Appendix

Power Function Review II

Kick Off Meeting

January 23, 2006

PFR Final Report Outcome

		FY 2002-2006 Average Expense	FY 2002-2006 Average Capital	PFR Base FY 2007-2009 Average Expense	PFR Base FY 2007-2009 Average Capital	PFR Draft Closeout Letter Average Expense	PFR Draft Closeout Letter Average Capital	PFR Final Report Average Expense	PFR Final Report Average Capital	PFR Delta Base to Final Expense	PFR Delta Base to Final Capital
1	Long-Term Generating Projects	$ 28	$ -	$ 25	$ -	$ 25	$ -	$ 25	$ -	$ -	$ -
2	Renewables Program (Expense Only) Removed Geothermal forecast FY07-08 - ($21 M/yr) Revise wind forecast FY07-09 - ($4 M/yr) Added facilitation budget FY07-08 - $6 M/yr Added renewable rate credit FY07-09 - $6 M/yr	$ 22	$ -	$ 56	$ -	$ 61	$ -	$ 42	$ -	$ (13)	$ -
3	Conservation Program (Expense Only)	$ 66	$ 27	$ 71	$ 32	$ 70	$ 28	$ 71	$ 32	$ -	$ -
4	Internal Operations Charged to Power Rates Included forecast for Process Improvements - ($8 M/yr) Included TCI forecast - $1.3 M/yr	$ 107	$ -	$ 116	$ -	$ 110	$ -	$ 110	$ -	$ (6)	$ -
5	Other Removed Spokane Settlement Forecast - ($6 M/yr) Updated Environmental Benefits Forecast - ($7 M/yr) Reduced US Fisheris Forecast - ($300 K/yr) Misc. Updates - ($1 M/yr)	$ 83	$ -	$ 120	$ -	$ 105	$ -	$ 105	$ -	$ (15)	$ -
6	Fish & Wildlife Direct Program (Integrated Program) Increased Integrated Program Forecast - $5 M/yr	$ 139	$ 20	$ 139	$ 36	$ 143	$ 36	$ 143	$ 36	$ 4	$ -
7	Transmission Purchases, and Reserve/Ancillary Services Removed Telemetering Forecast - ($800 K/yr) Updated 3rd Party GTA Wheeling Forecast - ($4 M/yr)	$ 171	$ -	$ 189	$ -	$ 184	$ -	$ 184	$ -	$ (5)	$ -
8	Settlement Payments to Residential & Small Farm Consumers of IOUs 1/	$ 375	$ -	$ 323	$ -	$ 323	$ -	$ 323	$ -	$ -	$ -
9	Corps and Reclamation O&M for Hydro Projects Reduced WECC/NERC complicance forecast - ($1.5 M/yr)	$ 196	$ 110	$ 242	$ 138	$ 240	$ 138	$ 240	$ 138	$ (2)	$ -
10	Columbia Generating Station O&M for Nuclear Plant Reduced O&M forecast per Draft Long Range Plan - ($22 M/yr) Increased contribution to Decomissioning Fund - $1 M/yr	$ 215	N/A	$ 284	$ -	$ 262	$ -	$ 263	$ -	$ (21)	$ -
11	Debt Management Debt Financed CGS Capital - ($13 M/yr) 2/ Adopted different CRFM schedule ($5 M/yr) Changed Conservation Augmentation Schedule to 5 years - ($10 M/yr)	$ 892	$ -	$ 1,003	$ -	$ 965	$ -	$ 965	$ -	$ (38)	$ -
12	Power Purchases	$ 559	$ -	$ 107	$ -	$ 107	$ -	$ 107	$ -	$ -	$ -
13	**Total**	**$ 2,853**	**$ 157**	**$ 2,674**	**$ 206**	**$ 2,594**	**$ 202**	**$ 2,577**	**$ 206**	**$ (96)**	**$ -**

1/ Total includes 900 aMW of Monetary Benefit ($139 M/yr average), and approximately 618 aMW of load augmentation (BPA power buyback) ($235 M/yr average)
2/ Total includes net impact of CGS capital decision. Final rate case outcome will show a reduction in CGS O&M and an increase in Debt Management.

