2010 BPA Rate Case

TR-10 Transmission & Ancillary Services

Customer Workshop

February 4, 2009

Workshop Agenda

- Discussion of transmission ancillary and control area service proposed rates and rate design for the Initial Proposal:
  - Wind Integration: Within-Hour Balancing
  - Regulation & Frequency Response
  - Operating Reserve – Spinning Reserve
  - Operating Reserve – Supplemental Reserve
  - Energy Imbalance
  - Generation Imbalance
- Discussion of incremental cost rates
- Next steps for the 2010 BPA Rate Case

Key Messages

- The material we are sharing today reflects estimates of reserve amounts, generation input costs, and transmission rates. Additionally, we have included information on varying wind schedule accuracy.
- These estimates are close to what will be reflected in the Initial Proposal for the 2010 BPA Rate Case.
- Please feel free to ask questions as we move through today's workshop materials.

Transmission Ancillary & Control Area Service Rates

Wind Integration: Within-Hour Balancing Rate for Varying Wind Schedule Accuracy

		WI-09	2-Hour	60-min	45-min	30-min
1	Forecasted Installed Wind Capacity (MW)	2,343	3,743 MW Average (FY10 = 3,155 & FY11=4,330)			
2	Required Reserves for Wind Integration into the BPA BA (MWs)	203	1,042	820	675	541
3	Total PS Per-Unit Cost Allocation for the Required Amount of Wind Reserves ($/kW/Mo)	$7.85	$9.76	$9.74	$9.59	$9.51
4	Total Annual Generation Input Costs for Wind Reserves (Millions)	$19	$122	$96	$78	$62
5	TR-10 Initial Proposal Wind Integration: With-in Hour Balancing Rate ($/kW/Mo)	$0.68	$2.73	$2.13	$1.73	$1.37

Note: The Initial Proposal is based on the 2-hour persistence scheduling forecast. All values represent estimated average values over the two year rate period.

Wind Integration: Within-Hour Balancing Simple Rate Design

- For the 2010 BPA Rate Case Initial Proposal, the transmission wind integration rate design reflects generation input costs that are passed through to transmission contract holders based on ***estimated*** installed wind capacity. The transmission wind integration rate will continue to be applied to the generator through the interconnection agreement.
- Transmission is proposing a simple rate based on installed wind capacity as the billing factor, similar to the existing rate; ***except*** that the required reserve amounts now include impacts to generation imbalance capacity.
- The proposed monthly rate is determined by: P / (Bf * 12 months)

  Where:

  – P = Power Services annual average generation input cost ($) established in WP-10 rate case for the total reserves required.

  – Bf = Monthly billing factor (kW) is the average forecasted installed wind generation capacity for the twenty four months of the rate period.

Regulating Reserves for the Initial Proposal

- Below is the preliminary Transmission Rate for Regulation and Frequency Response Service.

	REGULATION FREQUENCY RESPONSE RATE CALCULATION						
		$/kW-mo	MW-annual Avg	$	2010-11 mills/kWh	2008-09 mills/kWh	
		PS rate	Billing Factor	Revenue Req 1/	TS Rate 2/	TR Rate	% Inc
1	RFR	11.58	105	14,589,987	0.27	0.33	-18.5%
			FY10	FY11	FY10-11 Avg		
2	Billing Factors		6089.2	6302.3	6195.75	MW annual average	
	NOTES						
	1/ The revenue requirement for TS is based on the PS per-unit cost allocation shared at the 1/23/09 rate case workshop						
	2/ The TS rate is the annual revenue requirement divided by the TS annual billing factor for the rate period.						
	The TS billing factor is the load in the BPA Balancing Authority Area						
		PS Generation Inputs Cost					
	1	Embedded	8,832,600				
	2	Variable	5,757,387				
	3	Total	14,589,987				
	4	MWa	105				
	5	Rate =	11.58	$/kW-mo			

Operating Reserves for the Initial Proposal

- The current WECC standard for operating reserves is based on 5% of hydro generation, 5% wind generation and 7% of non-hydro generation.
- No change to the default rate, remains as a 15% rate increase above the normal rate.

	OPERATING RESERVES RATE CALCULATION							
	CURRENT 5/7 WECC OR STANDARD REFLECTED IN THE INITIAL PROPOSAL							
					2010-11	2008-09		
		$/kW-mo	MW-annual Avg	$(000)	mills/kWh	mills/kWh		
		PS Cost	Billing Factor	Revenue Req 1/	TS Rate 2/	TR Rate	% Inc	
1	Spin	8.14	256.5	25,055	**11.15**	**7.93**	40.6%	
2	Sup	7.19	256.5	22,131	**9.85**	**7.93**	24.2%	
3	Total		513	47,186				
4	Default Rate for OR 3/							
5	Spin				**12.82**	**9.12**	40.6%	
6	Sup				**11.33**	**9.12**	24.2%	
	NOTES							
	1/ The revenue requirement for TS is based on the PS per-unit cost allocation shared at the 1/23/09 rate case workshop							
	2/ The TS rate is the annual revenue requirement divided by the annual billing factor for the rate period.							
	3/ The default rate proposed is 15% greater than the standard rate.							

Energy Imbalance and Energy Imbalance Rate Design

- Transmission is proposing to clarify what we mean by **intentional deviations** and how they are applied under the Generation Imbalance (GI) and Energy Imbalance (EI) rate schedules.
- Transmission is also proposing to **modify the penalty charge for positive deviations to be 150% of BPA's incremental cost instead of 125%.** This penalty charge is designed to discourage poor scheduling behavior where generators lean on the federal system to meet their imbalance needs. The charge proposed is higher than the normal rate charged under band three.
- Additionally, BPA's proposal includes a modification to the Intentional Deviation and Spill Provision to recognize negative price index for incremental cost:
  - For negative deviations we propose to change the current zero credit to the lesser of zero or the index price that results in a charge instead of a credit.
  - For positive deviation we propose to provide no credit. In other words, a customer would never receive a credit when it takes energy from BPA during Spill Conditions or if the positive deviation is an Intentional Deviation.

Summary of ACS-10 for 2010 BPA Rate Case Initial Proposal

		Current	Proposed
1	Wind Integration: Within-Hour Balancing Service ($/kW/Mo)	$0.68	$2.73
2	Regulation & Frequency Response Service (Mills/kWh)	$0.33	$0.27
3	Operating Reserve - Spinning Reserve (Mills/kWh)	$7.93	$11.15
4	Operating Reserve - Spinning Reserve Default Rate (Mills/kWh)	$9.12	$12.82
5	Operating Reserve - Supplemental Reserve Service Default Rate (Mills/kWh)	$7.93	$9.85
6	Operating Reserve - Supplemental Reserve Service Default Rate (Mills/kWh)	$9.12	$11.33
7	Energy Imbalance Service	see GRSP	
8	Generation Imbalance Service	see GRSP	

Incremental Cost Rate

Incremental Cost Rate Design for the Initial Proposal

- Transmission is proposing to adopt a formula for incremental cost rates and to propose the structure and elements of a public process for determining and allocating costs of some facilities in the Network Open Season plan-of-service that do not meet the criteria to move forward at embedded cost rates.
- See separate handout for more detail.

Next Steps

- The formal rate proceeding begins with the publication of the Federal Register Notice (FRN) on or about Feb 10. A prehearing conference will follow on Feb 18.

- **Ex parte will begin with the publication of the FRN.** Once ex parte begins, BPA cannot discuss rate case issues with any party, except in noticed public meetings.

- The final proposal must be submitted to FERC for approval 60 days prior to the effective date, Oct. 1, 2009.