Renewable Follow-up Session June 10, 2010

1) Customer Comment: Please provide actual 2009 BPA wind expenses.

Wind integration Team (WIT)	FY09	FY10	FY11	FY12	FY13
Power FTE	\$270,397	\$460,000	\$754,667	\$763,125	\$763,125
Power Non-FTE 1/	\$82,685	\$80,000	\$821,000	\$826,375	\$826,375
Total Power	\$353,082	\$540,000	\$1,575,667	\$1,589,500	\$1,589,500
Corporate Strategy FTE	\$165,629	\$130,000	\$140,000	\$141,000	\$141,000
Corporate Strategy Non-FTE	\$2,115	\$0	\$0	\$0	\$0
Total Corporate Strategy	\$167,744	\$130,000	\$140,000	\$141,000	\$141,000
Legal FTE	\$1,925	\$280,000	\$280,000	\$280,000	\$280,000
Legal Non-FTE	\$0.00	\$0	\$0	\$0	\$0
Total Legal	\$1,925	\$280,000	\$280,000	\$280,000	\$280,000
Renawables Technology Innovation Projects (TI)	\$1,979,196	\$1,910,000	\$2,070,000	\$1,875,000	\$750,000
TI's Renewable FTE 2/	\$272,258	\$424,000	\$475,000	\$444,000	\$171,000
Total Technology Innovation	\$2,251,454	\$2,334,000	\$2,545,000	\$2,319,000	\$921,000
Transmission FTE	\$237,917	\$5,730,000	\$4,083,000	\$3,959,625	\$4,048,777
Transmission Non-FTE	\$547,067	\$270,000	\$0	\$0	\$0
Total Transmission	\$784,984	\$6,000,000	\$4,083,000	\$3,959,625	\$4,048,777
Total FTE	\$948,126	\$7,024,000	\$5,732,667	\$5,587,750	\$5,403,902
Total Non-FTE	\$2,063,996.00	\$2,260,000	\$2,891,000	\$2,701,375	\$1,576,375
Total WIT Budget 3/	\$3,012,122.00	\$9,284,000	\$8,623,667	\$8,289,125	\$6,980,277
Wind Purchase Power Costs	\$29,481,666	\$30,829,381	\$32,548,630	\$32,954,464	\$33,418,630
Direct cost Generator Interconnection 4/	\$12,831,077	\$63,809,900	\$57,784,700	\$35,266,700	\$36,450,300

^{1/} Can include: equipment, service contracts, space, training, travel, publications, sponsoring conferences and/or conference participation.

2) Customer Comment: Provide a summary of the Fiscal Year 2012-2013 Renewable budget and the treatment of Green Energy Premiums.

The 2012/2013 renewable budget is presented on slide 20 of the May 24th IPR package. It contains forecasted power costs associated with 6 wind projects as well as the budgets for wind and solar monitoring networks, WREGIS, AWEA and UWIG fees, corporate time charged to renewable projects and two line items for Project Development, both discussed below.

The renewable budget has historically contained the reinvestment expenses associated with the Green Energy Premiums. This practice will not continue into 2012 because the reinvestment expenses will not be tied to the renewable budget but will reside in other Power Services budget line items.

^{2/} Dollars provided to organizations to cover FTE working on TI projects

^{3/} The 2009 Renewables Budget funded \$1,307,735 of the total WIT expenses (which were \$3,012.122).

^{4/} BPA had a moratorium on new LGIAs for 2009.

Historically, The renewable budget contained a "Facilitation" budget that covered the costs of renewable purchases that exceeded the spot market value of the energy provided. This budget item has now changed to "Resource Development" and has been expanded to include capacity purchases as well as other resources for Tier 1. (see discussion below).

Green Energy Premiums (GEP) are the revenues associated with the sale of:

- Renewable Energy Certificates and
- Environmental Attributes associated with Environmentally Preferred Power (subscription customers) and Alternative Renewable Energy (presubscription customers).