Found $96M in cost reductions for FY07-09

PFR Final Report to Power Initial Proposal

	FY97-01 Average	FY02-06*** Average	PFR Final Report		FY07-09 Initial Proposal Revenue Requirement Average
Long-Term Generating Projects*	$ 57	$ 27	$ 25		$ 25
Renewables*	$ 3	$ 20	$ 42		$ 42
Conservation*	$ 22	$ 66	$ 71		$ 72
Internal Operations Charged to Power Rates	$ 93	$ 107	$ 110		$ 109
Other	$ 66	$ 83	$ 105	1	$ 125
Fish & Wildlife Program	$ 100	$ 141	$ 143		$ 143
Transmission Purchases, and Reserve/Ancillary Services	$ 259	$ 163	$ 184		$ 184
Payments to Residential & Small Farm Consumers of IOUs	$ 84	$ 383	$ 323		$ 324
Corps and Reclamation O&M for Hydro Projects	$ 147	$ 197	$ 240		$ 241
Columbia Generating Station O&M for Nuclear Plant	$ 178	$ 214	$ 263	2	$ 234
Debt Management**	$ 916	$ 883	$ 965		$ 979
Power Purchases*	$ 666	$ 580	$ 107	3	$ 144
TOTAL	**$ 2,589**	**$ 2,864**	**$ 2,578**		**$ 2,622**

**Does not Reflect Change in Revenues*

***Includes Rate Case EN Debt Service*

****Includes MNR actuals FY02-05, SOY FY06*

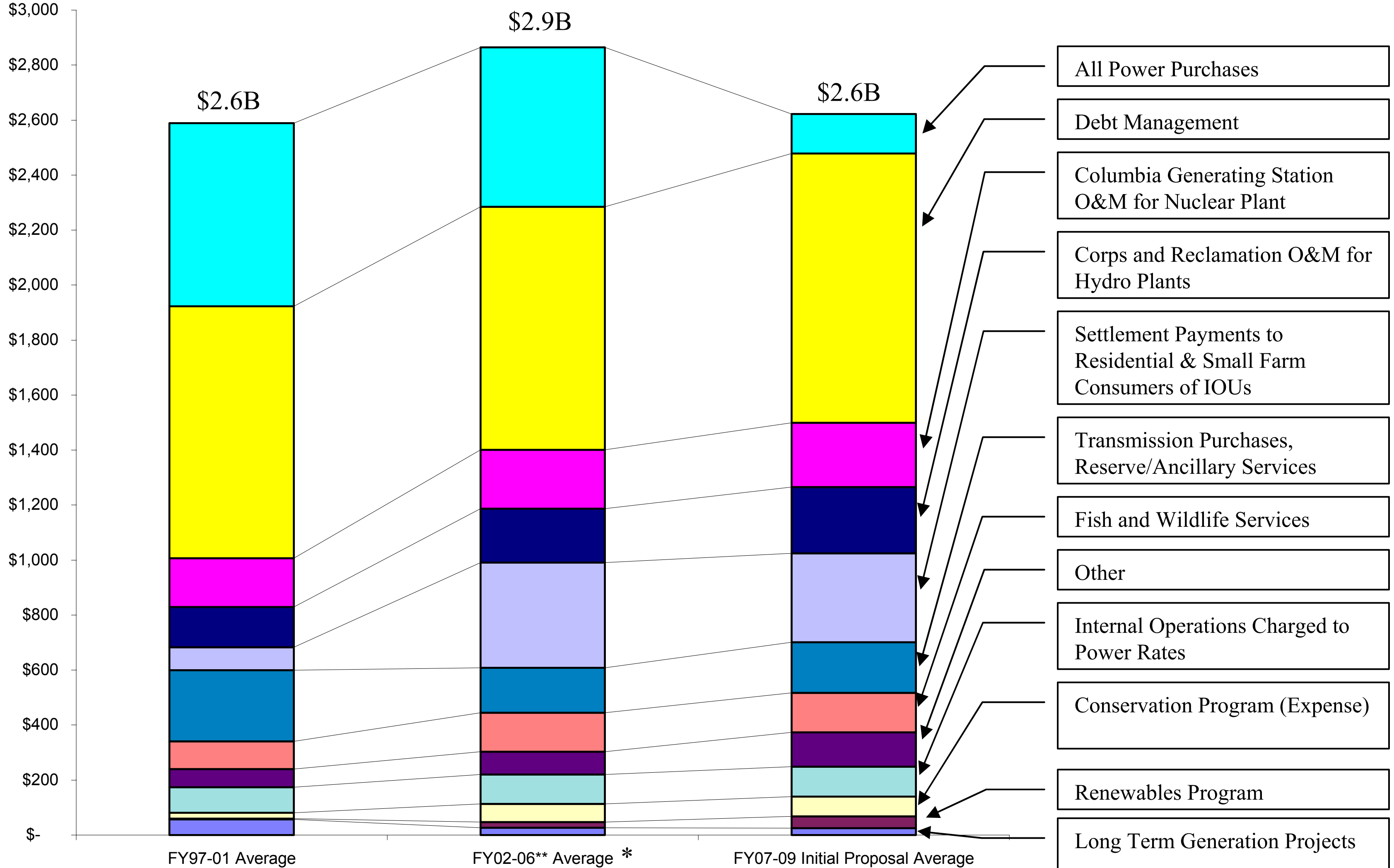
Reasons for Change:

