

System Operations Subcommittee
PJM Operations Summary
February 2016 Operations

There were 20 PCLLRWs and 0 High System Voltage events in February

CPS1: 153.7%, BAAL: 99.7% PJM (NERC 100%) ¹, CPS2: (84.8%), DCS: 100%

¹PJM directly measures the total number of BAAL excursions in minutes compared to the total number of minutes within a month with a target value for this performance goal at 99% on a daily and monthly basis. NERC rules limit the recovery period to no more than 30 minutes for a single event.

²PJM is participating in the BAAL field trial which substitutes for CPS2 compliance.

Manual Load Dump Warning (0 Events)

HLV Schedule Warning (0 Events)

HLV Schedule Action (0 Events)

Hot/Cold Weather Alert (2 Events)

2/10/2016 10:21	2/14/2016 0:15	Cold Weather Alert	<p>- WESTERN-Region - As of 10:21 on 02.10.2016 , a Cold Weather Alert has been issued for 02.13.2016 from 0100 to 2400 hrs. As indicated in M-13, members are expected to perform the following actions: <ul style="list-style-type:disc"> Generation (Gen) dispatchers review & update their unit parameters in eMkt through the Cold Weather Alert period paying particular attention to accurate Start-up & Notification, Min Run Time, Max Run Time, Eco Min/Max and Emergency Min/Max information. Gen dispatchers with dual fuel units confirm the equipment is functional & amount of alternate fuel available. Outages to the alternate fuel capability will be submitted to PJM via eMkt. Alternate fuel restrictions will also be communicated via eMkt. Gen dispatchers review fuel supply/delivery schedules in anticipation of greater than normal operation of units. Transmission/Gen dispatchers review plans to determine if any maintenance/testing, scheduled/being performed, on any monitoring, control, transmission/generating equipment can be deferred/canceled. Additional Comments: Western Control Zones</p>
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02/10/16 10:23	2/15/2016 0:10	Cold Weather Alert	- PJM-RTO-RTO - As of 10:23 on 02.10.2016 , a Cold Weather Alert has been issued for 02.14.2016 from 0100 to 2400 hrs. As indicated in M-13, members are expected to perform the following actions: <ul style="list-style-type:disc"> Generation (Gen) dispatchers review & update their unit parameters in eMkt through the Cold Weather Alert period paying particular attention to accurate Start-up & Notification, Min Run Time, Max Run Time, Eco Min/Max and Emergency Min/Max information. Gen dispatchers with dual fuel units confirm the equipment is functional & amount of alternate fuel available. Outages to the alternate fuel capability will be submitted to PJM via eMkt. Alternate fuel restrictions will also be communicated via eMkt. Gen dispatchers review fuel supply/delivery schedules in anticipation of greater than normal operation of units. Transmission/Gen dispatchers review plans to determine if any maintenance/testing, scheduled/being performed, on any monitoring, control, transmission/generating equipment can be deferred/canceled. Additional Comments: Entire RTO EXCEPT DOMINION
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Max Emergency Gen Alert (0 Events)

Primary Reserve Warning (0 Events)

Voltage Reduction Warning (0 Events)

Voltage Reduction (0 Events)

Emergency Energy Request (0 Events)

Max Emergency Generation (0 Events)

Min Gen Declaration (0 Events)

Min Gen Event (0 Events)

Local Min Gen Event (0 Events)

Spinning (1 Event)

02/08/16 15:05	2/8/2016 15:15	Spinning	<u>Spinning in PJM for Unit Trip FE-W Perry tripped off at approximately 1300 MW</u>
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High System Voltage (0 Events)

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Min. Gen Advisory (0 Event)

Shared Reserves (2 Events)

02/15/16 06:42	2/15/2016 7:11	Shared Reserve	<u>-93 MW with NYISO - Empire units 550MW</u>
02/16/16 08:36	2/16/2016 9:05	Shared Reserve	<u>-117 MW with NYISO - L/O Bruce 3 800MW - Regulation</u>

Min Gen Alert (1 Event)

2/2/2016 20:28	2/3/2016 4:58	Min Gen Alert	<u>- As of 20:28 on 02.02.2016 hours, a Minimum Generation Alert has been issued for the Midnight of 02.03.2016 Expected generation level is within 31 MW of normal minimum energy limits.</u>
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Capacity Emergencies (Emergency Procedure) (0 Events)

PCLLRW (16 Events)

