

**System Operations Subcommittee**  
**PJM Operations Summary**  
**September 2015 Operations (Partial Month)**

**Manual Load Dump Warning** (0 Events)

**HLV Schedule Warning** (0 Events)

**HLV Schedule Action** (0 Events)

**Hot Weather Alert** (3 Events)

9/1/2015 8:38	9/3/2015 20:22	Hot Weather Alert	- MIDATL-Region As of 08:30 on 09.01.2015 hours, a Hot Weather Alert has been issued for 09.03.2015 Additional Comments: Forecasted temperature 94 degrees, forecasted THI 81 degrees.
9/7/2015 10:41	9/8/2015 21:12	Hot Weather Alert	- MIDATL-Region As of 10:30 on 09.07.2015 hours, a Hot Weather Alert has been issued for 09.08.2015 Additional Comments: Forecasted temperatures 93 F & 81 THI
9/8/2015 10:00	9/9/2015 23:50	Hot Weather Alert	- MIDATL-Region As of 10:00 on 09.08.2015 hours, a Hot Weather Alert has been issued for 09.09.2015 Additional Comments: Forecasted high temperature in Phila. 91 degrees and forecasted THI 82.

**Primary Reserve Warning** (0 Events)

**Voltage Reduction Warning** (0 Events)

**Voltage Reduction** (0 Events)

**Emergency Energy Request** (0 Event)

**Emergency Procedure** (5 Events)

9/7/2015 23:48	9/8/2015 4:57	Emergency Procedure	- Issued Geomagnetic Disturbance Warning for PJM-RTO-RTO As of 23:48 on 09.07.2015 hours, a GMD warning of K-7 or greater is in effect beginning at 23:40 on 09.07.2015 and will continue until 04:00 on 09.08.2015 . PJM will issue any GMD events or extended warnings posted on the RCIS by MISO St. Paul via the PJM All-Call.
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9/11/2015 5:33	9/11/2015 19:00	Emergency Procedure	- Issued Geomagnetic Disturbance Warning for PJM-RTO-RTO As of 05:33 on 09.11.2015 hours, a GMD warning of K7 or greater is in effect beginning at 04:00 on 09.11.2015 and will continue until 17:00 on 09.11.2015 . PJM will issue any GMD events or extended warnings posted on the RCIS by MISO St. Paul via the PJM All-Call.
9/11/2015 8:38	9/13/2015 8:59	Emergency Procedure	- Issued Min Gen Advisory for PJM-RTO-RTO PJM is issuing a Minimum Generation Advisory for the valley periods 09.12.2015 through 09.13.2015 . This advisory is being issued to provide advanced warning that due to mild weather and light loads, PJM may be entering into Min Gen Alerts and possibly Min Gen Actions during these periods. No action is required from the members at this time. This is an informational notice only. As we approach these valley periods, PJM will implement Min Gen Alerts/Actions on an as needed basis.
9/20/2015 4:07	N/A	Manually Created Note	04:04 2nd NERC CC - Stated NOAA Alert @ 03:50 EDT K-7 observed.
9/20/2015 3:44	9/20/2015 9:55	Emergency Procedure	- Issued Geomagnetic Disturbance Warning for PJM-RTO-RTO As of 03:44 on 09.20.2015 hours, a GMD warning of K-7 or greater is in effect beginning at 03:20 on 09.20.2015 and will continue until 08:00 on 09.20.2015 . PJM will issue any GMD events or extended warnings posted on the RCIS by MISO St. Paul via the PJM All-Call. Additional Comments: WARNING: Geomagnetic K-index of 7 or greater expected Valid From: 2015 Sep 20 0720 UTC Valid To: 2015 Sep 20 1200 UTC Warning Condition: Onset NOAA Scale: G3 or greater - Strong to Extreme

**Max Emergency Gen Alert** (0 Events)

**Max Emergency Generation** (0 Events)

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**High System Voltage** (9 Events)