1 **Other category change** - DSI Benefits went from $40M to $59M per the DSI ROD.

2 **CGS O&M and Debt Management category change** – In PFR Final Report debt financing CGS items were shown in the Debt Management line where as in the Initial Proposal it is reflected it in the CGS O&M line -$29M.

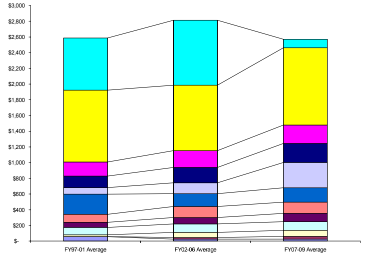
3 **Power Purchase category change** – Placeholder was in the PFR forecast until final hydro assumptions, loads and market prices were run in the Initial Proposal.

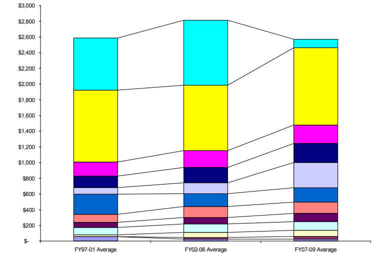
Average Power Expenses Over Time



*Includes Rate Case ENW Debt Service used to calculate rates; includes FY02-05 actual MNR expenses and FY06 SOY forecast

Average Power Expense Comparisons





<u>FY97-01 vs. FY07-09 Annual Average</u>

•Debt Management	$63M
•Columbia Generation Station O&M for Nuclear Plant	$56M
•Corps and Reclamation O&M for Hydro Plants	$94M
•Payments to Residential & Small Farm Consumers of IOUs*	$240M
•Transmission Purchases & Reserve/Ancillary Services	($75M)
•Fish & Wildlife Direct Program	$43M
•Internal Operations Charged to Power Rates	$16M
•Conservation Program (Expense)	$51M
•Renewables	$40M
•Long-Term Generating Projects	($32M)
•Other	$59M
•All Power Purchases (includes Augmentation)	($522M)

