

TVR Guideline - Both DRSS II Out of Service

Requirement for Transient Voltage Recovery
8KD West Bus (Holtsville) DRSS OOS & 8DV Randall Road (Wildwood) DRSS OOS
Issued 09/27/2022
(To be used for Summer period May 1st through September 30th)

				3301 - 3500 (MW)		3501 - 4000 (MW)						CONVERSION 2800 - 4000 (MW)				4001-4100(MW) (Interpolated ⁵)				4101-4200 (MW)				4201-4300 (MW) (Interpolated ⁵)				4301-4400 (MW)				4401-4500 (MW)				4501-4650 (MW) (Interpolated ⁵)				4651-4800 (MW)				4801-5000 (MW)			CONVERSION 4001- 5000 (MW)			5001-5500 (MW)		
DSPTCH	2800-3100 (MW)																																																			
CAITHNESS	1	0	0	1	0	1	1	0	0	0	0		1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0			1 ⁽¹⁾	1 ⁽¹⁾	0 ⁽²⁾								
# NPT STM	0	3/4	2/1	0	4/3/2	4/3/2	1	4	3	2	1		4/3	2	4	3/2	4/3	2	4	3/2	4/3	2	4	3/2	4/3	2	4	3/2	4/3	2	4	3	4/3	2	4	3	4	3	4/3			4	3 ⁽³⁾	4								
# PJ STM	0	0	1	0	1	0	0	2	2	2	2	1 PJ =2 LM 6000	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2							
# PJ LM6000	0	0	0	0	0	0	0	0	1	2	2	1 LM 6000 = 1 WDNG RVR 1 WDNG RVR= 1 HOLTS 69 1 HOLTS 69 = 1 HOLTS 138 1 HOLTS 138 = SHOREHM 1&2	0	1	2	2	0	1	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2					
# SHRM LM 6000	0	0	0	0	0	0	0	0	0	0	2		0	0	2	2	0	0	2	2	0	0	2	2	0	2	2	2	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2							
# WDNG RIV	0	0	0	0	0	0	0	0	0	0	2		0	0	0	1	0	0	3	3	0	0	3	3	0	1	3	3	0	2	3	3	1	2	3	3	3	3	3	3	3	3	3	3	3	3						
# HOLTS 69 GT	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	1	0	0	1	2	0	0	2	3	0	0	2	3	0	0	4	5	1	2	5	5	2	3	5	1 HOLTS 69 = 1 HOLTS 138	5	5	5					
# HOLTS 138kV	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	5	1 HOLTS 138 = SHOREHM 1&2	5	5	5								
# SHOR 1&2	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0							
NYPA Holts (see Note 6)	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	-	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0							
CSC	1	1	1	1	1	1	1	1	1	1	1	1 CSC = 1 PJ	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1						
East of Riverhead	See East End Operating Guideline																																					See notes (1) and (2)														

(1) - Caithness I/S: Above 5,300 MW system load level, all East End (i.e., East of Riverhead) generation units need to be dispatched.

(2) - Caithness O/S: Above 5,000 MW system load level, all East End (i.e., East of Riverhead) generation units need to be dispatched.

(3) - Caithness I/S: Loads less than 5400 MW and South Fork Load less than 255 MW and all East of Holbrook Generation Available (with the exception of Shoreham 1&2 GTs).

Note:

1. Based on dispatch awards for Caithness and Northport, select units in box for dispatch.

2. Caithness, NYPA Holtsville, and CSC are the most economic and will usually be awarded in the DAM.

3. This analysis was conducted utilizing the latest Caithness SRIS dynamic data.

4. This guideline assumes that Canal DRSS is in service. If Canal DRSS is not in service, the Shoreham 1 & 2 GTs should be dispatched for load levels above 5000 MW.

5. Analysis assumed the tripping of the NYPA Holtsville units for the worst contingency (phase to phase to ground fault on Ruland to Holbrook/Pilgrim to Holtsville GT 138 kV double circuit; 138-881/882).