02/08/16 09:24	2/8/2016 11:44	Post Contingency Local Load Relief Warning	<u>- As of 09:17 on 02.08.2016 a PCLLRW to maintain SANDERSO 138 KV at 127 KV in the AEP area has been issued for Transmission Contingency Control. Post contingency AEP would open the Pendleton 34kv G CB. Additional Comments: Anderson CT tripped. - NA</u>
02/10/16 13:04	2/10/2016 13:32	Post Contingency Local Load Relief Warning	<u>- As of 13:01 on 02.10.2016 a PCLLRW to maintain CENTER-WESTPORT 110552 at 278 MVA in the BGE area has been issued for Transmission Contingency Control. Additional Comments: Generation - slow response - NA</u>
2/11/2016 0:00	2/11/2016 3:20	Post Contingency Local Load Relief Warning	<u>- As of 23:58 on 02.10.2016 a PCLLRW to maintain CLOVERD2 345 KV at 317.4 KV in the AEP area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA</u>
2/11/2016 6:50	2/11/2016 8:57	Post Contingency Local Load Relief Warning	<u>- As of 06:48 on 02.11.2016 a PCLLRW to maintain GREENBRI 138 KV at 127 KV in the AEP area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA</u>
2/11/2016 6:56	2/11/2016 10:55	Post Contingency Local Load Relief Warning	<u>- As of 06:53 on 02.11.2016 a PCLLRW to maintain OPEQUON 138 KV at 127 KV in the APS area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA</u>
2/12/2016 6:27	2/12/2016 8:05	Post Contingency Local Load Relief Warning	<u>- As of 06:22 on 02.12.2016 a PCLLRW to maintain OPEQUON 138 KV at 127 KV in the APS area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA</u>

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02/12/16 06:49	2/12/2016 9:55	Post Contingency Local Load Relief Warning	- As of 06:46 on 02.12.2016 a PCLLRW to maintain GREENBRI 138 KV at 127 KV in the AEP area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA
2/12/2016 6:27	2/12/2016 8:05	Post Contingency Local Load Relief Warning	- As of 06:22 on 02.12.2016 a PCLLRW to maintain OPEQUON 138 KV at 127 KV in the APS area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA
02/12/16 06:49	2/12/2016 9:55	Post Contingency Local Load Relief Warning	- As of 06:46 on 02.12.2016 a PCLLRW to maintain GREENBRI 138 KV at 127 KV in the AEP area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA
2/13/2016 6:53	2/13/2016 10:51	Post Contingency Local Load Relief Warning	- As of 06:47 on 02.13.2016 a PCLLRW to maintain GREENBRI 138 KV at 127 KV in the AEP area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - capacitors available at Matt Funk, Catawba, Hancock
2/13/2016 17:46	2/15/2016 11:51	Post Contingency Local Load Relief Warning	- As of 17:43 on 02.13.2016 a PCLLRW to maintain OPEQUON 138 KV at 127 KV in the APS area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA
02/14/16 05:23	2/14/2016 9:47	Post Contingency Local Load Relief Warning	- As of 05:20 on 02.14.2016 a PCLLRW to maintain CULVER-OCEANCTY 6724-1 at 99 MVA in the DPL (Delmarva) area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA
2/15/2016 12:01	2/15/2016 19:56	Post Contingency Local Load Relief Warning	- As of 11:39 on 02.15.2016 a PCLLRW to maintain GREENBRI 138 KV at 127 KV in the AEP area has been issued for Transmission Contingency Control. Additional Comments: Post Contingency Switching available - Capacitors available at Matt Funk, Catawba, Hancock, Progress, Roanoke, Glenlyn
2/16/2016 0:25	2/16/2016 1:51	Post Contingency Local Load Relief Warning	- As of 00:23 on 02.16.2016 a PCLLRW to maintain BAGLEY - GRACETON 2304 at 733 MVA in the BGE area has been issued for Transmission Contingency Control. Additional Comments: Generation - slow response - NA
02/16/16 00:26	2/16/2016 1:51	Post Contingency Local Load Relief Warning	- As of 00:24 on 02.16.2016 a PCLLRW to maintain GRACETON-SAFEHARB 2303 at 551 MVA in the BGE area has been issued for Transmission Contingency Control. Additional Comments: Generation - slow response - NA
02/16/16 00:27	2/16/2016 1:50	Post Contingency Local Load Relief Warning	- As of 00:23 on 02.16.2016 a PCLLRW to maintain GRACETON 230-1 XFORMER at 309 MVA in the BGE area has been issued for Transmission Contingency Control. Additional Comments: Generation - slow response - NA

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Non-PCLLRW (4 Events)

2/8/2016 14:03	2/8/2016 21:37	Non-Market Post Contingency Local Load Relief Warn	- As of 14:00 on 02.08.2016 , a Non-Market PCLLRW to maintain 02LAKERD 1 XFORMER at 75 MVA in the CPP area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA
2/11/2016 7:07	2/11/2016 19:59	Non-Market Post Contingency Local Load Relief Warn	- As of 07:03 on 02.11.2016 , a Non-Market PCLLRW to maintain 02LAKERD 1 XFORMER at 75 MVA in the CPP area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA
02/12/16 07:15	2/12/2016 14:41	Non-Market Post Contingency Local Load Relief Warn	- As of 07:13 on 02.12.2016 , a Non-Market PCLLRW to maintain 02LAKERD 1 XFORMER at 75 MVA in the CPP area has been issued for Transmission Contingency Control. Additional Comments: Load -No Generation or Switching available - NA
02/14/16 00:27	2/14/2016 10:56	Non-Market Post Contingency Local Load Relief Warn	- As of 00:25 on 02.14.2016 , a Non-Market PCLLRW to maintain HANCOCK 138 KV at 127 KV in the AEP area has been issued for Transmission Contingency Control. Additional Comments: Post Contingency Switching available - NA