<u>FY02-06 vs. FY07-09 Annual Average</u>

•Debt Management	$96M
•Columbia Generation Station O&M for Nuclear Plant	$20M
•Corps and Reclamation O&M for Hydro Plants	$44M
•Payments to Residential & Small Farm Consumers of IOUs*	($59M)
•Transmission Purchases & Reserve/Ancillary Services	$20M
•Fish & Wildlife Direct Program	$2M
•Internal Operations Charged to Power Rates	$3M
•Conservation Program (Expense)	$6M
•Renewables	$22M
•Long-Term Generating Projects	($2M)
•Other (includes DSI benefits)	$42M
•All Power Purchases (includes Augmentation)	($436M)

*Includes augmentation, load reductions and buydowns to IOUs

Drivers of Program Costs Since FY 1997-2001

- Total power expenses are going down by approximately $250 M in FY07-09, but are not returning to FY97-01 levels, because:
    - BPA is serving 3000 aMW more public power load
    - Benefits to investor-owned utility residential and small farm consumers are likely to be over $300 million a year, compared to $70 million in FY97-01
    - Total fish and wildlife costs, not counting operation costs, are up by approximately $120 million a year
    - Conservation program expense is up by about $50 million a year
    - Increased operations, maintenance and debt service costs for the hydro and nuclear plant generating system are up about $60 million annually, not including fish and wildlife-related expense

Maximum Discretion Reductions

•These are costs related to programs that BPA is not contractually or legally required to continue, but are in the forecast because BPA has so far concluded they are mission critical

•BPA is not recommending the adoption of any of these options

EXPENSE CHANGES FROM PFR BASE				
Line #	**Program**	**2007-09 Average**		**Comments/Consequences/Risks**
1	**Renewables**			
2	Eliminate Facilitation Cost	$	6.0	BPA's decision in the Regional Dialogue ROD was that active and creative facilitation is the most appropriate role for the agency in FY2007-2011 period. PFR closeout forecast included $5.5M for facilitation in FY2007 and $11M for FY2008. BPA also committed to reinvest revenues from it's green marketing program on renewables (forecasted at $700,000 per year). It has been recommended that BPA use the majority of the facilitation budget and green premium revenues to increase the $/MWh renewable rate credit for new public customer renewable investments. IT has also been proposed that BPA set aside $1-$2 million/year for RD&D activities with the focus on bolstering RD&D efforts already underway by DOE, EPRI and other utilities. This commitment will add an estimated $5 million to the facilitation budget in the next rate period. In addition, in order to fill BPA's commitment to back stop customer renewable spending via the C&RD program, it has been recommend that this commitment be added to the FY2008 or FY2009 facilitation budgets to give us time to make good use of these dollars.
3	Eliminate Rate Credit	$	6.0	The 2007 Wholesale Power Rate Case Initial Proposal Revenue Requirement Study used these amounts in the category Renewable and Conservation Generation. It will be used to fund the renewable option to the conservation rate credit. More than 20 customers currently participate in the renewable portion of the C&RD program. Does not impact Conservation's ability to meet its target.
4	**Conservation**			
5	Eliminate Rate Credit	$	36.0	Council's new conservation targets not met; utility/vendor conservation delivery infrastructure collapes; BPA would be viewed as an unreliable business partner that funds conservation in a "roller coaster" manner; the cost of restarting results in higher than the average cost of ongoing programs; BPA does not achieve its strategic objective (S3).
6	Eliminate LIWx	$	5.0	Current funding agreements run thru FY 2006; 4-State LIWx programs reduced by 20%; Tribal LIWx programs reduced by 80%; support of economically disadvantaged citizens reduced during time of high energy and home heating costs.
7	**CGS**			
8	Eliminate license extension funding in FY07-09	$	2.8	There are concerns that eliminating the license extension project could jeopardize BPA/Energy Northwest's ability to extend Energy Northwest debt to 2024.
9	**Corps/Reclamation**			
10	Eliminate Non Routine Extraordinary Maintenance	$	8.0	Taking a greater chance of revenue loss if equipment breaks and don't have funds to repair it.
11	**Internal Operations Charged to Power**			
12	Not fill behind retirees (Power)	$	1.5	>Reduced customer service by AE's and support staff. >Risk of failure in any core system: scheduling, billing, trading floor, etc. >Reduced responsiveness to constituents. >Decline in technology/systems development to meet the challenges of rapidly evolving markets. >Decline in business strategy, assessment and policy. >Decline in financial analysis and transparency efforts both internally and externally. >Risk to the continued maintenance of production systems once development is complete. >Reduced market intelligence research. >Reduced Energy Efficiency and Conservation initiatives. >No preparation for RTO or market design change.