6. If the NYPA Flynn - Holtsville plant is out of service, no substitution is necessary as the guideline will not change.

7. Dispatch of the Northport 138kV shunt reactor connected to bus 1-1 will not change the guideline.

8. These columns are based on interpolation of the results on either side due to the need to reduce out of merit dispatch.

TVR Guideline - Only West Bus DRSS II in Service

Requirement for Transient Voltage Recovery

8KD West Bus (Holtsville) DRSS I/S & 8DV Randall Road (Wildwood) DRSS OOS

Issued 07/21/2022

(To be used for Summer period May 1st through September 30th)

DSPTCH	3900-4000 (MW)				4001-4200 (MW)				4201-4300 (MW)				4301-4500 (MW)				4501-4800 (MW)				CONVERSION For Load Levels 4301-4800 (MW)	4801-5000 (MW)		5001-5150 (MW)		5151-5300 (MW)		CONVERSION For Load Levels 4801-5300 (MW)	5301-5450 (MW)			5451-5600 (MW)		5601-5700 (MW)		COMMON CONVERSION For All Load Levels	
Notes:	Note (14)																				Note (10)			Note (11)	Note (12)	Note (11)	Note (12)	Note (10)	Note (13)			Note (13)		Note (13)			
CAITHNESS	1	1	0	0	1	1	1	0	0	1	1	0	0	1	1	0	0	1	1	0	0	If 2 East End units are online, 1 Holtsville 69kV GT can be backed-off from the RED Box	1	0	1	0	1	0	If 4 East End units are online, 2 Holtsville 69kV GT can be backed-off from the Blue Box.	1	1	0	1	0	1 LM6000 (Port Jeff or Shoreham) = 1 Holtsville 69kV or 1 Holtsville 138kV or 1 Wading River or Shoreham 1&2 1 PJ = 2 PJ LM6000 = 2 Holtsville 69kV 1 CSC = 3 LM6000		
#NPT-STM	0/1	2/3/4	0/1	2/3/4	0/1	2	3/4	2	3/4	2	3/4	2	3/4	2	3/4	2	3/4	2	3/4	2	3/4		3/4	3/4	3/4	3/4	3	4		3/4	4	4	4	4			
#PJLM6000	2	0	0	0	2	1	0	2	2	2	1	2	2	2	2	2	2	2	2	2	2		2	2	2	2	2	2		2	2	2	2				
#PJ-STM	0	0	2	1	0	0	0	2	1	0	0	2	2	1	1	2	2	2	2	2	2		2	2	2	2	2	2		2	2	2	2	2			
#HOLTS 69 GT	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	1	1	0	3	3		3	5	4	5	5	5		5	4	5	5	5		5	
#SHRM LM 6000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	1	0	0		2	2	2	2	2			
#WDNG RIV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0		1	0	3	1	3			
#HOLTS 138kV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	2			
#SHOR 1&2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0		0	0	0	0	0			
NYPA Holts (see Note 6)	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0		1/0	1/0	1/0	1/0	1/0	1/0		1/0	1/0	1/0	1/0	1/0			
CSC	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1					
East of Riverhead	Follow East End Operating Guideline																																				

