

**Rate Schedule L-AS3
SCHEDULE 3 to OATT
(Supersedes Rate Schedule SP-FR4
and Rate Schedule L-AS3 dated
October 1, 2011, through September 30, 2016)**

**UNITED STATES DEPARTMENT OF ENERGY
WESTERN AREA POWER ADMINISTRATION**

**ROCKY MOUNTAIN REGION
Colorado River Storage Project
Loveland Area Projects
Western Area Colorado Missouri Balancing Authority**

REGULATION AND FREQUENCY RESPONSE SERVICE

Effective

The first day of the first full billing period beginning on or after October 1, 2016, and extending through September 30, 2021, or until superseded by another rate schedule, whichever occurs earlier.

Applicable

This rate schedule applies to Colorado River Storage Project (CRCM) and Loveland Area Projects (LAPT) as Transmission Service Providers (TSPs) and to Western Area Colorado Missouri Balancing Authority (WACM) as the Control Area operator. 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 generation control (AGC) equipment as necessary, to follow the moment-by-moment changes in load. All loads inside the Control Area consume regulation; therefore, WACM, by default, provides Regulation Service to all loads inside the Control Area.

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The CRCM and LAPT TSPs offer this service when transmission service is used to serve load within WACM and the Federal Transmission Customers must purchase this service from the CRCM and LAPT TSPs or make alternative comparable arrangements with WACM to satisfy their regulation obligations. For the Load Serving Entities (LSEs) who are not taking transmission service from CRCM and LAPT, WACM will assess Regulation Service charges for their load and for their variable resources inside WACM.

The formula rate will be assessed to all applicable Federal Transmission Customers and to all applicable non-Federal LSEs serving load inside WACM.

Formula Rate

$$\begin{array}{l}
 \text{Regulation} \\
 \text{Service} \\
 \text{Formula Rate}
 \end{array}
 = \frac{\text{Total Annual Revenue Requirement for Regulation Service (\$)}}{\begin{array}{l}
 \text{Load inside WACM Requiring Regulation Service (kW)} \\
 + \\
 \text{(Installed Nameplate Capacity of Wind Generators Serving Load inside WACM} \\
 \text{X} \\
 \text{Wind Capacity Multiplier) (kW)} \\
 + \\
 \text{(Installed Nameplate Capacity of Solar Generators Serving Load inside WACM} \\
 \text{X} \\
 \text{Solar Capacity Multiplier) (kW)}
 \end{array}}$$

The total annual revenue requirement for Regulation Service includes such costs as LAP and CRSP plant costs, purchases of regulation products, purchases of power in support of the generating units' ability to regulate, purchases of transmission for regulating units trapped geographically inside another balancing authority, purchases of transmission required to relocate energy due to regulation/load following issues, and lost on-peak sales opportunities resulting from the requirement to generate at night to permit units to have "down" regulating capability.

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The total load for Regulation Service equals load inside WACM requiring Regulation Service, plus the installed nameplate capacity of wind generators serving load inside WACM times the wind capacity multiplier, plus the installed nameplate capacity of solar generators serving load inside WACM times the solar capacity multiplier.

A calculated charge will go into effect every October 1 based on the formula above and updated financial, load, and capacity multiplier data. The annual charge and multipliers will be posted on the CRCM and LAPT Open Access Same-Time Information System websites.

Types

There are two different applications of this Formula Rate:

1. Load-based Assessment: The charge is assessed on an entity's auxiliary load (total metered load less applicable Federal entitlements) and on the amount stated in any BA or transmission service agreements. The charge is also applied to the installed nameplate capacity of all variable energy resources, including wind and solar generators, serving load inside WACM multiplied by the applicable annually calculated Capacity Multiplier.
2. Self-provision Assessment: WACM allows entities with AGC to self-provide for all or a portion of their loads. Entities with AGC are known as Sub-Balancing Authorities (SBA) and must meet all of the following criteria:
 - a. Have a well-defined boundary, with WACM-approved revenue-quality metering, accurate as defined by the North American Electric Reliability Corporation (NERC), to include Megawatt flow data availability at 6-second or smaller intervals;

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- b. Have AGC responsive unit(s);
- c. Demonstrate Regulation Service capability; and
- d. Execute a contract with WACM in which entities agree to:
 - i. Provide all requested data to WACM.
 - ii. Meet SBA error criteria as described below.

Self-provision is measured by use of the entity's 1-minute average Area Control Error (ACE) to determine the amount of self-provision. The ACE is used to calculate the Regulation Service charges every hour as follows:

- a. If the entity's 1-minute average ACE for the hour is less than or equal to 0.5 percent of its hourly average load, no Regulation Service charge is assessed for that hour.
- b. If the entity's 1-minute average ACE for the hour is greater than or equal to 1.5 percent of its hourly average load, WACM assesses Regulation Service charges to the entity's entire auxiliary load, using the hourly Load-based Assessment applied to the entity's auxiliary 12-cp load for that month.
- c. If the entity's 1-minute average ACE for the hour is greater than 0.5 percent of its hourly average load, but less than 1.5 percent of its hourly average load, WACM assesses Regulation Service charges based on linear interpolation of zero charge and full charge, using the hourly Load-based Assessment applied to the entity's auxiliary 12-cp load for that month.

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- d. WACM monitors the entity's Self-provision on a regular basis. If WACM determines the entity has not been attempting to self-regulate, WACM will, upon notification, employ the Load-based Assessment described in No. 1, above.

Alternative Arrangements

Exporting Variable Resource Requirement: WACM does not provide Regulation Service to variable resources inside the WACM Control Area which are not used to serve load inside the WACM Control Area. An entity that exports the output from a variable generator to another Control Area will be required to dynamically meter or dynamically schedule the resource out of the WACM Control Area to another Control Area unless arrangements, satisfactory to WACM, are made for the entity to acquire this service from a third party or self-supply (as outlined below). A variable generator is one whose output is volatile and variable due to factors beyond direct operational control and, therefore, is not dispatchable.

Self- or Third-party supply: WACM may allow an entity to supply some or all of its required regulation, or contract with a third party to do so. This entity must have revenue quality metering at every load and generation point, accurate as defined by NERC, to include MW flow data availability at 6-second or smaller intervals. WACM will evaluate the entity's metering, telecommunications and regulating resource, as well as the required level of regulation, and determine whether the entity qualifies to self-supply under this provision. If approved, the entity is required to enter into a separate agreement with WACM which will specify the terms of the self-supply application.

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Customer Accommodation

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