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**Question 1:** Can we provide the total increase in costs, and break-down of those costs by program area, for the major initiatives that BPA has identified as driving changes in costs?

**Response**: The following pages provide estimates of the increased costs of four major initiatives – Regional Dialogue and Tiered Rates Methodology implementation and contracting, Master Lease Financing, Reliability Compliance, and Wind Integration.

These are rough "ballpark" estimates only.



#### **1A – Regional Dialogue and Tiered Rates**

- Estimated costs as increments to the costs we had in 2009 in the original 2007-09 rate case are:
  - 2009: \$2 million
  - 2010: \$2.5 million
  - 2011: \$4 million
- The single biggest component of the cost increases is the cost of providing scheduling services for customer-owned resources.
- Some of these incremental costs would probably be incurred even if we were not tiering rates or signing Regional Dialogue contracts, since current contracts expire in 2011 and must be replaced. We do not have an estimate of what those base case costs would be because we have not defined what the alternative replacement contracts would look like.



Estimated Costs by Program:

- \$1 million included in IPR for FY 2009
- Additional:
  - Contracting/Billing (RD contracts, including resource program, REP, RD/TRM billing, and related customer support data/systems work) - \$.8 million per year
  - Generation Asset Management, including O&M on systems associated with Slice and scheduling in connection with customerowned resources - \$.6 million per year
  - Bulk Marketing \$.4 million in 2010, \$2 million in 2011



#### **Master Lease**

#### **1B - Master Lease**

FY 2008 \$ 3.0 million

FY 2009-11 \$ 3.6 million (average)

*in Millions	SOY	IF	'nR
Organizational Impact	2008	2009	2010-2011
Staffing:			
Finance	0.5	0.5	0.5
Supply Chain Services	0.6	0.2	0.2
Transmission Asset and Workload Planning	0.6	0.5	0.5
Information Technology	0.1	0.2	0.2
Other:			
Property Taxes	n/a	0.1	0.9
Information Technology Systems	0.1	0.4	0.0
Additional Financing Costs	1.1	1.4	1.4
Total	3.0	3.3	3.7

**BPA Integrated Program Review** 



# 1C Estimated average annual internal costs associated with wind integration, FY 2009-2011:

Wind Integration Team

\$2 million

**Generation Asset Management** 

\$.5 million

#### Transmission Services

\$2.2 million

(Agreements with generation developers, feasibility and system impact studies and analysis, plans of service, cost estimates, documenting study results)



#### **1D - Reliability Compliance**

Estimated increments for 2009-2011 total \$10.4 million per year. Of this total amount the following are the major components:

- WECC/NERC- \$9.3 million
- FERC/Tariff- \$.8 million
- Other Compliance (Environment, COOP, OSHA, cultural, etc)- \$.3 million

These estimates are made based on the expense program. They do not include an evaluation of the capital program.



**Question 2:** When will BPA provide a new estimate of secondary revenues that will go into the FY 2009 rates? Please provide the forecast as soon as it becomes available.

**Response:** The secondary revenue forecast is not within the scope of the IPR, but rather is a rate case issue. BPA does not anticipate having a new estimate available prior to the WP-07 Supplemental Final Proposal and ROD in mid-to-late August.



## **Technology Innovation**

**Question 3:** Is the increase in Technology Innovation from \$1.6 million in FY 2007 to \$9.6 in FY 2008 "new money", and if not, how much of it was new versus how much was in the Power or Transmission costs in FY 2007.

**Response:** As we built the Technology Innovation program beginning in July of 2005, prior work had been done to estimate BPA's budgets for R&D. R&D had been formally and drastically reduced in the late 1990's, but some growth occurred in transmission from about 2000 on, rising to an estimated \$3 million by FY2005, driven by perceived needs to advance critical research related to reliability. Similarly, a few special exception projects were budgeted on the power side, some in energy efficiency related to the EnergyWeb concept, some in Hydro operations relating to specific trials of new turbine runners, and a growing realization of issues related to renewable energy. The R&D budget for the power side was also estimated to approach \$3 million in 2005. Together the \$6 million estimated budgets related to research accounted for less than 2/10ths of 1 percent of BPA revenues.

The 2005 PFR and the 2006 PIR tipped out that BPA felt a more appropriate budget level for R&D was 1/2 of 1 percent of revenues.

(Continued on next slide)



- In order to begin to build this ramp to a more appropriate agency budget level, the Technology Innovation central office function was separately budgeted, beginning at just the salaries and incidental costs of start-up staff, and then growing at a gradual ramp intended to reach the target in about FY 2011. The \$6 million in the balance of the agency was assumed to continue to be invested as in the past.
- BPA created a cross agency team of executives and experts to guide the formation and operation of the Technology Innovation program, the Technology Confirmation /Innovation Council. This group's deliberations guided transforming the distributed budget model to a centralized budget model so that R&D budgets, expenditures, and project progress could be better managed. This change occurred between FY 2007, and FY 2008. Hence, the \$1.6 million in FY 2007 represents the central office function before consolidation, and the \$9.6 million represents the combination of \$6 million formerly budgeted in power (\$3 million) and transmission (\$3 million) and the growth in centrally budgeted funds along the ramp up to 1/2 of 1 percent of revenues.
- The whole jump is not new money. About \$1.5 million represents progress on the ramp up.



**Question 4:** Please provide the rate case capital investment amounts for slide 17 of the June 12<sup>th</sup> Capital, Depreciation, Interest presentation

**Response:** Please refer to Slide 13 for FY 2007-2009 Rate Case capital investment amounts



## Net Interest, Depreciation & Amortization

*in Millions	Actı	uals	SOY		IPR	
Plant in Service by Year	2006	2007	2008	2009	2010-11	Average
CRFM (Original IPR forecast)	366.4	49.4	60.0	62.4	9	2.5
CRFM (Updated IPR forecast)			184.0	110.0	9	2.0
F&W Direct Program	35.4	35.2	36.0	50.0	6	5.0
Program Fixed Expenses- Capital Investments	2006	2007	2008 (2nd Quarter)	2009	2010	2011
Interest Expense	53.4	76.0	71.4	67.4	77.3	85.3
Amortization Expense	17.4	22.9	25.4	27.1	29.4	32.0
Depreciation Expense	16.7	14.0	14.6	17.1	18.5	19.7
Total Fixed Expense	87.5	112.9	111.4	111.6	125.2	137.0
WP-07 Rate Case Numbers	2007	2008	2009			
F&W Program Capital	36.0	36.0	36.0			
CRFM Capital	120.4	74.1	83.6			
Total	156.4	110.1	119.6			



**Question 5:** Can we get a more thorough breakdown of the \$170 million Corps direct-funded expense for 2009 and what is in extraordinary maintenance?

