

Participation by ATSI Zone Demand Resources in FRR Integration Auctions

Introduction

Load management products (i.e., Direct Load Control, Firm Service Level, or Guaranteed Load Drop programs) in the ATSI zone may be offered as a Demand Resource (DR) in the FRR Integration Auctions for the 2011/2012 and 2012/2013 Delivery Years provided all eligibility requirements are satisfied. Demand Resources that clear in a FRR Integration Auction will receive the resource clearing price that is applicable to the FRR Integration Auction for the MWs cleared, and will be subject to load management performance assessments (i.e., commitment compliance, load management event compliance and load management test) for the MWs cleared in accordance with Section 8 of *Manual 18, PJM Capacity Market Manual*, during the relevant Delivery Year.

Demand Resources may be offered into the FRR Integration Auctions for ATSI load for the 2011/2012 and 2012/2013 Delivery Years. Interruptible Load for Reliability resources within the ATSI zone are not eligible to receive RPM credits in 2011/2012, since there was no ILR forecast for the ATSI zone withheld from the RPM demand curve for that Delivery Year.

This document presents the definition of Load Management products, eligibility requirements of Load Management Products in FRR Integration Auctions, necessary steps to offer a Demand Resource in a FRR Integration Auction, and the requirements of Demand Resources that clear in a FRR Integration Auction.

Definition of Load Management Products

Load management is the ability to reduce metered load, either manually by the customer, after a request from the resource provider which holds the Load management rights or its agent (for Contractually Interruptible), or automatically in response to a communication signal from the resource provider which holds the Load management rights or its agent (for Direct Load Control).

PJM recognizes three types of Load Management products:

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Direct Load Control (DLC) – Load management that is initiated directly by the resource provider’s market operations center or its agent, employing a communication signal to cycle equipment (typically water heaters or central air conditioners).

Firm Service Level (FSL) – Load management achieved by a customer reducing its load to a pre-determined level (the Firm Service Level), upon notification from the resource provider’s market operations center or its agent.

Guaranteed Load Drop (GLD) - Load management achieved by a customer reducing its load by a pre-determined amount (the Guaranteed Load Drop), upon notification from the resource provider’s market operations center or its agent. Typically, the load reduction is achieved through running customer-owned backup generators, or by shutting down process equipment.

For each type of recognized Load Management Product, there can be two notification periods:

Step 1 (Short Lead Time) – Load management which must be fully implemented in zone in one hour or less from the time the PJM dispatcher notifies the market operations center of a curtailment event.

Step 2 (Long Lead Time) – Load management which requires more than one hour but no more than two hours, from the time the PJM dispatcher notifies the market operations center of a curtailment event, to be fully implemented.

Eligibility Requirements

The Resource Provider that is offering a Demand Resource in the ATSI zone must ensure that the load management at an end-use customer’s site meets the following criteria.

- Availability for up to the ten PJM-initiated interruptions at any time during the planning period.
- Interruptions of up to six consecutive hours’ duration between 12:00 PM (Noon) to 8:00 PM (Eastern Prevailing Time) for the months of May through September and 2:00 PM to 10:00 PM for the months of October through April, on weekdays other than PJM Holidays.

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- Load management must be able to be implemented within two hours of notification from PJM to the resource provider of a PJM-initiated load management event.
- Initiation of load interruptions upon request of PJM must be within the authority of the resource provider dispatcher without any additional approvals being required.

Demand Resources in the ATSI zone will be treated as either Existing or Planned DR. Existing DR are resources that currently have the capability to provide reduction in demand or control load. End-use customer sites that provided load management (FSL, GLD, or DLC) in Summer 2009 are eligible to be considered existing DR and not be subject to a credit requirement.

Planned Demand Resources are defined as resources that do not currently have the capability to provide reduction in demand or to otherwise control load, but the resource is scheduled to be capable of providing such reduction or control on or before the start of the Delivery year. The following requirements for a Planned DR must be satisfied prior to participating in a FRR Integration Auction.

