Attachment 1: Relevant Constraints for Included Dispatch Intervals

Constraint ID	Constraint description
H^V_SMTXH2	Outage = South Morang 330/220kV H2 transformer, limit Vic interconnectors and Snowy generation to avoid voltage collapse for loss of a Dederang to Murray 330kV line
H>>V_DBUSS_2	#N/A
H>>V_SMTXH1	Outage = South Morang 330/220kV (H1) transformer, limit Vic generators and interconnectors (Vic import) to avoid overload of South Morang H2 transformer for trip of the South Morang 500/330kV (F2) transformer
H>>V-DDMS_A	Out= one of Dederang-Murray(67 or 68), avoid the other Murray to Dederang (68 or 67) O/L on LowerTumut-Wagga(051)+ 970,990,99M trips; Feedback
H>>V-X_DDTX+DDSM	Out= Dederang H2 transformer and one DDTS - SMTS line, avoid O/L DDTS H1 transformer on trip of the remaining DDTS to SMTS line, Feedback
H>V_DDWO_1A	Outage = Dederang to Wodonga 330kV line, limit Vic interconnectors and generators to avoid overload Dederang to Murray No.2 330kV line for loss of the parallel No.1 line, 15 min line ratings
H>V_DDWO_1B	Outage = Dederang to Wodonga 330kV line, limit Vic interconnectors and generators to avoid overload Dederang to Murray No.2 330kV line for loss of the parallel No.1 line, 15 min line ratings
H>V_DDWO2	Outage = Dederang to Wodonga 330kV line, limit Vic interconnectors and generators to avoid overload Dederang to Murray No.2 330kV line for loss of the parallel No.1 line, 15 min line ratings
H>V_JNWO_1A	Outage = Jindera to Wodonga 330kV line, limit Vic interconnectors and generators to avoid overload Dederang to Murray No.1 330kV line for loss of the parallel No.2 line, 15 min line ratings
H>V_JNWO_1B	Outage = Jindera to Wodonga 330kV line, limit Vic interconnectors and generators to avoid overload Dederang to Murray No.2 330kV line for loss of the parallel No.1 line, 15 min line ratings
N::V_DDSM	Out= Dederang to South Morang line, NSW to Snowy Transient Limit
N>>V_DBUSS_1	Outage=Dederang DBUSS-line control scheme, limit NSW to VIC to avoid overload of a Dederang to Murray 330k line for trip of one of the two lines
N>>V_DBUSS_2	Outage = Dederang DBUSS-Transformer control scheme (System Normal and Prior Outage), limit Vic generation and interconnectors to avoid overloading Dederang No.1 330/220kV transformer for loss of Dederang No.2 or No.3 330/220kV transformers
N>>V_JNWO_1A	Outage = Jindera to Wodonga 330kV line, limit Vic interconnectors and generators to avoid overload Dederang to Murray No.1 330kV line for loss of the parallel No.2 line, 15 min line ratings
N>>V_JNWO_1B	Outage = Jindera to Wodonga 330kV line, limit Vic interconnectors and generators to avoid overload Dederang to Murray No.2 330kV line for loss of the parallel No.1 line, 15 min line ratings

N>>V_SMDD2	Outage = Dederang to South Morang 330kV line, limit loading on DDTS H1 330/220 kV transformer for loss of a SMTS-DDTS 330 kV line and DBUSS scheme disarmed, VENCorp TLM pg VI-C/3
N>>V_SMDD3	Outage = Dederang to South Morang 330kV line, limit loading on Eildon-Thomastown 220 kV line for loss of a SMTS-DDTS 330 kV line, VENCorp TLM pg VI-C/3
N>>V_SMSCP	Outage = South Morang 330kV series capacitor, limit NSW to Vic to avoid overloading Dederang No.1 330/220kV transformer for loss of Dederang No.2 or No.3 330/220kV transformers
N>>V_SMTXH1_2	Outage = South Morang 330/220kV H1 transformer, limit NSW to Vic to avoid overload of a Dederang 330/220kV transformer for trip of one of the three transformers
N>>V-JNWO_A	Out= Jindera-Wodonga(060), avoid UpperTumut to Murray (65) O/L on LowerTumut-Murray(66) trip; Feedback
N>>V-X_DDH2_DDSM_2	#N/A
N>>V-X_EPMB_DDSM_1A	#N/A
N>>V-X_EPMB_DDSM_1B	#N/A