**Response:** As indicated in the IPR meeting, approximately 75% of the Corps FY 2009 proposed budget of \$179 million is for salaries and benefits associated with personnel costs, and material and supply costs. The Corps employs about 1100 employees working on power generation operations and maintenance (O&M), engineering and administrative support of O&M, fish and wildlife operations and maintenance, and cultural resource mitigation activities. The balance of the budget is for support services and contracts (like guard services contracts, fish hatchery operations, fish trap and transport, buildings maintenance, etc).

Non-routine extraordinary maintenance are expense activities that occur infrequently, either because of equipment failure or sub component age related issues (aging infrastructure). Because part of the asset is being repaired or replaced, and not the whole asset, it is an expense cost instead of a capital cost. Cavatation repair, crane rehabilitation, spillway gate refurbishment, headgate rehabilitation, transformer rehabilitation, turbine oil replacement, and painting, are examples of non-routine extraordinary maintenance activities that are occurring at the 21 Corps generating projects.

Additional information and detail about hydrosystem performance is provided at twice yearly meetings with the PPC, and we're also available to meet separately to discuss as well. We're proposing a trip with customers up to Grand Coulee in the fall to present an overview of operations and maintenance activities at the facility, as well extraordinary maintenance expense activities that are planned in the 3rd powerhouse.



- **Question 6:** Please provide the rate case numbers for Agency Services from the June 11<sup>th</sup> workshop packet.
- Response: See next slide for constructed rate case amounts for Agency Services.

Rate Case amounts shown here reflect an effort in FY 2006 to create budgets that both tied to the Power and Transmission Rate Cases (which were based on different vintages of data) and incorporated the impacts of reorganizations made up to that time. An undistributed reduction was included in this reformulation.



## **Agency Services**

Expenses - Direct & Allocated	Rate Case	Initial IPR	Final IPR	Change Between Initial IPR and Final IPR	
Expenses - Direct & Anotateu	FY 2009	FY 2009	FY 2009	2009	
Executive Office	1,030	1,069	1.069	0	
Deputy Administrator	271	279	279	0	
Chief Risk Officer	5,136	5,871	5,871	0	
Technology Innovation & Confirmation	3,373	9,916	9,916	0	
Chief Public Affairs Office	18,379	17,439	17,439	0	
Internal Audit	1,930	2,384	2,384	0	
Finance	13,782	15,224	15,224	0	
Corporate Strategy	340	303	303	0	
Supply Chain Policy & Gov.	686	667	667	0	
Regulatory Affairs	1,829	2,327	2,327	0	
Strategic Planning	1,771	1,913	1,913	0	
Strategy Integration	7,510	7,604	7,604	0	
Security & Emergency Mgmt	7,042	7,404	7,404	0	
General Counsel	9,014	9,514	9,514	0	
Chief Operating Officer	3,254	3,507	3,507	0	
Customer Support Services	8,224	9,776	9,776	0	
Internal Business Services	576	576	576	0	
Business and Process Mgmt	n/a	n/a	n/a	n/a	_
Civil Rights	725	725	725	0	Slight
Safety	2,386	2,314	2,314	0	corrections
Human Capital Management	16,472	16,228	16,228	0	
Supply Chain Services	16,987	18,315	18,315	0	modificatio
Workplace Services	26,813	32,508	32,508	0	made to "ra
Information Technology	58,313	58,313	58,313	0	case" colui
Undistributed Reduction <sup>1</sup>	(8,386)		(6,725)	(6,725)	
Total	197,457	224,175	217,450	(6,725)	July 22, 20
Total Increase/Decrease (\$ amount)		26,718	(6,725)		

1 Rate Case amount shown here reflect an analytical "reformulation" effort done in FY 2006 to create spending levels that both tied to the Power and Transmission Rate Cases and that incorporated the impacts of reorganizations made up to that time. An undistributed reduction was included in this reformulation.

2 Part of the program estimate increase from the rate case to current estimates for FY 09 is the result of transfers of functions and resources from Power and Transmission to Agency Services. These transfers include: \$6M in Research and Development from Power and Transmission: \$2.1M in non-electric plant maintenance funds from transmission; and \$0.3M in training funds from Power and Transmission.

#### **BPA Integrated Program Review**



**Question 7:** Provide an actual annual average FTE count by power program for each year FY 2006 and FY 2007 and forecasted amounts for each year FY 2008 through FY2011.

**Response:** Please refer to slide 18 for forecasted FTE amounts for FY 2008-11 and estimated actual annual FTE averages for FY 2006 and FY 2007.



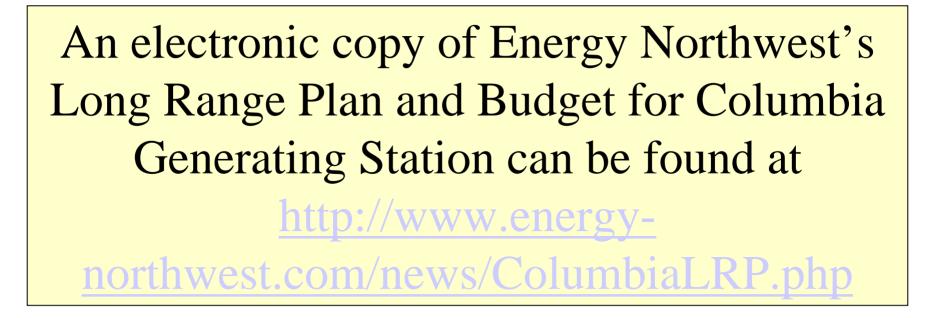
Power Program calculated FTE	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Internal Operations	388.4	388.0	388.0	391.5	392.1	388.9
Renewables	0.4	0.1	3.4	4.8	7.5	9.7
Generation Conservation	4.5	2.5	2.9	3.0	3.1	3.1
Fish & Wildlife	62.6	63.0	68.5	71.6	72.2	72.9
Residential Exchange	-	0.5	4.1	4.1	4.1	4.1
Total	455.9	454.1	467.0	475.0	479.0	478.8

**NOTE:** These FTE estimates are based on an average salary which includes benefits, premium pay (for personnel such as duty schedulers), overtime and other employee costs of \$120,000 with a 3.5% inflation factor increase for FY 2010 through FY 2011. Actual FTE staffing levels could be more or less per Power program depending on the salary structure for specific groups, and therefore is an estimate only.