9/12/2015 0:28	9/12/2015 0:45	Emergency Procedure	<p>- Issued High System Voltage for PJM-RTO-RTO As of 00:30 on 09.12.2015 hours, all companies shall take the following actions on the Bulk Electric System: 1. All switchable capacitors are out of service. 2. All reactors are in service. 3. TOs are requested to review and adjust LTC settings as appropriate. All LTC (230 kV and above) and voltage schedule adjustments shall be coordinated with PJM Dispatch. 4. All SVCs are absorbing reactive power. 5. Generation Owners shall operate generators at the lower bandwidth of their voltage schedule when possible. 6. Generation Owners shall communicate with PJM and the TO restrictions to their generator's ability to absorb MVARs if that capability varies from the existing "D" curve. Target: Distribution Companies/Transmission Owners/Generation</p>
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9/12/2015 0:30	9/12/2015 14:23	Emergency Procedure	<p>- Issued High System Voltage for PJM-RTO-RTO As of 00:30 on 09.12.2015 hours, all companies shall take the following actions on the Bulk Electric System: 1. All switchable capacitors are out of service. 2. All reactors are in service. 3. TOs are requested to review and adjust LTC settings as appropriate. All LTC (230 kV and above) and voltage schedule adjustments shall be coordinated with PJM Dispatch. 4. All SVCs are absorbing reactive power. 5. Generation Owners shall operate generators at the lower bandwidth of their voltage schedule when possible. 6. Generation Owners shall communicate with PJM and the TO restrictions to their generator's ability to absorb MVARs if that capability varies from the existing "D" curve. Target: Distribution Companies/Transmission Owners/Generation</p>
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9/12/2015 23:45	9/13/2015 8:57	Emergency Procedure	- Issued High System Voltage for PJM-RTO-RTO As of 23:45 on 09.12.2015 hours, all companies shall take the following actions on the Bulk Electric System: 1. All switchable capacitors are out of service. 2. All reactors are in service. 3. TOs are requested to review and adjust LTC settings as appropriate. All LTC (230 kV and above) and voltage schedule adjustments shall be coordinated with PJM Dispatch. 4. All SVCs are absorbing reactive power. 5. Generation Owners shall operate generators at the lower bandwidth of their voltage schedule when possible. 6. Generation Owners shall communicate with PJM and the TO restrictions to their generator's ability to absorb MVARs if that capability varies from the existing "D" curve. Target: Distribution Companies/Transmission Owners/Generation
9/13/2015 23:11	9/14/2015 5:47	Emergency Procedure	- Issued High System Voltage for PJM-RTO-RTO As of 23:10 on 09.13.2015 hours, all companies shall take the following actions on the Bulk Electric System: 1. All switchable capacitors are out of service. 2. All reactors are in service. 3. TOs are requested to review and adjust LTC settings as appropriate. All LTC (230 kV and above) and voltage schedule adjustments shall be coordinated with PJM Dispatch. 4. All SVCs are absorbing reactive power. 5. Generation Owners shall operate generators at the lower bandwidth of their voltage schedule when possible. 6. Generation Owners shall communicate with PJM and the TO restrictions to their generator's ability to absorb MVARs if that capability varies from the existing "D" curve. Target: Distribution Companies/Transmission Owners/Generation

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9/15/2015 0:45	9/15/2015 5:30	Emergency Procedure	- Issued High System Voltage for PJM-RTO-RTO As of 00:45 on 09.15.2015 hours, all companies shall take the following actions on the Bulk Electric System: 1. All switchable capacitors are out of service. 2. All reactors are in service. 3. TOs are requested to review and adjust LTC settings as appropriate. All LTC (230 kV and above) and voltage schedule adjustments shall be coordinated with PJM Dispatch. 4. All SVCs are absorbing reactive power. 5. Generation Owners shall operate generators at the lower bandwidth of their voltage schedule when possible. 6. Generation Owners shall communicate with PJM and the TO restrictions to their generator's ability to absorb MVARs if that capability varies from the existing "D" curve. Target: Distribution Companies/Transmission Owners/Generation
9/16/2015 0:15	9/16/2015 5:40	Emergency Procedure	- Issued High System Voltage for PJM-RTO-RTO As of 00:15 on 09.16.2015 hours, all companies shall take the following actions on the Bulk Electric System: 1. All switchable capacitors are out of service. 2. All reactors are in service. 3. TOs are requested to review and adjust LTC settings as appropriate. All LTC (230 kV and above) and voltage schedule adjustments shall be coordinated with PJM Dispatch. 4. All SVCs are absorbing reactive power. 5. Generation Owners shall operate generators at the lower bandwidth of their voltage schedule when possible. 6. Generation Owners shall communicate with PJM and the TO restrictions to their generator's ability to absorb MVARs if that capability varies from the existing "D" curve. Target: Distribution Companies/Transmission Owners/Generation

