



# **Integrated System Transmission and Ancillary Services Rates**

Public Information Forum

June 24, 2009

9 a.m. -12 p.m. CDT, Sioux Falls, SD



## Introductions



- Lloyd Linke – Operations Manager
- Ron Klinefelter – Attorney-Adviser
- Linda Cady-Hoffman – Rates Manager
- Steve Sanders – Operations and  
Transmission Advisor
- Stan Bayley – Public Utilities Specialist



# Agenda

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1. Public Process Overview
2. Summary of Advance Notice of Rate Adjustment Meeting
3. Transmission Rates
4. Ancillary Service Rates
5. Process Schedule
6. Contact Information

- Advance Notice of Rate Adjustment Meeting
- FRN published June 3, 2009
- Information Forum
- Comment Forum
- 120-day Comment Period
- Comment Period Closes – October 1, 2009





# Summary of Advance Notice of Rate Adjustment Meeting

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- Meeting - June 10, 2008 – Provided Notice of Intent to:
  - Update and revise rates under existing Western tariff
    - Provide consistency with other Western regions
    - Provide a method to deal with data timeliness issues
    - Change annual recalculation timeframe
    - Provide templates for submission of financial data
  
- Announced Potential Rate Changes
  - With MISO Module F, Part III Participation
  - No MISO Participation or MISO Module F, Part II Participation



## Transmission Rates

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- Revenue Requirement Calculation Templates
- Forward-Looking Formula Transmission Rates
- Effective date
- Recalculation date
- Network
- Firm Point-to-Point Transmission Service
- Non-Firm Point-to-Point Transmission Service



## Revenue Requirement Calculation Templates

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- Western proposes to initiate the use of revenue requirement calculation templates:
  - To provide a consistent data reporting format
  - To aid in the revenue requirement / rate recalculation and review process
  - Will be used to gather and record required financial information from:
    - Western
    - Basin
    - Heartland
    - Transmission Customers receiving facility credits



## Forward-Looking Formula Transmission Rates

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- Change to recover transmission expenses and investments on a current (forward looking) basis:
  - Will allow Western to more accurately match cost-recovery with cost incurrence .
  - Uses projections to estimate transmission costs and load for upcoming year in the ATRR.
  - Will “true-up” cost estimates with actual costs:
    - Rates will continue to be recalculated every year
    - Western will recover no more and no less than actual transmission costs for the year



