



Customer Brochure

**Proposed Formula Rates for
Loveland Area Projects Transmission
and WACM Ancillary Services
Rate Order No. WAPA-155**

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Contact Information

Mr. Bradley S. Warren
Regional Manager
Rocky Mountain Region
Western Area Power Administration
5555 East Crossroads Boulevard
Loveland, CO 80538-8986
Telephone: (970) 461-7201
e-mail: warren@wapa.gov

Mr. Ronald E. Moulton
Transmission Services Manager
Rocky Mountain Region
Western Area Power Administration
615 South 43rd Avenue
Phoenix, AZ 85009
Telephone: (602) 605-2668
e-mail: moulton@wapa.gov

Mr. Darren Buck
Operations Manager
Rocky Mountain Region
Western Area Power Administration
5555 East Crossroads Boulevard
Loveland, CO 80538-8986
Telephone: (970) 461-7693
e-mail: dbuck@wapa.gov

Mrs. Sheila D. Cook
Rates Manager
Rocky Mountain Region
Western Area Power Administration
5555 East Crossroads Boulevard
Loveland, CO 80538-8986
Telephone: (970) 461-7211
e-mail: scook@wapa.gov

Mr. Steven L. Cochran
Rates Analyst
Rocky Mountain Region
Western Area Power Administration
5555 East Crossroads Boulevard
Loveland, CO 80538-8986
Telephone: (970) 461-7312
e-mail: scochran@wapa.gov

Mrs. Barb Wayker
Rates Analyst
Rocky Mountain Region
Western Area Power Administration
5555 East Crossroads Boulevard
Loveland, CO 80538-8986
Telephone: (970) 461-7585
e-mail: bwayker@wapa.gov

E-Mail Address for Official Comments

laptransadj@wapa.gov

Materials Posted on Web site

<http://www.wapa.gov/rm/ratesrm/2012/default.htm>

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I. Introduction

The Western Area Power Administration's (Western) Rocky Mountain Customer Service Region (RMR) is proposing to update its Loveland Area Projects (LAP) Transmission and Western Area Colorado Missouri Balancing Authority (WACM) Ancillary Services formula rates. (See Section V for detailed project descriptions.) The current formula rates have been extended and will expire on February 28, 2013. Under this rate adjustment process, the proposed formula rates will supersede existing formula rates and will be in effect from October 1, 2011, through September 30, 2016. They will be applied under existing contracts and Western's revised Open Access Transmission Service Tariff (Tariff), which was effective December 1, 2009.

LAP will continue to offer network, firm point-to-point, non-firm point-to-point transmission service and transmission losses service to all Transmission Customers. Currently, all transmission service rate schedules include provisions for Unauthorized Use of Transmission. Pursuant to the Tariff, RMR is proposing a new schedule and formula rate for Unreserved Use Penalties. The proposed formula rates will be applicable to existing and future transmission service. As demonstrated in the rate methodology, the LAP Merchant takes LAP transmission service on the same basis as other LAP Transmission Customers. The cost of transmission service for serving LAP's Federal allocations will continue to be included in the LAP firm electric service (FES) rate, consistent with existing FES contracts. These contracts are set to expire in 2024.

WACM will continue to offer the following six ancillary services: 1) Scheduling, System Control and Dispatch Service; 2) Reactive Supply and Voltage Control from Generation or Other Sources Service; 3) Regulation and Frequency Response Service; 4) Energy Imbalance Service; 5) Spinning Reserves; and 6) Supplemental Reserves. Pursuant to the Tariff, RMR is also proposing a new schedule and formula rate for Generator Imbalance Service.

Rates History

Transmission

Prior to August 1, 1982, RMR had a transmission charge of 1.0 mill per kilowatt-hour (kWh) included in transmission service contracts. The first firm transmission service rate schedule was schedule P-SWD-T1, which became effective on August 1, 1982. This schedule was the first Pick-Sloan Missouri Basin Program--Western Division (P-SMBP-WD) transmission rate that included a capacity charge. The rates under this schedule were 1.1 mills per kWh or \$9.60 per kilowatt-year (kW-year) (\$0.80/kilowatt-month (kW-month)). Non-firm transmission service rate schedules using only the energy rate were implemented simultaneously with the firm rates.

On January 1, 1985, Rate Schedule P-SWD-T3 superseded Rate Schedule P-SWD-T1 with a rate of 1.3 mills per kWh or \$11.40 per kW-year (\$0.95/kW-month).

In 1991, Rate Schedule L-T1 (the first LAP schedule) superseded Rate Schedule P-SWD-T3 at a rate of 2.1 mills per kWh or \$18.24 per kW-year (\$1.52/kW-month). On February 1, 1994, Rate Schedule L-T1 was superseded by rate schedules L-T3 and L-T4 at a rate of 2.6 mills per kWh or \$22.52/kW-year (\$1.88/kW-month).

On April 1, 1998, Western implemented its Tariff. On March 31, 2004, rate schedules L-T3 and L-T4 were superseded by current rate schedules L-FPT1, L-NFPT1, and L-NT1, which contain formula-based rates that are recalculated annually using updated historical financial and load information. They've been extended twice, most recently on December 30, 2010, and will expire on February 28, 2013. Following is a table showing the recent history of LAP's transmission rates:

	2011	2010	2009	2008	2007
Firm Transmission ¹	\$3.18	\$3.13	\$2.89	\$2.72	\$2.75
Non-Firm Transmission ²	4.17 mills	4.17 mills	4.17 mills	3.75 mills	3.75 mills
Network Transmission Annual Revenue Requirement ³	\$48,000,660	\$47,623,283	\$42,881,371	\$39,667,895	\$39,272,990

^{1/} Charge basis is 'per kilowatt-month'.

^{2/} Charge basis is 'per kilowatt-hour'.

^{3/} Monthly charge is 12-month rolling average of customer load at the LAP system peak divided by the 12-month rolling average of the LAP system peak multiplied by 1/12 of the revenue requirement.

The formula-based rate schedules proposed in this document for LAP transmission will supersede the current transmission rate schedules. The basic formulas used to derive the transmission rates will not change; however, some of the methodologies used to generate data inputs to the formulas will be modified, as described in section III following. The annual recalculation of the transmission rates is proposed to be based on forward-looking/projected financial and load data.

Ancillary Services

In Order 888, the Federal Energy Regulatory Commission (FERC) identified six ancillary services that must be included in an Open Access Transmission Tariff (OATT). RMR established rates for those six services in April 1998, coincident with the merger of the Western Area Lower Missouri balancing authority (WALM) and a portion of the Western Area Upper Colorado balancing authority (WAUC), into the Western Area Colorado Missouri balancing authority (WACM), which is operated by RMR.

The rate schedules contain formula-based rates that are recalculated annually using updated historical financial and load information. The current schedules became effective March 1, 2004, except for the regulation rate schedule, which became effective June 1, 2006. On December 30, 2010, all of the ancillary services rate schedules were extended and will be in effect until February 28, 2013, or until

superseded. The rate history for the six ancillary services is as displayed in the following table:

	2011	2010	2009	2008	2007
Scheduling, System Control, and Dispatch Service ^{1/}	\$38.30	\$40.89	\$38.84	\$31.82	\$27.44
Reactive Supply and Voltage Control Service from Generation or Other Sources ^{2/}	\$0.180	\$0.180	\$0.187	\$0.150	\$0.165
Regulation and Frequency Response Service ^{3/}	\$0.339	\$0.544	\$0.360	\$0.292	\$0.220
Energy Imbalance Service ^{4/}	LAP weighted avg real-time pricing				
Operating Reserve Service (Spinning) ^{5/}	Market, plus fee				
Operating Reserve Service (Supplemental) ^{5/}	Market, plus fee				

^{1/} Charge basis is 'per schedule per day'.

^{2/} Charge basis is 'per kilowatt-month'.

^{3/} Charge basis is 'per kilowatt-month'.

^{4/} Charge basis is use of LAP weighted average real-time sales and purchase pricing with a 25% penalty for imbalances in excess of 5% of metered load.

^{5/} Charge is the market cost of the purchase of reserves and any activation energy, plus an amount for administration.

The formula-based rate schedules proposed in this document for WACM ancillary services will supersede the existing ancillary services rate schedules. Some of the formula rates for ancillary services will change, as detailed in section IV following. The annual recalculation of the ancillary services rates based on updated historical financial and load data will continue in these proposed rate schedules.

Summary of Proposed Changes

Transmission

- The annual recalculation of the transmission rates will be based on forward-looking/projected financial and load data.
- Changing the calculation to determine the Annual Transmission Cost.
- Adding a new rate schedule for Unreserved Use of Transmission Service.
- Changing the Losses pricing language to reflect WACM pricing vs. LAP pricing.

Ancillary Services

SSCD:

- Changing formula to include only annual cost of Scheduling Personnel and Related costs.
- No longer including Loss tags in the development of the rate, and no longer invoice for them.
- Allocating the cost of each schedule equally among all transmission providers listed on the tag that are inside WACM and invoicing all non-Federal Transmission Providers vs. invoicing only the last Transmission Provider.

VAR:

- Basing the percentage of annual costs for generation in the revenue requirement on the nameplate capability of the generating units with regard to reactive and real power production vs. measuring actual production of volt-amperes reactive and dividing by the unit nameplate.

Regulation:

- Formula will have four components vs. three.
- The denominator for the "Load-Based Assessment" will include the Load requiring regulation plus the Installed Nameplate Capacity of Intermittent Resources servicing load inside WACM.
- An entity that exports the output from an intermittent resource to another balancing authority will be required to dynamically meter or dynamically schedule the resource out of WACM vs. being assessed the Exporting Intermittent Resource Assessment.
- Self-provision will be measured by use of the 1-minute average of the entity's ACE vs. having the option to use the 1-minute average of its ACE or the 1-minute average of the first derivative of its ACE.

Energy Imbalance:

- Formula will be more consistent with FERC guidelines/bandwidths.
- Retaining the 4 MW minimum vs. implementing FERC's 2 MW minimum.
- Western is continuing to evaluate how the elimination of penalties will be implemented.
- Adding an administrative charge (application of this charge is still being considered).

Generator Imbalance:

- Adding a new formula rate and rate schedule (similar to Energy Imbalance).

Rate Comparison

Following is a table which compares the proposed formula rates for Fiscal Year (FY) 2012 with the current formula rates for FY 2011:

Formula Rate Comparison Table

Class of Service	Proposed Rate Schedule and Estimated Rate Effective October 1, 2011 (FY 2012)	Existing Rate Schedule and Rate Effective October 1, 2010 (FY 2011)
Network Transmission Service	L-NT1 Load ratio share of 1/12 of the revenue requirement of \$56,146,133	L-NT1 Load ratio share of 1/12 of the revenue requirement of \$48,000,660
Firm Point-to-Point Transmission Service	L-FPT1 \$3.45/kW-month	L-FPT1 \$3.18/kW-month Unauthorized Use Penalty of 150% of demand charge, with a maximum of monthly service.
Non-Firm Point-to-Point Transmission Service	L-NFPT1 Maximum of 4.73 mills/kWh	L-NFPT1 Maximum of 4.17 mills/kWh Unauthorized Use Penalty of 150% of demand charge, with a maximum of monthly service.
Scheduling, System Control, and Dispatch Service	L-AS1 \$24.03 per schedule per day	L-AS1 \$38.30 per tag per day for non-transmission customers.
Reactive Supply and Voltage Control from Generation or Other Sources Service	L-AS2 \$0.318/kW-month	L-AS2 \$0.180/kW-month
Regulation and Frequency Response Service	L-AS3 \$0.322/kW-month	L-AS3 \$0.339/kW-month
Energy Imbalance Service	L-AS4 -Imbalances less than or equal to 1.5% (minimum 4 MW) of metered load settled using WACM hourly pricing with no penalty. -Imbalances 1.5% to 7.5% (minimum 4 MW to 10 MW) of metered load settled using WACM hourly pricing with a 10% penalty. -Imbalances greater than 7.5% (minimum 10 MW) of metered load settled using WACM hourly pricing with a 25% penalty. -Administrative fee charged on every settlement.	L-AS4 -Imbalances less than or equal to 5% (minimum 4 MW) of metered load settled using WACM pricing with no penalty. -Imbalances greater than 5% of metered load settled using WACM pricing with a 25% penalty.
Operating Reserves Service – Spinning and Supplemental	L-AS5, L-AS6 Long-term reserves are not available from WACM. Reserves may be provided on a pass-through cost, plus cost of activation energy, plus a fee for administration.	L-AS5, L-AS6 Long-term reserves are not available from WACM. Reserves may be provided on a pass-through cost, plus cost of activation energy, plus a fee for administration.
Transmission Losses Service	L-AS7 Transmission losses may be settled either financially or with energy. Insufficient losses supplied will be settled financially by default. All customers will have the option to return the loss obligation for both prescheduled and real-time transactions 7 days later, same profile. Pricing used is WACM weighted average hourly purchase price.	L-AS7 Transmission losses may be settled either financially or with energy. Insufficient losses supplied will be settled financially by default. All customers will have the option to return the loss obligation for both prescheduled and real-time transactions 7 days later, same profile. Pricing used is LAP weighted

Generator Imbalance Service	L-AS9 -Imbalances less than or equal to 1.5% (minimum 4 MW) of metered generation settled using WACM hourly pricing with no penalty. -Imbalances 1.5% to 7.5% (minimum 4 MW to 10 MW) of metered generation settled using WACM hourly pricing with a 10% penalty. -Imbalances greater than 7.5% (minimum 10 MW) of metered generation settled using WACM hourly pricing with a 25% penalty. -Intermittent Resources not subject to 3 rd band penalties. -Administrative fee charged on every settlement.	average hourly purchase price. Provided Under Rate Schedule L-AS4.
Penalty Rate for Unreserved Use of Transmission Service	L-AS10 Penalized 200% of LAP's firm point-to-point rate, with a maximum of monthly service.	Provided Under Rate Schedules L-FPT1 and L-NFPT1.

The rates displayed for FY 2012 are preliminary, based upon data available at the time of preparation of this brochure. Because these proposed rates were calculated earlier than normal, some data from the most recent fiscal year was not yet available, so data from the prior year was used. The proposed rates are subject to change upon publication of the final formula rates.