V::H_BABEQE_R	Outage = Ballarat to Bendigo 220kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::H_BABEVB_R	Outage = Ballarat to Bendigo 220kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::H_BABEVE_R	Outage = Ballarat to Bendigo 220kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::H_BABEVF_R	Outage = Ballarat to Bendigo 220kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::H_BAHOVD_R	Outage = Ballarat to Horsham 220kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::H_BYPASS_HW_SY_QE	Outage = All three SMTS 500kV CB's for HWTS and SYTS line (No.1 or No.2) with temporary bypass for a direct HWTS to SYTS line, limit Vic gens and interconnectors to avoid transient instability for fault and trip of a HWTS-SYTS or HWTS-SMTS 500kV line
V::H_BYPASS_HW_SY_VE	Outage = All three SMTS 500kV CB's for HWTS and SYTS line (No.1 or No.2) with temporary bypass for a direct HWTS to SYTS line, limit Vic gens and interconnectors to avoid transient instability for fault and trip of a HWTS-SYTS or HWTS-SMTS 500kV line
V::H_DDMSVA_R	Outage = Dederang to Murray 330kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::H_DDMSVD_R	Outage = Dederang to Murray 330kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial

V::H_DDMSVE_R	Outage = Dederang to Murray 330kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::H_EPTTQE_R	Outage = Eildon to Thomastown 220kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::H_HORCQE_R	Outage = Horsham to Redcliffs 220kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::H_HWSMQA_R	Outage = Hazelwood to South Morang 500 kV line, Basslink import from Tas, limit Vic interconnectors and Vic generation to avoid transient instability for fault and trip of a Hazelwood to Sth Morang 500kV line, radial mode at Hazelwood
V::H_HWSMQB_R	Outage = Hazelwood to South Morang 500 kV line, Basslink import from Tas, limit Vic interconnectors and Vic generation to avoid transient instability for fault and trip of a Hazelwood to Sth Morang 500kV line, radial mode at Hazelwood
V::H_HWSMQC_R	Outage = Hazelwood to South Morang 500 kV line, Basslink import from Tas, limit Vic interconnectors and Vic generation to avoid transient instability for fault and trip of a Hazelwood to Sth Morang 500kV line, radial mode at Hazelwood
V::H_HWSMQD_R	Outage = Hazelwood to South Morang 500 kV line, Basslink export to Tas, limit Vic interconnectors and Vic generation to avoid transient instability for fault and trip of a Hazelwood to Sth Morang 500kV line, radial mode at Hazelwood
V::H_HWSMVA_R	Outage = Hazelwood to South Morang 500 kV line, Basslink import from Tas, limit Vic interconnectors and Vic generation to avoid transient instability for fault and trip of a Hazelwood to Sth Morang 500kV line, radial mode at Hazelwood
V::H_HWSMVB_R	Outage = Hazelwood to South Morang 500 kV line, Basslink import from Tas, limit Vic interconnectors and Vic generation to avoid transient instability for fault and trip of a Hazelwood to Sth Morang 500kV line, radial mode at Hazelwood
V::H_HWSMVC_R	Outage = Hazelwood to South Morang 500 kV line, Basslink import from Tas, limit Vic interconnectors and Vic generation to avoid transient instability for fault and trip of a Hazelwood to Sth Morang 500kV line, radial mode at Hazelwood
V::H_HWSMVD_R	Outage = Hazelwood to South Morang 500 kV line, Basslink export to Tas, limit Vic interconnectors and Vic generation to avoid transient instability for fault and trip of a Hazelwood to Sth Morang 500kV line, radial mode at Hazelwood
V::H_HWSMVE_R	Outage = Hazelwood to South Morang 500 kV line, Basslink export to Tas, limit Vic interconnectors and Vic generation to avoid transient instability for fault and trip of a Hazelwood to Sth Morang 500kV line, radial mode at Hazelwood
