenridge - 658L_TAP 138 kV line		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip 658L_TAP 138 kV breaker	6		
			trip Glenridge 138 kV breaker	24		
B50	CHAP_658L	Chappice - 658L_TAP 138 kV	3ph fault at Chappice on Chappice - 658L_TAP 138 kV line		System Stable	
			trip Chappice 138 kV breaker	6		
			trip 658L_TAP 138 kV breaker	24		
B51	DOME_EMPR	Dome Empress - Empress 138 kV	3ph fault at Dome Empress on Dome Empress - Empress 138 kV line		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip Dome Empress 138 kV breaker	6		
			trip Empress 138 kV breaker	24		
B52	DOME_EMPR	Dome Empress - Empress 138 kV	3ph fault at Empress on Dome Empress - Empress 138 kV line		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip Empress 138 kV breaker	6		
			trip Dome Empress 138 kV breaker	24		

Fault ID	Fault Name	Fault Location	Description	Clearing Time (Cycles)	Observation	Load Shed
B53	ANDE-WARE	Anderson - Ware JCT 240 kV	3ph Fault at Anderson on Anderson to W J 240 kV line		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459 and 2716
			trip Anderson 240 kV breaker	5		
			trip Ware JCT 240 kV breaker	6		
B54	WBRO-CASS	West Brooks - Cassils 240 kV	3ph Fault at West Brooks on West Brooks to Cassils 240 kV line		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459 and 2716
			trip West Brooks 240 kV breaker	5		
			trip Cassils 240 kV breaker	6		
B55	CASS-BOWM	Cassils - Bowmanton 240 kV	3ph Fault at Cassils on Cassils to Bowmanton 244S		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459 and 2716
			trip Cassils 240 kV breaker	5		
			trip Bowmanton 240 kV breaker	6		
B56	TINC-CORD	Tincherbray - Cordel 240 kV	3ph Fault at Tincherbray on Tincherbray 401S to Cordel 755S 240 KV line 9L xx		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459 and 2716
			trip Tincherbray 240 kV breaker	5		
			trip Cordel 240 kV breaker	6		
B57	HTHF-NEWE	HTHFIELD -NEWELL HVDC line	Loss of EATL HVDC line		System Stable	
			trip HTHFIELD 500 kV breaker	4		
			trip NEWELL 240 kV breaker	5		

Fault ID	Fault Name	Fault Location	Description	Clearing Time (Cycles)	Observation	Load Shed
Category C5						
C501	CHAP-CRW1	Chapel Rock - Castle Rock Ridge 240 kV Double Circuit lines	3ph fault at Chapel Rock on Chapel Rock - Castle Rock Ridge 240 kV Double Circuit lines		System Stable	
			trip Chapel Rock 240 kV breakers	5		
			trip Castle Rock Ridge 240 kV breakers	7		
C502	CRW1-CHAP	Chapel Rock - Castle Rock Ridge 240 kV Double Circuit lines	3ph fault at Castle Rock Ridge on Chapel Rock - Castle Rock Ridge 240 kV Double Circuit lines		System Stable	
			trip Castle Rock Ridge 240 kV breakers	5		
			trip Chapel Rock 240 kV breakers	7		
C503	LANG-ECAL	LANGDON - ECALGAR 240 kV Double Circuit lines	3ph fault at LANGDON on LANGDON - ECALGAR 240 kV Double Circuit lines		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip LANGDON 240 kV breakers	5		
			trip ECALGAR 240 kV breakers	7		
C504	ECAL-LANG	LANGDON - ECALGAR 240 kV Double Circuit lines	3ph fault at ECALGAR on LANGDON - ECALGAR 240 kV Double Circuit lines		System Stable	
			trip ECALGAR 240 kV breakers	5		
			trip LANGDON 240 kV breakers	7		
C505	LANG-MILO	LANGDON - MILO 240 kV Double Circuit lines	3ph fault at LANGDON on LANGDON - MILO 240 kV Double Circuit lines		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip LANGDON 240 kV breakers	5		
			trip MILO 240 kV breakers	7		
C506	MILO-LANG	LANGDON - MILO 240 kV Double Circuit lines	3ph fault at MILO on LANGDON - MILO 240 kV Double Circuit lines		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459 and 2716
			trip MILO 240 kV breakers	5		
			trip LANGDON 240 kV breakers	7		
C507	LANG-JANE	LANGDON - JANET 240 kV Double Circuit lines	3ph fault at LANGDON on LANGDON - JANET 240 kV Double Circuit lines		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip LANGDON 240 kV breakers	5		
			trip JANET 240 kV breakers	7		
C508	JANE-LANG	LANGDON - JANET 240 kV Double Circuit lines	3ph fault at JANET on LANGDON - JANET 240 kV Double Circuit lines		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip JANET 240 kV breakers	5		
			trip LANGDON 240 kV breakers	7		
C509	944-951_A	JENNER - WARE JCT 240 kV Double Circuit line	3ph fault at JENNER on JENNER - WARE JCT 240 kV Double Circuit line		Voltage Collapse at Cypress, Dome Empress	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459 and 2716
			trip JENNER 240 kV breakers	5		
			trip JENNER 275ST1 240/25 kV 3-winding transformer	6		
C510	944-951_B	WARE JCT - JENNER 240 kV Double Circuit lines	3ph fault at WARE JCT on WARE JCT - JENNER 240 kV Double Circuit lines		Voltage Collapse at Cypress, Dome Empress	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459 and 2716
			trip WARE JCT 240 kV breakers	5		
			trip JENNER 275ST1 240/25 kV 3-winding transformer	6		
C511	1002-1011_A	DOME EMPRESS - JENNER 240 kV Double Circuit lines	3ph fault at DOME EMPRESS on DOME EMPRESS - JENNER 240 kV Double Circuit lines		System Stable	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459
			trip DOME EMPRESS 240 kV breakers	5		
			trip JENNER 240 kV breakers	6		
C512	1002-1011_B	JENNER - DOME EMPRESS 240 kV Double Circuit lines	3ph fault at JENNER on JENNER - DOME EMPRESS 240 kV Double Circuit lines		System Stable Low Voltage at Cypress, Dome Empress	50.00 PERCENT OF INITIAL LOAD SHED AT BUS 17459 and 2716
			trip JENNER 240 kV breakers	5		
			trip JENNER 275ST1 240/25 kV 3-winding transformer	6		
			trip DOME EMPRESS 240 kV breakers	6		

















































































































































































































































































































































































































































































































