II. Proposed Schedule

September 29, 2010	Informal Meeting with Customers in Loveland
November 1, 2010	Posted and e-mailed Western's responses to questions asked at September 29 th customer meeting
January 10, 2011	Federal Register Notice (FRN) for Rate Extension for Current Rates published
January 28, 2011	FRN with Proposed Formula Rates published (Begins 90-day comment period)
February 2, 2011	Mailed Customer Invitation Letters with a copy of the FRN
March 9, 2011	Public Information Forum at 9 a.m. MST in Loveland, Colorado
March 9, 2011	Public Comment Forum at 1-2:30 p.m. MST in Loveland, Colorado
No Later Than April 14, 2011	Respond to questions not addressed at the Public Information Forum
April 28, 2011	Close of Comment Period
August 2011	Publication of FRN with Final Formula Rates
October 1, 2011	New Formula Rates in Effect
??	FERC's Final Approval of the Formula Rates

III. Proposed Formula Rates for LAP Transmission Service

LAP offers Network Integration (Network) and Point-to-Point transmission services. These services include the transmission of energy to points of delivery on the LAP interconnected high-voltage system, which includes transmission lines, substations, communication equipment and related facilities. Transmission service for the LAP Federal customers will continue to be bundled in their firm electric service rate. The transmission rates include the cost of one ancillary service, Scheduling, System Control and Dispatch Service.

The methodology used for rate development and the implementation process are described below.

Network Transmission Service

The monthly charge for Network Transmission Service will continue to be the product of the transmission customer's load-ratio share times one-twelfth of the Annual Transmission Revenue Requirement (ATRR).

$$\text{Monthly Charge} = 1/12 \times \text{ATRR} \times \text{Customer Load Ratio Share}$$

The customer's load-ratio share is the ratio of its network load to the LAP Transmission System Total Load at the LAP system peak. This is calculated on a rolling 12-month basis (12 coincident peak average or 12-cp).

The customer's load-ratio share is derived as follows:

- Identify the LAP transmission system peak hour for the month.
- Calculate the total delivery to the Network Transmission Service customer for the monthly peak hour.
- Identify the part of the total delivery associated with each customer's monthly Federal entitlements.
- Calculate the network delivery—total delivery less monthly Federal entitlements.
- Sum the most recent 12 monthly amounts and divide by 12 to derive the rolling 12-month average (12-cp) for the customer.
- The 12-cp is divided by the 12-month average of the system peak to derive the customer's load-ratio share.

Firm Point-to-Point Transmission Service

The proposed rate for Firm Point-to-Point Transmission Service under Rate Schedule L-FPT1 will continue to be the ATRR divided by the LAP Transmission System Total Load.

The formula for the rate is as follows:

$$\text{Firm Point-to-Point Transmission Rate} = \frac{\text{ATRR}}{\text{LAP Transmission System Total Load}}$$

The proposed rates for FY 2012 are the following:

Yearly Delivery:	\$41.44/kW of reserved capacity per year	=	$\frac{\$56,146,133}{1,354,899 \text{ kW}}$
Monthly Delivery:	\$3.45/kW of reserved capacity per month		
Weekly Delivery:	\$0.80/kW of reserved capacity per week		
Daily Delivery:	\$0.11/kW of reserved capacity per day		

A discussion of the ATRR and the LAP Transmission System Total Load is located below.

Non-Firm Point-to-Point Transmission Service

Non-Firm Point-to-Point Transmission Service under Rate Schedule L-NFPT1 is available for periods ranging from 1 hour to 1 month. The rate for Non-Firm Point-to-Point Transmission Service may be discounted based on market conditions, but will never be higher than the Firm Point-to-Point Transmission Service rate. The formula for Non-Firm Point-to-Point Transmission Service rate is:

$$\text{Maximum Non-Firm Point-to-Point Transmission Rate} = \text{Firm Point-to-Point Transmission Rate}$$

Based on the proposed Firm Point-to-Point Transmission Service Rate, the proposed maximum Non-Firm Point-to-Point Transmission Service Rate for FY 2012 is:

Monthly Delivery:	\$3.45/kW of reserved capacity per month
Weekly Delivery:	\$0.80/kW of reserved capacity per week
Daily Delivery:	\$0.11/kW of reserved capacity per day
Hourly Delivery:	4.73 mills/kWh

Proposed Annual Transmission Revenue Requirement

The ATRR is applicable to both Network and Point-to-Point transmission services. The calculation for the ATRR is:

	A		B		C		D		E			
Annual Transmission Revenue Requirement	=	Annual Transmission Cost	+	Transmission Expenses Increasing Transmission System Capacity	-	Revenues from Point- to-Point Transmission Service	-	Revenues from Scheduling & Dispatch Service	+	Miscellaneous Charges and Credits	+	Prior Year True-Up

The Annual Transmission Cost is the ratio of Gross Investment Cost for Transmission Facilities to Gross Investment Cost for All Facilities multiplied by the Total Annual Costs for All Facilities. Total Annual Costs include operations and maintenance, interest and depreciation expenses. The calculation is:

$$\text{Annual Transmission Cost} = \frac{\text{Gross Investment Cost for Transmission Facilities}}{\text{Gross Investment Cost for All Facilities}} \times \text{Total Annual Costs}$$

This represents a change in how the inputs for the rate are developed. Currently, the Annual Transmission Cost is derived by multiplying the Net Investment Cost for Transmission Facilities by an Annual Fixed Charge Rate.

The Gross Investment Cost for Transmission Facilities will be determined by an analysis of the LAP Transmission System. Each LAP facility is classified by function: transmission, sub-transmission, distribution, or generation-related. The facilities identified as performing the function of transmission include transmission lines that are normally operated in a continuously-looped manner and the associated substations and switchyard facilities. In the LAP Transmission System, these are primarily the 115-kV and the 230-kV transmission lines. In addition, a portion of the communication and maintenance facilities is included in the investment cost for transmission. Only the investment costs of the facilities identified as "transmission", including allocated costs for communication and maintenance facilities, are used in developing the Annual Transmission Cost. The investment costs of facilities identified as "sub-transmission" and "distribution" are excluded from the ATRR, as the LAP sub-transmission and distribution systems are used primarily for delivery of Federal power to Federal customers. If a transmission customer requires the use of the sub-transmission or distribution systems, an additional facility-use charge will be assessed. All costs of the Frypan-Arkansas Project (Fry-Ark) are considered generation-related and, therefore, are excluded from the ATRR.

The Transmission Expenses Which Increase Transmission System Capacity will continue to include payments made to others for their systems' augmentation of the LAP Transmission System. Miscellaneous Charges and Credits will include, but not be limited to, Unreserved Use Penalties and facility charges for transmission facility investments included in the revenue requirement.

Proposed Change to Forward-Looking Transmission Rates

RMR proposes to change the method it uses to calculate the ATRR to recover transmission expenses and investments on a current basis rather than a historical basis. The change RMR proposes will allow it to more accurately match cost recovery with cost incurrence. RMR will use projections to estimate transmission costs and load for the upcoming year in the annual rate calculation. Currently, the rate calculation for a year uses actual data from 2 years prior to that year. The proposed method will be a change in the manner in which the inputs for the rate are developed, rather than a change to the formula rate itself. When actual cost information for a year becomes available, RMR will calculate the actual revenue requirement. Revenue collected in excess of RMR’s actual revenue requirement will be included as a credit in the ATRR in a subsequent year. Similarly, any under-collection of the revenue requirement will be recovered in a subsequent year. This true-up procedure will ensure that RMR recovers no more and no less than the actual transmission costs for the year. For example, as FY 2012 actual financial data becomes available during FY 2013, the under- or over-collection of revenue during FY 2012 can be determined. When the rates are recalculated for FY 2014, the implemented rates will include an adjustment for revenue under- or over-collected in FY 2012.

Annual Operation and Maintenance Expenses are projected using historical averages or budgeted amounts. Depreciation and interest expenses are projected using historical amounts modified by projected additions to plant in service. Plant in service is projected using RMR’s Capital Improvement Plan in connection with construction already in progress.

The formulas with projected data for FY 2012 are:

$$\text{Annual Transmission Cost} = \frac{\$539,446,521}{\$717,069,652} \times \$87,112,291 = \$65,533,971$$

	A		B		C		D		E
ATRR =	\$65,533,971	+	-0-	-	\$8,604,636	-	\$883,202	+	\$100,000
ATRR =	\$56,146,133								

Transmission System Load for Point-to-Point Service

The LAP transmission System Total Load is the 12-month average of the system peak for network use (including Federal load), plus the reserved capacity for long-term firm point-to-point service. This load calculation is prepared once annually and is used to calculate the point-to-point rates for the entire year. The calculation used in Network billing, above, is a rolling average which changes each month.

This load was derived as follows:

- For each month in FY 2010
 - Obtained hourly individual revenue meter readings for Network delivery points on the LAP transmission system and calculated the sum of the hourly meter readings to find the LAP system peak.
 - Added the Federal power customers that do not use LAP auxiliary transmission.
 - Break this subtotal into Total Federal Load vs. Network Transmission.
 - Added the reserved capacity for point-to-point customers to determine the LAP Transmission System Total Load.
 - Calculated a 12-month average of the load.
- FY 2012 load was then projected by escalating FY 2010 load based on historical trends for 2 years.

The LAP Transmission System Total Load is calculated as follows, based upon data projected for FY 2012:

Federal Load	604,640	
Network Transmission Customers	<u>740,374</u>	
Subtotal Network Load	1,345,014	kW
Point-to-Point Reserved Capacity	<u>9,885</u>	
LAP Transmission System Total Load	1,354,899	kW

Proposed Penalty Rate for Unreserved Use of Transmission Service

Unreserved Use of Transmission Service (Unreserved Use) under the proposed Rate Schedule L-AS10 is provided when a transmission customer uses transmission service it has not reserved or that exceeds its reserved capacity. RMR proposes to assess Unreserved Use Penalties against a transmission customer that has not secured reserved capacity or exceeds its reserved capacity at any point of receipt or any point of delivery. Unreserved use may also include a Transmission Customer's failure to curtail transmission when requested.

RMR proposes that a transmission customer that engages in Unreserved Use be assessed a penalty charge of 200% of LAP's approved transmission service rate for

Point-to-Point Transmission Service as follows:

- 1) The Unreserved Use Penalty for a single hour of Unreserved Use will be based upon the rate for daily Firm Point-to-Point Service.
- 2) The Unreserved Use Penalty for more than one assessment for a given duration (e.g., daily) will increase to the next longest duration (e.g., weekly).
- 3) The Unreserved Use Penalty charge for multiple instances of Unreserved Use (e.g., more than one hour) within a day will be based on the rate for daily Firm Point-to-Point Service. Multiple instances of Unreserved Use isolated to one calendar week will result in a penalty based on the charge for weekly Firm Point-to-Point Service. The penalty charge for multiple instances of Unreserved Use during more than one week during a calendar month will be based on the charge for monthly Firm Point-to-Point Service.

A transmission customer that exceeds its firm reserved capacity at any point of receipt or point of delivery or an eligible customer that uses transmission service at a point of receipt or point of delivery that it has not reserved will be required to pay for all ancillary services identified in Western's Tariff based on the amount of transmission service it used and did not reserve.

Unreserved Use Penalties collected over and above the base Point-to-Point Transmission Service charge will be credited against the LAP ATRR in a subsequent year.

Transmission Losses Service

The rate schedule for Transmission Losses Service, L-AS7, is unchanged except that the language will be changed to state that losses settled financially will use WACM pricing rather than LAP pricing. The loss rate, currently 4.5%, is updated periodically and posted on the RMR Open Access Same Time Information System Web site. Customers are allowed the option of financial settlement or energy repayment. Energy repayment is either concurrently or 7 days later, same profile

Transmission Losses are assessed for all real-time and prescheduled transactions on transmission facilities managed by RMR or inside WACM. In the case of Network Transmission Service customers, transmission and transformer losses applicable under customers' respective contracts are calculated as part of the customers' Energy Imbalance Service settlement.

IV. Proposed Formula Rates for WACM Ancillary Services

Background

In accordance with Western's Tariff, Ancillary Services are needed with transmission service to maintain reliability inside and among the Control Areas affected by the transmission service. The WACM Balancing Authority currently provides the six ancillary services required by FERC Order 888 to be included in an open access transmission tariff: Scheduling, System Control and Dispatch Service; Reactive Supply and Voltage Control from Generation or Other Sources Service; Regulation and Frequency Response Service; Energy Imbalance Service; Operating Reserves – Spinning Reserve Service; and Operating Reserves - Supplemental Reserve Service. The Proposed Rates for these services are designed to recover the costs incurred for providing each of the services. Pursuant to Western's revised Tariff, effective December 1, 2009, and filed in response to FERC Order 890, Western is proposing a new formula rate for Generator Imbalance Service.

The first two of these seven FERC-defined services, Scheduling, System Control and Dispatch Service and Reactive Supply and Voltage Control from Generation or Other Sources Service, are defined by FERC as services that the Transmission Provider is required to provide (or offer to arrange with the balancing authority operator) and the transmission customer is required to purchase.

The other five FERC-defined ancillary services, Regulation and Frequency Response Service, Energy Imbalance Service, Generator Imbalance Service, Operating Reserves – Spinning Reserve Service, and Operating Reserves – Supplemental Reserve Service, are services that the Transmission Provider is required to offer to provide only to the Transmission Customer serving load within the Transmission Provider's balancing authority. The Transmission Customer serving load within the Transmission Provider's balancing authority is required to acquire these Ancillary Services, whether from the Transmission Provider, from a third party, or by self-supply.

Scheduling, System Control and Dispatch (SSCD) Service

This service is required to schedule the movement of power into, out of, inside or through WACM.

The proposed formula for SSCD Service under Rate Schedule L-AS1 will be as follows:

$$\text{Rate per Schedule} = \frac{\text{Annual Cost of Scheduling Personnel and Related Costs}}{\text{Number of Schedules per Year}}$$

This formula represents a change from the prior formula. In the past, RMR included some salaries, facility costs, and information technology support costs for the Automatic Generation Control, Switching, Transmission Planning and Operations Management groups in the formula, viewing the rate as encompassing all of system control and dispatch. Under the proposed formula, the Annual Cost of Scheduling Personnel and Related Costs will capture costs primarily for scheduling but will exclude costs for system control and dispatch. Those costs will be captured in other rates. The change in the formula reflects the philosophy that this rate should recover only the costs of providing scheduling/tagging service. The denominator will continue to be the yearly total of daily tags which result in a schedule. However, schedules for delivery of Transmission Losses will no longer be included in the calculation of the rate, nor will they be invoiced. This will allow customers to submit an unlimited number of loss tags, which permits WACM to associate the loss tags with their specific scheduled transactions without the customers being charged for these separate tags.