V::H_HYMLQE_R	Outage = Heywood to Moorabool 500kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::H_SMF2QC_R	Out = South Morang F2 500/330 kV transformer, limit Vic interconnectors, NSW to Qld on QNI and Vic generation to avoid transient instability for fault and trip of a Hazelwood to South Morang 500 kV line, third linear segment, Radial
V::H_X_EPMBQE_R	Outage = Both Eildon to Mt Beauty 220kV lines, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::H_X_SM_HW-SY_QB_R	Out = South Morang 500kV bus, one Hazelwood - South Morang 500kV line and one South Morang - Sydneham 500kV line, Basslink import from Tas, transient stability limit, Radial mode
V::H_X_SM_HW-SY_QE_R	Out = South Morang 500kV bus, one Hazelwood - South Morang 500kV line and one South Morang - Sydneham 500kV line, Basslink export to Tas, transient stability limit, Radial mode

V::H_X_SM_HW-SY_VD_R	Out = South Morang 500kV bus, one Hazelwood - South Morang 500kV line and one South Morang - Sydneham 500kV line, Basslink export to Tas, transient stability limit, Radial mode
V::H_X_SM_HW-SY_VE_R	Out = South Morang 500kV bus, one Hazelwood - South Morang 500kV line and one South Morang - Sydneham 500kV line, Basslink export to Tas, transient stability limit, Radial mode
V::N_BABEQD_R	Outage = Ballarat to Bendigo 220kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::N_BABEVE_R	Outage = Ballarat to Bendigo 220kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::N_BYPASS_HW_SY_QA	Outage = All three SMTS 500kV CB's for HWTS and SYTS line (No.1 or No.2) with temporary bypass for a direct HWTS to SYTS line, limit Vic gens and interconnectors to avoid transient instability for fault and trip of a HWTS-SYTS or HWTS-SMTS 500kV line
V::N_BYPASS_HW_SY_QB	Outage = All three SMTS 500kV CB's for HWTS and SYTS line (No.1 or No.2) with temporary bypass for a direct HWTS to SYTS line, limit Vic gens and interconnectors to avoid transient instability for fault and trip of a HWTS-SYTS or HWTS-SMTS 500kV line
V::N_BYPASS_HW_SY_QD	Outage = All three SMTS 500kV CB's for HWTS and SYTS line (No.1 or No.2) with temporary bypass for a direct HWTS to SYTS line, limit Vic gens and interconnectors to avoid transient instability for fault and trip of a HWTS-SYTS or HWTS-SMTS 500kV line
V::N_BYPASS_HW_SY_QE	Outage = All three SMTS 500kV CB's for HWTS and SYTS line (No.1 or No.2) with temporary bypass for a direct HWTS to SYTS line, limit Vic gens and interconnectors to avoid transient instability for fault and trip of a HWTS-SYTS or HWTS-SMTS 500kV line
V::N_DDMSQE_R	Outage = Dederang to Murray 330kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::N_HWSMQA_R	Outage = Hazelwood to South Morang 500 kV line, Basslink import from Tas, limit Vic interconnectors and Vic generation to avoid transient instability for fault and trip of a Hazelwood to Sth Morang 500kV line, radial mode at Hazelwood
V::N_HWSMQB_R	Outage = Hazelwood to South Morang 500 kV line, Basslink import from Tas, limit Vic interconnectors and Vic generation to avoid transient instability for fault and trip of a Hazelwood to Sth Morang 500kV line, radial mode at Hazelwood
V::N_HWSMQC_R	Outage = Hazelwood to South Morang 500 kV line, Basslink import from Tas, limit Vic interconnectors and Vic generation to avoid transient instability for fault and trip of a Hazelwood to Sth Morang 500kV line, radial mode at Hazelwood
V::N_HWSMQD_R	Outage = Hazelwood to South Morang 500 kV line, Basslink export to Tas, limit Vic interconnectors and Vic generation to avoid transient instability for fault and trip of a Hazelwood to Sth Morang 500kV line, radial mode at Hazelwood
