PJM Demand Response Activity
January 7-8, 2014

March 26, 2014
Demand Response – Cold Days Report

• This report is meant to provide a quick snap shot of Demand Response activity during periods when PJM experienced tight supply conditions. The following charts illustrate:
  – All economic demand response dispatched or cleared in day ahead energy market across PJM.
  – All emergency demand response (known as “load management” or “DR”) capacity resources dispatched by PJM.

• Quick summary:
  – January 7th – Long and Short Lead Emergency (DR) resources dispatched twice in all Zones in RTO. Maximum hourly CSP emergency energy load reduction = 2,379 MW.
  – January 8th – Long and Short Lead Emergency (DR) resources dispatched in all Zones in RTO. Dispatch was cancelled approximately 2 hours after it was initiated which was before official start time for long lead resources. Resource that reduced load and needed to stay down for 2 full hours were allowed to submit settlements through 9am. Maximum hourly CSP emergency energy load reduction = 1,179 MW.

• Notes:
  – CSP emergency energy load reductions are significantly different than capacity commitment (7,692 MW) because resources were dispatched outside availability window (e.g. summer) and measured based on emergency energy reduction (customer baseline type approach) and not capacity compliance (firm service level type approach).
  – Expected energy load reductions are provided by CSPs in advance of event as required by PJM market rules to be used for PJM dispatch decisions.
  – Detailed list of all emergency events: http://www.pjm.com/~/media/planning/res-adeq/load-forecast/alm-history.ashx
Demand Response in PJM: January 7, 2014

Notes:
Emergency DR Amounts are Emergency Energy Settlement Reductions.
RTO Instantaneous Load January 7, 2014

Emergency DR Event Period

00:00 - 04:00: RTO Long and Short Lead Notified
04:00 - 08:00: RTO Long Lead Activation
08:00 - 12:00: RTO Short and Long Lead Released
12:00 - 16:00: RTO Short Lead Activation
16:00 - 20:00: RTO Long Lead Activation
20:00 - 00:00: RTO Short and Long Lead Released
Demand Response in PJM: January 8, 2014

Notes:
Emergency DR Amounts are Emergency Energy Settlement Reductions.
Cold Weather DR load reductions
January 7 and 8, 2014

Notes:
1) DR events dispatched during non-compliance period.
2) Expected Energy Load Reductions (MW) - CSP reported estimate based on current market rule
3) MW value is average hourly load reduction for non-ramp in hours
4) Event on Jan 8 was cancelled prior to official start time. PJM allowed CSPs to settle if their load reduction had already started (or needed run for 2 hours).