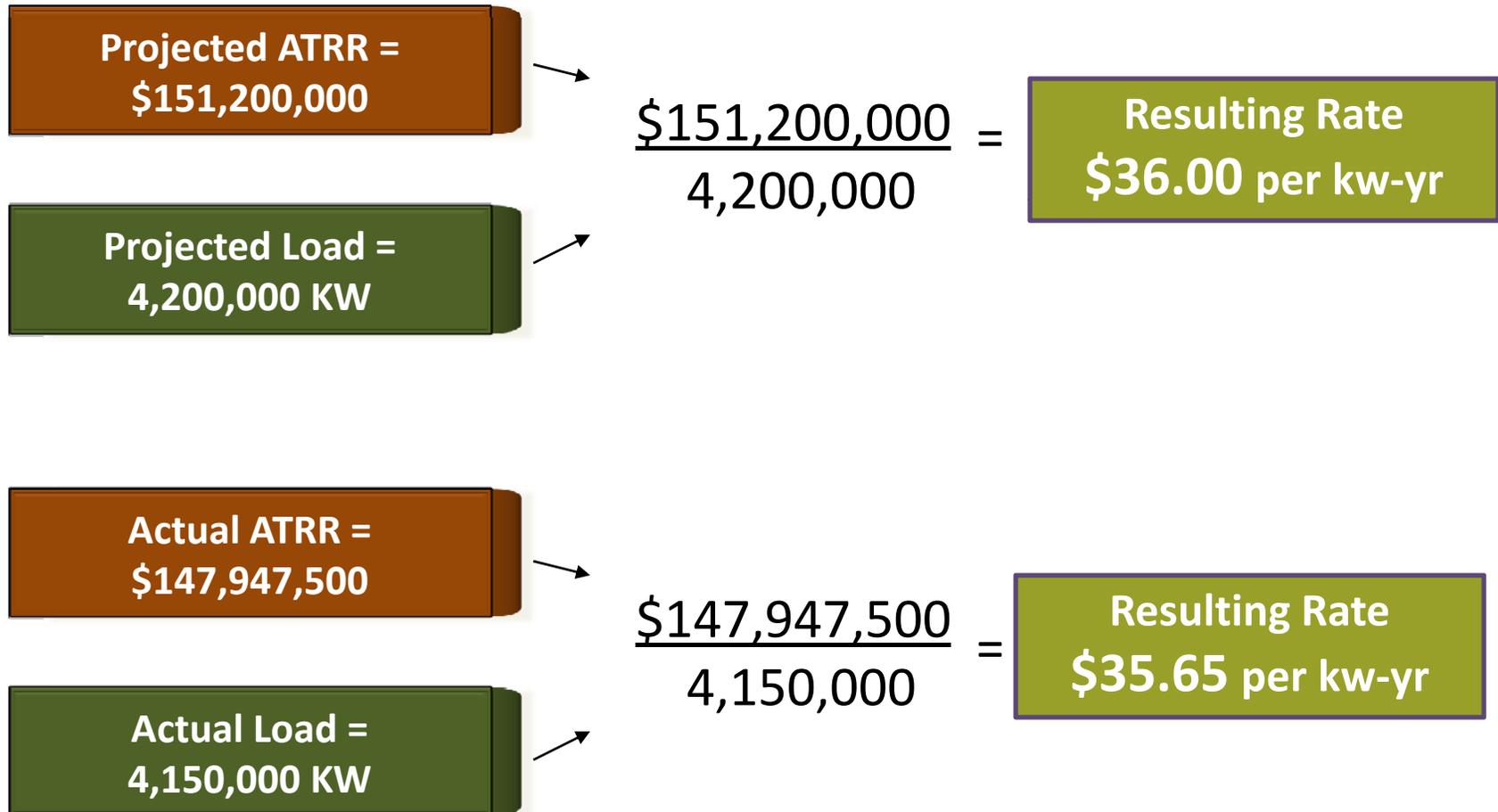
## Forward-Looking Formula Transmission Rates – True-Up Procedures

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- Differences between estimated Revenue Requirements and actual Revenue Requirements identified.
- Revenue collected in excess of actual net Revenue Requirement returned through reduction of a future year Revenue Requirement.
- Collected revenue less than actual net Revenue Requirement would be collected by increasing a future year Revenue Requirement.
- Actual load determined and compared to projected load.



# Forward-Looking Formula Transmission Rates – True-Up Example





# Forward-Looking Formula Transmission Rates – True-Up Calculation

- There is an over recovery of net ATRR of \$3,252,500

$$\begin{array}{r} \$151,200,000 \\ -\$147,947,500 \\ \hline \$3,252,500 \end{array}$$

- Shortfall of net ATRR (due to volume) of \$1,800,000

$$\begin{array}{r} 4,200,000\text{KW} \\ -4,150,000\text{KW} \\ \hline 50,000\text{KW} \end{array}$$



$$50,000\text{KW} \times \$36.00 \text{ kw-yr} = \$1,800,000$$



## Forward-Looking Formula Transmission Rates – True-Up Calculation (cont.)

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- True-up Adjustment Amount is net over recovery of \$1,452,500

\$3,252,500
<u>-\$1,800,000</u>
\$1,452,500



## Forward-Looking Formula Transmission Rates – True-Up Calculation (cont.)

The True-up Adjustment can also be calculated by taking the difference between the projected rate and the rate calculated using actual financial data and multiplying it times the actual load.

$$\begin{array}{r} \$36.00 \\ -\$35.65 \\ \hline \$ 0.35 \text{ per kw-yr} \end{array}$$



$$\begin{array}{r} 4,150,000\text{kw} \\ \times \quad \$0.35 \\ \hline \$1,452,500 \end{array}$$



