PJM Demand Response Activity
September 10-11, 2013

December 17, 2013
PJM Demand Response

- Following charts depict:
  
  - All economically scheduled demand response across PJM for all dates.
  
  - All emergency demand response (known as “load management” or “DR”) capacity resources called by PJM to reduce load that had not already reduced economically.
  
  - September 10th – Long Lead Emergency (DR) resources dispatched in ATSI Zone and AEP Canton sub-zone for total DR of 740 MW.*
  
  - September 11th – Long Lead Emergency (DR) resources dispatched in AEP, ATSI, DOM, DUQ, and all Mid-Atlantic Zones, and Short Lead resources in all Mid-Atlantic Zones for total DR of 6048 MW.*

*See following link for specific deployment time for each zone and lead time:
http://www.pjm.com/planning/resource-adequacy-planning/~/media/planning/res-adeq/load-forecast/alm-history.ashx
Demand Response in PJM: September 10, 2013

- Actual Emergency DR
- Estimated Emergency DR*
- Economic DR
- PJM Eastern Hub LMP
- PJM RTO LMP

*PJM does not measure compliance for partial clock hours and therefore estimated reduction based on compliance from full clock hour performance.
Actual¹ vs Committed Reductions² During Compliance Period
September 10, 2013

1. Actual Emergency DR values are Emergency Compliance reductions (which may be different than reductions from Emergency Energy Settlements).
2. Committed Emergency DR values are final RPM commitment values.
Demand Response in PJM: September 11, 2013

- Actual Emergency DR
- Estimated Emergency DR*
- Economic DR
- PJM Eastern Hub LMP
- PJM RTO LMP

*PJM does not measure compliance for partial clock hours and therefore estimated reduction based on compliance from full clock hour performance.
Actual\(^1\) vs Committed Reductions\(^2\) During Compliance Period
September 11, 2013

1. Actual Emergency DR values are Emergency Compliance reductions (which may be different than reductions from Emergency Energy Settlements).
2. Committed Emergency DR values are final RPM commitment values.
ATSI Zone Instantaneous Load September 10, 2013

MW

00:00 04:00 08:00 12:00 16:00 20:00 24:00
09/10/2013 09/10/2013 09/10/2013 09/10/2013 09/10/2013 09/10/2013 09/11/2013

6,000 7,000 8,000 9,000 10,000 11,000 12,000 13,000

13:50 - ATSI Zone Long Lead Notified
15:50 - ATSI Zone Long Lead Activated
21:30 - ATSI Zone Long Lead Released

Emergency DR Event Period
Mid-Atlantic Instantaneous Load September 11, 2013

MW

00:00 04:00 08:00 12:00 16:00 20:00 00:00

Emergency DR Event Period

13:00 - All Zones Short and Long Lead Notified
14:00 - All Zones Short Lead Activated
15:00 - All Zones Long Lead Activated

Releases:
17:00 - AECO, JCPL, PSEG, RECO Long Lead
17:15 - All Zones Short Lead
17:30 - PECO, PPL, METED Long Lead
18:00 - BGE, DPL, PEPCO Long Lead
18:30 - PENELEC Long Lead
RTO Instantaneous Load September 11, 2013

Emergency DR Event Period

Notifications:
- 11:30 - AEP Long Lead
- 12:00 - ATSI Long Lead
- 12:30 - DOM Long Lead
- 13:00 - MidAtl Zones Short and Long Lead; DUQ Long Lead

Activations:
- 13:30 - AEP Long Lead
- 14:00 - MidAtl Zones Short Lead; ATSI Long Lead
- 14:30 - DOM Long Lead
- 15:00 - MidAtl Zones Long Lead; DUQ Long Lead

Releases:
- 17:00 - AECO, JCPL, PSEG, RECO Long Lead
- 17:15 - MidAtl Zones Short Lead
- 17:30 - PECO, PPL, METED Long Lead
- 18:00 - BGE, DPL, PEPCO Long Lead
- 18:30 - PENELEC, DOM, DUQ Long Lead
- 19:30 - AEP Long Lead
- 20:00 - ATSI Long Lead
- 20:30 - BGE, DPL, PEPCO Long Lead