Rate Design

This rate recovers the annual expenses associated with transmission scheduling. The Annual Cost of Scheduling Personnel and Related Costs is comprised of annual expenses for personnel, facilities, equipment and software, as well as credits representing fees for agent services and unscheduled flow mitigation services. This revenue requirement is divided by the number of non-loss schedules per year to derive a rate per schedule per day. The Rate Per Schedule for FY 2012 is calculated as follows:

$$\text{Rate per Schedule} = \frac{\$3,070,417}{122,778 \text{ schedules}}$$

$$\text{Rate per Schedule} = \$24.03 \text{ per schedule per day}$$

Per Schedule 1 of Western’s Tariff, “this service can be provided only by the operator of the Control Area in which the transmission facilities used for transmission service are located”. In cases where the Transmission Provider (LAP and/or CRSP) directly provides the service as the Control Area operator, the costs for this service are bundled in the respective Federal transmission rate. In cases where the Transmission Providers on the schedules are not the operator, WACM indirectly performs this service for those Transmission Providers’ transmission systems. RMR has historically invoiced the last Transmission Provider that is inside WACM on the schedule.

RMR is proposing a change in the implementation of this rate. RMR believes it would be more appropriate to invoice all non-Federal Transmission Providers that are inside WACM on the schedule, since all non-Federal Transmission Providers are indirectly taking this service from WACM. Under this proposed rate formula, **RMR will allocate the cost of each schedule equally among all Transmission Providers**

(Federal and non-Federal) listed on the schedule that are inside WACM. The Federal transmission segments will be exempt from invoicing, as costs for these segments will continue to be included in the Federal (LAP and CRSP) Transmission Service rates.

Following are two examples of this methodology, using actual FY 2010 schedules with entity names changed:

Schedule #1

Segment	POR PSE	POR BA	Transmission Provider	POD PSE	POD BA
1	PSE #1	WACM	TP #1	PSE #1	WACM
2	PSE #1	WACM	TP #2	PSE #1	WACM
3	PSE #1	WACM	TP #3	PSE #2	BA #2
4	PSE #2	BA #2	TP #3	PSE #2	BA #3
5	PSE #2	BA #3		PSE #2	BA #3

Only segments #1 and #2 are inside WACM. Under the billing methodology in place in FY 2010, transmission provider #2 was charged for the entire cost of this schedule, \$40.89. Under the proposed billing methodology, the cost of the schedule proposed for FY 2012, \$24.03, will be shared by transmission providers #1 and #2:

TP #1	\$ 12.015
TP #2	<u>12.015</u>
Total Charge	\$ 24.03

Schedule #2

Segment	POR PSE	POR BA	Transmission Provider	POD PSE	POD BA
1	PSE #1	WACM	TP #1	PSE #1	WACM
2	PSE #1	WACM	LAPT	PSE #2	WACM
3	PSE #2	WACM		PSE #2	WACM

In this example, all transmission segments are inside WACM. Under the billing methodology in place in FY 2010, no charge was assessed for this schedule due to the fact that one of the segments (segment 2) uses Federal transmission. Under the proposed billing methodology for FY 2012, the cost of the schedule will be split between the two transmission providers, but only the non-Federal segment (segment 1) will be invoiced separately:

TP #1	\$ 12.015
LAPT	<u>-0-</u>
Total Charge	\$ 12.015

It has been suggested that RMR recover all scheduling costs through its transmission rate. That is perhaps a valid methodology in a balancing authority in which the only

transmission is that owned by the balancing authority operator. Even though an SSCD rate would most likely be in place under the transmission provider's OATT, all scheduling costs would be bundled into its transmission rate.

RMR feels that it is not appropriate to apply that methodology to WACM's SSCD service, as WACM is a balancing authority with several non-Federal Transmission Providers inside it. Under that type of methodology, the cost of a schedule using non-Federal transmission would end up being borne by the Federal transmission customers and, to the extent that transmission costs are bundled into firm electric service, by the firm electric service customers, as well. For FY 2010, approximately 41% of non-loss schedules in WACM used no Federal transmission.

Reactive Supply and Voltage Control Service from Generation or Other Sources Service (VAR Support)

This service is required to maintain transmission voltages in the balancing authority within acceptable limits. Typically, this service is provided from generation facilities under the operational control of the balancing authority operator to produce or absorb reactive power within operational limits in order to control voltage. The loads of customers with generators providing WACM with VAR Support may be excluded from development of this rate.

The proposed formula for VAR service, Rate Schedule L-AS2, is unchanged from Western's current formula:

$$\text{VAR Support Rate} = \frac{\text{TARRG} \times \% \text{ of Resource}}{\text{Load Requiring VAR Support}}, \text{ where}$$

TARRG = Total Annual Revenue Requirement for Generation
 % of Resource = Percentage of Resource Used for VAR Support

The numerator captures the percentage of annual generation plant costs which are used for this service. Most of the LAP generation plant facilities are owned and operated by the Bureau of Reclamation, but RMR has some facilities that are

considered generation-related. Net generation plant costs are multiplied by a fixed charge rate (FCR) for generation to determine the TARRG, where

$$\text{FCR} = \frac{\text{Annual Operation \& Maintenance Expenses} + \text{Annual Depreciation Expenses}}{\text{Net Investment}} + \frac{\text{Annual Interest Expenses}}{\text{Unpaid Balances}}$$

The FCR is a methodology used to assign a portion of total expenses to generation. Applying these formulas to historical data provides the following results:

$$\text{FCR} = \frac{\$38,869,031 + \$7,412,424}{\$358,166,448} + \frac{\$16,450,805}{\$246,301,546}$$

$$\text{FCR} = 19.601\%$$

Applying this percentage to the amount of net generation plant costs,

$$\text{TARRG} = \$317,732,100 \times 19.601\% = \$62,278,365$$

The percentage of TARRG which is included in the revenue requirement will be based on the nameplate capability of the generating units with regard to reactive and real power production. The TARRG is multiplied by the complement of the weighted average power factor rating for generating units. The weighted average power factor rating for the LAP generating units is 94.18%, so the revenue requirement for this rate includes 5.82% of the TARRG. This is a change in the process for collecting data inputs to the formula rate. In the current formula rate, the percentage of resource for a unit is calculated by measuring actual production of volt-amperes reactive and dividing by the unit nameplate power capability.

So, the portion of the revenue requirement contributed by LAP plant costs is as follows:

$$\text{LAP Plant Costs} = \$62,278,365 \times 5.824\% = \$3,627,064$$

Plant costs for Colorado River Storage Project (CRSP) plants in WACM are calculated using identical methodology. The contribution to the revenue requirement

from CRSP plants is \$1,239,823. The total revenue requirement, after adjusting for a small amount of revenue on point-to-point transactions not in the rate design, is:

LAP Plant Costs	\$3,627,064
CRSP Plant Costs	\$1,239,823
PTP Revenue	<u>\$(53,524)</u>
Revenue Requirement	\$4,813,362

The load taking this service totals 1,260,472 kW, resulting in a proposed rate for FY 2012 of:

$$\text{VAR Support Rate} = \frac{\$4,813,362}{1,260,472 \text{ kW}}$$

$$\text{VAR Support Rate} = \$0.318 / \text{kW-month}$$

The rate is applicable to all transmission transactions inside WACM in excess of any Federal entitlements. For Federal entitlements, the cost for this service will be included in the firm electric service rate. Customers with generators providing WACM with VAR Support may be excluded from the application of this rate. Any such exclusion must be documented in the Customer's Service Agreement.

Regulation and Frequency Response Service

Regulation and Frequency Response Service (Regulation Service) is necessary for WACM to provide for the continuous balancing of resources, generation and interchange, with load, as well as for maintaining scheduled interconnection frequency at sixty cycles per second (60 Hz). Regulation Service is provided by the generation facilities under WACM's operating control that are operated so as to increase or decrease total generation delivered to WACM through the use of automatic generating control (AGC) equipment. Regulation Service corrects for instantaneous variations between the customers' resources and load, even if the variations net to zero over the course of an hour. Imbalance Service, outlined below, captures hourly energy provided in correcting for these variations.

The proposed formula rate for Regulation Service under Rate Schedule L-AS3 will have 4 components:

1. Load-based Assessment
2. Exporting Intermittent Resource Requirement
3. Self-Provision Using AGC
4. Other Self- or Third-party Supply

1. Load-Based Assessment

The proposed formula for the Load-Based Assessment is:

$$\begin{array}{l} \text{Regulation} \\ \text{Service} \\ \text{Rate} \end{array} = \frac{\text{Total Annual Revenue Requirement for Regulation Service}}{\text{Load in WACM Requiring Regulation Service Plus the Installed Nameplate Capacity of Intermittent Generators Serving Load inside WACM}}$$

The rate applies to all entities' auxiliary load (total metered load less Federal entitlements) and also to the installed nameplate capacity of intermittent generators inside WACM that also serve load inside WACM. Restricting this service to intermittent generators serving load inside WACM is a change from the current rate. See "Exporting Intermittent Generator Requirement" below. Otherwise, the formula is unchanged.

The revenue requirement will include such costs as plant costs, purchases of a regulation product, purchases of power in support of the generating units' ability to regulate, purchases of transmission for regulating units that are trapped geographically inside another balancing authority, purchases of transmission required to relocate energy due to regulation/load following issues and lost sales opportunities resulting from the requirement to generate at night to permit units to have 'down' regulating capability.

The methodology for determining annual plant costs is unchanged. First, the annual costs for plants used to regulate is calculated by multiplying the net plant costs by the FCR for generation. Then, the annual cost per unit of capacity for regulating plants is calculated by dividing the annual costs for regulating plants by the capacity of those plants. Next, the portion of the total annual plant costs to be recovered in the Regulation Service Rate is calculated by multiplying the annual unit cost by the amount of capacity required for regulation.

The capacity required for regulation is subject to re-evaluation every year. Current analyses indicate that 75 MW of capacity will be required for Regulation Service for FY 2012. Of this total, 55 MW will be supplied by LAP plants and 20 MW will be supplied by CRSP plants.

Inserting financial data into the formulas results in the following calculation:

LAP Plant Costs	\$3,696,492
Purchase Power Costs in Support of Regulation	\$5,049,193
Lost Sales Opportunities from having to generate in off-peak hours	\$1,320,110
Transmission Costs for Trapped Regulating Units	\$1,042,800
Purchases of Transmission	\$52,598
CRSP Plant Costs	<u>\$498,450</u>
Annual Revenue Requirement	\$11,659,643

The load inside WACM requiring Regulation Service and the installed nameplate capacity of intermittent resources serving load inside WACM are 2,943,328 kW and 73,220 kW, respectively.

$$\begin{aligned}
 \text{Rate for Load-based Assessment} &= \frac{\$11,659,643}{3,016,548 \text{ kW}} \\
 &= \$ 0.322 / \text{kW-month} \\
 &= \$ 0.458 / \text{MW-hour}
 \end{aligned}$$

2. Exporting Intermittent Generator Requirement

An entity that exports the output from an intermittent generator to another balancing authority will be required to dynamically meter or dynamically schedule that resource out of WACM to another balancing authority. An intermittent generator is a generator that is not dispatchable and cannot store its fuel source and, therefore, cannot respond to changes in system demand or to transmission security constraints.

Western supports the installation of renewable sources of energy but recognizes that certain operational constraints exist in managing the significant fluctuations that are a normal part of their operation. RMR has marketed the maximum practical amount of power from its projects, leaving little flexibility for additional WACM services. Consequently, WACM will not regulate for the difference between the output of an intermittent generator located inside WACM and a delivery schedule from that generator serving load located outside WACM.

3. Self-Provision using AGC

RMR allows entities with automatic or manual generation control to self-provide for all or a portion of their loads. Entities with generation control are known as Sub-Balancing Authorities (SBA) and must meet all of the following criteria:

- a. Have a well-defined boundary, with revenue-quality metering that is approved by WACM, accurate as defined by NERC and which includes megawatt (MW) flow data availability at 6-second or smaller intervals;
- b. Have AGC capability; and
- c. Have demonstrated Regulation Service capability.

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

- a. If the entity's 1-minute average ACE for the hour is ≤ 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 for the hour is ≥ 1.5 percent of the entity's hourly average load, WACM will assess full Regulation Service charges using the 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 > 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, using the Load-based Assessment applied to the entity's auxiliary 12-cp load for that month.

This represents a change from the current formula. Under the current formula rate, the customer has the option of measuring Self-provision by use of either the 1-minute average of its ACE or the 1-minute average of the first derivative of its ACE.

Example of Self-Provision

Hr 1 Average Load = 300 MW

Hr 1, Min 1 ACE = 4

$$\% \text{ of hourly load} = \frac{4 \text{ MW}}{300 \text{ MW}} = 1.33\%$$

Amount of Regulation Provided = (% of hourly load minus 0.5%) x 100

Amount of Regulation Provided = (1.33% - 0.5%) x 100

Amount of Regulation Provided = 83% of full assessment

This percentage is calculated for each minute of the hour and averaged for the hour. That average amount of Regulation Service provided is multiplied by the monthly 12-cp load and then by the hourly Regulation Service rate to calculate the hourly charge:

$$\text{Hourly charge} = \frac{\text{Average Regulation}}{\text{Provided}} \times \frac{\text{Monthly 12-cp}}{\text{Load}} \times \frac{\text{Hourly Regulation}}{\text{Rate}}$$

If the customer's 12-cp load is 300 MW and the average Regulation Service provided for the hour is 0.4 of the full assessment, the hourly charge would be as follows:

$$\begin{aligned} \text{Hourly charge} &= 0.4 \times 300 \text{ MW} \times \$0.458 / \text{MW-hour} \\ \text{Hourly charge} &= \$54.96 \end{aligned}$$

This calculation is repeated for every hour of the month.

RMR will monitor the entity's Self-provision on a regular basis. If RMR determines that the entity has not been attempting to self-regulate, RMR will, upon notification, employ the full Load-based Assessment described above.

4. 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, even without well-defined boundary metering. 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 contract with WACM which will specify the terms of the Self-supply agreement.

Imbalance Services

Energy Imbalance

Energy Imbalance Service was designed and implemented to create an hourly accounting with each customer of the difference between its resources and obligations. An hourly accounting encourages the customer to more closely follow its load.

