

**UNITED STATES DEPARTMENT OF ENERGY  
WESTERN AREA POWER ADMINISTRATION  
DESERT SOUTHWEST CUSTOMER SERVICE REGION**

**REGULATION AND FREQUENCY RESPONSE SERVICE**

Effective:

The first day of the first full billing period beginning on or after October 1, 2011, through September 30, 2016.

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 60 cycles per second (60 Hz). Regulation Service is accomplished by committing on-line generation whose output is raised or lowered as necessary, predominantly through the use of automatic generation control equipment, to follow the moment-by-moment changes in load. The obligation to maintain this balance between resources and load lies with the Western Area Lower Colorado (WALC) Balancing Authority (BA) operator. Customers (Federal transmission customers and customers on others' transmission systems within WALC) with conforming loads must purchase this service from WALC or make alternative comparable arrangements to satisfy their Regulation Service obligations. Customers with non-conforming loads will be charged differently as stated below. A non-conforming load is defined as a single plant or site with a regulation capacity requirement of 5 megawatts (MW) or greater on a recurring basis and whose capacity requirement is equal to 10 percent or greater of its average load.

The charges for Regulation Service are outlined below.

Types:

There are two different applications of this Formula Rate:

1. **Load-based Assessment:** The rate for the load-based assessment is reflected in the “Formula Rate” section and is applied to entities that take regulation service from the WALC BA. This load-based rate is assessed on an entity’s auxiliary load (total metered load less Federal entitlements, including behind the meter generation rating, or if available, hourly data if generation is synchronized to the system) and is also applied to the installed nameplate capacity of all intermittent generators within WALC.
2. **Self-Provision Assessment:** Western allows 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) and should meet all of the following criteria:
  - a. Have a well-defined boundary, with WALC-approved revenue-quality metering, accurate as defined by NERC, to include MW flow data availability at 6-second or smaller intervals.
  - b. Have Automatic Generation Control capability.
  - c. Demonstrate Regulation Service capability.
  - d. Execute a contract with the WALC BA to:
    - i. Provide all requested data to the WALC BA.

- 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 assessment is calculated every hour, and the value of ACE is used to calculate the Regulation Service charges as follows:

- a. If the entity's 1-minute average ACE is  $\leq 0.5$  percent of the entity's hourly average load, no Regulation Service charges is assessed by WALC.
- b. If the entity's 1-minute average ACE is  $\geq 1.5$  percent of the entity's hourly average load, WALC assesses Regulation Service charges to the entity's entire load, using the load-based rate.
- c. If the entity's 1-minute average ACE is  $> 0.5$  percent of the entity's hourly average load, but  $< 1.5$  percent of the entity's hourly average load, WALC assesses Regulation Service charges based on linear interpolation of zero charge and full charge, using the load-based rate.
- d. Western monitors the entity's self-provision on a regular basis. If Western determines that the entity has not been attempting to self-regulate, Western will, upon notification, employ the load-based assessment methodology described in No. 1 above.

### **Alternative Arrangements**

Exporting Intermittent Resource Requirement: An entity that exports the output from an intermittent generator to another balancing authority will be required to dynamically meter or

Rate Schedule DSW-FR3  
Schedule 3 to Tariff  
(Supersedes Rate Schedule DSW-FR2)

dynamically schedule that resource out of WALC to another balancing authority unless arrangements, satisfactory to Western, are made for that entity to acquire this service from a third-party or self-supply (as outlined below). An intermittent generator is one that is volatile and variable due to factors beyond direct operational control and, therefore, is not dispatchable.

Other Self- or Third-party Supply: Western may allow an entity to supply some or all of its required regulation or contract with a third party to do so, even without well-defined boundary metering. This entity must have revenue quality metering at every load and generation point, accuracy as defined by NERC, to include MW flow data availability at 6-second (or smaller) intervals. WALC 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 contract with Western, which will specify the terms of the self-supply agreement.

Formula Rate:

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

Rates:

Load-Based Rate

The rate to be in effect October 1, 2013, through September 30, 2014, for Nos. 1 and 2, as

Rate Schedule DSW-FR3  
Schedule 3 to Tariff  
(Supersedes Rate Schedule DSW-FR2)

described above in the “Types” section of this rate schedule is:

Monthly:	\$0.1897/kW-month
Weekly:	\$0.0437672/kW-week
Daily:	\$0.0062353/kW-day
Hourly:	\$0.0002598/kWh

This rate is based on the above formula and will be revised annually based on updated financial and load data. The above Load-Base Rate applies to conforming loads. Regulation Service for non-conforming loads, as determined by Western, must be delineated in a service agreement, and charged an amount that includes the cost to procure the service and the additional amount required to monitor and supply this service.

WALC 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 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.