

Settlement Changes associated with the Alternative Technology Regulation Pilot Program

November 18, 2008

Objective

- To explain impacts to the Regulation market settlement from the Alternative Technology Regulation (ATR) Pilot Program.

Reason for the Changes

- In compliance with FERC [Order 890](#)
- The ATR Pilot Program will test the impact of non-generating technologies on the Regulation market.
 - Will result in new data points and settlement calculations for non-generating resources.

Timing of Changes

- Effective with Operating Day November 18, 2008.
- Notification of changes to Market Information Server (MIS) reports expected in mid-October, 2008.

Summary of Changes

- Non-generating resources will be compensated based on Automatic Generation Control (AGC) performance and availability to provide Regulation at the Regulation Clearing Price (RCP).
- Non-generating resources do not submit bids and are treated as self scheduled for regulation.
- New data point for Fade Time.
 - Applies to non-generating resources only.
 - Identifies the number of minutes a resource deviates from its AGC Set point.
 - Used in calculations of credits for Regulation service.

What Will Not Change

- No changes to credit calculations for generating resources.
- No changes to allocation of charges.

Regulation Credit Calculation

- Regulation Service Credit Calculation Changes

- Current calculation

- Still applies to generating resources.
 - Uses the greater of the RCP or Regulation bid price.

$$\boxed{\text{Regulation Service (MW)}} \times \boxed{\text{MAX(RCP, BID)}} \times \boxed{\text{Q Factor}}$$

- New calculation

- Applies to non-generating resources only.
 - Prorated by fade time.
 - Uses RCP only.

$$\boxed{\text{Regulation Service (MW)}} \times \left(\frac{\boxed{\text{\# of Minutes on Regulation}} - \boxed{\text{Fade Time}}}{\boxed{\text{\# of Minutes on Regulation}}} \right) \times \boxed{\text{RCP}} \times \boxed{\text{Q Factor}}$$

Regulation Credit Calculations (cont)

- Time on Regulation Credit Calculation Changes
 - Current calculation
 - Still applies to generating resources.
 - Uses the greater of the Regulation Clearing Price or Regulation bid price.

$$\left(\frac{\text{\# of Minutes on Regulation}}{60} \right) \times \text{REG CAP} \times \text{MAX(RCP, BID)}$$

- New calculation:
 - Applies to non-generating resources only.
 - Prorated by fade time.
 - Uses RCP only.

$$\left(\frac{\text{\# of Minutes on Regulation} - \text{Fade Time}}{60} \right) \times \text{REG CAP} \times \text{RCP}$$

Regulation Credit Calculations (cont)

- Non-generating resources will not receive Regulation Opportunity Cost since they are always considered self scheduled for Regulation.

MIS Report Changes

- Two new columns on the SD_REGDTLASM report.
 - Fade Time
 - Applies to non-generating resources only.
 - Perfect AGC Output While Regulating
 - Informational only for non-generating resources.
 - Used in calculation of Regulation Opportunity Cost for generating resources.

Regulation Unit Details Report																						
SD_REGDTLASM_000000001_2007050100_20080911144757.CSV																						
VIU1																						
Date: 05/01/2007 and Version: 09/11/2008 14:47:57 GMT																						
Unit															Customer Share					Unit		
Trading Interval	Asset ID	Asset Name	Regulation Service	Regulation Service Credits	Minutes on Regulation	Minutes on Must Regulate for Reliability	Regulation Capacity	Delivered Regulation	Time on Regulation Credit	Self Scheduled Regulation	Pool Scheduled Regulation	Regulation Offer Price	Regulation Opportunity Cost	Regulation Opportunity Cost Type	Ownership Share	Customer Share of Pool Scheduled Regulation	Customer Share of Self Scheduled Regulation	Customer Share of Regulation Service Credits	Customer Share of Time on Regulation Credit	Customer Share of Regulation Opportunity Cost	Fade Time	Perfect AGC Output While Regulating
Hour End	Number	String	MWh	\$	Minutes	Minutes	MW	MWh	\$	MWh	MWh	\$	\$	String	%	MWh	MWh	\$	\$	\$	Minutes	MW
1	101	Generating Unit	50.000	75.00	30.00	10.00	100.000	50.000	750.00	0.000000000	50.000000000	15.00	0.00	NA	66.6667	33.333350000	0.000000000	50.00	500.00	0.00		150.000
1	501	Non-Generating Unit	50.000	62.50	60.00	0.00	100.000	83.333	1250.00	83.333000000	0.000000000		0.00	NA	100.0000	0.000000000	83.333000000	62.50	1250.00	0.00	10.00	150.000

Review of Important Points

- Effective with the November 18, 2008 operating day.
- New data point for Fade Time for non-generating resources.
- No Regulation Opportunity Costs for non-generating resources.
- No changes to current credit calculations for generating resources and allocation of charges.
- MIS report changes to be communicated by mid-October.

References

- ISO New England Web site
 - [MIS Report Formats](#)
 - [Market Rule 1, Section III, Appendix J](#)
 - [ISO New England FERC filings](#)
 - [ISO News #168](#)
- ISO Customer Service Department
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