Western proposes to revise its formula rate for Energy Imbalance Service to be more consistent with FERC guidelines. Currently, RMR calculates imbalances in two deviation bands and assesses a 25 percent penalty for hourly deviations in excess of 5 percent of metered load. RMR proposes to implement a penalty and bandwidth structure with 3 deviation bands as follows:

1. Imbalances of less than or equal to 1.5 percent of metered load (or 4 MW,

whichever is greater) will be settled financially at 100 percent of the WACM pricing for that hour. Each hour will stand on its own—there will be no monthly netting. There is no change in the use of pricing. If the WACM aggregate imbalance is a net over-delivery, sales pricing will be used; if the aggregate imbalance is a net under-delivery, purchase pricing will be used.

2. Imbalances between 1.5 percent and 7.5 percent of metered load (or 4 to 10 MW, whichever is greater) will be settled financially at 90 percent of the WACM hourly sales price for over-scheduling imbalances or 110 percent of the WACM hourly purchase price for under-scheduling imbalances.
3. Imbalances greater than 7.5 percent of metered load (or 10 MW, whichever is greater) will be settled financially at 75 percent of the WACM hourly sales price for over-scheduling imbalances or 125 percent of the WACM hourly purchase price for under-scheduling imbalances.

Generator Imbalance

Western is proposing a new Generator Imbalance Service Formula Rate under Rate Schedule L-AS9 pursuant to FERC guidelines. This service would be provided to the following customers:

1. Multi-party generators whose output is shared by several entities.
2. Intermittent generators serving load inside WACM.
3. Non-intermittent generators serving load outside WACM.

RMR has marketed the maximum amount of capacity from its projects, leaving little flexibility for additional WACM services. Consequently, WACM will not regulate for the difference between the output of an intermittent generator located inside WACM and a delivery schedule from that generator serving load located outside WACM. Intermittent generators serving load outside WACM will be required to dynamically meter or dynamically schedule their generation to another balancing authority. An intermittent resource is a generator that is not dispatchable and cannot store its fuel source and, therefore, cannot respond to changes in system demand or to transmission security constraints (see discussion on the proposed formula rate for Regulation Service).

An entity's solely-owned non-intermittent generator inside WACM will be included in its Energy Imbalance Service calculation.

The formula rate for Generator Imbalance Service will be identical to that for Energy Imbalance Service, with the following exceptions:

1. Bandwidths will be calculated as a percentage of metered generation, since there is no load.
2. Intermittent generators will be exempt from the outer bandwidth. All deviations greater than 1.5 percent of metered generation will be subject only to a 10 percent

penalty.

In any hour, RMR may charge a customer a penalty for either Generator Imbalance Service or Energy Imbalance Service, but not both, unless the imbalances aggravate rather than offset each other. ***RMR is continuing to evaluate how the elimination of penalties will be implemented.***

Minimum Bandwidth

RMR believes that strict imposition of FERC Order 890 parameters for minimum bandwidth would be unnecessarily restrictive to small customers. LAP's Federal allocation may be the only resource that a small customer has available for following load and staying within prescribed bandwidths. RMR requires customers to schedule their Federal allocations 48 hours in advance, which is unique in the industry. With weekends and holidays, this schedule may have to be submitted several days in advance. This situation is exacerbated by the requirement that scheduling be done in whole megawatts, while loads (and imbalance) are measured to the kilowatt. In these circumstances, RMR believes that it is not reasonable to start assessing penalties after a 2 MW deviation.

No costs are being passed to customers with larger loads due to the larger minimum bandwidth. The imbalance penalty is not a recovery of costs—it is additional revenue. One of the reasons that Order 890 specified that penalty revenue be re-distributed to non-offending customers was to prevent the transmission provider (or balancing authority) from creating a profit center by retaining undistributed penalty revenues. Western considers its proposed rate formula to be superior to that recommended by Order 890 in that it is less punitive to customers.

Settlement and Pricing

All imbalances will be settled financially using WACM pricing for each hour. This is a continuation of the practice that's been in place since WACM purchase and sale transactions were distinguished from LAP transactions. Prior to that time, LAP real time transactions were used for Imbalance Service pricing. For all imbalance bands, the defaults for pricing in an hour when no sale or purchase has been made are:

1. WACM weighted average sale or purchase pricing for the day (on and off peak).
2. WACM weighted average sale or purchase pricing for the month (on and off peak).
3. WACM weighted average sale or purchase pricing for the prior month (on and off peak).
4. WACM weighted average sale or purchase pricing for the month prior to the prior month (and continuing until sale or purchase pricing occurs) (on and off peak).

The imbalance for each applicable entity inside WACM shall be totaled and netted to determine WACM's aggregate energy condition. The sign of the aggregate energy condition for WACM will determine whether sale or purchase pricing will be used in

the 1st band (surplus hours will use sale pricing, and deficit hours will use purchase pricing).

Outside the 1st band, imbalances will not be priced based on WACM's aggregate energy condition--they will be priced based on whether the entity's imbalance is an under- or over-delivery. WACM sales pricing will be used for over-deliveries and purchase pricing will be used for under-deliveries.

Since the publication of the FRN with the Proposed Formula Rates, RMR has decided to evaluate the pricing used in Imbalance Service.

Expansion of the Bandwidth

Expansion of the bandwidth may be done to accommodate the following: 1) physical resource loss; 2) transition of large thermal resources. Details are as follows:

1. RMR will expand the bandwidth during an event established by a Western-recognized reserve-sharing group, such as the Rocky Mountain Reserve Group. A response made by a member of the reserve group will be accounted for by an after-the-fact schedule. Normally, these events are 1-2 hours in duration. Since such events are accounted for by after-the-fact schedules, no expansion will be necessary for the entity receiving the response. The expanded bandwidth will apply to the customer that increased generation in response to the event and will be based on the magnitude of that customer's generation response.
2. During transition of large base-load thermal resources (capacity greater than 200 MW) between off-line and on-line following a reserve sharing group response, RMR may expand the bandwidth (eliminate all penalties) during hours in which the unit generates less than the predetermined minimum scheduling level. RMR may not have access to information necessary to determine these hours for some generators and will not have access to information on events for reserve sharing groups outside the RMR. Customers should request bandwidth expansion in hours in which they believe it to be warranted. Western may request additional information for its decision as to whether to grant request. Bandwidth will not be expanded when ramping services have been acquired by another entity.

Balancing Authority Operating Constraints

RMR will reserve the right to offer no credit for Imbalance Service over-deliveries during times of WACM operating constraints, such as "must-run" hydrologic conditions, or times when WACM cannot dispose of surplus energy. Due to the unpredictable nature of hour-to-hour energy imbalances and the very short notice for disposition of over deliveries, WACM may experience some hours of zero value sales and may eliminate credits in these hours.

If WACM is unable to dispose of the entire net over-delivery and operating criteria for the balancing authority are not met, there may be financial sanctions to Western

from reliability oversight agencies, such as the North American Electric Reliability Corporation or the Western Electricity Coordinating Council. In these cases, credit to customers will be eliminated and customers over-delivering may share in the cost of the sanction. Also, there may be conditions under which customers who under-deliver may share in any sanctions brought to Western by reliability oversight agencies.

Administrative Charge

RMR is proposing to assess an administrative charge on each monthly settlement under Imbalance Services. RMR will establish a pool of costs to be recovered to include, but not be limited to, salaries for personnel administering this service. RMR would then calculate the ratio of this amount to the absolute value of all Imbalance Service settlements for the most current year for which data is available. This percentage will be applied to the amount of each monthly settlement, reducing payments or increasing charges to the customers. For FY 2012, the calculation of the administrative charge is as follows:

$$\begin{array}{r}
 \text{Admin Costs to be} \\
 \text{Recovered} \\
 \text{Administrative Charge} = \frac{\text{-----}}{\text{Abs Value (Prior Yr} \\
 \text{Settlements)}} \\
 \\
 \text{\$184,591} \\
 = \frac{\text{-----}}{\text{\$7,948,101}}
 \end{array}$$

Administrative Charge = 2.32%

A charge of 2.32% of the absolute value of each settlement will be assessed against every settlement in FY 2012. Any over- or under-collection of the administrative costs being recovered will be included as an adjustment to a future year's Administrative Charge.

Since the publication of the FRN with the Proposed Formula Rates, RMR has been reconsidering how this charge will be applied.

Operating Reserves – Spinning and Supplemental Reserves Services

The proposed rates for Spinning and Supplemental Reserves Services under Rate Schedules L-AS5 and L-AS6 are unchanged.

WACM has no reserves available for sale. At a customer's request, WACM will purchase and pass through the cost of reserves, plus the cost of any activation energy, plus a fee for administration. For all reserves purchased, the customer will be responsible for purchasing adequate transmission to support the purchase.

V. Project Descriptions

Loveland Area Projects

The LAP is an operational and contractual integration of the Fryingpan-Arkansas Project (Fry-Ark) and the Pick-Sloan Missouri Basin Program—Western Division (P-SMPB-WD). LAP delivers Federal power to preference customers in Colorado, Wyoming, Nebraska, and Kansas. LAP sells more than 2 billion kilowatt-hours of power under long-term contracts set to expire in 2024. This power is generated at 20 hydroelectric plants. LAP also serves firm electric and transmission customers over a system of approximately 3,452 miles and 74 substations.

RMR also operates WACM. Ancillary services provided by WACM are supplied using LAP and CRSP resources and/or other purchased resources.

P-SMBP-WD

The Pick-Sloan Missouri Basin Program (PSMBP) is a comprehensive program authorized by Congress in 1944 to provide flood control, navigation improvement, irrigation, municipal and industrial water development, and hydroelectric production for the entire Missouri River Basin. Multipurpose projects have been developed on the Missouri River and its tributaries in Colorado, Montana, Nebraska, North Dakota, South Dakota, and Wyoming.

The Colorado-Big Thompson, Kendrick, and Shoshone Projects were administratively combined with P-SMBP in 1954, followed by the North Platte Project in 1959. These projects are known as the "Integrated Projects" of the P-SMBP. The Riverton Project was reauthorized as a unit of the P-SMBP in 1970. The P-SMBP-WD includes 18 power plants of the Integrated Projects plus P-SMBP's Yellowtail plant.

Fry-Ark

Fry-Ark is a trans-mountain diversion development in southeastern Colorado. Fry-Ark diverts water from the Fryingpan River and other tributaries of the Roaring Fork River to the Arkansas River on the East Slope of the Rocky Mountains. The Fryingpan and Roaring Fork Rivers are part of the Colorado River Basin, on the west slope of the Rocky Mountains. The water diverted from the west slope, together with regulated Arkansas River water, provides supplemental irrigation and municipal and industrial water supplies, and produces hydroelectric power. Flood control, fish and wildlife enhancement, and recreation are other important purposes of Fry-Ark.

The project has six dams and 5 reservoirs, 70 mile of tunnels and canals and the Mount Elbert pumped-storage power plant at Twin Lakes. The plant's two generating units have an installed capacity of 200 MW. While the majority of project capacity depends on water pumped during off-peak hours and water releases for power production when needed, some generation is attributed to flow-through water.

CRSP

CRSP consists of four major storage units: Glen Canyon Dam on the Colorado River in Arizona near the Utah border; Flaming Gorge Dam on the Green River in Utah near the Wyoming border; Navajo Dam on the San Juan River in northwestern New Mexico near the Colorado Border; and the Wayne N. Aspinall unit (formerly Curecanti) on the Gunnison River in west-central Colorado.

Five Federal power plants are associated with the project. Operating capacity of CRSP's 16 generating units is 1,727,350 kW. CRSP provides for the electrical needs of more than one million people spread across Colorado, Utah, New Mexico, Arizona, southern California, Nevada and Wyoming. More than 2,324 miles of high-voltage transmission lines are strung throughout these states to deliver power to customers.

VI. Rate Adjustment Procedures

Public Process

The formal Public Consultation and Comment Period began with the publication of the Federal Register Notice on January 28, 2011, and will end 90 days later, on April 28, 2011. During this time, interested parties may consult with and obtain information from RMR representatives about the rate proposals. A Public Information Forum and a Public Comment Forum will be held during the Public Consultation and Comment Period.

The Public Information Forum will be held at the following time at location:

March 9, 2011, at 9:00 a.m. MST
Budweiser Events Center
5290 Arena Circle
Loveland, CO

During the Public Information Forum, RMR representatives will explain the need for the Proposed Rate adjustment and answer questions. Questions not answered at the Public Information Forum will be answered in writing at least 15 days before the end of the Consultation and Comment Period.

The Public Comment Forum will be held at the following time and location:

March 9, 2011, at 1-2:30 p.m. MST
Budweiser Events Center
5290 Arena Circle
Loveland, CO

At the Public Comment Forum, interested persons may submit written or oral comments.

Both the Public Information Forum and the Public Comment Forum will be recorded and transcribed. Copies of the transcript will be available for purchase from the Court Reporter.

All interested parties may submit written comments to RMR at any time during the Consultation and Comment Period. All comments must be received by RMR by the end of the comment period to be considered in RMR's decision process. Written comments should be sent to:

Mr. Bradley S. Warren
Regional Manager
Western Area Power Administration
Rocky Mountain Customer Service Region
P.O. Box 3700
Loveland, CO 80539-3700

Comments may also be faxed to the Regional Manager at (970) 490-7213 or e-mailed to LAPTransAdj@wapa.gov

For further information, please contact:

Mrs. Sheila D. Cook
Rates Manager
Rocky Mountain Region
Western Area Power Administration
5555 East Crossroads Boulevard
Loveland, CO 80538-8986
Telephone: (970) 461-7211
e-mail: scook@wapa.gov

Mr. Steven L. Cochran
Rates Analyst
Rocky Mountain Region
Western Area Power Administration
5555 East Crossroads Boulevard
Loveland, CO 80538-8986
Telephone: (970) 461-7312
e-mail: scochran@wapa.gov

Revision and/or Finalization of Proposed Formula Rates

After the Consultation and Comment Period has expired and RMR has conducted a thorough review of oral and written comments, RMR may revise the Proposed Formula Rate(s). If Western's Administrator decides that further public comment on the revised Proposed Formula Rate(s) should be invited, a second consultation and comment period may be initiated. In that event, one or more additional meetings will be convened.

