

Markets Gateway Data for Non-Energy Regulation Resources

A non-energy regulation resource must have a valid schedule ID for it to be considered, then clear as either self-scheduled or pool-assigned if economical in the Regulation Market. Schedule ID is necessary in order for the resource's market data to propagate through the Market system that allows resource visibility to the Market Clearing Engines. Other energy related data like Schedule Offer with an offer curve set at \$999 as previously advised for a non-energy regulation resource is no longer necessary and will need to be removed.

For a non-energy regulation resource, a schedule type "1-Cost-PLS" for generators or a schedule type "1" for demand response resources must be created. In Markets Gateway, the "Schedule Manager" page for generators or "Offer Curve Manager" page for demand response is used to create these types of schedules. The "Create a New Schedule Type" section of the Markets Gateway [User Guide](#) provides additional information.

Resource type: "Generator"

Schedules

Under the "Generator" section in the left-hand directory, select "Schedules", then "Manager". For the selected "Portfolio", and selected "Location", right-click to "Add Item", then fill in unit's schedule name, schedule description, and select "1-Cost-PLS" under schedule type. Then click "Save". This process needs to be completed one time only. Use the screenshots below as a guide.

Participant >> PJM Reg_Battery (001122333)

<input type="checkbox"/>	Schedule Name	Schedule Description	Schedule Type
<input type="checkbox"/>	PJM Reg_Batt Cost	Cost	1-Cost-PLS
<input checked="" type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="text" value="1-Cost-PLS"/>

Must select "1-Cost-PLS" Schedule Type from drop-down menu

Unit Hourly Updates

Values for Economic Min and Economic Max are required. They can be set as daily defaults on the Unit -> Detail screen under the Economic & Emergency section. These can also be set on an hourly interval on the Unit -> Hourly Updates screen.

Regulation Offer & Updates

The following fields are required as part of the Regulation Offer:

- Offer MW
- Capability Offer Cost
- Performance Offer Cost
- Availability
- Reg Min MW
- Reg Max MW

The Capability Offer Price and Performance Offer Price are optional.

Any hourly values on the Regulation Market -> Updates screen will override the daily values on the Regulation Market -> Offers screen. If no changes are made on the updates page, the daily values will be used. Daily defaults for Reg Min and Reg Max can also be set on the Unit -> Detail screen under the Regulation section.

The Regulation MWs available to clear are bounded by the following limits:

$$\begin{aligned} \text{RegHi} &= \min[\text{EcoMax}, \text{RegMax}] \\ \text{RegLo} &= \max[\text{EcoMin}, \text{RegMin}] \\ \text{RegMW} &\leq \frac{(\text{RegHi} - \text{RegLo})}{2} \end{aligned}$$

Resource type: "Demand Response"

Schedules

Under the "Demand Response" section in the left-hand directory, select "Demand Response" then "Offer Curve Manager". For the selected "Portfolio", and selected "Location", right-click to "Add Item", then fill in resource's schedule name, schedule description, and select "1" under schedule type. Then click "Save". This process needs to be completed one time only. Use the screenshots below as a guide.

The screenshot shows the "Offer Curve Manager" interface with a table of schedules. The table has three columns: "Schedule Name", "Schedule Description", and "Schedule Type". The first row is "PJM Reg_Batt Cost" with description "Cost" and schedule type "1". The second row is a new entry with empty fields and a dropdown menu for "Schedule Type" showing options "1" and "2". A red arrow points to the "1" option in the dropdown menu, with the text "Must select '1' Schedule Type from drop-down menu".

☐	Schedule Name	Schedule Description	Schedule Type
☐	PJM Reg_Batt Cost	Cost	1
☑	<input type="text"/>	<input type="text"/>	<input type="text" value="1"/>

Hourly Updates

Values for Economic Min and Economic Max are required. These can be set on an hourly interval on the Demand Response -> Hourly Updates screen. Commit Status can be set to 'Unavailable' for non-energy resources.

Regulation Offer & Updates

The following fields are required as part of the Regulation Offer:

- Offer MW
- Capability Offer Cost
- Performance Offer Cost
- Availability
- Reg Min MW
- Reg Max MW

The Capability Offer Price and Performance Offer Price are optional.

Any hourly values on the Regulation Market -> Updates screen will override the daily values on the Regulation Market -> Offers screen. If no changes are made on the updates page, the daily values will be used.

The Regulation MWs available to clear are bounded by the following limits:

$$\begin{aligned}RegHi &= \min[EcoMax, RegMax] \\RegLo &= \max[EcoMin, RegMin] \\RegMW &\leq \frac{(RegHi - RegLo)}{2}\end{aligned}$$

Appendix

For additional information on using Markets Gateway, please see the [User Guide](#).

Please contact the PJM Member Relations Hotline with questions at 866-400-8980 or email custsvc@pjm.com.

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