In WP-07 and again in the May 2008 IPR (for the 2010-2011 rate period), BPA committed to reinvest GEP in renewable research, development and/or demonstration (RD&D)¹. The May 2008 long-term regional dialogue record of decision gave BPA the ability to revisit this reinvestment commitment for 2012 and beyond.

During the 2007-2009 and 2010-2011 rate periods BPA forecasted GEP revenues and offsetting expenses though the renewable budget. Technology Innovation's (TI) renewable RD&D expenses were offset by forecasted GEP revenues rather than rates. Slice customers were not credited for the GEP revenues nor charged for the associated TI expenses (as part of the Slice True Up calculation).

FY 2007-2009 actual GEP revenues of \$10.7M exceeded forecasted GEP revenues. Also in 2009, BPA ceased funding the Bonneville Environmental Foundation with GEP revenues². The combination of these circumstances left \$5.22M (from 2007-2009) in unspent GEP in reserves going into 2010/2011 rate period.

During FY2010-2011, GEP revenues are estimated at \$3.7M/year. These revenues will be/are used to fund renewable RD&D through TI and to fund a pumped storage feasibility study. BPA did not forecast or budget for \$5.22M in unspent 2007/2009 GEP revenues going into the 2010/2011 rate period. Instead, renewable RD&D budgets were set to match expected GEP revenues earned during the 2010-2011 rate period. BPA estimates that there may be as much as \$6.3M in unspent GEP revenues going into the 2012-2013 rate period.

BPA is proposing to use this (estimated) \$6.3M to fund 2012 -2013 Smart Grid, pumped storage and Wind Integration Team forecasting efforts which otherwise would have been funded by Tier 1 rates or eliminated in cost-cutting exercises.

BPA expects to receive GEP revenues during FY 2012-2016 from REC sales to customers with EPP option rights. BPA is proposing to not reinvest these GEP revenues and instead include them as credits in the composite cost pool.

¹ In 2007-2008 renewable facilitation was largely accomplished through the Bonneville Environmental Foundation.

² BPA previously directed 36% of GEP revenues to the Bonneville Environmental Foundation.

Summary of forecasted GEP reinvestment activities:

(\$ in thousands)				
GEP REINVESTMENT	2010	2011	2012	2013
1. Smart Grid Demonstration Project (renewable portion 75% of total Smart Grid)	\$1,500	\$1,875	\$1,875	\$750
2. Inter-area Oscillation Dampening renewable portion is 10% of total Oscillation Dampening budget)	\$35	\$35	\$0	\$0
3. Decision Support System for Tidal Energy Developments (renewable portion	\$160	\$160	\$0	\$0
1. Wind Integration Model (renewable	\$200	\$0	\$0	\$0
portion 100%)	\$15	\$0	\$0	\$0
5. Normal & Emergency Operation Visualization (renewable portion 10%)				
5. Technology Innovation FTE (In 2010, he renewable portion is 14% of TI's total FTE.)	\$424	\$475	\$444	\$171
7. Renewables Projects anticipated from the R&D solicitation (renewable		>\$0	>\$0	>\$0
portion 100%) 8. Pumped Storage (renewable portion	\$920	\$475	\$481	\$486
00%)	\$0	\$0	\$1,800	\$1,800
Wind Integration Team (GEP will be overing about 30% of the total 2012/2013 WIT udget .)				
10. TOTAL EXPENSES	\$3,254	\$3,020	\$4,600	\$3,207
11. GEP REVENUE	\$8,922	\$3,700	\$0	\$0

Line 7: BPA expects to have some renewable-related projects in 2012-2013 but we will not know what those project are until we complete the R&D solicitation for each year.

Line 11: 2010 GEP revenues are comprised of \$5.22M in unspent GEP earned during 2007-2009 plus GEP earned during 2010. 2010 GEP revenue is forecasted to equal \$3.7M.