Deputy Secretary's Confirmation of Provisional Formula Rates

Following the end of the Consultation and Comment Period(s), RMR will finalize development of the Proposed Formula Rates. Western will request that the Deputy Secretary confirm, approve, and place these formula rates in effect on a provisional basis. The decision and an explanation of the principal factors leading to the decision will be announced in the Federal Register. RMR proposes to place the proposed formula rates into effect on October 1, 2011.

FERC's Approval of the Formula Rates

The Deputy Secretary will submit all information concerning the provisional rates to FERC and request approval of the methodologies used in their development. FERC may then confirm and approve the submittal, remand it to Western, or disapprove the submittal.

VII. Ratemaking Procedure Requirements

Environmental Compliance

In compliance with the National Environmental Policy Act of 1969 (NEPA) (42 U.S.C. 4321-4347), Council on Environmental Quality Regulations (40 CFR parts 1500-1508), and DOE NEPA Regulations (10 CFR part 1021), Western is in the process of determining whether an environmental assessment or an environmental impact statement should be prepared or if this action can be categorically excluded from those requirements.

Determination Under Executive Order 12866

Western has an exemption from centralized regulatory review under Executive Order 12866; accordingly, no clearance of this process by the Office of Management and Budget is required.

Appendix A

UNITED STATES DEPARTMENT OF ENERGY
WESTERN AREA POWER ADMINISTRATION
ROCKY MOUNTAIN REGION
Western Area Colorado Missouri Balancing Authority

SCHEDULING, SYSTEM CONTROL AND DISPATCH SERVICE

Applicable

Scheduling, System Control and Dispatch Service is required to schedule the movement of power into, out of, inside or through the Western Area Colorado Missouri Balancing Authority (WACM). This service must be purchased from the WACM operator. The rate will be applied to all schedules, except those for the delivery of transmission losses.

Unless other arrangements are made with WACM, the rate will be divided equally among the transmission providers displayed in the schedule that are inside WACM. The amounts applicable to non-Federal transmission will be assessed to those transmission providers. Those applicable to Federal transmission will be included in the Federal transmission service rates.

WACM will accept any number of scheduling changes over the course of the day without any additional charge.

**Rate Schedule L-AS1
SCHEDULE 1 to Tariff
October 1, 2011**

Effective

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

Formula Rate

$$\begin{array}{l} \text{Rate} \\ \text{per} \\ \text{Schedule} \end{array} = \frac{\text{Annual Cost of Scheduling Personnel and Related Costs}}{\text{Number of Schedules per Year}}$$

Rate

The rate to be in effect October 1, 2011, through September 30, 2012, is \$24.03 per schedule per day. A revised rate will go into effect October 1 of each year of the effective rate period based on the formula above and updated financial and schedule data. The Rocky Mountain Region will notify the Customer annually of the revised rate on or before September 1.

Any change to the charges for Scheduling, System Control and Dispatch Service 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.

UNITED STATES DEPARTMENT OF ENERGY
WESTERN AREA POWER ADMINISTRATION
ROCKY MOUNTAIN REGION
Western Area Colorado Missouri Balancing Authority

**REACTIVE SUPPLY AND VOLTAGE CONTROL FROM
GENERATION OR OTHER SOURCES SERVICE**

Applicable

To maintain transmission voltages on all transmission facilities within acceptable limits, generation facilities under the control of the Western Area Colorado Missouri Balancing Authority (WACM) are operated to produce or absorb reactive power. Thus, Reactive Supply and Voltage Control from Generation or Other Sources Service (VAR Support) must be provided for each transaction on the transmission facilities. The amount of VAR Support supplied to the Customer's (Federal Transmission Customers and customers on others' transmission systems inside WACM) transactions will be based on the VAR Support necessary to maintain transmission voltages within limits that are generally accepted in the region and consistently adhered to by WACM. The Customer must acquire this service from the WACM operator.

Customers with generators providing WACM with VAR Support may be excluded from the application of this rate. Any such exclusion must be documented in the Customer's Service Agreement.

Effective

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

**Rate Schedule L-AS2
SCHEDULE 2 to Tariff
October 1, 2011**

Formula Rate

Total Annual Revenue Requirement for Generation = TARRG
Percentage of Resource Capacity Used for VAR Support = % of Resource

$$\text{VAR Support Rate} = \frac{\text{TARRG} \times \% \text{ of Resource}}{\text{Load in WACM Requiring VAR Support}}$$

Rate

The rate to be in effect October 1, 2011, through September 30, 2012, is:

Monthly:	\$0.318/kW-month
Weekly:	\$0.073/kW-week
Daily:	\$0.010/kW-day
Hourly:	\$0.000436/kWh

A revised rate will go into effect October 1 of each year of the effective rate period based on the formula above and updated financial and load data. The Rocky Mountain Region will notify the Customer annually of the revised rate on or before September 1.

Any change to the charges for the Support 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.

UNITED STATES DEPARTMENT OF ENERGY
WESTERN AREA POWER ADMINISTRATION
ROCKY MOUNTAIN REGION
Western Area Colorado Missouri Balancing Authority

REGULATION AND FREQUENCY RESPONSE SERVICE

Applicable

Regulation and Frequency Response Service (Regulation Service) is necessary to provide for the continuous balancing of resources with obligations, 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 as necessary, predominantly through the use of automatic generation control equipment (AGC), 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 Balancing Authority (WACM) operator. Customers (Federal 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.

Types

There are four different applications of this Formula Rate:

1. **Load-based Assessment:** The Rate is reflected in the Formula Rate section and is applied to entities that serve load inside WACM. This load-based rate is assessed on an entity's auxiliary load (total metered load less Federal entitlements) and is also applied to the installed nameplate capacity of all intermittent generators inside WACM that also serve

load inside WACM.

2. **Exporting Intermittent Resource Requirement:** An entity that exports the output from an intermittent generator to another balancing authority is required to dynamically meter or dynamically schedule that resource out of WACM to another balancing authority. An Intermittent generator is one that is not dispatchable and cannot store its fuel source and, therefore, cannot respond to changes in system demand or to transmission security constraints.
3. **Self-Provision Using AGC Assessment:** The Rocky Mountain Region (RMR) allows entities with automatic or manual generation control to self-provide for all or a portion of their loads. Entities with generation control 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 NERC, to include MW flow data availability at 6-second or smaller intervals;
 - b. Have AGC capability;
 - c. Demonstrate Regulation Service capability; and
 - d. Execute a contract with WACM:
 - i. Provide all requested data to WACM.
 - ii. Meet SBA Error Criteria as described under section 3.1 below.
- 3.1. Self-provision is measured by use of the entity's 1-minute average ACE to determine the amount of self-provision. ACE is used to calculate the Regulation

**Rate Schedule L-AS3
SCHEDULE 3 to Tariff
October 1, 2011**

Service charges every hour as follows:

- a. If the entity's 1-minute average ACE for the hour is ≤ 0.5 percent of the entity's hourly average load, no Regulation Service charge is assessed by WACM for that hour.
 - b. If the entity's 1-minute average ACE for the hour is ≥ 1.5 percent of the entity's 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 > 0.5 percent of the entity's hourly average load, but < 1.5 percent of the entity's 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.
 - d. RMR monitors the entity's Self-provision on a regular basis. If RMR determines that the entity has not been attempting to self-regulate, RMR will, upon notification, employ the Load-based Assessment described in section 1 above.
4. Self- or Third-party supply: RMR 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, accurate as defined by NERC, to include MW flow data availability at

**Rate Schedule L-AS3
SCHEDULE 3 to Tariff
October 1, 2011**

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.

Customer Accommodation

For entities unwilling to take Regulation Service, self-provide it as described above, or acquire the service from a third party, RMR 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.

Effective

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

Formula Rate

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

$$\begin{array}{l} \text{Regulation} \\ \text{Service} \\ \text{Rate} \end{array} = \frac{\text{Total Annual Revenue Requirement for Regulation Service}}{\text{Load inside WACM Requiring Regulation Service} \\ \text{Plus the Nameplate of Intermittent Generators Serving} \\ \text{Load inside WACM}}$$

**Rate Schedule L-AS3
SCHEDULE 3 to Tariff
October 1, 2011**

Rates

Load-Based Assessment

The rate to be in effect October 1, 2011, through September 30, 2012, for Nos. 1 and 3, as described above in the "Types" section of this rate schedule is:

Monthly:	\$0.322 /kW-month
Weekly:	\$0.074/kW-week
Daily:	\$0.011/kW-day
Hourly:	\$0.000458/kWh

A revised rate will go into effect October 1 of each year of the effective rate period based on the formula above and updated financial and load data. RMR will notify the Customer annually of the revised rate on or before September 1.

Any change to the charges for Regulation Service 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.

UNITED STATES DEPARTMENT OF ENERGY
WESTERN AREA POWER ADMINISTRATION
ROCKY MOUNTAIN REGION
Western Area Colorado Missouri Balancing Authority

ENERGY IMBALANCE SERVICE

Applicable

The Western Area Colorado Missouri Balancing Authority (WACM) provides Energy Imbalance Service when there is a difference between a Customer's (Federal Transmission Customers and customers on others' transmission systems within WACM) resources and obligations. Energy Imbalance is calculated as resources minus obligations (adjusted for transmission and transformer losses) for any combination of generation, scheduled transfers, transactions, or actual load integrated over each hour. Customers inside WACM must either obtain this service from WACM or make alternative comparable arrangements to satisfy their Energy Imbalance Service obligation. This rate applies to all customers with load inside WACM.

Effective

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

Formula Rate:

All Energy Imbalance Service provided will be settled financially and accounted for hourly at the end of each month. Imbalances are calculated in three deviation bands as follows:

- 1) Imbalances of less than or equal to 1.5 percent of metered load (or 4 MW, whichever is greater) are settled financially at 100 percent of the WACM pricing for that hour. If the WACM aggregate imbalance is a net over-delivery, sales pricing will be used; if the aggregate imbalance is a net under-delivery, purchase pricing will be used.
- 2) Imbalances between 1.5 percent and 7.5 percent of metered load (or 4 to 10 MW, whichever is greater) are settled financially at 90 percent of the WACM hourly sales price for over-scheduling imbalances or 110 percent of the WACM hourly purchase price for under-scheduling imbalances.
- 3) Imbalances greater than 7.5 percent of metered load (or 10 MW, whichever is greater) are settled financially at 75 percent of the WACM hourly sales price for over-scheduling imbalances or 125 percent of the WACM hourly purchase price for under-scheduling imbalances.

All settlements for under-scheduling imbalances are incremented, and those for over-scheduling imbalances decremented, by an administrative charge. The charge is a fixed percentage of the monthly settlement.

Expansion of the bandwidth may be allowed during the following instances:

- The loss of a physical resource.

**Rate Schedule L-AS4
SCHEDULE 4 to Tariff
October 1, 2011**

- During transition of large base-load thermal resources (capacity greater than 200 MW) between off-line and on-line following a reserve sharing group response, when the unit generates less than the predetermined minimum scheduling level.

During periods of balancing authority operating constraints, the Rocky Mountain Region (RMR) reserves the right to eliminate credits for over-deliveries. The cost to Western of any penalty assessed by a regulatory authority due to a violation of operating standards resulting from under- or over-delivery of energy may be passed through to Energy Imbalance Service customers.

Pricing Defaults

When no hourly data is available, the pricing defaults for sales and purchase pricing both inside and outside the bandwidth are applied in the following order:

1. Weighted average sale or purchase pricing for the day (on and off peak).
2. Weighted average sale or purchase pricing for the month (on and off peak).
3. Weighted average sale or purchase pricing for the prior month (on and off peak).
4. Weighted average sale or purchase pricing for the month prior to the prior month (and continuing until sale or purchase pricing is located) (on and off peak).

Rate

The bandwidths, penalties and pricing described above are in effect October 1, 2011, through September 30, 2012. The administrative charge is 2.32% of the settlement amount before surcharge.

**Rate Schedule L-AS4
SCHEDULE 4 to Tariff
October 1, 2011**

A revised administrative charge will go into effect October 1 of each year based on updated financial data. RMR will notify the Customer annually of the revised administrative charge on or before September 1.

Any change to the charges for Energy Imbalance Service 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.

UNITED STATES DEPARTMENT OF ENERGY
WESTERN AREA POWER ADMINISTRATION
ROCKY MOUNTAIN REGION
Western Area Colorado Missouri Balancing Authority

OPERATING RESERVE - SPINNING RESERVE SERVICE

Applicable

Spinning Reserve Service (Reserves) is needed to serve load immediately in the event of a system contingency. Reserves may be provided by generating units that are on-line and loaded at less than maximum output. The Customers (Federal Transmission Customers and customers on others' transmission system inside Western Area Colorado Missouri Balancing Authority (WACM)) must either purchase this service from WACM or make alternative comparable arrangements to satisfy their Reserve obligations.

Effective

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

Formula Rate

WACM has no long-term Reserves available for sale. At a Customer's request, WACM will purchase Reserves and pass through the cost of Reserves and any activation energy, plus a fee for administration. The Customer will be responsible for providing the transmission to deliver the Reserves.

UNITED STATES DEPARTMENT OF ENERGY
WESTERN AREA POWER ADMINISTRATION
ROCKY MOUNTAIN REGION
Western Area Colorado Missouri Balancing Authority

OPERATING RESERVE - SUPPLEMENTAL RESERVE SERVICE

Applicable

Supplemental Reserve Service (Reserves) is needed to serve load in the event of a system contingency; however, it is not available immediately to serve load but rather within a short period of time. Reserves may be provided by generating units that are on-line but unloaded, by quick-start generation or by interruptible load. The Customers (Federal Transmission Customers and customers on others' transmission system inside Western Area Colorado Missouri Balancing Authority (WACM)) must either purchase this service from WACM or make alternative comparable arrangements to satisfy their Reserve obligations.

Effective

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

Formula Rate

WACM has no long-term Reserves available for sale. At a Customer's request, WACM will purchase Reserves and pass through the cost of Reserves and any activation energy, plus a fee for administration. The Customer will be responsible for providing the transmission to deliver the Reserves.

UNITED STATES DEPARTMENT OF ENERGY
WESTERN AREA POWER ADMINISTRATION
ROCKY MOUNTAIN REGION
Western Area Colorado Missouri Balancing Authority

TRANSMISSION LOSSES SERVICE

Applicable

The Western Area Colorado Missouri Balancing Authority (WACM) provides Transmission Losses Service to all Transmission Service Providers who market transmission inside WACM. The rate currently in effect is posted on the Rocky Mountain Region (RMR) Open Access Same-Time Information System (OASIS) Web site.

