

UNITED STATES DEPARTMENT OF ENERGY
WESTERN AREA POWER ADMINISTRATION
ROCKY MOUNTAIN REGION
Loveland Area Projects

REGULATION AND FREQUENCY RESPONSE SERVICE

Effective

The first day of the first full billing period beginning on or after June 1, 2006, through May 31, 2011.

Applicable

Regulation and Frequency Response Service (Regulation Service) is necessary to provide for the continuous balancing of resources, generation and interchange with load, and for maintaining scheduled interconnection frequency at sixty cycles per second (60 Hz). Regulation Service is accomplished by committing on-line generation whose output is raised or lowered, predominantly through the use of automatic generating control equipment, as necessary to follow the moment-by-moment changes in load. The obligation to maintain this balance between resources and load lies with the Western Area Colorado Missouri (WACM) Balancing Authority operator. The Customers (Loveland Area Projects (LAP) Transmission Customers and customers on others' transmission systems within WACM) must purchase this service from WACM or make alternative comparable arrangements to satisfy their Regulation Service obligations. The charges for Regulation Service are outlined below.

LAP charges for Regulation Service may be modified upon written notice to Customers. Any change to the Regulation Service charges will be listed in a revision to

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this rate schedule issued under applicable Federal laws, regulations, and policies and made part of the applicable service agreement. Western will charge Customers under the rate then in effect.

Types

There will be three different applications of this rate, none of which are exclusive of the other, and all three may be applied to the same entity where appropriate. The three applications are:

1. **Load-based Assessment:** The Rate is reflected in the Formula Rate section and will be applied to entities who serve load within the WACM Balancing Authority. This load-based rate will be assessed on an entity's auxiliary load (total metered load less Federal entitlements) and will also be applied to the installed nameplate capacity of all intermittent generators within WACM.
2. **Exporting Intermittent Resource Assessment:** This application will apply to entities that export the output from intermittent resource(s). The entity will continue to pay the load-based charge on the nameplate capacity, as described in No. 1 above, but will also pay an additional Regulating Reserve charge for mismatched capacity; i.e., the hourly average mismatch of the resource's forecast versus actual generation, using the regional market rate for capacity/reserves as pricing.
3. **Self-Provision Assessment:** Western will allow entities with automatic or manual generation control to self-provide for all or a portion of their loads. Typically, entities with generation control are known as Sub-Balancing Authorities (SBA)

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and should meet all of the following criteria:

- a. Have a well-defined boundary, with WACM-approved revenue-quality metering, accurate as defined by NERC, to include MW flow data availability at 6-second or smaller intervals.
 - b. Have AGC capability.
 - c. Demonstrate Regulation Service capability.
 - d. Execute a contract with the WACM Balancing Authority to:
 - i. Provide all requested data to the WACM Balancing Authority.
 - ii. Meet SBA Error Criteria as described under section 3.1 below.
- 3.1. Self-provision will be measured by use of the entity's 1-minute average ACE or the entity's 1-minute first derivative of ACE (at the customer's choice), to determine the amount of self-provision. The assessment will be calculated every hour and the value of ACE or its derivative will be used to calculate the Regulation Service charges as follows:
- a. If the entity's 1-minute average ACE or entity's 1-minute first derivative of ACE is \leq than 0.5 percent of the entity's hourly average load, no Regulation Service charges will be assessed by WACM.
 - b. If the entity's 1-minute average ACE or the entity's 1-minute first derivative of ACE is \geq 1.5 percent of the entity's hourly average load, WACM will assess Regulation Service charges to the entity's entire load, using the load-based rate.

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- c. If the entity's 1-minute average ACE or the entity's 1-minute first derivative of ACE is > 0.5 percent of the entity's hourly average load, but < 1.5 percent of the entity's hourly average load, WACM will assess Regulation Service charges based on linear interpolation of zero charge and full charge.

Customer Accommodation

For entities unwilling to take Regulation Service, self-provide it as described above, or acquire the service from a third party, Western will assist the entity in dynamically metering its loads/resources to another balancing authority. Until such time as that meter configuration is accomplished, the entity will be responsible for charges assessed by WACM under the rate in effect.

Formula Rate

Load-Based Rate, applicable to No. 1 and No. 3 as described above and outlined in the "Types" section of this rate schedule:

$$\begin{array}{l} \text{WACM} \\ \text{Regulation} \\ \text{Rate} \end{array} = \frac{\text{Total Annual Revenue Requirement for Regulation}}{\text{Load in the Balancing Authority Requiring Regulation} \\ \text{Plus the Nameplate of Intermittent Resources}}$$

Pass-Through Costs (Market), will be applicable only to No. 2 as described above and outlined in the "Types" section of this rate schedule.

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Rates

Load-Based Rate

The rate to be in effect October 1, 2008, through September 30, 2009, for Nos. 1, 2, and 3, as described above and outlined in the “Types” section of this rate schedule is:

Monthly:	\$0.360/kW-month
Weekly:	\$0.083/kW-week
Daily:	\$0.012/kW-day
Hourly:	\$0.000500/kWh

This rate is based on the above formula and on fiscal year 2007 financial and load data, and will be adjusted annually as new data become available.

Pass-Through Rate

The rate to be in effect October 1, 2008, through September 30, 2009, for No. 2 as described above and outlined in the “Types” section of this rate schedule will be the regional market-based cost for capacity/reserves.