

Order 831 Offer Validation for Demand Response

December 29, 2017



www.pjm.com PJM©2017



- FERC has clarified the impact to Demand Response
 - No impact to Load Management (Emergency or Pre-Emergency DR)
 - No change to Strike Prices still capped by Lead Time on registration
 - No change to ability to set LMP
 - No change to any other aspect of Load Management
 - Economic DR and Emergency Energy Only DR that wants to submit energy offer greater than \$1,000 must submit verifiable incremental energy cost detail

PJM compliance filing will be submitted by 12/1/17



Demand Response Offer Cap Validation Process

Demand
Response
(Economic and
Emergency
Energy Only
registrations):

Default Energy Offer Cap

 \$1000 is the default Energy Offer Cap for both Economic and Emergency Energy Only registrations

Incremental Cost Validation

 Member validation of Incremental Costs with supporting documentation above \$1,000 in DR Hub (by email until enhancements can be implemented)

Ongoing Member management of offers

 Member monitors energy offers on a hourly basis to ensure any offers above \$1000 have supporting documentation

FERC will determine the implementation date

Temporary Economic DR Validation Email Process

- Offer Cap less than \$1,000
 - no validation is required (considered "price based")
- Offer Cap change greater than \$1,000
 - Market Seller must email demand_response_operations@pjm.com prior to the operating day:
 - Provide summary and details of incremental costs
 - Provide the supporting documentation that details how incremental cost were calculated and associated validation
 - PJM will manually enter Offer Cap in Markets Gateway and CSP may then offer up to the Energy Offer Cap



Temporary Economic DR Validation Email Process Cont'd

- Offer Cap change above \$2,000
 - Will not be used to set LMPs
 - Market Seller must email demand_response_operations@pjm.com prior to the operating day:
 - Provide summary and details of incremental costs
 - Provide the supporting documentation that details how incremental cost were calculated and associated validation
 - Energy Offer Cap in Markets Gateway will remain at \$2000. If CSP then wishes to offer over \$2000, an email must be sent to PJM prior to offer timeframe with details of offer (resource, time and amount of offer)



- CSPs should manage their offers up to the Energy Offer Cap
 - Any offer over \$1000 must have incremental cost documentation that supports the offer time period
 - If CSP lowers their Energy Offer Cap, and has previously copied offers in Markets Gateway over the new Energy Offer Cap for future days, the CSP must take action to lower the future offers to the new Energy Offer Cap
 - PJM intends to audit on periodic basis and any issues with supporting documentation will be escalated to IMM/FERC Office of Enforcement for further investigation, as necessary