- A Demand Resource (DR) Plan must be submitted by February 19, 2010, no later than 15 business days prior to the opening of the FRR Integration Auction bidding window to rpm_hotline@pjm.com. The DR Plan must provide details regarding the load management program(s) that constitute the DR Resource, timelines for any equipment installation, customer aggregation plans, and anticipated Nominated Value of DR Resource (i.e., the anticipated load reduction that the DR resource will provide). The DR Plan must demonstrate to PJM's satisfaction that the Demand Resource will be available for the start of the Delivery Year.
 - Load reductions for FSL, GLD, and DLC programs must be estimated in accordance with *PJM Manual 19, Load Forecasting & Analysis Manual*.
 - DR Providers with DLC programs which employ a radio signal may elect to either submit a load research study supporting base per-participant impacts for their program, or utilize the base per-participant impacts contained in the "Deemed Savings Estimates for Legacy Air Conditioning and Water Heating Direct Load Control Programs in PJM Region" report. Providers utilizing other technology must submit a load research study. All Providers must submit switch operability studies once every five years.

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DLC Load Research guidelines are outlined in *PJM Manual 19, Load Forecasting & Analysis Manual*.

- Credit must be posted by FirstEnergy prior to the planned resource being submitted to PJM as part of the FirstEnergy FRR Capacity plan.

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Steps to Offer a DR in a FRR Integration Auction

1. The DR Provider must request PJM to model their Demand Resource in the eRPM system no later than two weeks prior to the opening of the FRR Integration Auction bidding window.
2. Once the DR is modeled in the eRPM system, the DR Provider must create a DR Modification (DR MOD) in the eRPM system. The DR MOD is a type of transaction in the eRPM that allows for the ICAP value of a DR resource to be represented in a DR Provider's eRPM account.
3. PJM will "Provisionally Approve" a DR MOD for a Demand Resource in the ATSI zone once the applicable credit has been posted and the DR Plan for such resource has been reviewed and approved by PJM. DR MODs must be in "Provisionally Approved" status in order for the resource to offer into the FRR Integration Auction.
4. Sell Offers for the Demand Resource must be submitted by the DR Provider in the eRPM System. Sell offers will only be accepted when the bidding window for the FRR Integration Auction is open. The bidding window for the 2011/2012 and 2012/2013 FRR Integration Auctions opens March 15, 2010 12:01 AM EPT and closes March 19, 2010 5:00 PM EPT.

If DR does not clear in the FRR Integration Auction, it may be offered into scheduled RPM Incremental Auctions, provided any credit required for planned DR is provided by the supplier directly.

Requirements for Cleared DR

A DR Provider that cleared a DR in a FRR Integration Auction or RPM Incremental Auction must meet the following requirements:

- The DR Provider must register the end-use customer sites that constitute the Demand Resource in the Emergency Load Response Program through PJM's Load Response System prior to June 1 of the Delivery Year. The Emergency Load Response Registration period for a Delivery Year opens January 1 prior to the Delivery Year. As part of a Emergency Load Response registration, DR Providers will submit the following types of information:
 - Customer-specific load management information for planning and verification purposes (i.e., EDC account number, zone, etc.)

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- Customer-specific information to establish nominated load management levels (e.g., Peak Load Contribution, EDC loss factor, notification period, firm service level data, direct load control data, or guaranteed load drop data).
- The eRPM Demand Resource name to link to the site.
- A point of contact with appropriate backup to ensure single call notification from PJM and timely execution of the notification process.
- The DR Provider must provide (or contract with another party to provide) supplemental status reports during the Delivery Year, detailing availability of the demand resource, as requested by PJM System Operations in accordance with the PJM Manuals.
- The DR Provider must provide (or contract with another party to provide) end-use customer-specific event compliance and verification information via the PJM Load Response system within 45 days after the end date of the month in which a PJM-initiated Load Management Event occurred, in accordance with the Load Management Event Compliance section of Section 8 of *PJM Manual 18, PJM Capacity Market Manual*.
- In absence of a PJM-initiated Load Management Event, the DR Provider must have simultaneously tested all their demand resources in a zone in accordance with the Load Management Test Compliance section of Section 8 of *PJM Manual 18, PJM Capacity Market Manual*. The DR Provider must provide (or contract with another party to provide) end-use customer-specific test compliance and verification information via the PJM Load Response system by no later than November 14th of the Delivery Year.
- The DR Provider must provide load drop estimates for all Load Management events (whether initiated by PJM or the DR Provider) in accordance with *PJM Manual 19, Load Forecasting & Analysis Manual*.