FTE estimates <u>do not</u> include Agency Services allocations. FTE estimates do include Corporate organizations that directly budget personnel dollars against Power programs. For Internal Operations, Agency Services allocations (costs) represent approximately half the dollars so FTE quantity is unknown and therefore not available.



Question 8: Please provide a copy of Energy Northwest's Long Range Plan and Budget for CGS





**Question 9:** Can you provide power costs in the income statement format?

**Response:** Slides 21-23 provide detailed statements of power expenses in income statement format.

**Question 10:** Can you provide an explanation of changes in power purchases?

**Response:** Slide 24 provides a detailed explanation of the changes in power purchases.



#### **Power Services Detailed Statement of Expenses**

 Power Services Detailed Statement of Expenses
 Run Date\Time: May 14, 2008 11:08

 FY 2007 to FY 2011 Budget Comparison
 Preliminary/ Unaudited

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 EY 2007
 FY 2008
 FY 2008
 FY 2009
 FY 2011

		FY 2007	5	FY 2008	100 C	FY 2009		FY 2010 FY 201		
		Actuals: FY 2007	WP-07 Rate Case	SOY	DELTA SOY - Rate Case	WP-07 Rate Case	IPR	DELTA IPR - Rate Case	IPR	IPR
0	perating Expenses	A	1 ······			· · · · · · · · · · · · · · · · · · ·		The second second P		
	Power System Generation Resources									
	Operating Generation	and the second second	and the second se	States and		and the second second		and the second sec		
1	COLUMBIA GENERATING STATION	276,409	188,631	231,431	42,800	242.842	293,700	50,858	269,200	365,000
1	BUREAU OF RECLAMATION	67,332	74,760	74,760		77,766	82,100	4,334	87,700	98,550
0	CORPS OF ENGINEERS	158,410	165,742	165,742		170,407	179,500	9.093	193,000	197.911
1	LONG-TERM CONTRACT GENERATING PROJECTS	28,247	25,314	31,858	6,544	25,751	31,613	5.862	31,889	32,343
2	Sub-Total	530,398	454,447	503,791	49.344	516,766	586,913	70,146	581,789	693,804
	Operating Generation Settlement Payment	252425.0					to deve			Tester.
3	COLVILLE GENERATION SETTLEMENT	19,871	17,354	17,354		17,749	20,909	3,160	21,328	21,754
4	SPOKANE GENERATION SETTLEMENT		A REAL PROPERTY AND A REAL		A		10010-00			
5	Sub-Total	19,871	17,354	17,354	Di	17,749	20,909	3,160	21,328	21,754
2	Non-Operating Generation				1 million (1997)					
6	TROJAN DECOMMISSIONING	2,009	4,700	5,000	300	3,100	2,500	(600)	2,200	2,300
7	WNP-1&3 DECOMMISSIONING	99	200	300	100	200	404	204	418	428
8	Sub-Total	2,108	4,900	5,300	400	3,300	2,904	(396)	2,618	2,728
	Gross Contracted Power Purchases (excluding bookout adjustme	nts) <note 1<="" td=""><td></td><td></td><td></td><td>1000</td><td></td><td>N</td><td></td><td>1.00</td></note>				1000		N		1.00
9	DSI MONETIZED POWER SALES	44,487	59,000	59,000		59,000	54,999	(4,001)	58,867	58,867
20	PNCA HEADWATER BENEFITS	1,399	1,714	1,714		1.714	1,714	2.2.2. 2	2,042	2,620
1	HEDGING/MITIGATION	A4.94 X			Company and			100000000000000000000000000000000000000	-10 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	1000
2	OTHER POWER PURCHASES - (e.g. Short-Term)	235,853	64,693	132,074	67,381	61,570	73,035	11,465	86,917	78,957
3	Sub-Total	281,738	125,407	192,788	67,381	122,284	129,748	7,464	147,826	140,444
4	Bookout Adjustments to Contracted Power Purchases <note 1<="" td=""><td>(94,705)</td><td>(</td><td>1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</td><td>1</td><td></td><td></td><td>5.00</td><td></td><td>1.00.00</td></note>	(94,705)	(	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1			5.00		1.00.00
	Augmentation Power Purchases (includes IOU Load Reduc. and		the second second	1.00					a second of	
5	AUGMENTATION POWER PURCHASES	85,381	118,024	23,024	(95,000)	169,926	186,705	16,779	179,363	264,351
6	CONSERVATION AUGMENTATION	The set of the set of the	- State and the state of the	1. A.	and the second sec			100001010-1	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	at at a black of
	Exchanges & Settlements						10 Carlot 1			
7	PUBLIC RESIDENTIAL EXCHANGE		35,861		(35,861)	36,320	9,000	(27,320)	9,000	9,000
8	IOU RESIDENTIAL EXCHANGE	300,581	301,000	303,000	2,000	301,000	203,985	(97,015)	212,426	211,44
9	OTHER SETTLEMENTS	39,667		10 M						2.5464.65
	Renewable Generation			1 A 141				and the second second		
0	RENEWABLE CONSERVATION RATE CREDIT	5,863	10 Sec. 11	6,000	6,000	10000	6,000	6,000	10 10 To 1	a married
1	RENEWABLES	20,962	35,798	38,381	2,583	41,913	37,955	(3,958)	41,588	43,438
	Generation Conservation				10.00					
2	DSM TECHNOLOGY	174	646	600	(46)	147	1,600	1,453	1,600	1,600
3	CONSERVATION ACQUISITION	1,643	3,654	6,745	3,091	4,153	7,000	2,847	14,000	14,000
4	LOW INCOME WEATHERIZATION & TRIBAL	4,188	5,000	5,000	a more than	5,000	5,812	812	5,000	5,000
5	ENERGY EFFICIENCY DEVELOPMENT	17,172	12,908	22,000	9,092	12,933	22,000	9,067	20,500	20,500
6	LEGACY	4,545	2,638	2,638	0	2,114	2,114		1,988	1,622
17	MARKET TRANSFORMATION	10,773	10,000	10,000	A	10,000	10,000	and the second sec	12,000	12,000
8	Sub-Total	38,494	34,846	46,983	12,137	34,347	48,526	14,179	55,088	54,722
9	Conservation Rate Credit (CRC)	33,619	36,000	36,000		36,000	36,000		32,000	32,000
0	Power System Generation Sub-Total	1,263,977	1,163,637	1,172,621	8,984	1,279,605	1.268,646	(10,959)	1,283,027	1,473,686



