PJM Sub-zonal dispatch references

PJM Tariff

1. Definitions

1.32E PJM Region:

Shall mean the aggregate of the PJM West Region, the VACAR Control Zone, and the MAAC Control Zone.

1.32G PJM West Region:

The PJM West Region shall include the Zones of Allegheny Power; Commonwealth Edison Company (including Commonwealth Edison Co. of Indiana); AEP East Operating Companies; The Dayton Power and Light Company; and the Duquesne Light Company.

1. MARKET OPERATIONS

1.6 Office of the Interconnection.

1.6.2 Scope of Services.

v) Determine and declare that an Emergency is expected to exist, exists, or has ceased to exist, in all or any part of the PJM Region, or in another directly or indirectly interconnected Control Area and serve as a primary point of contact for interested state or federal agencies

1.7 General.

1.7.11 Emergencies.

(a) The Office of the Interconnection, with the assistance of the Members' dispatchers as it may request, shall be responsible for monitoring the operation of the PJM Region, for declaring the existence of an Emergency, and for directing the operations of Market Participants as necessary to manage, alleviate or end an Emergency. The standards, policies and procedures of the Office of the Interconnection for declaring the existence of an Emergency, including but not limited to a Minimum Generation Emergency, and for managing, alleviating or ending an Emergency, shall apply to all Members on a non-discriminatory basis. Actions by the Office of the Interconnection and the Market Participants shall be carried out in accordance with this Agreement, the NERC Operating Policies, Applicable Regional Reliability Council reliability principles and standards, Good Utility Practice, and the PJM Manuals. A declaration that an Emergency exists or is likely to exist by the Office of the Interconnection shall be binding on all Market Participants until the Office of the Interconnection announces that the actual or threatened Emergency no longer exists. Consistent with existing contracts, all Market Participants shall comply with all directions from the Office of the Interconnection for the purpose of managing, alleviating or ending an Emergency. The Market Participants shall authorize the

Office of the Interconnection and PJMSettlement to purchase or sell energy on their behalf to meet an Emergency, and otherwise to implement agreements with other Control Areas interconnected with the PJM Region for the mutual provision of service to meet an Emergency, in accordance with this Agreement.

PJM EMERGENCY LOAD RESPONSE PROGRAM

Emergency Operations

PJM will initiate the request for load reduction following the declaration of Maximum Emergency Generation and prior to the implementation of Load Management Steps 1 and 2. (Implementation of the Emergency Load Response Program can be used for regional emergencies.) It is implemented whenever generation is needed that is greater than the highest economic incremental cost. PJM posts the request for load reduction on the PJM website, on the Emergency Conditions page, and on eData, and issues a burst email to the Emergency Load Response majordomo. A separate All-Call message is also issued. Following PJM's request to reduce load, (i) participants in the Energy Only Option voluntarily may reduce load; and (ii) participants in the Full Program Option are required to reduce load unless they already have reduced load pursuant to the Economic Load Response Program. PJM will dispatch the resources of all Emergency Load Response Program participants (not already dispatched under the Economic Load Response Program) based on the Minimum Dispatch Prices specified in the participants' Emergency Registration Forms.

The Minimum Dispatch Price of a Full Program Option participant that reduces load may set the real time Locational Marginal Price ("LMP") provided that the participant's load reductions are needed to meet demand in the PJM Region. The Minimum Dispatch Price of an Energy Only Option participant that reduces load may set the real time LMP provided that such participant's load reductions are needed to meet demand in the PJM Regions and the Energy Only Option participant's resource satisfies PJM's telemetry requirements.

Operational procedures are described in detail in the *PJM Manual for Emergency Operations*.

PJM Manual 13
Emergency Operations

Section 2: Capacity Emergencies

2.3 Capacity Shortages

2.3.2 Real-Time Emergency Procedures (Warnings and Actions)

Step 1: Emergency Mandatory Load Management Reductions (Long Lead Time)

Applicability: Any site registered in the PJM Demand Response program as a capacity resource of either interruptible load for reliability (a.k.a. ILR) or demand resource (a.k.a. DR) type that needs between 1 to 2 hours lead time to make its reductions. These reductions are mandatory. The purpose of the Load Management Reductions is to provide additional load relief by using PJM controllable load management programs. Load relief is expected to be required after initiating Maximum Emergency Generation. <i>PJM Actions:</i>
\square PJM dispatcher notifies PJM management, PJM public information personnel, and members. PJM dispatcher advises members to consider the use of public appeals to conserve electricity usage. PJM dispatcher notifies other Control Areas through the RCIS.
☐ PJM dispatcher, via the PJM All Call, requests Curtailment Service Providers (CSP) to implement Emergency Mandatory Load Management Reductions (Long Lead Time). An Action can be issued for the entire PJM RTO, specific Control Zone(s) or a subset of a Control Zone if transmission limitations exist.
☐ PJM dispatcher issues a NERC Energy Emergency Alert Level 2 (EEA2 = ALERT LEVEL 2) via the RCIS to ensure all Reliability Authorities clearly understand potential and actual PJM system emergencies if one has not already been issued concurrent with the issuance of Emergency Mandatory Load Management Reductions. NERC EEA2 is issued when the following has occurred: Public appeals to reduce demand, voltage reduction, and interruption of non-firm load in accordance with applicable contracts, demand side management, or utility load conservation measures.
☐ PJM dispatcher cancels, when appropriate.
PJM Member Actions:
☐ Member Curtailment Service Providers implement load management reductions as requested by PJM dispatchers.
☐ Member dispatchers notify management of the emergency procedure and that they should consider the use of public appeals to conserve electricity usage.
☐ Member dispatchers notify governmental agencies, as applicable.
Step 2: Emergency Mandatory Load Management Reductions (Short Lead Time) Applicability: Any site registered in the PJM Demand Response program as a capacity resource of either interruptible load for reliability (a.k.a. ILR) or demand resource (a.k.a. DR) type that needs up to 1 hour lead time to make its reductions. These reductions are mandatory. PJM Actions:
☐ PJM dispatcher notifies PJM management, PJM public information personnel, and members. PJM dispatcher advises members to consider the use of public appeals to conserve electricity usage. PJM dispatcher notifies other Control Areas through the RCIS.
☐ PJM dispatcher requests, via the PJM All Call, Curtailment Service Providers to implement Emergency Mandatory Load Management Reductions (Short Lead Time). An Action can be

issued for the entire PJM RTO, specific Control Zone(s) or a subset of a Control Zone if transmission limitations exist.
□ PJM dispatcher issues a NERC Energy Emergency Alert Level 2 (EEA2 = ALERT LEVEL 2) via the RCIS to ensure all Reliability Authorities clearly understand potential and actual PJM system emergencies if one has not already been issued concurrent with the issuance of Emergency Mandatory Load Management Reductions (Short Lead Time). NERC EEA2 is issued when the following has occurred: Public appeals to reduce demand, voltage reduction, and interruption of non-firm load in accordance with applicable contracts, demand side management, or utility load conservation measures.
☐ PJM dispatcher cancels, when appropriate. PJM Member Actions:
☐ Member Curtailment Service Providers implement load management reductions, as requested by PJM dispatchers.
☐ Member dispatchers notify their management of the emergency procedure and that they should consider the use of public appeals to conserve electricity usage.
☐ Member dispatchers notify governmental agencies, as applicable.