V::N_HWSMQE_R	Outage = Hazelwood to South Morang 500 kV line, Basslink export to Tas, limit Vic interconnectors and Vic generation to avoid transient instability for fault and trip of a Hazelwood to Sth Morang 500kV line, radial mode at Hazelwood
V::N_HWSMQF_R	Outage = Hazelwood to South Morang 500 kV line, Basslink export to Tas, limit Vic interconnectors and Vic generation to avoid transient instability for fault and trip of a Hazelwood to Sth Morang 500kV line, radial mode at Hazelwood
V::N_HWSMVA_R	Outage = Hazelwood to South Morang 500 kV line, Basslink import from Tas, limit Vic interconnectors and Vic generation to avoid transient instability for fault and trip of a Hazelwood to Sth Morang 500kV line, radial mode at Hazelwood

V::N_HWSMVB_R	Outage = Hazelwood to South Morang 500 kV line, Basslink import from Tas, limit Vic interconnectors and Vic generation to avoid transient instability for fault and trip of a Hazelwood to Sth Morang 500kV line, radial mode at Hazelwood
V::N_HWSMVD_R	Outage = Hazelwood to South Morang 500 kV line, Basslink export to Tas, limit Vic interconnectors and Vic generation to avoid transient instability for fault and trip of a Hazelwood to Sth Morang 500kV line, radial mode at Hazelwood
V::N_HWSMVE_R	Outage = Hazelwood to South Morang 500 kV line, Basslink export to Tas, limit Vic interconnectors and Vic generation to avoid transient instability for fault and trip of a Hazelwood to Sth Morang 500kV line, radial mode at Hazelwood
V::N_HYMLQB_R	Outage = Heywood to Moorabool 500kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::N_HYMLQD_R	Outage = Heywood to Moorabool 500kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::N_HYMLQE_R	Outage = Heywood to Moorabool 500kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::N_HYMLVE_R	Outage = Heywood to Moorabool 500kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::N_JNWOQE_R	Outage = Jindera to Wodonga 330kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::N_ROSMQD_R	Outage = Rowville to South Morang 500kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::N_ROSMQE_R	Outage = Rowville to South Morang 500kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::N_ROSMQF_R	Outage = Rowville to South Morang 500kV line, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV line, Radial
V::N_SM330_2B	Vic-NSW Trans Lim SM 330kV No 2 Bus Out, Eqn 3.1q - 75MW
V::N_SMCSQB_R	Outage = South Morang 330kV series capacitor, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV, Radial
V::N_SMCSQC_R	Outage = South Morang 330kV series capacitor, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV, Radial
V::N_SMCSQD_R	Outage = South Morang 330kV series capacitor, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV, Radial
V::N_SMCSQE_R	Outage = South Morang 330kV series capacitor, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV, Radial
V::N_SMCSQF_R	Outage = South Morang 330kV series capacitor, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV, Radial

V::N_SMCSVC_R	Outage = South Morang 330kV series capacitor, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV, Radial
V::N_SMCSVE_R	Outage = South Morang 330kV series capacitor, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV, Radial
V::N_SMCSVF_R	Outage = South Morang 330kV series capacitor, limit Vic generators and interconnectors to avoid transient instability for fault and trip of a Hazelwood to South Morang 500kV, Radial
V::N_SMF2VB_R	Outage=South Morang 500/330 kV F2 transformer, limit Vic interconnectors and generators, avoid transient instability for fault and trip of a Hazelwood to South Morang 500 kV line, second linear segment, Radial