### **Power Services Detailed Statement of Expenses**

iit of Measure: \$ Thousands (\$ 000)		Powers	FY 2007 to F	Y 2011 Budget Co iminary/ Unaudite	Sector Sector Sector	585		Run Date\Time: Ma	y 14, 2008 1°
	c ]	D I	EI	G		к		0	0
	FY 2007	2 m	FY 2008			FY 2009		FY 2010	FY 2011
The second s	Actuals: FY 2007	WP-07 Rate Case	SOY	DELTA SOY - Rate Case	WP-07 Rate Case	IPR	DELTA IPR - Rate Case	IPR	IPR
Power Non-Generation Operations	1							r	
Power Services System Operations				100 million (1990)			and the second se		
EFFICIENCIES PROGRAM	164			10.00		10.00		1.11	1.
INFORMATION TECHNOLOGY	5,678	2 224	5,423	5,423		5,423	5,423	6,359	6,
GENERATION PROJECT COORDINATION	6,025	6,031 2,303	6,293	262	6,144	7,648 2,486	1,504	7,892 2,790	8, 2,
SLICE IMPLEMENTATION Sub-Total	2,217	8,334	2,124 13,840	(179) 5,506	2,312 8,455	15,557	<u>174</u> 7,102	17,042	17.
Power Services Scheduling	14,004	0,004	15,640	0,000	0,400	10,007	7,192	17,042	16
OPERATIONS SCHEDULING	7,648	8,231	8.393	163	8,378	9,571	1,194	9,999	10
OPERATIONS PLANNING	5,144	5,435	5,721	286	5,531	5,969	438	6,207	6
Sub-Total	12,792	13,666	14,114	448	13,908	15,540	1,632	16,206	16
Power Services Marketing and Business Support				Les automatica de la compañía de la					
SALES & SUPPORT	14,527	14,761	16,398	1,637	15,162	18,988	3,826	19,391	19
PUBLIC COMMUNICATION & TRIBAL LIAISON				1					
STRATEGY, FINANCE & RISK MGMT	10,790	10,519	14,707	4, 188	10,607	16,142	5,535	17,151	17
EXECUTIVE AND ADMINISTRATIVE SERVICES	2,604	1,568	2,872	1,303	1,554	3,123	1,569	3,645	5
CONSERVATION SUPPORT	7,053	6,537	7,606	1,069	6,644	7,996	1,352	9,359	9
Sub-Total	34,975	33,385	41,583	8,198	33,968	46,249	12,281	49,545	52
Power Non-Generation Operations Sub-Total	61,852	55,385	69,537	14,152	56,331	77,346	21,015	82,793	86
Power Services Transmission Acquisition and Ancillary	Services			10000					
PBL Transmission Acquisition and Ancillary Services	1	1.620	100 million (1997)	- 1 - Contraction (1)	100.00			1.000	
POWER SERVICES TRANSMISSION & ANCILLARY SERVICES	110,213	123,215	114,000	(9,215)	117,853	117,853	2400	117,853	117
3RD PARTY GTA WHEELING	44,007	47,000	49,170	2,170	48,000	50,370	2,370	50,690	51
POWER SERVICES - 3RD PARTY TRANS & ANCILLARY SVCS	1,327	1,300	1,300		3,000	1,000	(2,000)	1,000	1
GENERATION INTEGRATION	8,468 31	8,462 210	8,462 50	(100)	8,462 210	6,800 50	(1,662) (160)	6,800 50	6
TELEMETERING/EQUIP REPLACEMT Power Srvcs Trans Acquisition and Ancillary Services \$	164,046	180,187	172,982	(160) (7,205)	177,525	176,073	(1,452)	176,393	177
		100,107	172,902	(7,200)	111,525	170,073	(1,+32)	170,030	
Fish and Wildlife/USF&W/Planning Council/Environmenta	l Req	Distance Address	1.1.1	1	the second second second		N. 8	1.0000.000	
BPA Fish and Wildlife (includes F&W Shared Services)	100 171	1 10 000	1 10 000	~	440.000	100.000	50.000	000 000	
FISH & WILDLIFE F&W HIGH PRIORITY ACTION PROJECTS	139,471	143,000	143,000	0	143,000	199,998	56,998	230,000	236
Sub-Total	139,471	143.000	143,000	0	143.000	199.998	56,998	230,000	236
USF&W Lower Snake Hatcheries	19,270	19,500	19,500	0	20,400	19,690	(710)	23,600	230
Planning Council	8,390	9,266	9,266		9,453	9,450	(7 (0)	9,641	9
Environmental Requirements	0,000	500	300	(200)	500	300	(200)	300	
Fish and Wildlife/USF&W/Planning Council Sub-Total	167,131	172,266	172,066	(200)	173,353	229,439	56,086	263,541	270
BDA Internal Connect		N CONTRACTOR			1				
BPA Internal Support	10	0.055		1.	10.000	سنج برو	10-1	15 505	
Additional Post-Retirement Contribution	10,550	9,000	9,000	(40.007)	15,375	15,277	(98)	15,598	16
Agency Services G&A (excludes direct project support) Shared Services (includes Supply Chain & excludes direct project	46,413	54,457	43,460	(10,997)	55,235	47,684	(7,551)	51,816	52,
BPA Internal Support Sub-Total	56,963	63,457	52,460	(10,997)	70.610	62,961	(7,649)	67,414	68,