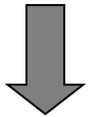
# Forward-Looking Formula Transmission Rates – True-Up Timeline

**2010**

**Jan 1**

**Sept 1**

***before Oct 31***



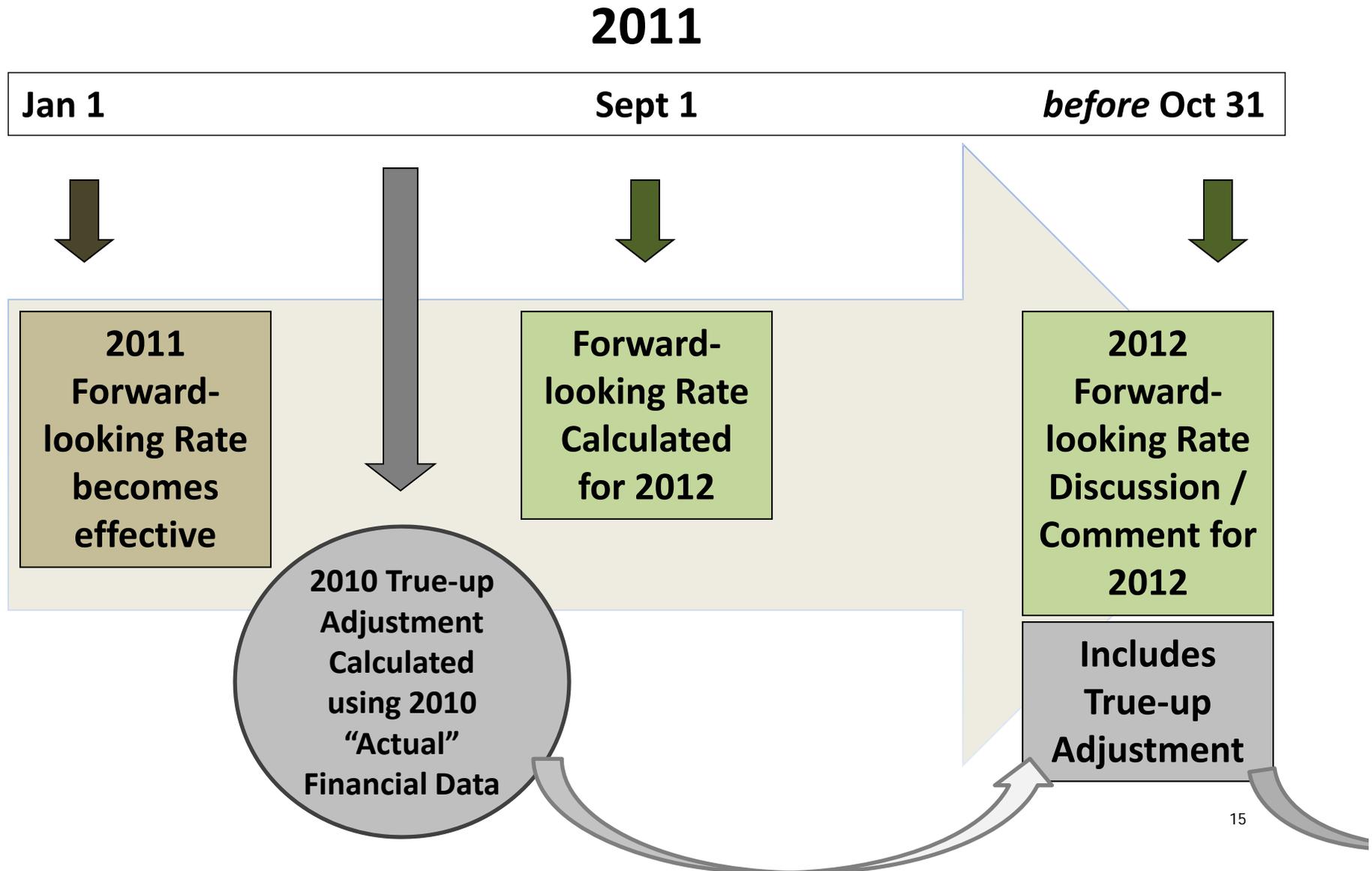
**Initial  
Forward-  
looking Rate  
becomes  
effective**