V::V_DDSM	Outage = Dederang to South Morang 330kV line, limit VIC to NSW to avoid transient instability for fault and trip of a Dederang to South Morang 330kV line, equation 3.1q from TLM-Q
V::V_EPTT	Outage = Eildon to Thomastown 220kV line, limit Vic to NSW and Vic to SA on Murraylink to avoid transient instability for fault and trip of a Dederang to South Morang 330kV line, equation 18.1 from TLM-D
V:H_DDSM2	#N/A
V:HHWRO3_R	#N/A
V^SML_VFRB_3	Outage = Murraylink VFRB scheme, limit Vic to SA on Murraylink to avoid overload on the Ballarat North to Buangor 66kV line for loss of the Ballarat to Horsham 220kV line, BATS-HOTS 66kV tie closed, pre-dispatch only
V>>H_SMTXH1	#N/A
V>>H_SMTXH2	#N/A
V>>N_SMTXF2A	#N/A
V>>N_SMTXH1	Outage = South Morang 330/220kV (H1) transformer, limit Vic generators and interconnectors (Vic export) to avoid overload of South Morang H2 transformer for trip of the South Morang 500/330kV (F2) transformer
V>>N_SMTXH2	Outage = South Morang 330/220kV (H2) transformer, limit Vic generators and interconnectors (Vic export) to avoid overload of South Morang H1 transformer for trip of the South Morang 500/330kV (F2) transformer
V>>N-JNWO_C	Out= Jindera-Wodonga(060), avoid Murray to UpperTumut (65) O/L on Murray-LowerTumut(66) trip; Feedback
V>>S_HYML_1	#N/A
V>>S_HYML_2	#N/A
V>>SML_BAML	Out = Ballarat to Moorabool (No.1 or No.2) line, limit Vic generators and interconnectors to avoid overloading Moorabool to Terang line on loss of Ballarat to Moorabool (No.2 or No.1) line
V>>SML_DDGN	Outage = Dederang to Glenrowan No.1 or No.3 220kV line, limit Vic generators and interconnectors to avoid overloading Dederang to Shepparton 220kV line on loss of Dederang to Glenrowan No.3 or No.1 220kV line
V>>SML_MLTG_1	Out = Moorabool to Terang or Ballarat to Moorabool No.2 line, avoid O/L Ballarat to Moorabool No.1 line on loss of Ballarat to Moorabool No.2 or Moorabool to Terang line, swamped if Murraylink VFRB enabled and Murraylink > 25MW

V>>V_DDTX_A	Outage = Dederang No.2 or No.3 330/220kV transformer, limit Vic generation and interconnectors to avoid pre-contingent overload of the Dederang No.1 transformer
V>>V_EPMB	#N/A
V>>V_EPTT_3B_R	Outage = Eildon to Thomastown 220kV line, limit Vic interconnectors and generation to avoid post-contingent O/L the South Morang 500/330kV (F2) transformer for trip of Rowville 500/220kV transformer, Yallourn unit 1 in 220kV mode, radial
V>>V_GTKT_1	Out = Geelong to Keilor No.2 or No.3 220kV line, limit Vic generation and interconnectors to avoid O/L the Geelong to Keilor No.1 220kV line for trip of the Moorabool 500/220kV transformer
V>>V_GTKT_3	Out = Geelong to Keilor No.1 or No.2 220kV line, limit Vic generation and interconnectors to avoid O/L the Geelong to Keilor No.3 220kV line for trip of the Moorabool 500/220kV transformer
V>>V_HWPS-RO2_3-5_1	Out = Hazelwood to Rowville No.2 220kV line, 3-5 Parallel, Jeeralang split with JLGS B connected to Hazelwood #1 or #2 220kV bus, avoid O/L Hazelwood to Rowville No.1 220kV line for loss of Hazelwood #1 or #2 500/220kV transformer
V>>V_HWTS_TX3_3-5MOD	Out = Hazelwood #3 or #4 500/220kV transformer, 3-5 Parallel, Jeeralang split with JLGS A connected to Hazelwood #3 or #4 220kV bus, avoid O/L Hazelwood #4 or #3 500/220kV transformer for loss of Rowville to Yallourn #5 220kV line
V>>V_HWTS_TX3_PAR3-5	Out = Hazelwood #3 or #4 500/220kV transformer, 3-5 Parallel, Jeeralang split with JLGS B connected to Hazelwood #3 or #4 220kV bus, avoid O/L Hazelwood #4 or #3 500/220kV transformer for loss of Rowville to Yallourn #5 220kV line
V>>V_MLSY2_1B	#N/A