#### **BPA Integrated Program Review**



### **Power Services Detailed Statement of Expenses**

Unit of Measure: \$ Thousands (\$ 000)	-		FY 2007 to F	Y 2011 Budget Co liminary/ Unaudite	SILES AND ALL T			Run Date\Time: Maj	,, 2000 ,
	C FY 2007	D	E FY 2008	G		K FY 2009	L	0 FY 2010	0 FY 2011
	Actuals: FY 2007	WP-07 Rate Case	SOY	DELTA SOY - Rate Case	WP-07 Rate Case	IPR	DEL TA IPR - Rate Case	IPR	IPR
Bad Debt Expense	(90)				7		· · · · · · · · ·		
Other Income, Expenses, Adjustments Non-Federal Debt Service Energy Northwest Debt Service	49	1,800	1,800	-	3,600	3,600		1,800	3,60
COLUMBIA GENERATING STATION DEBT SVC	96,868	217,856	128,778	(89,078)	218,767	225,532	6,765	234,040	227,92
WNP-1 DEBT SVC	88,559	165,916	145,637	(20,279)	163,282	166,757	3,475	160,376	162,23
WNP-3 DEBT SVC	79,034	160,092	154,252	(5,840)	153,030	153,250	220	142,923	168,22
EN RETIRED DEBT	178,888	and the second second	82,500	82,500				1.1	
EN LIBOR INTEREST RATE SWAP Sub-Total	(2,091) 441,258	543,864	2,000 513,167	2,000 (30,697)	535.079	545,539	10,460	537,339	558,38
Non-Energy Northwest Debt Service	441,200	545,664	513,167	(30,697)	555,079	545,559	10,400	557,558	000,00
ITROJAN DEBT SVC	8,149	7,888	7,900	12					
CONSERVATION DEBT SVC	5,288	5,198	5,198	0	5,196	5,188	(9)	5,079	4,92
COWLITZ FALLS DEBT SVC	11,708	11,583	11,713	130	11,571	11,571		11,566	11,56
NORTHERN WASCO DEBT SVC		1,664	1,664		2,168	2,168	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	2,200	2,19
Sub-Total	25,145	26,333	26,474	142	18,935	18,927	(9)	18,845	18,68
Non-Federal Debt Service Sub-Total	466,404	570,197	539,641	(30,555)	554,014	564,466	10,451	556,184	577,06
Depreciation	106,434	121,852	112,580	(9,272)	124,617	112,677	(11,940)	114,288	117,38
Amortization	69,770	76,332	75,311	(1,021)	81,263	78,832	(2,431)	107,242	117,40
Total Operating Expenses	2,356,535	2,405,113	2,368,998	(36,115)	2,520,919	2,574,040	53,121	2,652,681	2,891,72
Interest Expense				1.14	1.00	5	1 TO		1000
Interest Appropriated Interest	234,454	208,560	222,955	14,395	202.008	211,439	9,431	214,287	221,06
Capitalization Adjustment	(45,937)	208,560 (45,937)	(45,937)	14, 385	(45,937)	(45,937)	9,431	214,287 (45,937)	(45,93
Gross Bonds Interest Expense	39,304	70,159	43,655	(26,504)	81,775	(45,957) 59,871	(21,904)	71,171	81,74
Interest Earned on BPA Fund	(56,651)	(55,034)	(60,225)	(5,191)	(52,347)	(59,201)		(59,201)	(59,20
AFUDC	(25,654)	(8,000)	(12,800)	(4,800)	(8,000)	(10,200)	(2,200)	(10,200)	(10,20
Net Interest Expense	145,516	169,748	147,648	(22,100)	177,499	155,971	(21,528)	170,120	187,46
Total Expenses	2,502,050	2,574,861	2,516,646	(58,215)	2,698,418	2,730,011	31,593	2,822,801	3,079,19

#### **BPA Integrated Program Review**

# **Power Purchases Including DSI Monetized Power Sales**

	WP-07 Rate Case for FY 2009	FY 2009 Supplemental	FY 2009 IPR	IP	۲R
	FY 2009	FY 2009	FY 2009	FY 2010	FY 2011
Spending	292,210	316,575	316,454	327,189	404,795
Increase/Decrease (\$ amount)		24,365	(121)	10,735	77,606

**Drivers of Change:** 

Change from the WP-07 Rate Case to the Supplemental Proposal is made up of the following components:

<b>DSI Monetized Power Sale</b>	- 4
<b>Other Power Purchases (Short-term)</b>	+11
Augmentation Power Purchases	+17

Power Purchases are higher because the firm load deficit in the supplemental rate case shows a higher deficit (354 aMW vx. 270 aMW) than in the WP-07 case. Partially offsetting this increase in firm load deficit is a reduction in the expected price of power.

The levels for 2010-2011 will be results from modeling in the 2010-2011 rate case.