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9/26/2015 0:59	9/26/2015 8:30	Emergency Procedure	- Issued High System Voltage for PJM-RTO-RTO As of 00:59 on 09.26.2015 hours, all companies shall take the following actions on the Bulk Electric System: 1. All switchable capacitors are out of service. 2. All reactors are in service. 3. TOs are requested to review and adjust LTC settings as appropriate. All LTC (230 kV and above) and voltage schedule adjustments shall be coordinated with PJM Dispatch. 4. All SVCs are absorbing reactive power. 5. Generation Owners shall operate generators at the lower bandwidth of their voltage schedule when possible. 6. Generation Owners shall communicate with PJM and the TO restrictions to their generator's ability to absorb MVARs if that capability varies from the existing "D" curve. Target: Distribution Companies/Transmission Owners/Generation
9/26/2015 23:43	9/27/2015 10:32	Emergency Procedure	- Issued High System Voltage for PJM-RTO-RTO As of 23:43 on 09.26.2015 hours, all companies shall take the following actions on the Bulk Electric System: 1. All switchable capacitors are out of service. 2. All reactors are in service. 3. TOs are requested to review and adjust LTC settings as appropriate. All LTC (230 kV and above) and voltage schedule adjustments shall be coordinated with PJM Dispatch. 4. All SVCs are absorbing reactive power. 5. Generation Owners shall operate generators at the lower bandwidth of their voltage schedule when possible. 6. Generation Owners shall communicate with PJM and the TO restrictions to their generator's ability to absorb MVARs if that capability varies from the existing "D" curve. Target: Distribution Companies/Transmission Owners/Generation

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9/28/2015 0:40	9/28/2015 5:25	Emergency Procedure	- Issued High System Voltage for PJM-RTO-RTO As of 00:40 on 09.28.2015 hours, all companies shall take the following actions on the Bulk Electric System: 1. All switchable capacitors are out of service. 2. All reactors are in service. 3. TOs are requested to review and adjust LTC settings as appropriate. All LTC (230 kV and above) and voltage schedule adjustments shall be coordinated with PJM Dispatch. 4. All SVCs are absorbing reactive power. 5. Generation Owners shall operate generators at the lower bandwidth of their voltage schedule when possible. 6. Generation Owners shall communicate with PJM and the TO restrictions to their generator's ability to absorb MVARs if that capability varies from the existing "D" curve. Target: Distribution Companies/Transmission Owners/Generation
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**Spinning** (3 Events)

9/4/2015 21:09	9/4/2015 21:16	Spinning	Spinning in RTO for Unit Trip Gavin 2
9/10/2015 6:04	9/10/2015 6:12	Spinning	Spinning in PJM for Low ACE System frequency dropped to 59.92HZ, no report of any unit loss.
9/28/2015 20:47	9/28/2015 20:58	Spinning	Spinning in MAD for Unit Trip Lost of Hope Creek Loaded at 1250MW

**Shared Reserves** (7 Events)

9/4/2015 9:18	9/4/2015 9:40	Shared Reserve	-84 MW with NYISO - Loss of Nine Mile 1 - Regulation
9/5/2015 5:58	9/5/2015 6:09	Shared Reserve	-104 MW with NPCC - Lake Road 1-2-3 Loaded @ 725MW - Regulation
9/9/2015 16:39	9/9/2015 17:09	Shared Reserve	-67 MW with NPCC - Phase 2 ( 500 Mws ) - Regulation
9/19/2015 6:34	9/19/2015 6:50	Shared Reserve	-41 MW with NYISO - Belldune - Regulation
9/19/2015 7:06	N/A	Manually Created Note	New Brunswick - Belldune loaded at 325.
9/28/2015 20:49	9/28/2015 21:10	Shared Reserve	656 MW with NYISO - Hope Creek - Spinning & Regulation
9/28/2015 21:18	N/A	Manually Created Note	656MW was an incorrect number provided by NYISO as per their software calculation.