Effective

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

Formula Rate

Transmission losses will be assessed for all real-time and prescheduled transactions on transmission facilities managed by RMR or inside WACM. The Customer is allowed the option of energy repayment or financial repayment. Energy repayment may be either concurrently or seven days later, same profile. Customers must declare annually their preferred methodology of energy payback.

When a transmission loss energy obligation is not provided (or is under provided) by a Customer for a transmission transaction, the energy still owed for losses is calculated and a charge is assessed to the Customer, based on the WACM weighted average hourly purchase price.

**Rate Schedule L-AS7
October 1, 2011**

Pricing for loss energy due 7 days later, and not received by WACM, will be priced at the 7-day-later-price based on the WACM weighted average hourly purchase price.

There will be no financial compensation or energy return to Customers for over-delivery of transmission losses, as there should be no condition beyond the control of the Customer that results in overpayment.

Rate

This rate, as posted on the RMR OASIS, is in effect October 1, 2011, through September 30, 2012. Customers may settle financially or with energy. The pricing for this service will be the WACM weighted average hourly purchase price. When no hourly data is available, pricing defaults will be applied in the following order:

1. Weighted average purchase pricing for the day (on and off peak).
2. Weighted average purchase pricing for the month (on and off peak).
3. Weighted average purchase pricing for the prior month (on and off peak).
4. Weighted average purchase pricing for the month prior to the prior month (and continuing until sale or purchase pricing is located) (on and off peak).

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

**LONG-TERM FIRM AND SHORT-TERM FIRM POINT-TO-POINT
TRANSMISSION SERVICE**

Applicable

The Transmission Customer shall compensate the Loveland Area Projects (LAP) each month for Reserved Capacity under the applicable Firm Point-to-Point Transmission Service Agreement and the rate outlined herein.

Discounts

Three principal requirements apply to discounts for transmission service as follows:

- 1) any offer of a discount made by LAP must be announced to all eligible customers solely by posting on the Rocky Mountain Region's (RMR) Open Access Same-Time Information System Web site (OASIS);
- 2) any customer-initiated requests for discounts, including requests for use by the LAP merchant, must occur solely by posting on the OASIS; and
- 3) once a discount is negotiated, details must be immediately posted on the OASIS.

For any discount agreed upon for service on a path, from Point(s) of Receipt to Point(s) of Delivery, LAP must offer the same discounted transmission service rate for the same time period to all eligible customers on all unconstrained transmission paths that go to the same point(s) of delivery on the transmission system.

**Rate Schedule L-FPT1
SCHEDULE 7 to Tariff
October 1, 2011**

Effective

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

Formula Rate

$$\begin{array}{l} \text{Firm} \\ \text{Point-to-Point} \\ \text{Transmission Rate} \end{array} = \frac{\text{Annual Transmission Revenue Requirement}}{\text{LAP Transmission System Total Load}}$$

Rate

The rate to be in effect October 1, 2011, through September 30, 2012, is:

	<u>Maximum of:</u>
Yearly:	\$41.44/kW of reserved capacity per year
Monthly:	\$ 3.45/kW of reserved capacity per month
Weekly:	\$ 0.80/kW of reserved capacity per week
Daily:	\$ 0.11/kW of reserved capacity per day

A revised rate will go into effect October 1 of each year of the effective rate period based on the formula above and updated financial and load projections. RMR will notify the Transmission Customer annually of the revised rate on or before September 1.

Any change to the charges for Long-Term Firm and Short-Term Firm Transmission Service 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.

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

NON-FIRM POINT-TO-POINT TRANSMISSION SERVICE

Applicable

The Transmission Customer will compensate Loveland Area Projects (LAP) for Non-Firm Point-to-Point Transmission Service under the applicable Non-Firm Point-to-Point Transmission Service Agreement and the rate outlined herein.

Discounts

Three principal requirements apply to discounts for transmission service as follows:

1) any offer of a discount made by LAP must be announced to all eligible customers solely by posting on Rocky Mountain Region's (RMR) Open Access Same-Time Information System Web site (OASIS); 2) any customer-initiated requests for discounts, including requests for use by the LAP merchant, must occur solely by posting on the OASIS; and 3) once a discount is negotiated, details must be immediately posted on the OASIS. For any discount agreed upon for service on a path, from Point(s) of Receipt to Point(s) of Delivery, LAP must offer the same discounted transmission service rate for the same time period to all eligible customers on all unconstrained transmission paths that go to the same point(s) of delivery on the transmission system.

**Rate Schedule L-NFPT1
SCHEDULE 8 to Tariff
October 1, 2011**

Effective

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

Formula Rate

$$\begin{array}{ccc} \text{Maximum Non-Firm Point-to-Point} & = & \text{Firm Point-to-Point} \\ \text{Transmission Rate} & & \text{Transmission Rate} \end{array}$$

Rate

The rate to be in effect October 1, 2011, through September 30, 2012, is:

	<u>Maximum of:</u>
Monthly:	\$3.45/kW of reserved capacity per month
Weekly:	\$0.80/kW of reserved capacity per week
Daily:	\$0.11/kW of reserved capacity per day
Hourly:	4.73 mills/kWh

A revised rate will go into effect October 1 of each year of the effective rate period based on the formula above and updated financial and load projections. RMR will notify the Transmission Customer annually of the revised rate on or before September 1.

Any change to the charges for Non-Firm Point-to-Point Transmission Service 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.

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

**ANNUAL TRANSMISSION REVENUE REQUIREMENT FOR
NETWORK INTEGRATION TRANSMISSION SERVICE**

Applicable

Transmission Customers will compensate the Loveland Area Projects (LAP) each month for Network Transmission Service under the applicable Network Integration Service Agreement and the annual transmission revenue requirement described herein.

Effective

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

Formula Rate

$$\text{Monthly Charge} = \text{Transmission Customer's Load-Ratio Share} \times \frac{\text{Revenue Requirement}}{12}$$

Rate

The annual transmission revenue requirement in effect October 1, 2011, through September 30, 2012, is \$56,146,133.

A revised annual transmission revenue requirement will go into effect October 1 of each year of the effective rate period based on updated financial projections. RMR will notify the Transmission Customer annually of the revised revenue requirement on or before September 1.

**Rate Schedule L-NT1
Attachment H to Tariff
October 1, 2011**

Any change to the Annual Transmission Revenue Requirement for Network Integration Transmission Service 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.

Draft

UNITED STATES DEPARTMENT OF ENERGY
WESTERN AREA POWER ADMINISTRATION
ROCKY MOUNTAIN REGION
Western Area Colorado Missouri Balancing Authority

GENERATOR IMBALANCE SERVICE

Applicable

The WACM Balancing Authority provides Generator Imbalance Service when there is a difference between a Customer's (Federal Transmission Customers and customers on others' transmission systems inside WACM) resources and obligations. Generator Imbalance is calculated as actual generation minus scheduled generation for each hour. Customers inside WACM must either obtain this service from WACM or make alternative comparable arrangements to satisfy their Generator Imbalance Service obligation. This rate applies to all jointly-owned generators, intermittent generators serving load inside WACM, and any non-intermittent generators serving load only outside WACM.

Effective

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

Formula Rate

All Generator Imbalance Service will be settled financially and accounted for hourly at the end of each month. Imbalances are calculated in three deviation bands as follows:

- 1) Imbalances of less than or equal to 1.5 percent of metered generation (or 4 MW, whichever is greater) are settled financially at 100 percent of the WACM pricing for that

**Rate Schedule L-AS9
Schedule 9 to Tariff
October 1, 2011**

hour. If the WACM aggregate imbalance is a net over-delivery, sales pricing will be used; if the aggregate imbalance is a net under-delivery, purchase pricing will be used.

- 2) Imbalances between 1.5 percent and 7.5 percent of metered generation (or 4 to 10 MW, whichever is greater) are settled financially at 90 percent of the WACM hourly sales price for over-scheduling imbalances or 110 percent of the WACM hourly purchase price for under-scheduling imbalances.
- 3) Imbalances (other than those related to intermittent resources) greater than 7.5 percent of metered generation (or 10 MW, whichever is greater) are settled financially at 75 percent of the WACM hourly sales price for over-scheduling imbalances or 125 percent of the WACM hourly purchase price for under-scheduling imbalances. Intermittent resources will not be subject to the 25% penalty.

All settlements for under-scheduling imbalances are incremented, and those for over-scheduling imbalances decremented, by an administrative charge. The charge is a fixed percentage of the monthly settlement.

Expansion of the bandwidth will be allowed during the following instances:

- The loss of a physical resource.
- During transition of large base-load thermal resources (capacity greater than 200 MW) between off-line and on-line following a reserve sharing group response, when the unit generates less than the predetermined minimum scheduling level.

**Rate Schedule L-AS9
Schedule 9 to Tariff
October 1, 2011**

During periods of balancing authority operating constraints, the Rocky Mountain Region (RMR) reserves the right to eliminate credits for over-deliveries. The cost to RMR of any penalty assessed by a regulatory authority due to a violation of operating standards resulting from under- or over-delivery of energy may be passed through to Energy Imbalance Service customers.

Pricing Defaults

When no hourly data is available, the pricing defaults for sales and purchase pricing both inside and outside the bandwidth are applied in the following order:

1. Weighted average sale or purchase pricing for the day (on and off peak).
2. Weighted average sale or purchase pricing for the month (on and off peak).
3. Weighted average sale or purchase pricing for the prior month (on and off peak).
4. Weighted average sale or purchase pricing for the month prior to the prior month (and continuing until sale or purchase pricing is located) (on and off peak).

Rate

The bandwidths, penalties and pricing described above are in effect October 1, 2011, through September 30, 2012. The administrative charge is 2.32% of the settlement amount before the charge.

A revised administrative charge will go into effect October 1 of each year based on updated financial data. RMR will notify the Customer annually of the revised administrative charge on or before September 1.

**Rate Schedule L-AS9
Schedule 9 to Tariff
October 1, 2011**

Any change to the charges for Generator Imbalance Service 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.

Draft

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

PENALTY RATE FOR UNRESERVED USE OF TRANSMISSION SERVICE

Applicable

The Transmission Customer shall compensate the Loveland Area Projects (LAP) each month for Unreserved Use of Transmission Service (Unreserved Use) under the applicable transmission service rates as outlined herein. Unreserved Use is provided when a Transmission Customer uses transmission service that it has not reserved or uses transmission service in excess of its reserved capacity. Unreserved Use may also include a Customer's failure to curtail transmission when requested.

Penalty Rate

The penalty rate for a Transmission Customer that engages in Unreserved Use is 200 percent of LAP's approved rate for firm point-to-point transmission service assessed as follows: the Unreserved Use Penalty for a single hour of Unreserved Use will be based upon the rate for daily firm point-to-point service. The Unreserved Use Penalty for more than one assessment for a given duration (e.g., daily) will increase to the next longest duration (e.g., weekly). The Unreserved Use Penalty for multiple instances of Unreserved Use (e.g., more than 1 hour) within a day will be based on the rate for daily firm point-to-point service. The Unreserved Use Penalty for multiple instances of Unreserved Use isolated to 1 calendar week would result in a penalty based on the rate for weekly firm point-to-point service. The Unreserved Use Penalty for

**Rate Schedule L-AS10
Schedule 10 to Tariff
October 1, 2011**

multiple instances of Unreserved Use during more than 1 week in a calendar month is based on the rate for monthly firm point-to-point service.

A Transmission Customer that exceeds its firm reserved capacity at any point of receipt or point of delivery or an eligible customer that uses transmission service at a point of receipt or point of delivery that it has not reserved is required to pay for all ancillary services that were provided by WACM and associated with the Unreserved Use. The Customer will pay for ancillary services based on the amount of transmission service it used and did not reserve.

Effective

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

Rate

The rate for Unreserved Use is 200 percent of LAP's approved rate for firm point-to-point transmission service assessed as described above.

Any change to the Penalty Rate for Unreserved Use of Transmission Service 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.

Appendix B



Loveland Area Projects & WACM Balancing Authority

Transmission & Ancillary Services Formula Rates

Rocky Mountain Region
Informal Customer Meeting
September 29, 2010

1



Agenda

- Welcome and Introductions
- Why we're here
- Process
- Rate Proposals
- Next Steps
- Contact Information

2



Why We're Here

- OCP Implementation
- Move toward common interpretation and implementation of Tariff provisions
- Reorganization
- Western's OATT (Open Access Transmission Tariff)
 - Originally filed 1/6/98, Revised 1/25/05
 - To comply with FERC 888
- Revised OATT filed 9/30/09 (effective 12/1/09)
 - To comply with FERC 890 and Western's statutory & regulatory requirements

3



Why We're Here

- Most formula rates expire February 28, 2011 (Rate Order WAPA-106)
 - LAP Transmission Rates
 - Network
 - Point-to-Point (Firm and Non-Firm)
 - Transmission Losses
 - WACM Ancillary Service Rates
 - Scheduling, System Control and Dispatch
 - Reactive Supply and Voltage Control from Generation Sources
 - Regulation and Frequency Response (Rate Order WAPA-118 exp. May 2011)
 - Energy Imbalance
 - Operating Reserves – Spinning Reserves
 - Operating Reserves – Supplemental Reserves



4



Why We're Here

- New Rates:
 - Generator Imbalance
 - Penalty Rate for Unreserved Use of Transmission

5



Proposed Timeline for Rate Process for Transmission & Ancillary Services

<u>Date</u>	<u>Action</u>
Sept 29, 2010	Informal Meeting with Customers in Loveland
November 2010 ?	Possible 2 nd Informal Meeting
January 2011	Publish Rate Extension for Current Rates
February 2011	Publish Federal Register Notice (FRN) for Rate Proposal
May 2011	End of Comment Period
August 2011	Publish FRN for Final Rate Formulas
October 2011	New Rate Formulas in Effect

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LAP Transmission Rate Formulas Schedules 7, 8 & Attachment H

Formula for Network Transmission:

$$\text{Monthly Charge} = \text{Load Ratio Share} \times \text{Annual Transmission Revenue Requirement (ATRR)} \times 1/12$$

Formula for Point-to-Point:

$$\text{Rate} = \frac{\text{(ATRR)}}{\text{LAP Transmission System Load}}$$

No Change to Existing Formulas



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LAP Transmission Rate Components

Annual Transmission Revenue Requirement (ATRR) =

- Annual Cost of Transmission System
- + System Augmentation Expense
- Ancillary Service Revenue
- Point-to-Point Transmission Revenue
(including Revenues from Unreserved Use of Transmission)

8



LAP Transmission Rate Components

Annual Cost of Transmission System =

$$\frac{\text{LAP Transmission Plant}}{\text{Total LAP Plant}} \times \text{Expenses (O\&M, Depreciation, Interest)}$$

- Minor change from existing methodology
 - Moving to '% of Plant' Methodology
 - Current Formula Uses an Annual Fixed Charge Rate

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Lap Transmission Rate Components

- Change being proposed on Data Collection:
 - Projection of costs & loads for the current year (e.g., estimated FY12 data for the FY12 rate) vs. 2-year old historical data.
 - Uses projections to estimate transmission rate components for the upcoming year.
 - Will allow Western to match cost recovery with the incurring of the cost.
 - Allows for collection of plant costs as soon as the plant is placed in service
 - Provides for a 'truing up' of costs after the year is complete.