Maximum Discretion Reductions, cont.

Line #	Program	2007-09 Average	Comments/Consequences/Risks
13	Not fill behind retirees (Corp allocation to Power)	$ 1.5	BPA is currently engaged in reviewing and streamlining corporate processes through the EPIP initiative. As they are completed, EPIP studies are determining means of improving processes and reducing the required resources and staff. BPA is relying on attrition and retirements to reduce staff when called for by the EPIP studies. This proposal to freeze all new hires by not replacing retirees would duplicate these already existing efforts. As such, it is difficult to determine what additional savings would be possible due to a complete freeze on retiree replacement. We estimate that the savings of such a freeze would be relatively insignificant - about $1.5M more per year than already anticipated in the EPIP savings. This freeze would reduce the benefits of the EPIP effort, as FTE reductions would be random rather than based on the systematic, targeted, and balanced recommendations of EPIP. This would also make it impossible to realize savings through selectively converting contractors to FTE where cost effective. BPA would also be unable to address significant skill gaps left by retiring employees - resulting in greater reliance on contracting. With BPA's significant retirement profile, this freeze would also constrain our ability to implement developmental plans for the upcomir generation of employees. Remaining employees would also experience additional workload and stress performing functions wh large numbers of retirements are anticipated.
14	Eliminate TCI	$ 1.3	Estimate based on PFR forecast. Actual amount will depend on how much the PBL is currently doing to achieve target.
15	Grants	$ 1.5	National Parks Endowment ($1.5 M) and Public Comm & Tribal Liaison (FY06 = $.2M [total is $.5 but $.25 already committed] FY07-09 $.1M)
16	**F&W Integrated Program**		
17	Targeted Spedning Reductions and Program Closelouts.	$ 15.0	Undermines strategic direction and tactics that include testing the value of making tradeoffs within current expense spending limits, as a precursor to trade-offs made more broadly between offsite mitigation efforts and operational expenses, a highly focused monitoring program that allows more room for on the ground efforts that directly affect fish and wildlife. Inconsistent with predictable, reliable levels of expense spending (qualified in the PFR close-out of an unknown litigation outcome). Compromises constituent relationships of the agency, by raising questions about BPA's motivations, intentions, and integrity. Diminishes improved collaborative planning and implementation decision-making, and renews impetus to transfer program administration to third-party. Alienates partners in Remand collaborative process. Does not support Agency and EF&W BSC objectives
18	**Debt Management**		
19	Extend $350M CGS debt to FY19-24 and finance new CGS capital through FY24.	$ 16.0	EN E-Board has to approve, meeting scheduled for January 26. The results will be different when combines with other debt management actions and other updates to study inputs are incorporated in the final proposal repayment study.

Maximum Discretion Reductions, cont.

Line #	Program	2007-09 Average	Comments/Consequences/Risks
20	**DSI Benefits**		
21	Eliminate monetary benefits*	$ 59.0	Placeholder in PFR Final Report was $40M per year. The June 30, 2005, DSI ROD changed the amount to $59M per year for the DSI aluminum smelters. BPA's decision in the ROD increased the $40M benefit cap to $59M per year for the aluminum smelters; this change recognized that the probability of the $40M benefit in closing the gap between power market prices and BPA's lowest-cost rate was not sufficient to allow the minimum amount of power necessary to operate. DSI contracts are scheduled to be signed in mid-February. The 2007 Wholesale Power Rate Case Initial Proposal Revenue Requirement Study used $59M per year for DSI benefits in the category Other Income, Expenses, and Adjustments.
22	**Other**		
23	LSRCP	$ 0.2	Midway between PFR low (1) and mid (2) funding alternatives. Further reductions may defer essential hatchery facility and
24	CRFM	?	Work to reduce future CRFM appropriations.
25	**TOTAL**	**$ 159.8**	

* Current plan is to make decision consistent with PFR process, but decision may be accelerated if circumstances change such that smelters could operate using BPA benefits.