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**Min Gen Alert** (12 Events)

9/12/2015 22:00	9/13/2015 7:59	Min Gen Alert	- As of 21:55 on 09.12.2015 hours, a Minimum Generation Alert has been issued for the Midnight of 09.13.2015 Expected generation level is within 64 MW of normal minimum energy limits. Additional Comments: Form number 33302
9/13/2015 20:14	9/14/2015 5:47	Min Gen Alert	- As of 20:14 on 09.13.2015 hours, a Minimum Generation Alert has been issued for the Midnight of 09.14.2015 Expected generation level is within -1411 MW of normal minimum energy limits.
9/14/2015 20:52	9/15/2015 5:30	Min Gen Alert	- As of 20:40 on 09.14.2015 hours, a Minimum Generation Alert has been issued for the Midnight of 09.15.2015 Expected generation level is within -419 MW of normal minimum energy limits.
9/15/2015 19:54	9/16/2015 5:40	Min Gen Alert	- As of 19:50 on 09.15.2015 hours, a Minimum Generation Alert has been issued for the Midnight of 09.16.2015 Expected generation level is within -348 MW of normal minimum energy limits.
9/17/2015 20:32	9/18/2015 5:30	Min Gen Alert	- As of 20:18 on 09.17.2015 hours, a Minimum Generation Alert has been issued for the Midnight of 09.18.2015 Expected generation level is within -1904 MW of normal minimum energy limits.
9/21/2015 21:02	9/22/2015 5:10	Min Gen Alert	- As of 21:02 on 09.21.2015 hours, a Minimum Generation Alert has been issued for the Midnight of 09.22.2015 Expected generation level is within -1898 MW of normal minimum energy limits.
9/22/2015 20:10	9/23/2015 5:26	Min Gen Alert	- As of 20:10 on 09.22.2015 hours, a Minimum Generation Alert has been issued for the Midnight of 09.23.2015 Expected generation level is within -1141 MW of normal minimum energy limits. Additional Comments: Minimum Generation Report #33313
9/23/2015 20:26	9/24/2015 5:32	Min Gen Alert	- As of 20:25 on 09.23.2015 hours, a Minimum Generation Alert has been issued for the Midnight of 09.23.2015 Expected generation level is within -454 MW of normal minimum energy limits. Additional Comments: Edart Report ID # 33314

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9/24/2015 22:50	9/25/2015 5:02	Min Gen Alert	- As of 22:50 on 09.24.2015 hours, a Minimum Generation Alert has been issued for the Midnight of 09.25.2015 Expected generation level is within 2301 MW of normal minimum energy limits.
9/25/2015 20:11	9/26/2015 6:22	Min Gen Alert	- As of 20:11 on 09.25.2015 hours, a Minimum Generation Alert has been issued for the Midnight of 09.26.2015 Expected generation level is within -1804 MW of normal minimum energy limits. Additional Comments: eDart Report #33316
9/26/2015 21:09	9/27/2015 7:05	Min Gen Alert	- As of 21:09 on 09.26.2015 hours, a Minimum Generation Alert has been issued for the Midnight of 09.26.2015 Expected generation level is within -629 MW of normal minimum energy limits.
9/27/2015 22:11	9/28/2015 5:20	Min Gen Alert	- As of 22:11 on 09.27.2015 hours, a Minimum Generation Alert has been issued for the Midnight of 09.28.2015 Expected generation level is within -2211 MW of normal minimum energy limits.

**Min Gen Declaration** (0 Events)

**Min Gen Event** (0 Events)

**Local Min Gen Event** (0 Events)

**PCLLRW** (18 Events)

9/2/2015 14:44	9/2/2015 19:55	Post Contingency Local Load Relief Warning	- As of 14:41 on 09.02.2015 a PCLLRW to maintain CNTRLHAR 138 KV at 127 KV in the EKPC area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA
9/2/2015 14:45	9/2/2015 19:55	Post Contingency Local Load Relief Warning	- As of 14:43 on 09.02.2015 a PCLLRW to maintain ROGERSVJ 69 KV at 61.5 KV in the EKPC area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA
9/3/2015 13:03	9/3/2015 21:23	Post Contingency Local Load Relief Warning	- As of 13:00 on 09.03.2015 a PCLLRW to maintain GALLATIN 138 KV at 127 KV in the EKPC area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA

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9/4/2015 16:27	9/4/2015 20:07	Post Contingency Local Load Relief Warning	- As of 16:25 on 09.04.2015 a PCLLRW to maintain GALLATIN 138 KV at 127 KV in the EKPC area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA
9/8/2015 12:27	9/9/2015 22:16	Post Contingency Local Load Relief Warning	- As of 12:25 on 09.08.2015 a PCLLRW to maintain BETHLEHE-BRUES BET-BRU at 166 MVA in the AEP area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA
9/8/2015 12:53	N/A	Manually Created Note	This PCLLRW will cover the contingency violation for Bethlehem-County Line also. Conferred with AEP who is aware of the slight differences in DFAX but will shed load sufficient to clear both violations.
9/8/2015 13:31	9/8/2015 20:46	Post Contingency Local Load Relief Warning	- As of 13:29 on 09.08.2015 a PCLLRW to maintain EPOINT-OHIOCENT at 255 MVA in the AEP area has been issued for Transmission Contingency Control. Additional Comments: Generation - slow response - NA
9/8/2015 13:59	9/8/2015 20:46	Post Contingency Local Load Relief Warning	- As of 13:56 on 09.08.2015 a PCLLRW to maintain KAMMER2-WBELLA12 at 296 MVA in the AEP area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA
9/8/2015 13:59	9/8/2015 21:12	Post Contingency Local Load Relief Warning	- As of 13:56 on 09.08.2015 a Post Contingency Local Load Relief Warning to maintain KAMMER2-WBELLA12 at 296 MVA in the AEP area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available
9/8/2015 16:24	9/8/2015 20:46	Post Contingency Local Load Relief Warning	- As of 16:21 on 09.08.2015 a PCLLRW to maintain WBELLA12 . 1 XFORMER at 539 MVA in the AEP area has been issued for Transmission Contingency Control. Additional Comments: Post Contingency Switching available - Post Contingency restore T302 @ Kammer
9/8/2015 17:01	9/8/2015 20:38	Post Contingency Local Load Relief Warning	- As of 16:58 on 09.08.2015 a PCLLRW to maintain 502JCT TR2 XFORMER at 587 MVA in the APS area has been issued for Transmission Contingency Control. Additional Comments: Generation - slow response - NA

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9/16/2015 15:46	9/16/2015 20:52	Post Contingency Local Load Relief Warning	- As of 15:41 on 09.16.2015 a PCLLRW to maintain BETHLEHE-BRUES BET-BRU at 172 MVA in the AEP area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA
9/16/2015 16:26	9/16/2015 19:17	Post Contingency Local Load Relief Warning	- As of 16:21 on 09.16.2015 a PCLLRW to maintain BECKETT-PAULSBORO 0722-2 at 93 MVA in the AE (Atlantic Elec) area has been issued for Transmission Contingency Control. Additional Comments: Generation - called late - NA
9/17/2015 15:13	9/17/2015 20:47	Post Contingency Local Load Relief Warning	- As of 15:11 on 09.17.2015 a PCLLRW to maintain BETHLEHE-BRUES BET-BRU at 172 MVA in the AEP area has been issued for Transmission Contingency Control. Additional Comments: Generation - slow response - Post Contingency AEP will close the 138kv R1 CB (Reactor bypass) at Tidd.
9/18/2015 14:31	9/18/2015 19:34	Post Contingency Local Load Relief Warning	- As of 14:29 on 09.18.2015 a PCLLRW to maintain BETHLEHE-BRUES BET-BRU at 172 MVA in the AEP area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA
9/22/2015 16:14	9/22/2015 22:47	Post Contingency Local Load Relief Warning	- As of 16:11 on 09.22.2015 a PCLLRW to maintain 02EMILY 138 KV at 127 KV in the ATSI area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA
9/23/2015 13:09	9/24/2015 0:00	Post Contingency Local Load Relief Warning	- As of 13:03 on 09.23.2015 a PCLLRW to maintain 02EMILY 138 KV at 126.96 KV in the ATSI area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA
9/29/2015 11:30	Not closed	Post Contingency Local Load Relief Warning	- As of 11:27 on 09.29.2015 a PCLLRW to maintain KAMMER-NATRIUM at 263 MVA in the AEP area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA

**Non-PCLLRW** (0 Events)