**Forward-  
looking Rate  
Calculated  
for 2011 Rate**

**Forward-  
looking Rate  
Discussion /  
Comment for  
2011 Rate**



# Forward-Looking Formula Transmission Rates – True-Up Timeline (cont.)





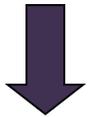
# Forward-Looking Formula Transmission Rates – True-Up Timeline (cont.)

**2012**

Jan 1

Sept 1

Oct 31



**2012  
Forward-  
looking Rate  
becomes  
effective**

**Includes  
True-up  
Adjustment**

*PROCESS REPEATS*

# Implementation of Transmission and Ancillary Services Rates

- Applicable rates from this process will be implemented January 1, 2010
- Recalculation:
  - Current process -
    - Implementation of recalculation of the formula rates effective annually on **May 1**.
  - Proposed process -
    - Implementation of recalculation of the formula rates effective annually on **January 1**.
    - Rate information available for review and comment September 1 of each year.
    - Opportunity to discuss and comment prior to October 31 each year.





## Formula Rate for Network Transmission Service

- Formula will remain unchanged but will use expense estimates to calculate ATRR.
- Involves a change to the manner in which inputs are developed.
  - Same ATRR used for Network and Point-to-Point rates
  - Rate includes costs for Scheduling, System Control, and Dispatch (SSCD) Service needed for Transmission.

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



## Formula Rate for Firm Point-to-Point IS Transmission Service

Formula will remain unchanged -

- will use projected transmission costs as data inputs to determine the annual revenue requirement
- load projection  
*(as described on previous slides)*

Firm  
Point-to-Point  
Transmission Rate  
\$/kW-Mo

$$= \frac{\text{Annual IS Transmission Service Revenue Requirement}}{\text{IS Transmission System Total Load}}$$

*Rate includes cost for SSCD Service needed for Transmission*



## Formula Rate for Non-Firm Point-to-Point Transmission Service

Formula will remain unchanged -

- will use projected transmissions cost as data inputs to determine annual revenue requirement
- load projection

*(as described on previous slides)*

$$\begin{array}{l} \text{Maximum Non-Firm} \\ \text{Point-to-Point} \\ \text{Transmission Rate} \\ m/kWh \end{array} = \frac{\text{Firm Point-to-Point Transmission Rate}}{730 \text{ hours/month}} \times 1000 \text{ mills/\$}$$



## Ancillary Service Rates

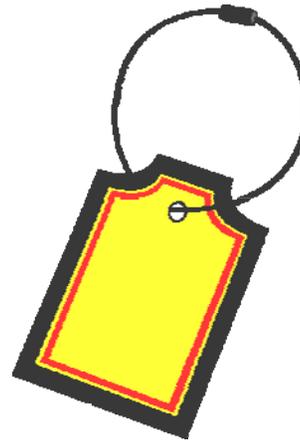
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- Scheduling, System Control, and Dispatch (SSCD) Service
- Reactive Supply and Voltage Control from Generation Sources Service (RSVC)
- Regulation and Frequency Response Service
- Energy Imbalance Service
- Operating Reserves Service – Spinning and Supplemental
- Generator Imbalance Service



## Formula Rate for Scheduling, System Control, and Dispatch Service

- This formula will remain unchanged but will divide the annual revenue requirement for SSCD Service by the # of daily tags in the calculation year (instead of dividing the annual revenue requirement by the # of daily schedules in the calculation year).
  - *Terminology change only*





## Formula Rate for Reactive Supply and Voltage Control From Generation Sources Service

- Current rate:

$$\text{RSVC Service Rate per kW-Mo} = \frac{\text{Annual Revenue Requirement for VAR Support}}{\text{Load Requiring VAR Support}}$$