1. Based on dispatch awards for Caithness and Northport, select units in box for dispatch.
2. Caithness, NYPA Holtsville, and CSC are the most economic and will usually be awarded in the DAM.
3. This analysis was conducted utilizing the latest Caithness SRIS dynamic data.
4. This guideline assumes that Canal DRSS is in service. If Canal DRSS is not in service, all East of Holbrook units should be dispatched for load levels above 5300 MW.
5. Analysis assumed the tripping of the NYPA Holtsville units for the worst contingency (phase to phase to ground fault on Ruland to Holbrook/Pilgrim to Holtsville GT 138 kV double circuit; 138-881/882).
6. If the NYPA Flynn - Holtsville plant is out of service, no substitution is necessary as the guideline will not change.
7. Dispatch of the Northport 138kV shunt reactor connected to bus 1-1 will not change the guideline.
8. These columns are based on interpolation of the results on either side due to the need to reduce out of merit dispatch.
9. All East of Holbrook and East End Cap Banks assumed to be in service including Culloden Point Cap Bank
10. For load levels 4301 MW - 4800 MW, if 2 East End units are online (if required as per East End guideline) 1 Holtsville 69kV GT can be backed-off from the guideline. Similarly for load levels 4801 MW - 5300 MW, if 4 East End units are online (if required as per East End guideline) 2 Holtsville 69kV GT's can be backed-off from the guideline.
11. Above 5000 MW system load level having Caithness I/S at least one East of Riverhead unit recommended to be dispatched.
12. Above 5000 MW system load level having Caithness O/S, all East of Riverhead units are recommended to be dispatched.
13. Above 5300 MW system load level, all East of Riverhead units are recommended to be dispatched regardless of East End guideline and Caithness availability.
14. Below 3900 MW system load level having Caithness I/S, no units are required to be dispatched for TVR.

TVR Guideline - Only Wildwood DRSS II in Service

Requirement for Transient Voltage Recovery
8KD West Bus (Holtsville) DRSS OOS & 8DV Randall Road (Wildwood) DRSS IS
Issued 09/27/2022
(To be used for Summer period May 1st through September 30th)

DSPTCH	<3200 (MW)	3201-3500 (MW)			3501-3800 (MW)			3801 - 4100 (MW)			4101 - 4500 (MW)				4501 - 4700 (MW)					4701-5000 (MW)					5001-5100 (MW)			5101-5200 (MW)		5201-5500 (MW)			CONVERSION 4001-5000 (MW)
CAITHNESS	0	1	0	0	1	0	0	1	1	0	1	1	0	0	1	1	0	0	0	1	1	1	0	0	1	1	0	1	0	1	1	0	1 Northport = 2 LM 6000
# NPT STM	0	0	2	1	1	1	1	1	0	2	4/3/2	1	4	3	1	4	4	3	2	2	3	4	4	3	4	3	4	4/3	4	4	3	4	1 PJ = 2 LM 6000
# PJ STM	0	0	0	1	0	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1 LM 6000 = 1 WDNG RVR
# PJ LM6000	0	0	0	0	0	2	0	0	2	2	1	2	2	2	2	0	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
# SHRM LM 6000	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	1 WDNG RVR= 1 HOLTS 69
# WDNG RIV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 HOLTS 69 = 1 HOLTS 138
# HOLTS 69 GT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	2	4	4	2	1	5	4	2	3	5	3	5	5	5	5	1 HOLTS 138 = SHOREHM 1&2
# HOLTS 138kV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	-	
# SHOR 1&2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
NYPA Holts (see Note 6)	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	-	
CSC	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1 CSC = 3 LM 6000	
East of Riverhead	See East End Operating Guideline																																

- Note:
1. Based on dispatch awards for Caithness and Northport, select units in box for dispatch.
 2. Caithness, NYPA Holtsville, and CSC are the most economic and will usually be awarded in the DAM.
 3. This guideline assumes that Canal DRSS is in service. If Canal DRSS is not in service, the Shoreham 1 & 2 GTs should be dispatched for load levels above 5000 MW.
 4. Analysis assumed the tripping of the NYPA Holtsville units for the worst contingency (phase to phase to ground fault on Ruland to Holbrook/Pilgrim to Holtsville GT 138 kV double circuit; 138-881/882).
 5. If the NYPA Flynn - Holtsville plant is out of service, no substitution is necessary as the guideline will not change.
 6. Dispatch of the Northport 138kV shunt reactor connected to bus 1-1 will not change the guideline.
 7. These columns are based on interpolation of the results on either side due to the need to reduce out of merit dispatch.