10



LAP Transmission Rate Components— Example of True-Up

- Year 1 Projected Rev Requirement = \$50,000,000
- Year 1 Projected Load 2,500,000 kW

2 years later

- Year 1 Actual Rev Requirement = \$51,000,000
- Year 1 Revenue Collected (including bundled w/FES) = \$48,000,000
- Difference \$ 3,000,000

Two components of difference:

Change in Revenue Requirement	\$ 1,000,000
Under-collection of projected revenue requirement due to over-estimation of load	<u>\$ 2,000,000</u>
	\$ 3,000,000

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LAP Transmission Rate Components— Example of True-Up (Cont'd)

- Difference to be included with Year 3 projected revenue requirement:

Year 3 Projected Rev Requirement	\$54,000,000
Year 1 True-Up	<u>\$ 3,000,000</u>
Year 3 Adjusted Revenue Requirement	\$57,000,000

Questions?

12

- No change to Rate Schedule.
 - Rate as posted on the WACM Open Access Same-Time Information System (OASIS).
 - Energy Return or Financial Settlement.
 - Energy return concurrent or 7 days later.
 - Option to include merchant transactions in imbalance calculation.
 - WACM pricing.
- Postage stamp rate is currently 4.5%, as of Oct 1, 2010



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Ancillary Services—Penalty Rate for Unreserved Use of Transmission (Schedule 10)

- New Rate Schedule for Penalty Rate for Unreserved Use of Transmission (previously part of Transmission Rate schedules).
 - 200% penalty for the period of unreserved use.
 - Use FERC-defined periods (e.g., no hourly rate).
 - No distribution of penalty revenue above the base charge to non-offending customers. Revenue will be returned to customers via credits to future transmission revenue requirements.



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Proposed Formula

$$\text{WACM Scheduling Rate} = \frac{\text{Total Annual Revenue Requirement for Scheduling}^*}{\text{Number of Schedules Per Year}}$$



* Changing description in numerator from 'Cost of Scheduling and Dispatch Personnel, and Related Costs'

- Proposed Change on Data Collection
 - We're more narrowly defining the costs recovered through this rate to be costs related to tagging.
- Proposed Change on Implementation/Billing
 - The tag charge will be divided equally among all transmission providers on the tag.
 - More equitable method of cost allocation.
 - Effects each customer differently, depending on the structure of their tags.



Ancillary Services – Scheduling and Dispatch

Rate in Effect for FY 2011 \$38.30 per tag per day

Estimated Rate Calculated Using
Actual FY 2009 Financial Data
in Proposed Formula \$21.00 per tag per day *

* Example only. Not necessarily an indicator of what the actual
FY12 rate will be.



Ancillary Services-Scheduling & Dispatch Example of Billing

Three transmission providers on the tag...

<u>Trans.Prov.</u>	<u>FY 2011 Rate</u>	<u>Est. FY 2012 Rate</u>
TP #1		\$ 7.00
TP #2		\$ 7.00
TP #3	\$ 38.30	\$ 7.00
Total Collected for Tag	\$ 38.30	\$ 21.00



**Ancillary Services-Scheduling & Dispatch
Example of Billing**

If LAPT or CRCM is a TP on the tag...

	<u>FY 2011 Rate</u>	Est <u>FY 2012 Rate</u>
TP #1		\$ 7.00
TP #2 (LAPT)		\$ 7.00
TP #3	\$ 38.30	\$ 7.00
Total Collected for Tag	\$ 38.30 -0-	\$ 21.00 14.00

Charge to LAPT will be bundled in the transmission rate.

Questions?

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**Ancillary Services-Reactive Supply
Schedule 2**

- Also referred to as 'VAR Support'

Formula

$$\text{WACM VAR Support Rate} = \frac{\text{TARRG} \times \% \text{ of Resource}}{\text{Load Requiring VAR Support}}$$

Where:

- TARRG = Total Annual Revenue Requirement for Generation
- % of Resource = Percentage of Resource Capacity Used for VAR Support
= (1 minus power factor)
- Load Requiring VAR Support = Trans12-cp minus self supply/waivers

No Change to Existing Formula

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Ancillary Services-Reactive Supply

- Change being proposed on Data Collection:
 - % of Resource will be based on weighted average of unit nameplate values (1-PF). Currently use actual unit performance data.
- | | <u>Proposed</u> | <u>Current</u> |
|------------|-----------------|----------------|
| LAP Units | 5.78% | 2.9% |
| CRSP Units | 4.94% | 3.6% |
- Denominator will include nameplate of intermittent resources that do not meet specified requirements with regard to reactive supply.
 - "Request for Waiver" may be provided to the Balancing Authority with proof that intermittent resources do not require VAR Support

Questions?

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Ancillary Services-Regulation Schedule 3

Formula

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

Load is a 12-cp calculation (on the LAP system peak) of loads in the balancing authority taking this service (not necessarily on the LAP system)

No Change to Existing Formula

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Ancillary Services—Regulation

- Three components to Regulation Rate:
 - Load-based Assessment
 - Self-provision Assessment
 - Exporting Intermittent Resource Requirement

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Ancillary Services-Regulation Load-Based Assessment

- No change being proposed for Load-Based Assessment:
 - Revenue requirement includes:
 - Plant costs for regulation from LAP units (Amount of required regulation capacity to be re-evaluated every year).
 - Purchased regulation.
 - Power purchases needed to support the ability of the LAP units to regulate upward during on-peak periods.
 - Lost sales opportunity from having to generate in off-peak hours to support downward regulation.
 - Third-party transmission costs associated with regulating.
 - Costs for regulation from CRSP units.
 - Denominator is BA load requiring regulation, including load served by Federal allocations, plus nameplate of intermittent resources.

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Ancillary Services-Regulation

Example

Customer A:

12-cp Aux Load within WACM* = 150,000 kW

Wind generator serving WACM Load = 8,000 kW (nameplate)

FY 2011 Regulation Rate = \$0.339/kW-month

Monthly Invoice:

Load 150,000 x \$0.339 = \$ 50,850

Wind 8,000 x \$0.339 = 2,712

Total \$ 53,562

* Including loads not on the LAP transmission system.

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Ancillary Services-Regulation Self-Provision Assessment

- Change being proposed to the Self-Provision Assessment:
 - Currently, self-provision can be measured by use of the customer's 1-minute average ACE or the customer's 1-minute average of the first derivative of the ACE (customer's choice).
 - Proposed assessment will be measured only by the customer's 1-minute average ACE.
 - More accurate measurement of the service being provided.

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Ancillary Services-Regulation Exporting Intermittent Resource Requirement

- Change being proposed for Exporting Intermittent Resource Assessment:
 - An intermittent resource not serving load inside the balancing authority will be required to be dynamically metered out of the balancing authority.
 - Requires Metering Changes.
 - No export schedule from WACM.
 - Customer must still purchase transmission.
 - There will no longer be a Regulating Reserve Charge for mismatched capacity.



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Ancillary Services-Regulation Non-Conforming Load

- The Rate Schedule will continue to exclude language addressing Non-Conforming Load.
- In the future, we plan to analyze load variations. If there is a need, we will include rate provisions to address non-conforming load in a future rate schedule.

Questions?

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Ancillary Services—Reserves Schedules 5 & 6

- No change to rate schedules for Spinning and Supplemental Reserves.
- No long-term Reserves are available beyond internal WACM requirements.
- At a customer's request, WACM may purchase Reserves and pass through that cost, plus an amount for administration. The customer would be responsible for providing the transmission for the reserves.

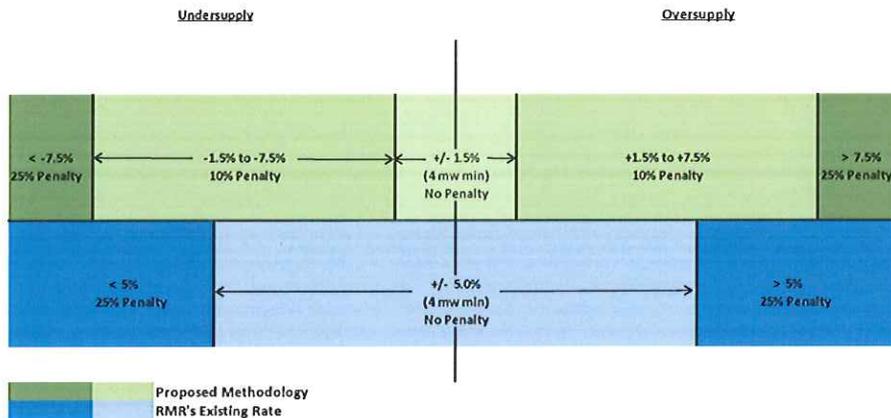
Questions?

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Ancillary Services-Energy Imbalance Schedule 4

ENERGY IMBALANCE BANDWIDTHS



Existing Rate - Imbalances settled using WACM real time pricing.
Proposed Method - Imbalances settled using WACM real time pricing.

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Ancillary Services-Energy Imbalance

- Features of EI implementation:
 - Continue to be calculated on metered load.
 - Continued use of 4 MW minimum on first band (vs. 2 MW).
 - Continued use of WACM real-time pricing as representative of incremental cost.
 - No redistribution of penalty revenue.
 - Adding administrative surcharge.



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Ancillary Services-Energy Imbalance Example Calculation of Administrative Charge

Pool of Admin Costs to be Recovered	\$ 185,000
Absolute Value of Prior Yr Settlements	\$ 10,200,000

= Percentage of Costs to Settlement **1.81%**

- Will be re-calculated every year.
- Will be assessed against all settlements.

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Ancillary Services-Energy Imbalance

General Effects of Proposed Bandwidth and Penalty Structure On Invoicing for FY 2009

- Large Customers—Amounts billed would have increased, as there is now a penalty for deviations between 1.5% and 5%.
- Small Customers—Amounts billed would have decreased, as the penalty for excursions beyond the 4 MW minimum have decreased from 25% to 10%.
- Wind Units—Amounts billed would have increased, as there is now a band with an associated penalty.
- Multi-party Generators—Results were mixed, as the bandwidth was already at 2% and is changing to 1.5%.

These are the general trends noted by applying the proposed formula to FY09 performance and do not imply a guarantee of future results.

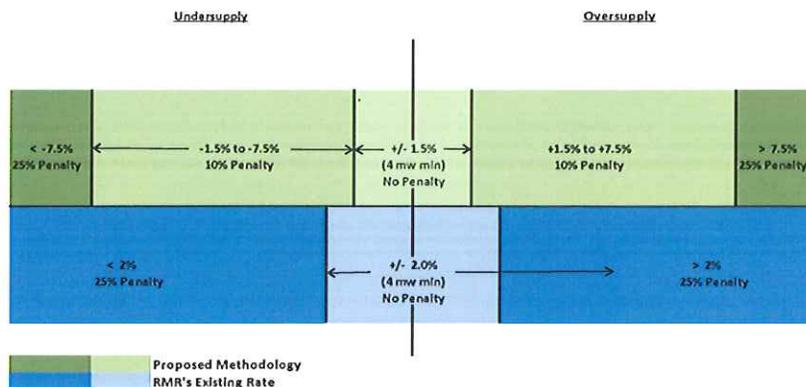
Questions?

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Ancillary Services-Generator Imbalance Schedule 9 (new)

GENERATOR IMBALANCE BANDWIDTHS



Existing Rate - Imbalances settled using WACM real time pricing.
Proposed Method - Imbalances settled using WACM real time pricing.

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Ancillary Services-Generator Imbalance

- Features of GI Implementation:
 - Same bandwidth and penalty structure as with Energy Imbalance calculations.
 - Calculated on metered generation (vs. load).
 - No 7.5% bandwidth for intermittent resources.
 - Will apply to:
 - Multi-party generation facilities.
 - Intermittent generation facilities serving load in the WACM balancing authority.
- 4 MW minimum, WACM pricing, admin fee.
- No redistribution of penalty revenue.