Annual Revenue Requirement includes:

- Western's Synchronous Condenser Costs operating outside the 0.95 leading to 0.95 lagging power factor bandwidth
- Costs of Generators providing RSVC Service within the 0.95 leading to 0.95 lagging power factor bandwidth



## Formula Rate for Reactive Supply and Voltage Control From Generation Sources Service (cont.)

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- Western is currently **not compensated** for providing RSVC Service from its own generators operating **within** the power factor bandwidth:
  - Western collects its RSVC Service costs for its generators operating within the power factor bandwidth in its firm power revenue requirement.
  - Only Federal preference customers will pay the RSVC costs of Federal generators operating within the power factor bandwidth.
- Non-Federal Generators currently **receive compensation** for providing RSVC Service **within** the power factor bandwidth.



## Formula Rate for Reactive Supply and Voltage Control From Generation Sources Service (cont.)

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- Western believes both Federal and non-Federal generators should be treated comparably when they provide RSVC Service within the power factor bandwidth.
  
- Proposed Changes:
  - Remove generation costs associated with operation within the bandwidth from the total revenue requirement for this service.
  - Provide payment for generators requested by Western to operate outside the power factor bandwidth.



## Formula Rate for Reactive Supply and Voltage Control From Generation Sources Service Cont.

- Proposed rate:

$$\text{RSVC Rate per kW-Mo} = \frac{\text{Annual Revenue Requirement for VAR Support}}{\text{Load Requiring VAR Support}}$$

Annual Revenue Requirement equals:

- Western's Synchronous Condenser Costs operating outside the 0.95 leading to 0.95 lagging power factor bandwidth.
- Western's payment to Generators required to operate outside the 0.95 leading to 0.95 lagging power factor bandwidth.



# Formula Rate for Regulation and Frequency Response Service

- This formula will remain unchanged:

$$\begin{array}{l} \text{Regulation} \\ \text{Rate} \\ \textit{per kW/Mo} \end{array} = \frac{\text{Annual Revenue Requirement for Regulation}}{\text{Load in the Control Area Requiring Regulation}}$$



## Rate for Energy Imbalance Service

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### Current Rate:

- Penalty for Imbalances outside a 3 % bandwidth ( $\pm 1.5\%$  deviation)
- Penalty for under deliveries outside the 3% bandwidth = 100 mills/kWh
- Over deliveries outside the bandwidth are forfeited

*Proposed change is consistent with FERC Order 890*



## Rate for Energy Imbalance Service (cont.)

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**Three deviation bandwidths** – applied hourly to any energy imbalance as a result of Transmission Customer's scheduled transaction(s) -

- 1. Deviations within  $\pm 1.5\%$  (minimum 2 MW)** will be netted on a monthly basis and settled financially at the end of the month at 100% of the average incremental cost for the month.



## Rate for Energy Imbalance Service (cont.)

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- 2. Deviations greater than  $\pm 1.5\%$  up to  $7.5\%$  (greater than 2 MW up to 10 MW) will be settled financially at the end of the month at:**
- 110% of incremental cost when energy taken in a schedule hour is greater than energy scheduled; and
  - 90% of incremental cost when energy taken in a schedule hour is less than the scheduled amount.



## Rate for Energy Imbalance Service - Continued

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- 3. Deviations greater than  $\pm 7.5\%$  (or 10 MW) will be settled financially at the end of the month at:**
- 125% of the highest incremental cost that occurs that day when energy taken in a schedule hour that is greater than energy scheduled; or
  - 75% of the lowest incremental cost that occurs that day when energy taken is less than the scheduled amount.



## Rate for Energy Imbalance Service - Continued

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### Incremental Cost -

- Western's incremental cost will be based upon a representative hourly energy index or combination of indexes.
- Index will be posted on OASIS prior to use.
- Will not be changed more often than once per year (unless Western determines existing index is no longer a reliable price index).