V>>V_MLTX_1	Out = Moorabool 500/220kV transformer, limit Vic generation and interconnectors to avoid O/L the Geelong to Keilor No.1 220kV line for loss of the remaining Moorabool transformer
V>>V_ROTS_TX_3A_R	Outage = Rowville 500/220kV transformer, limit Vic interconnectors and gen to avoid post-contingent O/L South Morang 500/330kV (F2) transformer for trip of Rowville 500/220kV transformer, Yallourn unit 1 in 500kV mode, radial mode at Hazelwood
V>>V_ROTS_TX_3B_R	Outage = Rowville 500/220kV transformer, limit Vic interconnectors and gen to avoid post-contingent O/L South Morang 500/330kV (F2) transformer for trip of Rowville 500/220kV transformer, Yallourn unit 1 in 220kV mode, radial mode at Hazelwood
V>>V_SMSY_KTSM_1B_R	#N/A
V>>V_SMSY_KTSM_5R	#N/A
V>>V_SMSY_KTSM_6R	#N/A
V>>V_SMTS_TX_H1_3B_R	#N/A
V>>V_SMTS_TX_H2_2B_R	Outage = Sth Morang H2 330/220kV transformer, limit Vic interconnectors and Vic generation to avoid O/L Sth Morang 500/330kV (F2) transformer, Yallourn unit 1 in 220kV mode, radial mode at Hazelwood
V>>V_TTS_B1_2	#N/A
V>>V_TTS_B1_3B	#N/A

V>>V_X_DD-GN-SH_DDSM	#N/A
V>>V_X_DDSM_TWO	Outage = Both Dederang to Sth Morang 330kV lines, limit Vic generators and interconnectors to avoid O/L the Ballarat to Bendigo 220 kV line for trip of Eildon to Thomastown 220kV line
V>>V_X_DDTX1_DBUSS_A	Outage = Dederang No.1 330/220kV transformer and DBUSS transformer control scheme, limit Vic generation and interconnectors to avoid overloading the Dederang No.2 transformer for loss of the Dederang No.3 transformer
V>>V_X_DDTX2_3_DBUSS	Outage = Dederang No.2 or No.3 330/220kV transformer and DBUSS transformer control scheme, limit Vic generation and interconnectors to avoid overloading the Dederang No.1 transformer for loss of the other Dederang transformer
V>>V-HWLY_1	Outage = Hazlewood to Loy Yang (HWTS-LYPS) No.1 500kV line, avoid overloading Hazelwood to Loy Yang No.2 or No.3 500kV line on trip of any of the remaining Hazelwood to Loy Yang 500 kV line
V>>V-HWLY_2	Outage = Hazlewood to Loy Yang (HWTS-LYPS) No.2 500kV line, avoid overloading Hazelwood to Loy Yang No.1 or No.3 500kV line on trip of any of the remaining Hazelwood to Loy Yang 500kV line
V>>V-HWLY_2_3	#N/A
V>>V-HWLY_3	Outage = Hazlewood to Loy Yang (HWTS-LYPS) No.3 500kV line, avoid overloading Hazelwood to Loy Yang No.1 or No.2 500kV line on trip of any of the remaining Hazelwood to Loy Yang 500kV line
V>LY_1900	Discretionary Latrobe Loy Yang A, B and Loy Yang Gas Generation and Basslink Limit <= 1900 MW
V>LY_2200	Discretionary Latrobe Loy Yang A, B and Loy Yang Gas Generation and Basslink Limit <= 2200 MW
V>LY_2300	Discretionary Latrobe Loy Yang A, B and Loy Yang Gas Generation and Basslink Limit <= 2300 MW
V>SML_BESH_3	Outage = Bendigo to Shepparton 220kV line, limit Murraylink from Vic to SA to avoid overloading Ballarat to Moorabool No.1 220kV line on loss of Ballarat to Moorabool No.2 220kV line, swamped if Murraylink VFRB enabled and Murraylink > 25MW
V>SML_VFRB_3	Outage = Murraylink VFRB scheme, limit Vic to SA on Murraylink to avoid overload on the Ballarat North to BGR (Buangor) 66kV line for loss of the Ballarat to Horsham 220kV line
V>SML_VFRB_7	Outage = Murraylink VFRB scheme, limit Vic to SA on Murraylink to avoid overload on the Ballarat North to BGR (Buangor) 66kV line for loss of the Ballarat to Horsham 220kV line
V>SMLBAHO1	Out = Ballarat to Horsham or Bendigo to Kerang line, Murraylink limit to avoid O/L Buronga to Balranald to Darlington Point (X5) line or Buronga to Recliffs (OX1) line or voltage collapse on X5, for trip of Bendigo to Kerang or Ballarat to Horsham line
V>SMLBAHO4	#N/A