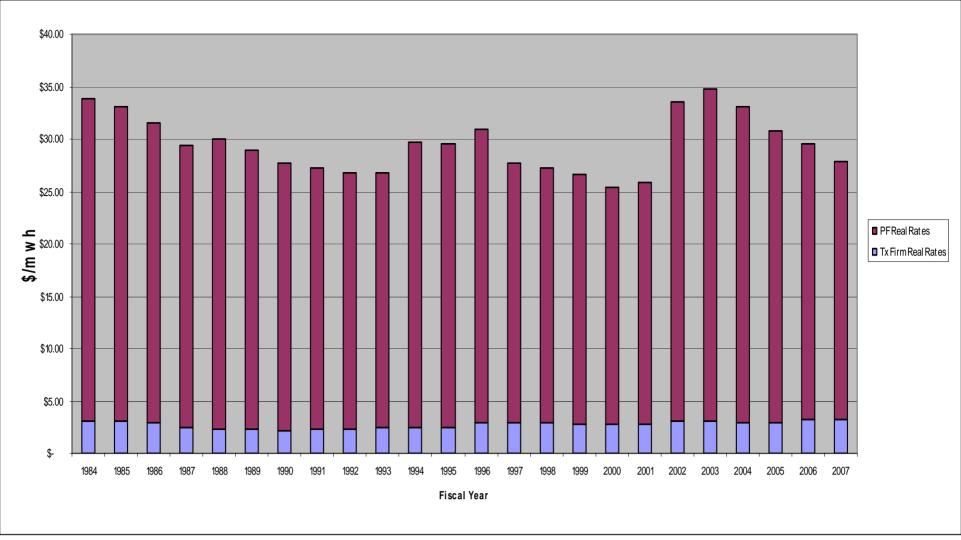


# **Question 11:** Is the chart on slide 30 of the Overview Workshop in 2004 dollars?

**Response:** Yes, the chart is in 2004 dollars and is shown on Slide 26 of this packet.



### FY 1984-2007 Wholesale Energy – Cost Components (\$/MWh)



Is this chart in 2004 dollars? Yes

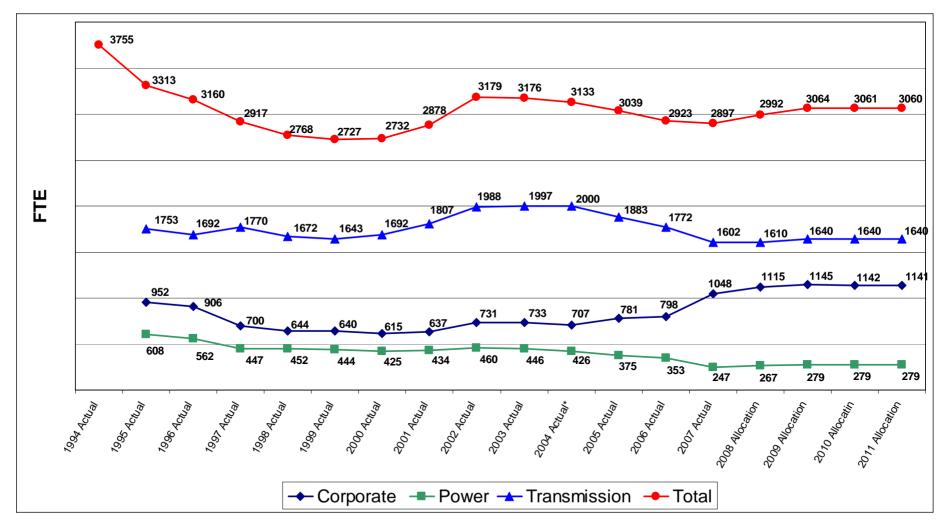


**Question 12:** Please provide a breakdown of FTE by agency, business unit, and program.

**Response:** A chart showing historical and forecast FTE by business line is provided on slide 28.



### Bonneville Power Administration FTE History FY 1994 to 2012



\*The increase in corporate FTE and decrease in PBL and TBL FTE from 2004 to 2005 is due to IT consolidation



**Question 13:** Please provide a list of the number of attorneys in General Counsel over the recent years.

**Response:** The FTE (Full Time Equivalent) allocation to the Office of General Counsel in recent years is as follows:

FY 2006: 47 FTE FY 2007: 50 FTE FY 2008: 55 FTE FY 2009: 55 FTE FY 2010-11: 53 FTE

Changes to General Counsel FTE are the result of: increased need for legal services in transmission due to new transmission initiatives, new reliability standards and compliance requirements; increased use of third party financing, resumptions of the Residential Exchange with attendant legal review; and increase support for Fish and Wildlife programs.



**Question 14:** Can you provide the portfolio of projects proposed for the Technology Confirmation and Innovation program?

**Response:** The FY 2008 research and development project portfolio is shown on the next two slides. Annual portfolios are guided by technology roadmaps that outline potential directions for technology innovation in critical areas such as Climate Change, Distributed Generation, Energy Efficiency, etc. Annual portfolios are developed each year through an R&D steering committee approval of project proposals and can vary based on strategic direction, status of ongoing projects and new ideas. The attached portfolio is illustrative of the results of this process.



#### FY 2008 Agency R&D Portfolio – For Illustration Only

Proposal #	Proposal Name	Duration (Yrs)	FY08 Allocated
1	Advanced Surge Suppression Resistor Development	1	\$71,000
2	Automated Diagnostic for Packaged HVAC	2	\$20,747
5	CEATI Life Cycle Management of Substation Equipment	3	\$35,000
	CEATI Working Group: Overhead Line Design, Wind and Ice Mitigation Interest Group	3	\$40,000
10	CEATI Working Group: Transmission Line Asset Management Interest Group (TLAM)	3	\$15,000
	CIGRE Transmission Tower Working Group	4	\$15,135
	CIGRE B2.12/26, Electrical Aspects of Conductors Working Group	4	\$15,135
	Climate Change Streamflows for the Columbia Basin	3	\$100,000
	Design and Build Process for Seismically Isolating Substation Equipment Using Friction-		
	Type Energy Dissipation Devices	2	\$53,000
	EPRI Program 170 Dynamic Energy Management	5	\$105,485
	EPRI TC Project Electrical Condition Assessment of Polymer Insulators	6	\$25,000
	EPRI Membershp Program 38: Increased Utilization of Transmission Corridors	6	\$144,167
	EPRI TC Project Development of Inspection Tool to Identify NCIs at High Risk of		
	Mechanical Failure during In-Service Conditions	6	\$35,000
	EPRI Membership Program 35: Overhead Transmission	6	\$169,360
	EPRI TC Project Seismic Studies	6	\$25,000
	EPRI Membership Program 37: Substations	6	\$254,843
	ETO Statcom NCSU	3	\$510,000
	EPRI TC Project Evaluation of Aged Insulators (porcelain, glass or NCI) on the BPA		
	System or being considered for purchase	4	\$50,000
	EPRI TC Project Hotstick Leakage Monitor -Prototype Development	1	\$30,000
	Human Factors in Dispatcher Training and Operations	2	\$100,000
	Improved Wind Farm Modeling in Tx System Studies	2	\$90,000
	Interactability Demonstration Project	4	\$250,000
	Line Tension Monitors Internal Data Reduction and Review (Continuation)	1	\$1,500
	Load Modeling in Power System Studies	3	\$90,000
	Low Temperature Heat Pump	2	\$32,000
	Mini-Split Heat Pump Demonstration and Monitoring	5	\$77,000
	National Seismic Research Center Collaborative	1	\$160,000
43	Assessment of variable characteristics of the PNW region's wave and tidal current power		<b><b><b><b></b></b></b></b>
	resources	1	\$95,000