Maximum Discretion Reductions, cont.

CAPITAL CHANGES FROM PFR BASE			
Line #	Program	2007-09 Average	Comments/Consequences/Risks
26	**Conservation**		
27	Eliminate uncommitted Bilateral Contracts (capital) ($30 Million/yr)	$ 8.0	5 new CAA contracts with a $2M/year commitment have been signed; Council's new conservation targets not met; utility/vendor conservation delivery infrastructure collapes; BPA would be viewed as an unreliable business partner that funds conservation in a "roller coaster" manner; the cost of restarting results in higher than the average cost of ongoing programs; BPA does not achieves its strategic objective (S3). The results will be different when combined with other debt management actions and other updates to study inputs are incorporated in the final proposal repayment study. NOTE: This cannot be added to any savings due to eliminating conservation investments during the rate period (line #28).
28	**Debt Management**		
29	Extend Conservation Amortization period for investments starting in FY 2007 to 20 years instead of Amortize up to 2011 (capital)	n/a	A 20 year amortization schedule is not possible as conservation assets have an average service life of no greater than 15 years. A 15 year amortization schedule would result in a average annual reduction of approximately $7 million. The results will be different when combined with other debt management actions and other updates to study inputs are incorporated in the final proposal repayment study. NOTE: This cannot be added to any savings due to eliminating conservation investments during the rate period (line #27).
30	**Corp. and Reclamation Capital**		
31	Reduce FCRPS Capital Investment Program	$ 7.0	The amount of the potential reduction is $20.8 million (note, it is capital, not the expenses associated with capital). This represents the amount of the future 3-year budget that is not committed to specifically identified investments (i.e., not already under contract or committed). Until the final repayment study
32	**TOTAL**	**$ 8.0**	

Fish and Wildlife Program Annual Average Cost

Percentage of Budget Categories Allocated to F&W

FY 2007-2009 ($ in Millions)

Budget Category	% Allocated to F&W	FY 2007-2009 ($ in Millions)
UNSLICED 50-year Annual Average Hydro Operations Effects (Power Purchases & Foregone Revenues)		356.9*
Integrated Program – Annual Average	100%	143.0*
NWPCC – Annual Average	50%	4.6
US Fish & Wildlife Service – Annual Average Lower Snake Compensation Plan	100%	19.5
Corps of Engineers O&M – Annual Average	~25%	37.5
Reclamation O&M – Annual Average	~7%	4.2
Total repayment obligations for current & past F&W investments		129.6
Total		**695.3**

Plant in Service

COE/Reclamation/USF&WS Appropriation for Capital F&W Investments

BPA Borrowing for Capital F&W Investments

***Note!:** Operational costs reflect expected 2007 river conditions with RSWs operational at IHR and in test mode at LMN and a BGS in test mode at TDA – actual operations may be more costly. Potential savings of additional RSWs and cost effects of a Snake River Transport vs. In-River migration study make operational costs highly variable during this period. One possible range of average annual OPS costs for FY07-09 is $352M to $369M; even this range is optimistic in that it assumes no schedule slippage and implementation of assumed spill levels.

Integrated Program assumes additional projects funded within existing budget.

BPA Financial Disclosure Information

1. All FY ’06-’09 information was provided in January 2006 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 ’97-’05 information was provided in January 2006 and is consistent with audited actuals that contain BPA-approved Agency Financial Information.