

Cost Review of the Federal Columbia River Power System

Management Committee Recommendations
March 10, 1998

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Fund regional conservation market transformation at a level proportional to the percent of the regional firm load served by Bonneville. Carry out a review of the need for, and the appropriateness of, continued Bonneville support beyond the 10-year life establish in Comprehensive Review.

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Reduce projection of legacy conservation contract and staffing expenses. Allow Bonneville to extend low-income weatherization contracts with the states to be consistent with the end of the legacy contract commitments to the utilities.

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Introduction In 1997, the four Northwest Governors asked the Northwest Power Planning Council (Council) to establish a cost control forum to assist the Bonneville Power Administration (Bonneville) in controlling the costs it recovers through rates in preparation for a subscription process for the post-2001 period. This Cost Review has covered planned costs of the Federal Columbia River Power System (FCRPS), including transmission, with a focus on projected costs for the 2002-2006 period. The objective has been to ensure that Bonneville's near and long-term power and transmission costs are as low as possible consistent with sound business practices, thereby enabling full cost recovery with power rates at or below market prices.

Following are the recommendations of the Cost Review Management Committee (Management Committee). They reflect the Committee's consideration of extensive public comment on its draft recommendations. In particular, the Committee has heeded the admonitions of many commentors to ensure that its recommendations for conservation and renewable resource development are consistent with the

recommendations of the Comprehensive Review of the Northwest Energy System . In addition, the recommendations regarding Washington Public Power Supply System (Supply System) Plant 2 have been modified to respond to legal and operational issues that have been identified.

These recommendations have been forwarded to the Bonneville Administrator and to the region's Governors, the Northwest Congressional delegation, and the House and Senate Committees on Appropriations in Congress. Responsibility for decision and action lies with the Administrator. The recommendations identify \$146 million in reductions to planned power expenses for Bonneville's next rate period, Fiscal Years (FY) 2002-2006. These reductions are in addition to substantial cost cutting already undertaken. Fully implemented, the cost reductions identified herein and those identified in earlier Bonneville budget planning would reduce annual power expenses in the FY 2002-2006 period are more than \$200 million lower than Bonneville planned when rates were set for the current rate period, FYs 1997-2001.

The Management Committee consisted of 11 members, including five "outside" experts in corporate management and finance, and representatives from both the Council and Bonneville. The outside members brought fresh business perspectives and the benefit of private-sector experience in leading large organizations through restructuring, cost cutting, and downsizing.

The committee members were:

Mr. Curtis Bostick, Marco Island, Florida

Bostick is a personal investment manager who serves on the boards of numerous organizations, including two electric cooperatives in Florida and the Mariner Group, which operates nine hotels in the state.

Ms. Joyce Cohen, Portland, Oregon

Cohen served as one of Oregon's Council members until December 31, 1997, when her term expired.

Mr. Charles Collins, Seattle, Washington

Collins is president of Colspur Investment Company, LLC, and a former member of the Northwest Power Planning Council. Collins chaired the 1996 Comprehensive Review of the Northwest Energy System.

Mr. Jim Curtis, Portland, Oregon

Curtis is Bonneville's Senior Vice President for Business Services.

Mr. John Etchart, Helena, Montana

Etchart is chair of the Northwest Power Planning Council.

Mr. Steve Hickok, Portland, Oregon

Hickok currently is Bonneville's Acting Chief Operating Officer and formerly the Senior Vice President for the Power Business Line.

Mr. Mike Kreidler, Olympia, Washington Kreidler is a former member of the United States House of Representatives, and he currently represents western Washington on the Council.

Mr. Robert J. Lane, Portland, Oregon

Lane is former president of the corporate banking group at U.S. Bancorp. Lane was president of West One Bancorp until August 1996.

Mr. Todd Maddock, Lewiston, Idaho

Maddock is chair of the Cost Review Management Committee and one of Idaho's two members on the Council.

Ms. Rosemary Mattick, Seattle, Washington

Mattick is Vice President of Procurement and Supply Management for the Weyerhaeuser Company.