#### FY 2008 Agency R&D Portfolio – For Illustration Only

Proposal #	Proposal Name	Duration (Yrs)	FY08 Allocated
44	EPRI TC Project Non-Ceramic Insulator Electrical Assessment Tool for Energized Work		
		2	\$30,100
	Operational Multi-Gigabit Ethernet Transport	2	\$320,000
	Operations Real-time Study Improvement	2	\$175,000
	Operations Study Process Improvement: Next Hour	2	\$115,000
	Power System Controls - Inter-area Oscillation Damping	3	\$235,000
	Power System Controls - Response-Based Voltage Stability Controls	4	\$355,000
	Power Systems Engineering Research Center continuing membership	6	\$55,000
54	Real-Time Oscillation Monitoring Expert	2	\$30,000
	Extreme Event Risk and Vulnerability Assessment (SERA)	2	\$168,000
59	Short Term Wind Forecast		
		2	\$94,980
	R&D state estimator to real time transient stability phase 1	3	\$212,000
70	Wind Regulation & Load Following Study (PNNL)		
		4	\$65,000
	Wide Area Energy Storage & Management (PNNL)	3	\$240,000
	Development and Demonstration of Advanced Lighting Technologies for Energy Efficiency	_	• · ·
	and Demand Response Applications (EPRI)	2	\$127,992
	Integrated Decision Support System for Location, Assessment, and Optimization of In-	~	<b>#</b> 50.000
	Stream Tidal Energy Developments (Pacific Int'l. Engineering)	3	\$52,260
90	Grid-Responsive Demand-Side Control using Grid Friendly™ Appliance Technologies	4	¢145.000
OF	(PNNL) Wide Area Dower System Security Region (DNNL)	4	\$145,000
	Wide Area Power System Security Region (PNNL)	I	\$160,000
97	Tidal In-Stream Energy Conversion (TISEC) Project in Puget Sound, WA - Phase IIA (Snohomish PUD)	3	\$450,000
		3	φ+50,000
			\$5,639,704
		Available for	New Projects



**Question 15:** Can you provide the funding amounts that were transferred to TCI from Power and Transmission and how the transfer impacts statements of revenues and expenses?

**Response**: Prior to the formulation of the Technology Confirmation and Innovation group, Power and Transmission each invested about \$3M a year on R&D efforts. The current TIC budget incorporates both these transferred funds and additional resources, with the goal of dedicating approximately 0.5% of revenue to R&D efforts. Power and Transmission Statements of Revenues and Expenses are based on programs, not organizations, so the transfer of funds from Power and Transmission to Technology Innovation and Confirmation is transparent. R&D activities are shown in the same project now as they were before the consolidation.



# **Follow Up Items**

**Question 16:** Please show how resources are managed when functions and/or staff are transferred between different parts of BPA.

**Response:** As the result of EPIP reviews and similar efficiency efforts in the last few years, several functions and accompanying staff have been transferred, consolidated, and, in some cases, enhanced. These transfers are managed as a team effort by Finance, Human Capital Management, Workplace Services, Information Technology and others. Final details of the transfers are reviewed and approved by both the sending and receiving managers, as well senior managers if additional resources are included. For EPIP related reorganizations, resource transfers are also reviewed to establish baselines from which to measure progress toward EPIP goals.

In most cases, these transfers are transparent to financial statement users since statements are based on programs/functions, not on organizations. Project cost estimates are generally shown in the same lines of the Revenue and Expenses statements after reorganizations as before. When staff members are moved from Transmission or Power organizations to Agency Services organizations without a change in function or effort, the decreases on one side are offset by increases on the other and the financial statements remain unchanged.

If resource levels are increased or reduced due to changes in a program, these changes will show as increases or decreases to programs on the financial statement. This provides a simple and effective means of managing the financial impacts of functional or programmatic changes.



**Question 17:** What is the payment to the National Park Foundation, e.g., what does it actually pay for?

**Response:** In the congressional language authorizing removal of those projects, operations and maintenance (O&M) functions for the Elwah and Glines projects was to be provided by Reclamation, and BPA was to market the power. Revenue from the power generated pays the O&M costs for the projects, which allows them to operate until they are removed (currently scheduled for 2012). If the value of the generation is higher than the cost for O&M, the difference is to be donated at the Administrator's discretion to the National Park Foundation Fund as specified in the congressional language and the triparty agreement between the National Park Service, Reclamation, and BPA.



**Question 18:** Please provide a breakdown of the Oracle Customer Billing and Contract system (Lodestar) costs.

**Response:** The capital and expense estimates through FY 2011 have been provided on Slide 37. (it's a fairly constant expense level for maintenance after project implementation - i.e., after FY 2009).

# Customer Billing & Contract System

#### Cost Breakdown for Agency Customer Billing and Contract System (Oracle) \* Dollars in \$Millions

May 28, 2008

	FY 2008			FY 2009			FY2010			FY2011		
Customer												
Billing &												
Contract												
Project	Capital	Expense	Total	Capital	Expense	Total	Capital	Expense	Total	Capital	Expense	Total
Total												
Budget	\$2,411	\$0	\$2,411	\$5,875	\$364	\$6,239	\$0	\$769	\$769	\$0	\$774	\$774

\* Provided in response to IPR data request.

We are intending this to be the single, integrated billing and contract management system for the Agency (instead of continuing to develop and maintain two or more systems) . . . hence greater efficiencies and reduced financial risk, as recommended under the Marketing and Sales EPIP.



**Question 19:** A request was made to determine how the River has *actually* been run in past years?

**Response**: We believe the requested analysis was to compare the 2006-2007 Courtordered spill criteria costs with those of the new BiOp when considered over a wide range of flow conditions (e.g. 70-years). The study (2006-2007 Court-ordered spill criteria) required to respond to this request has not been done, and BPA does not expect to create it. However, as explained in the workshop, we expect there would not be much difference in that the spill operation in the BiOp provides summer spill in the LSN as was provided in the court's order (though the duration of spill is shorter since in the BiOp we aren't spilling after juveniles have passed through that reach).