TVR Guideline - Both West Bus and Wildwood DRSS II in Service

Requirement for Transient Voltage Recovery

8KD West Bus (Holtsville) DRSS I/S & 8DV Randall Road (Wildwood) DRSS I/S

Issued

7/21/2022

(To be used for Summer period May 1st through September 30th)

DSPTCH	<4200 (MW)	4201-4300 (MW)			4300-4500 (MW)					4501-4800 (MW)			4801-5000 (MW)		5001-5150 (MW)		5151-5300 (MW)	5301-5450 (MW)	5451-5600 (MW)	5601-5700 (MW)
Notes:	Note (14)																			
CAITHNESS	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
# NPT STM	0/1/2/3/4	0	1	2/3/4	0/1	1	2	3	4	2	3	4	3	4	3	4	4	4	4	4
# PJ LM6000	0	2	1	0	2	2	2	1	0	2	2	2	2	2	2	2	2	2	2	2
# PJ STM	0	0	0	0	2	1	0	0	0	2	1	0	1	0	2	1	2	2	2	2
# HOLTS 69 GT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2
# SHRM LM 6000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# WDNG RIV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# HOLTS 138kV	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
# SHOR 1&2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NYPA Holts (see Note 6)	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0	1/0
CSC	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
East of Riverhead					Follow East End Operating Guideline															
COMMON CONVERSION For All Load Levels	1 LM6000 (Port Jeff or Shoreham) = 1 Holtsville 69kV or 1 Holtsville 138kV or 1 Wading River or Shoreham 1&2 1 PJ =2 PJ LM 6000 = 2 Holtsville 69kV 1 CSC = 3 LM 6000 1 Northport = 2 Holtsville 69kV = 2 LM 6000 = 2 Holtsville 138kV = 2 Wading River Caithness = 3 Holtsville 69kV = 3 Wading River = 3 LM 6000 = (2 LM 6000 + 1Holtsville 69kV) (See Note 15)																			

- Note:
1. Based on dispatch awards for Caithness and Northport, select units in box for dispatch.
 2. Caithness, NYPA Holtsville, and CSC are the most economic and will usually be awarded in the DAM.
 3. This analysis was conducted utilizing the latest Caithness SRIS dynamic data.
 4. This guideline assumes that Canal DRSS is in service. If Canal DRSS is not in service, all East of Holbrook units should be dispatched for load levels above 5300 MW.
 5. Analysis assumed the tripping of the NYPA Holtsville units for the worst contingency (phase to phase to ground fault on Ruland to Holbrook/Pilgrim to Holtsville GT 138 kV double circuit; 138-881/882).
 6. If the NYPA Flynn - Holtsville plant is out of service, no substitution is necessary as the guideline will not change.
 7. Dispatch of the Northport 138kV shunt reactor connected to bus 1-1 will not change the guideline.
 8. These columns are based on interpolation of the results on either side due to the need to reduce out of merit dispatch.
 9. All East of Holbrook and East End Cap Banks assumed to be in service including Culloden Point Cap Bank
 10. For load levels 4301 MW - 4800 MW, if 2 East End units are online (if required as per East End guideline) 1 Holtsville 69kV GT can be backed-off from the guideline. Similarly for load levels 4801 MW - 5300 MW, if 4 East End units are online (if required as per East End guideline) 2 Holtsville 69kV GT's can be backed-off from the guideline.
 11. Above 5000 MW system load level having Caithness I/S at least one East of Riverhead unit recommended to be dispatched.
 12. Above 5000 MW system load level having Caithness O/S, all East of Riverhead units are recommended to be dispatched.
 13. Above 5300 MW system load level, all East of Riverhead units are recommended to be dispatched regardless of East End guideline and Caithness availability.
 14. Below 4200 MW system load level having Caithness I/S and regardless of Northport unit availability, no East of Holbrook units are required to be dispatched for TVR.
 15. For Caithness out of service conversion, Do not use Holtsville 138kV GT's as replacement.