3) Customer Comment: Explain how BPA will credit Slice customers for the unspent Green Energy Premiums at the end of the 2010/2011 rate period.

BPA is not proposing to credit slice customers for unspent GEP remaining at the end of FY 2011 as part of the Slice True-Up because BPA would like to honor its reinvestment commitment to reinvest all of the

GEP revenues earned through FY 2011 on qualifying renewable reinvestment activities. To this end, BPA will propose in the WP-12 rate case, to credit the FY 2012/2013 Composite Cost Pool with unspent GEP remaining at the end of FY 2011. This credit will be associated with the GEP reinvestment activities listed in the table above. This proposed credit will benefit all customers in that the Composite Customer Charge will be lower than it otherwise would have been without the credit.

4) Customer Comment: Explain the \$4M/year "Resource Development" budget.

BPA has proposed a \$4 M/year budget item in the renewable budget for "Resource Development." We explained during IPR (May 24th) that this \$4M/year was for "resource studies, generation options, generation input purchases or resource purchase prior to inclusion in next rate case."

This budget allows Power Services to react quickly to changes in capacity needs occurring during the rate period. These capacity needs could be required for Tier 1 load, generation inputs or to support Resource Support Services³. This budget could also be used for a BPA Tier 1 renewable purchase resource (to the extent that it exceeded the forecast augmentation cost in the rate case). If not spent, the \$4M will go into reserves for non-Slice customers and will be refunded in the slice true up.

Without this budget item, Power Services may be delayed, (until the next rate period) in taking actions to acquire capacity, requiring further use of remaining amounts of seasonal surplus capacity of the existing Federal system. If delayed, Power Services may also need to make additional medium-term balancing purchases to cover capacity needs. If Power Services purchased without a budget, BPA would have reduced reserves going into the 2014/2015 rate period and Slice customers would face a true-up expense.

To provide perspective;

\$4M is large-enough to conduct a 12-month 25MW capacity pilot.

³ At this point, Power Services is assuming BPA will not have a formula rate to enable Power Services to pass through wind-related generation input capacity costs to wind generators. (Such a formula rate is a rate case issue.)

5) Customer Comment: Explain why the 2011 Project Development/EIS budget jumped from rate case amount of \$153,435 to \$277,712 in the 2008 IPR. (line 22 of slide 20)

The Project Development/EIS budget provides funds to cover environmental studies associated with new Tier 1 purchases. The jump from \$153K to \$277K in the 2011 Project Development/EIS budget from the rate case to the IPR is a typo. This increase should have been included in the Wind Station Monitoring Network budget line; (Corrections shown below.)

In 2010 BPA added 14 anemometers to the monitoring network increasing the total to 20. The \$124K increase is the forecasted cost of calibrating and maintaining the 14 additional anemometers.

RENEWABLES PROGRAM COST FORECAST FOR THE 2010 INTEGRATED PROGRAM REVIEW (June 10, 2010)		Correction for 2011 BPA Rate Case FY 2011		IPR FY 2011	
	(\$)		(\$)		
SUPPORT COSTS					
Solar Data Collection - University of Oregon	\$	121,492	\$	122,020	
Wind Data Collection - Oregon State University	\$	84,028	\$	84,028	
Wind Station Monitoring and Maintenance	\$	180,000	\$	180,000	
Corrected IPR Workshop Number	\$	50,000			
Membership Fees (UWIG, AWEA)	\$	13,000	\$	13,000	
WREGIS Fees	\$	5,000	\$	5,000	
Communications	\$	600	\$	600	
Leases	\$	6,000	\$	6,000	
Project Development/Environmental Impact Studies, Etc.	\$	151,435	\$	277,712	
Corrected IPR Workshop Number	\$	276,835			
Corporate Charges - General Counsel	\$	22,682	\$	21,277	
Total Support Costs	\$	579,637	\$	709,637	