

Manual 03: Transmission Operations Updates – Version 57

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- Cover to cover periodic review
 - Corrected typos, removed references to SPS. Updated references to Section 5.

The PJM RTO is operated so that loading on all PJM SOL are within normal continuous ratings, and so that immediately following any single facility malfunction or failure, the loading on all remaining facilities can be expected to be within emergency ratings. (All deviations from normal procedure must be approved and documented in [a PJM Manual Section 5](#).)

- Section 1.5: Removed Section 2 reference from Manual 3A.

1.5.1 Model Information and Data Requirements

- The Transmission Owner is responsible to provide the information and data needed by PJM about the Transmission Owner System.
- Telemetry data requirements are defined in the PJM M-01: Control Center and Data Exchange Requirement.
- System analytical model information and update requirements are defined in the PJM M-3A: Energy Management System (EMS) Model Updates and Quality Assurance (QA); [Section 2](#).

1.5.12 Process to Change the PJM Congestion Management Control Facilities List

The process and timeline required to make adjustments to the existing Congestion Management Control Facilities List is described in detail in the PJM M-3A: Energy Management System (EMS) Model Updates and Quality Assurance (QA); [Section 2](#).

- Section 1.7: Updated RAS procedure for PRC-012 standard.

- Section 3 and Attachment C: Updated baseline voltage tables and voltage exception request due to new eDART function for voltage limit implementation.

345-kV	LD	EL	NL	NH	Vdrop Warning	Vdrop-Limit
PJM-Baseline	310.5	317.4	327.8	362.3	5.0%	8.0%
Baseline P.U.	0.90	0.92	0.95	1.05	n/a	n/a
TO-Baseline same as PJM-Baseline:						
	PS, PN, AP, AEP, DLGO, DAY, ATSI, DEOK, OVEC				•	•
TO Zonal/Substation Deviations from PJM-Baseline:						
Indicates same as PJM-Baseline						
TO-Zones	LD	EL	NL	NH	Vdrop Warning	Vdrop-Limit
REGO	•	319.0	•	•	•	•
GE	•	327.7	338.1	•	7.0%	10.0%
EKPC	•	•	•	•	•	10.0%
ITCI	•	•	334.7	369.2	•	•
OVEC - Emergency High Limit is 379.5 kV (1.1 p.u.)						

345 kV						
kV	310.5	317.4	327.8	362.3	5.0%	8.0%
P.U.	0.90	0.92	0.95	1.05	n/a	n/a

Voltage Limit Exceptions

<https://edart.pjm.com/reports/voltage/limits.csv>

- Section 3.11: Updated language showing eDART Voltage Schedule is the required method for communicating generator voltage schedules.

- Section 3.9: Removed language concerning TSA Benchmarking.

TSA is used to monitor and control the generators with known stability concerns as defined in Manual-03: Section 5. Since TSA uses real-time system conditions to assess stability, the limits tend to be less conservative or less restrictive than the M-03 Section 5 procedures. The Section 5 limits are usually determined using conservative assumptions in order to cover a wider range of operating conditions. For scheduled transmission outages, TSA studies are used to determine the stability limits. For forced outages, the Section 5 procedure limits are used until a real-time TSA run is completed. PJM will also use the Section 5 stability limits in certain cases, such as when TSA is down ~~or the plant/generator model has not been fully benchmarked.~~

- Section 4.5: Added Outage Acceleration posting site and contact email.

Under certain circumstances, it may be beneficial to investigate the possibility of moving or accelerating a transmission facility outage if shortening the overall outage time or moving the start/stop dates can alleviate transmission congestion or revenue inadequacy. To accommodate outages that may be accelerated under this process, PJM will review "on time" outages exceeding 5 days in duration submitted by the Transmission Owners and forced outages projected to last into the month of the analysis window. This analysis will begin on the first of the month 60 days in advance of the outage start dates. If such outage meets the criteria as outlined in the next section, it may be posted for acceleration under this process. The posting is at <https://www.pjm.com/markets-and-operations/etools/oasis/outage-accel.aspx>. The PJM contact information for Outage Acceleration is outage_acceleration_group2@pjm.com.

- RTO
 - Updated Perry and Calvert Cliffs NPIR voltage limits.
 - Updated NY/NJ PAR Coordination and deleted 5018 Hopatcong – Ramapo PAR Coordination in RTO based on updated Joint Operating Memo (OM 022B Market to Market Redispatch Flowgates and NY NJ PAR Coordination, Rev. 10).
- AE
 - Additional facilities added to Bi-Directional Ratings table.
- AEP
 - Updated Jacksons Ferry SVC Procedure.
 - Removed Cook Stability Restriction Procedure.
- BGE
 - Updated Calvert Cliffs Stability Limit Procedure.
 - Deleted Westport Breaker Limitations and Gould St. Generation Operations procedure.

- FE-S
 - Updated Belmont RAS Procedure.
- FE-E
 - Updated Seneca Stability Procedure with updated limits.
 - Added new Ironwood Stability Procedure.
 - Updated Homer City Stability Trip procedure.
- DOM
 - Updated powerflow/SA language for the DOM Northern Virginia High Voltage Control procedure.
 - Added new Mosby/Mt. Storm SVC procedure and Colington STATCOM procedure.
 - Added new Ladysmith/Doswell Stability Procedure.
 - Updated Brunswick/Greenville Stability procedure.

- COMED
 - Removed Lisle substation from Normally Open Bus Tie procedures.
 - Updated language to use RAS for the Electric Junction – North Aurora procedure and modified location of CS 0605 to be at 11106 line.
 - Updated Camp Grove Islanding (SPOG 2-40) procedure for new configuration.
 - Updated the Powerton Stability Trip Scheme procedure due to the new Nevada substation.
 - Updated the Islanding Prevention Scheme for TSS 941 Grand Ridge Generation (SPOG 2-41) procedure.
 - Updated Prospect Heights SVC procedure.
 - Added new Lancaster Automatic Trip Scheme to Prevent Islanding of Ecogrove procedure.

- **PECO**
 - Added new Conowingo Stability Procedure.
- **PPL**
 - Added new Safe Harbor Relay procedure.
 - Updated Martins Creek stability procedure.
- **PSEG**
 - Updated Artificial Island procedure due to new substation

- Attachment A
 - Updated language for Wolfs Crossing RAS.
 - Removed two Lisle schemes due to station reconfiguration.
- Attachment B
 - Added clarifying language to ‘Cut-In’ Criteria for TO associated with project work.

