



WESTERN AREA POWER ADMINISTRATION
An agency of the U.S. Department of Energy

Sierra Nevada Region

Rate Schedule (CV-RFS3) for Regulation and Frequency Response Service

Informal Rates Meeting

October 29, 2009

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Regulation Rate



- Regulation and Frequency Response Service (CV-RFS3) (WAPA-115)
 - Effective until September 30, 2011 (via Rate extension: Rate Order No. WAPA-139)
 - Applicable to customers receiving Regulation and Frequency Response Service
- See also OATT, Schedule 3
 - <http://www.oatioasis.com/WAPA/WAPAdocs/WAPA-Tariff-Docs.htm>

Conditions of Service



Regulation:

- Provides for continuous balancing of resources, generation and interchange, with load for maintaining scheduled interconnection frequency.
- The Transmission Provider must offer this service when transmission service is used to serve load within the Balancing Authority.

Rate Schedule



- Component 1: Formula Rate
$$\frac{\text{Annual Revenue Requirement}}{\text{Annual Regulating Capacity (kW)}}$$
- Component 2: Any FERC or other Regulatory body charges/credits are directly passed through to customers receiving this service.
- Component 3: Any HBA charges/credits applied to Western for providing this service are directly passed through to customers receiving service.

Rate Schedule (cont.)



- Self-Provide: The penalty for nonperformance by a customer that committed to self-provide will be the GREATER of actual costs or 150 percent of the market price.
- Rate changes occur when either:
 - Western receives updated financial data in March of each year; or
 - A change in numerator or denominator results in a rate change of at least \$0.25 per kW-month.

Formula Rate (Component 1)



Numerator: Annual Revenue Requirement

- Cost for facilities that support the generation capability of the CVP system
 - O&M, including unfunded benefits and HBA costs
 - Interest Expense
 - Depreciation Expense

Denominator: Annual Regulating Capacity kW

- Capacity is the total regulating capacity bandwidths provided by Western under the interconnected operations agreement (IOA) with sub-balancing authority (SBA) members.

Rate Calculation Example



Calculation of Regulation and Frequency Control Rate			
Step	Line Description	Value	Reference or Calculation
A.	Total Cost of Generation	\$83,900,000	Slide No. 8
B.	Plant Capacity (kW)	1,358,000	Slide No. 9
C.	Cost/kW (\$/kW) Year	\$61.78	A/B
D.	Regulation Capacity (kW)	27,000	Slide No. 10
E.	Regulation Revenue Requirement	\$1,668,060	C * D
F.	Monthly Revenue Requirement	\$139,005	E/12
G.	Rate \$/kW-mo	\$5.15	F/D

Note: For illustrative purpose only

Annual Revenue Requirement

Allocation of Costs between Transmission and Non-Transmission/Generation			
Line Description	Total Cost (Western & Reclamation)	Transmission	Generation
A. CVP Plant Investment			
Western	\$251,000,000	50%	50%
Reclamation	\$496,000,000	0.00%	100.00%
B. O&M			
Western	\$51,700,000	\$25,850,000	\$25,850,000
Reclamation	\$34,500,000	\$0	\$34,500,000
C. Depreciation			
Western	\$6,100,000	\$3,050,000	\$3,050,000
Reclamation	\$5,300,000	\$0	\$5,300,000
D. Interest (Cost of Capital)			
Western	\$6,800,000	\$3,400,000	\$3,400,000
Reclamation	\$11,800,000	\$0	\$11,800,000
F. Revenue Requirement	\$116,200,000	\$32,300,000	\$83,900,000

Note: For illustrative purpose only

PLANT CAPACITY



Annual Coincident Peak for the CVP Northern Power Plants			
Month/Year	Day	Hour	Coincident Peak MW
Aug-08	2	16	1,224
Sep-08	3	17	988
Oct-08	6	17	894
Nov-08	21	18	621
Dec-08	26	19	578
Jan-09	8	18	461
Feb-09	18	19	448
Mar-09	31	21	444
Apr-09	21	14	766
May-09	16	17	1,061
Jun-09	25	17	1,166
Jul-09	13	16	1,263
Annual Coincident Peak MW			1,263
Plus San Luis and O'Neill			95
Total Plant Capacity MW			1,358

Note: For illustrative purpose only

Annual Regulating Capacity kW



Regulating Capacity Bandwidths under IOAs	
SBA Customer	Regulating Capacity Bandwidth kW
Customer 1	6,000
Customer 2	10,000
Customer 3	2,000
Customer 4	9,000
Total Regulating Capacity	27,000 kW

Note: For illustrative purpose only

Western Billing (Regulation)



- Western bills customers monthly based on rate multiplied by regulating capacity bandwidth (kW).

Example:

\$5.17	Rate \$/kW-Month
<u>x 6000</u>	Regulating capacity bandwidth (kW)
\$41,360	Total Regulation Monthly Cost

Rate History



REGULATION RATES			
Effective Date	Rate \$/kW-month	Annual Regulation Revenue Requirement	Regulation Capacity (MW)
Jan 05-Mar 06	\$2.83	\$748,000	22 MW
Apr 06-Mar 07	\$2.87	\$928,260	27 MW
Apr 07-Sep 07	\$3.00	\$972,000	27 MW
Oct 07-Sep 08	\$3.97	\$1,284,930	27 MW
Oct 08-Mar 09	\$4.36	\$1,413,720	27 MW
Apr 09-Sep 09	\$4.21	\$1,362,960	27 MW
Oct 09-Mar 10	\$5.17	\$1,675,299	27 MW

Proposed Rate Language Change

- Annual Regulating Capacity (kW): The annual regulating capacity is **one-half of** the total regulating capacity bandwidths provided by the Western Area Power Administration (Western) under the interconnected operations agreements with sub-control area **balancing authority** (SCBA) members.



Questions?