## Rates for Operating Reserves Service –Spinning and Supplemental

- This formula will remain unchanged:
  - Will substitute reserve requirement of current reserve sharing group or will substitute own operating reserve requirement for MAPP requirement.

$$\begin{array}{l} \text{Reserves} \\ \text{Rate} \\ \textit{per kW-Mo} \end{array} = \frac{\text{Annual Revenue Requirement for Reserves}}{\text{Load Requiring Reserves}}$$



## Rate for Generator Imbalance Service

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- New Service - **New** rate schedule - UGP-AS7 -
  - Will only be utilized if Western implements a Generator Imbalance Service in a revised OATT.
  - Generator Imbalance Service is provided when a difference occurs between the output of a generator located within the Transmission Provider's Control Area and a delivery schedule from that generator to:
    - Another Control Area
    - or*
    - A load within the Transmission Provider's Control Area over a single hour.



## Rate for Generator Imbalance Service (cont.)

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**Three deviation bandwidths** – applied hourly to any energy imbalance as a result of Transmission Customer's scheduled transaction(s).

- 1. Deviations within  $\pm 1.5\%$  (minimum 2 MW)** will be netted on a monthly basis and settled financially at the end of the month at 100% of the average incremental cost for the month.



## Rate for Generator Imbalance Service (cont.)

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- 2. Deviations greater than  $\pm 1.5\%$  up to  $7.5\%$  (greater than 2 MW up to 10 MW) will be settled financially at the end of the month at:**
- 110% of incremental cost when energy taken in a schedule hour is greater than energy scheduled; and
  - 90% of incremental cost when energy taken in a schedule hour is less than the scheduled amount.



## Rate for Generator Imbalance Service (cont.)

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- 3. Deviations greater than  $\pm 7.5\%$  (or 10 MW) will be settled financially at the end of the month at:**
- 125% of the highest incremental cost that occurs that day when energy taken in a schedule hour that is greater than energy scheduled; or
  - 75% of the lowest incremental cost that occurs that day when energy taken is less than the scheduled amount.

**Exception:** Intermittent resources will be exempt from this deviation band and will pay the deviation band charges for all deviations greater than the larger of 1.5% or 2 MW.



## Rate for Generator Imbalance Service (cont.)

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### Incremental Cost:

- Western's incremental cost - based upon representative hourly energy index or combination of indexes.
- Index posted on OASIS prior to use.
- Will not be changed more often than once per year (unless Western determines existing index is no longer a reliable price index).



## Rate for Generator Imbalance Service (cont.)

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Western may charge a Transmission Customer for either *hourly generator imbalances* or *hourly energy imbalances for imbalances occurring within the same hour*, but not both, unless the imbalances aggravate rather than offset each other.



# Summary of Rate Changes - Transmission

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- Transmission Rates –
  - No change to formulas
  - Implements Forward Looking Rate
  - Implements True-up Procedure
  - Utilizes Templates to Develop Revenue Requirements



## Summary of Rate Changes – Ancillary Services

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- SSCD –
  - Terminology change
  
- Reactive -
  - Remove payment for service within the bandwidth
  - Provides for payment for operation of generation outside the bandwidth
  
- Regulation –
  - No change to formula



## Summary of Rate Changes – Ancillary Services (cont.)

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- Energy Imbalance –
  - Changes to deviation bands
  
- Reserves -
  - No change to formula
  - Substitutes reserve sharing group requirement
  
- Generator Imbalance –
  - Service is added



## Process Schedule

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- June 3, 2009 - *FRN for Proposed Rate Adjustment was published*
- June 3, 2009, through October 1, 2009 - *120-day comment period*
- June 24, 2009 - *Information Forum*
- July 28, 2009 - *Comment Forum*
- November, 2009 - *Publication of Interim Rate*
- January 1, 2010 - *Implement Interim Rate*



## Contact Information

Materials will be posted on Website:  
<http://www.wapa.gov/ugp/rates/default.htm>

### **Contacts:**

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Thank you for your attention. Please provide written comments at the comment forum July 28, 2009, or send written comments, via email or letter form, by October 1, 2009.