V>SMLBEKG	Outage = Bendigo to Kerang or Balranald to Darlington Pt (X5/1) line, limit Murraylink from Vic to SA to avoid overloading Ballarat to Horsham line on loss of Balranald to Darlington Point (X5/1) or Bendigo to Kerang line
V>SMLBESH1	Outage = Bendigo to Shepparton or Ballarat to Bendigo 220kV line, limit Murraylink from Vic to SA to avoid overloading Ballarat to Horsham 220kV line on loss of Ballarat to Bendigo or Bendigo to Shepparton 220kV line
V>SMLBESH3	Outage = Bendigo to Shepparton 220kV line, limit Murraylink from Vic to SA to avoid overloading Ballarat to Moorabool No.1 220kV line on loss of Ballarat to Moorabool No.2 220kV line, Murraylink VFRB enabled and Murraylink > 25MW
V>SMLGTKT	#N/A

V>SMLHORC1	Out = Horsham to Red Cliffs 220kV line, limit Murraylink from Vic to SA to avoid overloading Balranald to Darlington Pt (X5/1) 220kV line for trip of Bendigo to Kerang line
V>SMLHORC2	Out = Horsham to Redcliffs 220kV line, limit Murraylink from Vic to SA to avoid overloading Bendigo to Kerang 220kV line for trip of Balranald to Darlington Point (X5/1) 220kV line
V>SMLHORC3	Out = Horsham to Redcliffs 220kV line, limit Murraylink from Vic to SA to avoid overloading Kerang to Redcliffs 220kV line for trip of Balranald to Darlington Point (X5/1) 220kV line
V>SMLKGRC1	Outage = one Kerang to Red Cliffs 220kV line, limit Murraylink from Vic to SA to avoid overloading Balranald to Darlington Pt (X5/1) 220kV line for trip of Ballarat to Horsham line
V>SMLKGRC2	Out = Kerang to Redcliffs 220kV line, limit Murraylink from Vic to SA to avoid overloading Ballarat to Horsham 220kV line for loss of Balranald to Darlington Point (X5/1) 220kV line
V>V_HWJL2_RADIAL_2	Outage = Hazelwood to Jeeralang No.2 220kV line, limit Hazelwood area generation to avoid O/L Hazelwood A2 transformer for trip of A3 transformer, Yallourn unit 1 in 220kV mode, Hazelwood Radial Mode with 1,2,3,4 busses split
V>V_HWJL2_RADIAL_3	Outage = Hazelwood to Jeeralang No.2 220kV line, limit Hazelwood units 3,4,5 to avoid overload of Hazelwood A1 transformer, Hazelwood Radial Mode with 1,2,3,4 busses split
V>V_HWJL3-4_RAD	Outage = Hazelwood to Jeeralang No.3 or No.4 220kV line, limit HWPS units3,4,5 and Jeeralang A to avoid O/L HWTS A1 Tx for trip of HWPS-JLTS No.4 or No.3 220kV line, Radial Mode with 1&2 busses split and 3&4 busses split or tied
V>V_HWJL4	Outage = Hazelwood to Jeeralang No.4 220kV line, limit Hazelwood units 1,2+Jeeralang+Bairnsdale+Morwell 1,2,3 to avoid overload on Hazelwood to Jeeralang No.3 220kV line for loss of the HWTS 500/220kV No.2 transformer, Hazelwood in radial mode.
V>V_HWTS_A1_R_2	#N/A
V>V_HWTS_TX1_PAR_3-5	Out = Hazelwood #1 or #2 500/220kV transformer, 3-5 Parallel, Jeeralang split with JLGS B connected to Hazelwood #1 or #2 220kV bus, avoid O/L Hazelwood to Rowville #1 and #2 220kV lines for loss of Hazelwood #2 or #1 500/220kV transformer
V>V_HWTS_TX3_3-5_MOD	Out = Hazelwood #3 or #4 500/220kV transformer, 3-5 Parallel, Jeeralang split with JLGS A connected to Hazelwood #3 or #4 220kV bus, avoid O/L Rowville to Yallourn #5, #6, #7or #8 220kV lines for loss of Hazelwood #4 or #3 500/220kV transformer
V>V_HWTS_TX3_PAR_3-5	Out = Hazelwood #3 or #4 500/220kV transformer, 3-5 Parallel, Jeeralang split with JLGS B connected to Hazelwood #3 or #4 220kV bus, avoid O/L Rowville to Yallourn #5, #6, #7or #8 220kV lines for loss of Hazelwood #4 or #3 500/220kV transformer
V>V_HWTX1_PAR_3-5_2	Out = Hazelwood #1 or #2 500/220kV transformer, 3-5 Parallel, Jeeralang split with JLGS A connected to Hazelwood #1 or #2 220kV bus, avoid O/L Hazelwood to Rowville #1 and #2 220kV lines for loss of Hazelwood #2 or #1 500/220kV transformer