**Question 20:** We would like to get an accurate reflection of what the total cost of the MOAs is, including interest, etc.

**Response:** We have not identified the discrete costs and capital investments associated with the MOAs separate from those associated with the BiOp and the existing program.

**Question 21:** Could you please provide the Lower Snake River Comp Plan?

**Response**: This plan can be found on the on the following website (<u>http://www.fws.gov/lsnakecomplan/</u>), in addition to other useful information pertaining to LSRC.



**Question 22:** Is the \$162 million in Direct Program Expense for FY 2009 a planning number or an actual expenditure number? Put another way, will BPA be including in their rate structure the ability to spend \$162 million or 93 percent of \$162 million for FY 2009?

**Response:** As shown on page 9 of the materials provided at the F&W workshop on May 21, \$162 million is the amount forecast to be spent in FY 2008. As shown on pages 8 and 11 of the materials, the amount proposed to be spent in FY 2009 is \$200 million. These proposed spending levels are what BPA is proposing be assumed in upcoming rate-setting proceedings



**Question 23:** Please provide descriptions of the programs involved in TI (roadmap)?

**Response:** This has been provided in the 5/20 Follow Up.

**Question 24:** Please provide additional information regarding the Acquisition Expense items listed on Table 2 (page 8) of the EE Workshop presentation.

**Response:** Slide 42-44 provide additional detail pertaining to the items identified as Acquisition Expenses in the table on slide 3



## **Acquisition Expense Items**

#### Table 2: Actual (2006-08) and Projected (2009-11) Conservation Budgets

	20 Rates	06 Actuals	200 Rates	)7 Actuals	200 Rates	)8 SOY(+)	200 Rates	9 Plan	2010 Plan	2011 Plan
aMW Target/Achieved	44.0	48.5	52.0	58.1	52.0	52.0	52.0	52.0	70.0	70.0
Budget Line Items (in millions of \$) Capital										
Bilateral	20.0	19.9	32.0	7.0	32.0	42.0	32.0	42.0	56.0	56.0
Non-Wires Solutions (in Trans \$)			1.0		3.0	0.5	3.0	3.0	3.0	3.0
Expense										
Rate Credit (Conservation Only)	37.0	36.0	36.0	33.6	36.0	36.0	36.0	36.0	32.0	32.0
Reimbursable	9.3	17.2	12.9	17.2	12.9	22.0	12.9	22.0	20.5	20.5
Market Transformation (re/NEEA)	10.0	10.1	10.0	10.8	10.0	10.0	10.0	10.0	12.0	12.0
Acquisition Expense		0.5	2.6	1.6	2.0	6.7	2.0	7.0	14.0	14.0
Support for Acquiring aMW*						2.2			5.0	5.0
Load Management								2.0	2.0	2.0
Planning/Evaluation				0.6		1.4		1.4	2.0	2.0
Marketing		0.2		0.2		0.7		0.8	1.5	1.5
Tracking/Reporting/RTF		0.3		0.6		0.7		0.8	1.0	1.0
Sector Support				0.6		1.7		2.0	2.5	2.5
Low Income Weatherization	3.7	5.9	5.0	4.2	5.0	5.0	5.0	5.8	5.0	5.0
Legacy	4.2	4.3	3.7	4.5	2.6	2.6	2.1	2.1	2.0	1.6
DSM Technologies	1.8	0.5	1.7	0.2	2.3	0.6	2.3	1.6	1.6	1.6
Program Level Spending	66.0	74.5	71.9	72.1	70.8	83.0	70.3	84.5	87.1	86.7
Internal Operations	6.5	6.6	6.4	7.1	6.7	7.6	7.0	8.5	9.5	10.1
Fixed Cost	5.3	5.3	5.2	5.3	5.2	5.2	5.2	5.2	5.0	4.9
Total	97.7	106.3	116.6	91.4	117.7	138.3	117.5	143.2	160.6	160.7
BFTE Burn/Allocation		61.8		55.4		60.0		62.0	62.0	62.0

+ - Subsequent mid-year reduction from SOY of \$29M (Capital reduction of \$22M Bi-Lateral Contracts and \$.25M Non-Wires Solutions plus Expense Forecast \$5M Reimbursable Program and \$1.5M Acquisition Expense reduction).

- \$2 million in unspent acquisition expense funds was carried over from FY 2007 to FY 2008.



#### Support for Acquiring aMW

- Manufacturer but downs and related up channel incentives for specific technologies
- Regional programs run by third parties for BPA and interested utilities
- Trade ally (vendors/distributors/installers) inducements

### **Load Management**

- Non-wires studies and implementation design
- Load management analysis and program design
- Pilot projects and demonstrations

#### **Planning/Evaluation**

- Long term data collection (e.g., updating end-user load profiles, engineering estimates for energy conservation measures (ECM's), building stock data, etc.)
- Market research and program planning
- Evaluation, measurement and verification



# **Clarification of Acquisition Expense Items**

#### Marketing

- Sector marketing materials
- Sponsorships and memberships
- Targeted campaigns to increase penetration in hard-to-reach markets
- Website design, development and maintenance
- Utility marketing support
- Branding and design

#### **Tracking and Reporting**

- Planning, tracking and reporting (PTR) system support, enhancements and training
- System planning for the long term
- Regional Technical Forum (RTF) collaboration and support

#### **Sector Support**

- Technical service providers (TSP) for providing technical assistance to utilities
- Trade ally support
- Sector staffing support (contract support)
- Education, training and outreach
- Program design



- 1. All FY 2008-2013 information was provided in May 2008 and cannot be found in BPAapproved Agency Financial Information, but is provided for discussion or exploratory purposes only as projections of program activity levels, etc. This information is a derived estimate for presentation purposes and cannot be found in BPA-approved Agency Financial Information but is provided for discussion or exploratory purposes only as "*projections of program activity levels, etc.*"
- 2. All FY 2007 and earlier information was provided in May 2008 and is consistent with audited actuals that contain BPA-approved Agency Financial Information.