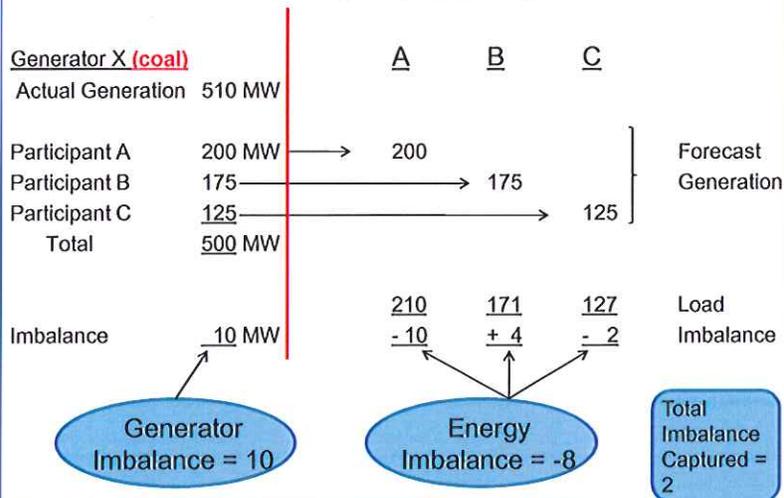


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Ancillary Services-Energy & Generator Imbalance Examples

How Multi-Party Generators Work-Method A (Participant Schedules)

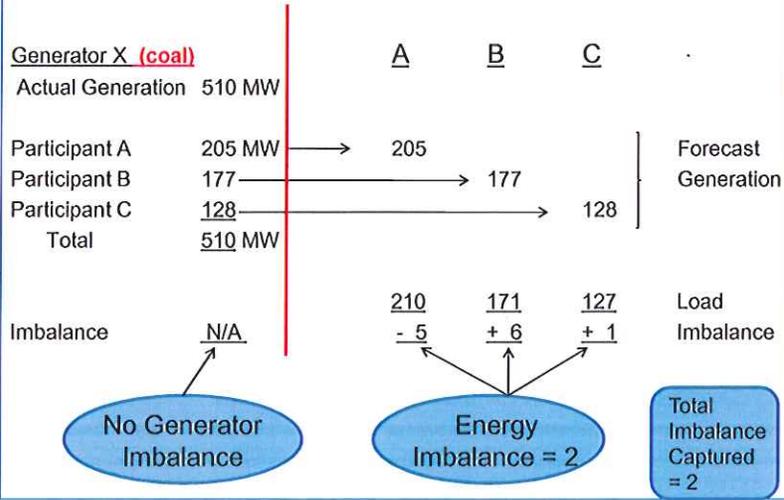


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Ancillary Services-Energy & Generator Imbalance Examples

How Multi-Party Generators Work-Method B (Generation is Allocated)

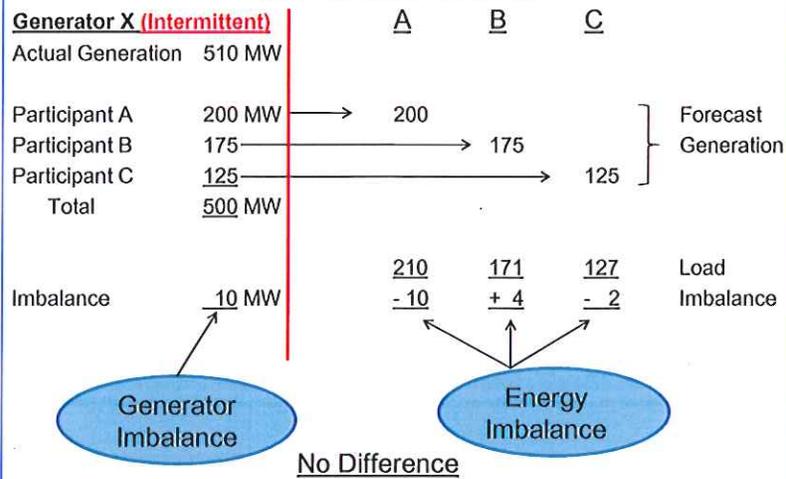


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Ancillary Services-Energy & Generator Imbalance Examples

How Multi-Party Generators Work-Method A (Participant Schedules)

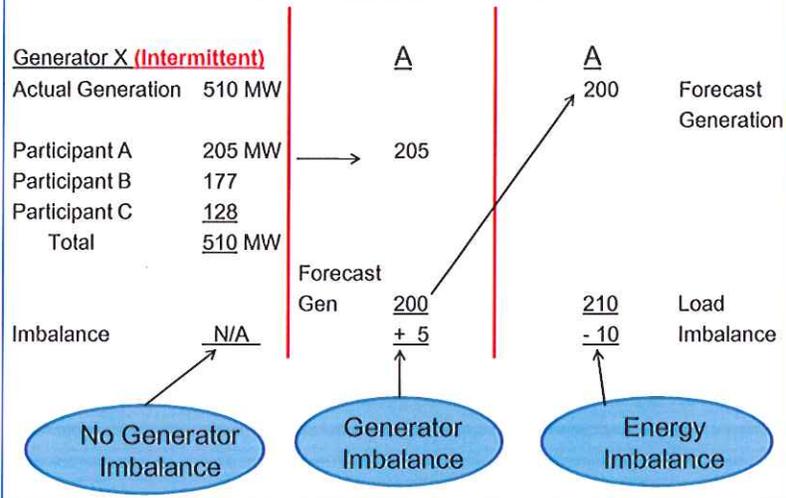


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Ancillary Services-Energy & Generator Imbalance Examples

How Multi-Party Generators Work-Method B (Generation is Allocated)



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Ancillary Services Summary of Significant Changes

- Transmission
 - Projecting Cost and Load
- Scheduling and Dispatch
 - Tagging Costs Only
 - Tag cost allocated to each transmission provider on tag
- Reactive Supply
 - % of resource based on generator nameplate
 - Intermittent subject to service pending waiver
- Regulation
 - Exporting Intermittent—requirement to dynamic out
- Energy Imbalance
 - New Bandwidth and penalty structure
 - Administrative Charge
- New Penalty Rate for Unreserved Use of Transmission
- New Generator Imbalance Rate

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Questions??



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Next Steps

Next Steps

- Western will evaluate comments/feedback received today.
- If necessary, we will hold a 2nd informal meeting tentatively in early November.
- Extend current rates to allow for public process.
- Formal process expected to begin in Feb 2011 with the publication of a Federal Register Notice with the Final rate proposals; and to be complete by May 2011.
- Rates become effective October 1, 2011.

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Contact Information

Contact Information:



Sheila Cook, Rates Manager
(970) 461-7211
scook@wapa.gov

Steve Cochran, Rates Analyst
(970) 461-7312
scochran@wapa.gov

General e-mail: laptransadj@wapa.gov

For further information relating to these rate proposals, visit our website at <http://www.wapa.gov/rm/ratesRM/2012/default.htm>

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Contact Information

Contact Information:



Ron Moulton
Transmission Services Manager
(602) 605-2668
moulton@wapa.gov

Ed Hulls
Operations Manager
(970) 461-7566
hulls@wapa.gov

For further information relating to these rate proposals, visit our website at <http://www.wapa.gov/rm/ratesRM/2012/default.htm>

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Thank you for you interest in this process!

**Please feel free to contact us with any questions or
comments.**

Appendix C

LAP Transmission Formula Rates
WACM Ancillary Services Formula Rates
Informal Customer Meeting—Comments and Responses
September 29, 2010

Notes from the September 29th meeting are in black. Comments submitted subsequent to the meeting, as well as Western’s expanded responses to comments on each rate, are shown in blue.

I. Transmission

- a. A customer wanted to know the dollar values of the components of the Annual Transmission Revenue Requirement (Annual Cost of Transmission System, System Augmentation, Scheduling and Dispatch Revenues, Point-to-Point Transmission Revenues). Western provided that information from the FY 2011 rate design (FY 2009 financial information) at the meeting:

Annual Cost of Transmission	\$58.2 M
System Augmentation	-
Scheduling and Dispatch Revenues	(1.9)
Long-Term Firm Transmission Revenues	(4.4)
Nonfirm and Short-term Firm Trans Rev	<u>(3.9)</u>
Annual Transmission Revenue Reqt	\$48.0 M

II. Scheduling, System Control and Dispatch (SSCD)

- a. There was discussion about the allocation of tag costs to all the transmission providers (TPs) on the tag, as opposed to the current method of charging the costs to the last TP on the tag.
 - i. One customer wanted examples of how it would work. Would we be able to invoice everyone?
 - ii. Another customer brought up the point that they were charged for scheduling just because their transmission was used, even though a different customer created the tag.
- b. Western agreed to gather some examples of real tags and provide them to the customers.
 - i. Since an e-tag contains proprietary information not to be shared with entities that are not a party to the tag, we have decided not to post examples of actual tags describing how the proposed charging methodology would apply to those tags. If any customer would like to discuss the proposed methodology in connection with their tags, please contact us.

LAP Transmission Formula Rates
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- c. Subsequent to the meeting, a customer commented that Western is unique in its decision to charge the transmission provider rather than the transmission customer for scheduling and dispatch service.
- d. Western's Expanded Response
 - i. Western's direct transmission customers do not pay a separate SSCD charge—the tag costs are bundled in Western's transmission rate. The charges that are assessed under this rate schedule are for tags using other transmission providers in the balancing authority. A purchasing-selling entity (PSE) who submits a tag to WACM using transmission other than LAPT or CRCM is not Western's transmission customer on that transaction. It's not guaranteed that we will have a contractual vehicle under which we can charge another transmission provider's customer for scheduling and dispatch service. This is why we've chosen to charge the transmission providers, with whom we do have such a vehicle. Our position has consistently been that the transmission providers should be passing these SSCD costs along to their transmission customers. [Note: this may not be an issue for a balancing authority with only the operator's transmission.]
 - ii. Western is still evaluating this issue. We are attempting to develop a billing methodology that will assess the correct entities on the highest percentage of the tags, given that the entity that should be charged may be a party with which we do not have a contractual vehicle under which we can invoice. Another proposal we're considering is to have a two-pronged approach to invoicing:
 - 1. If the tag sinks within WACM, Western would charge the sink PSE.
 - 2. If the tag sinks outside WACM, Western will adopt the proposal presented at the meeting—divide the charge equally among the transmission providers inside WACM, unless we have an arrangement with the PSE outside WACM.

Please provide us your comments on this second proposal.

III. Reactive Supply

- a. There was a question as to the inclusion of intermittent resources in the denominator. One party asked if this would apply to hydro.
 - i. Western responded that this applied to 'non-dispatchable' resources.

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WACM Ancillary Services Formula Rates
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ii. Western's Expanded Response

1. Western has since decided to not pursue this methodology. The nameplate of intermittent resources will not be included in the denominator of the Reactive Supply and Voltage Control from Generation Sources Rate.

IV. Energy Imbalance

a. Bandwidth Structure

- i. A customer questioned why Western doesn't use the minimum bandwidth specified in FERC Order 890. The customer indicated that it doesn't make sense to use 4 MW instead of 2 MW and that reducing penalty revenue puts upward pressure on the Firm Electric Service (FES) rate.

1. At the meeting, Western responded that the narrower bandwidth is unnecessarily punitive to our small customers who are required by Western to schedule 2 days in advance (Western is unique in the industry in this requirement) and don't have staff to follow their loads on a real-time basis. Western conceded that changing the bandwidth minimum from 4 MW to 2 MW would put insignificant downward pressure on the FES rate. However, the bandwidth minimum is currently 4 MW, so keeping it at that level has no effect on the FES rate.

ii. Western's Expanded Response

1. Western believes that strict imposition of FERC Order 890 parameters would be unnecessarily restrictive to small customers. Western's allocation may be the only resource that a small customer has available for following load and staying within prescribed bandwidths. The Rocky Mountain Region requires customers to schedule their Federal allocations 48 hours in advance, which is unique in the industry. With weekends and holidays, this schedule may have to be submitted several days in advance. This situation is exacerbated by the requirement that scheduling be done in whole megawatts, while loads (and imbalance) are measured to the kilowatt. In these circumstances, Western believes that it is not reasonable to start assessing penalties after a 2MW deviation.

LAP Transmission Formula Rates
WACM Ancillary Services Formula Rates
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2. No costs are being passed to customers with larger loads due to the larger minimum bandwidth. The energy imbalance penalty is not a recovery of costs—it is additional revenue. One of the reasons that Order 890 specified that penalty revenue be redistributed to non-offending customers was to prevent the transmission provider (or balancing authority) from creating a profit center by retaining undistributed penalty revenues. Western considers its proposed rate formula to be superior to that recommended by Order 890 in that it is less punitive to customers. Western does not agree with the assertion that making the rate less punitive for a small customer results in it being more punitive to large ones by virtue of crediting a lower level of penalty revenue to the Firm Electric Service Rate.
3. Western has not acted in an arbitrary manner in proposing the 4 MW minimum bandwidth. This same 4 MW minimum has been in place since Western first implemented its Energy Imbalance Rate in July 2002. We are not convinced that there is adequate justification for modifying it.

b. Administrative Charge

- i. A customer suggested that we allocate the administrative costs evenly rather than by settlements.
 1. Western responded that this would not result in a fair allocation of the costs, as some calculations are very difficult to complete and others are very easy.
 2. Western stated that, prior to our decision to propose allocation by settlements, we also looked at allocation by load (or generation).
 3. Western will entertain other suggestions, as well.
- ii. The customer stated that this is not 'superior' (in the FERC sense—less punitive to the customer) to the FERC model.
 1. Western replied that FERC is silent on this issue.
- iii. The customer added that his staff has to spend time reviewing the calculations and wondered if he should charge those costs back to Western.
 1. Another customer responded that all the customers perform this review.

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- iv. Subsequent to the meeting, a customer expressed concern that Western's methodology may unintentionally pass under-recovered ancillary services costs to transmission customers and questioned whether this methodology would be applied to other ancillary services.
- v. Western's Expanded Response
 - 1. Settlements under Energy and Generator Imbalance Service are based only on energy purchase and sales prices. Under our current rate design, costs for administering the Energy Imbalance Service end up being borne by the Firm Electric Service customers. Many of the Firm Electric Service customers are not Energy Imbalance Customers. Western does not consider it proper to continue charging these customers for the administration of other customers' Energy Imbalance Service. Recovery of administrative costs under the proposed imbalance rate schedules is also reflective of customers' stated wishes that all of Western's rates include the correct costs. Western does not consider this to be an issue of OATT superiority.
 - 2. Energy Imbalance is the only service in which settlements are based on a pass-through of energy purchase and sale prices that don't include any personnel costs. All of Western's other ancillary service rates have operation and maintenance costs, including personnel costs, built into the designs, so it is not necessary to allocate additional administrative costs to those rates.

V. Generator Imbalance

- a. Multi-Party Generators (Slide 39, showing that a wind generator imbalance calculation has to be separate from the energy imbalance calculation for the same customer).
 - i. A customer noted that it's possible for the customer to have offsetting imbalances which net to zero in the two calculations and still be charged penalties in both calculations.
 - 1. Western agreed, noting that, while the participant schedules appearing in both calculations are provided by the customers, Western's Rates and Settlements Groups would be working together to create programming to identify hours where this

LAP Transmission Formula Rates
WACM Ancillary Services Formula Rates
Informal Customer Meeting—Comments and Responses
September 29, 2010

occurs. We will work with customers to develop a process to handle these situations.

2. Western's Expanded Response
 - a. Western has developed formula modifications for the Energy Imbalance template which will identify hours in which a penalty has been assessed in both the Generator Imbalance calculation and the Energy Imbalance calculation on offsetting imbalances, and will remove the penalty from the Generator Imbalance calculation. Since participant schedules which appear in both calculations are provided by the customer, it will be the customer's responsibility to identify hours in which they believe that both penalties should be eliminated. This process may require coordination with the operator of a multi-party generation facility.