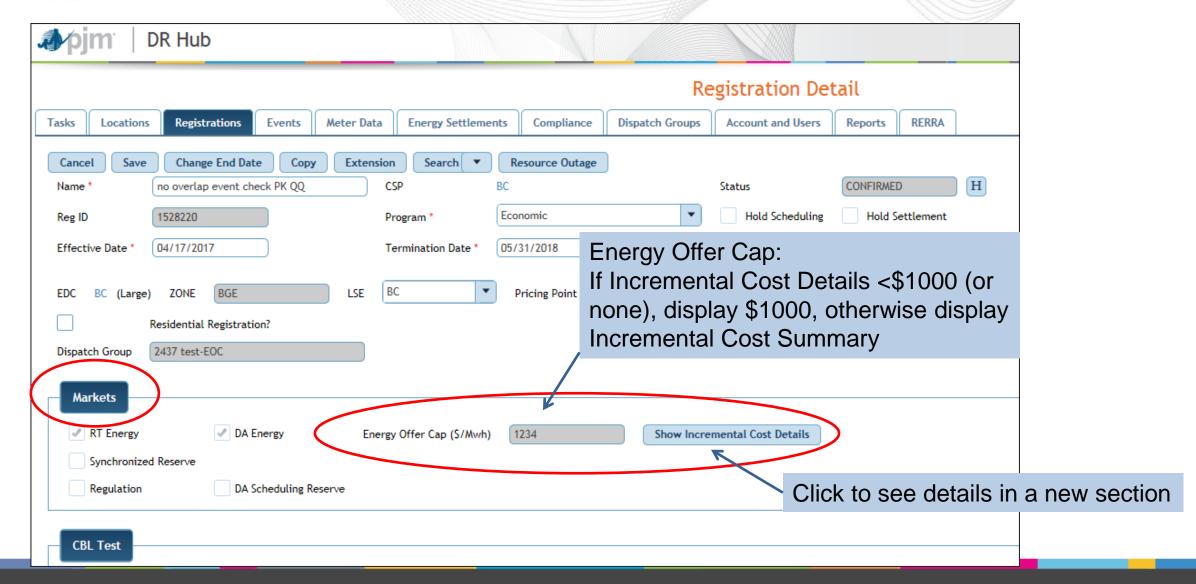


Future DR Hub Enhancements: Economic DR Validation Process

- Offer cap less than \$1,000
 - no validation is required (considered "price based")
- Offer Cap change greater than \$1,000
 - Market Seller must enter and validate incremental cost in DR Hub prior to the operating day:
 - 1. Provide summary and details of incremental costs
 - 2. Upload the supporting documentation that details how incremental cost were calculated and associated validation
- Offer Cap change above \$2,000
 - Will not be used to set LMPs
 - Offer Cap in Markets Gateway will remain at \$2000. If CSP then wishes to offer over \$2000, an email must be sent to PJM with details of offer (resource, time and amount of offer)

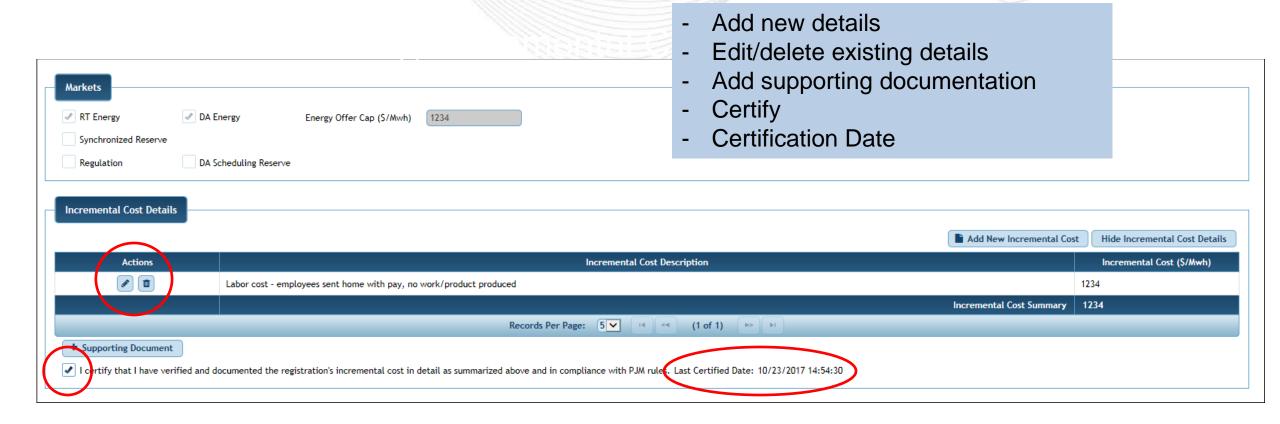


Economic Registration Validation





Economic Offer Validation Screen





- Max Offer Cap is set to \$1000 or the Incremental Cost Summary amount if > \$1000
- Can enter up to 5 different incremental costs with associated descriptions
- Updating the Incremental Cost summary will uncheck the Certification checkbox
- Must click Certification Checkbox each time the Incremental Cost summary screen is saved
- On Save, time/date stamp is put on Certification
- May set Incremental Cost to \$0 without deleting Description
- If Incremental Cost Summary is > \$1000, there must be at least 1 supporting document uploaded by CSP
- Registration History will record any changes to the Energy Offer Cap and the Offer Validation screen



- Energy Offer Cap is \$1000, unless Incremental Costs are provided in DR Hub and support higher cap
- Energy Offer Cap may not be greater than \$2000 (greater than \$2000 managed by email with DR Ops)
- Changes to the Energy Offer Cap are transferred to Markets Gateway the next calendar day

Example: Incremental Costs documented on 11/13/2017 in DR Hub

- 11/14/2017 Updated Energy Offer Cap available
 - for Real-Time offers same day
 - for Day-Ahead offers for next day (11/15/2017)