Mr. William Vititoe, Seattle, Washington

Vititoe is the retired Chairman of the Washington Energy Company, a natural gas utility.

Background information is available on the Council's Web Site (www.nwppc.org/cost_rev.htm).

Also available is a summary of public comment received on the Committee's draft recommendations.

Call the Council's Public Affairs Division for more information: 800/222-3355 or 503/222-5161.

The Foundation: the Comprehensive Review of the Northwest Energy System

The Cost Review is an outgrowth of the Comprehensive Review of the Northwest Energy System. The Comprehensive Review was a yearlong process initiated by the governors of the Northwest states, culminating in December 1996. The Comprehensive Review involved representatives of major interest groups from around the region. It focused much of its effort on Bonneville's role, obligations, and risks in a deregulated, competitive marketplace, and on aligning the risks and benefits of the Federal Columbia River Power System among customers, environmental imperatives, and taxpayers.

The primary goal of the Comprehensive Review was to ensure that Bonneville could continue to meet its obligations to the U.S. Treasury and third-party debt holders, fulfill its responsibilities for fish and wildlife recovery, and retain the long-term benefits of the FCRPS for the Northwest. The Comprehensive Review also sought to define a role for Bonneville in the new competitive environment that was sustainable

politically and competitively.

Key direction of the Comprehensive Review that has guided the Cost Review can be summarized as follows:

- **Market** the power products of the federal system for relatively long terms (five years or more) to Northwest customers at cost based rates through a subscription system. This recommendation is central to achieving the primary goal of the Comprehensive Review.
- **Return** Bonneville to its historic role of marketing and transmitting power produced by the FCRPS, rather than becoming an aggressive marketer of power products and services in the competitive marketplace;
- **End** Bonneville's responsibility to acquire resources to meet the load growth of customers, except on a bilateral basis where the customer accepts the risk and financial obligations associated with such acquisitions;
- **Limit** Bonneville's financial support of conservation acquisition to current contractual obligations and certain market development activities, provided they are self-sustaining by 1999. Also limit support for conservation market transformation in proportion to the share of regional firm loads served by Bonneville;
- **Define** Bonneville's responsibility for renewable resource development (beyond current wind and geothermal pilot projects) to limited research and development support, and to renewable resource purchases on the behalf of, and funded by, customer utilities; and
- **Require** Bonneville's transmission rates, terms and conditions to be designed and implemented in a manner that is comparable to those developed by investor-owned utilities (IOU) subject to Federal Energy Regulatory Commission (FERC) regulation.

In addition, the Comprehensive Review recommended that the responsibilities and funding of the Council be brought into line with the more limited role recommended for Bonneville.

The Cost Review Goal

In July 1998, the subscription process recommended by the Comprehensive Review for selling Bonneville's power products will begin. The objective is to get new long-term power sales contracts in place for FY 2002-2006 and beyond. Achieving a very high level of subscription by Northwest wholesale power customers is a high priority. It is the most certain way to achieve the primary goal of the Comprehensive Review: satisfying obligations to the U.S. Treasury and third-party bondholders; fulfilling responsibilities for funding fish and wildlife recovery; and retaining the substantial long-term benefits of the FCRPS for the Northwest.

The work of the Cost Review Management Committee has been driven by the objective of achieving a high level of long-term Northwest subscription. However, Bonneville's wholesale customers are facing a period of unprecedented uncertainty and risk. There are new suppliers and increased price competition in the marketplace. With the onset of retail competition, utilities are uncertain of their future loads. It is the Management Committee's view that these utilities are unlikely to buy power from Bonneville on a long-term basis unless they perceive Bonneville's price to be very low relative to these risks. Thus, the Management Committee believes that the key to a high level of long-term subscription is to reduce the costs as much as possible, consistent with the Comprehensive Review and sound business practices. This should enable Bonneville to price its subscription products well below current market price expectations. Bonneville has been working toward a cost structure that would allow it to compete successfully in a 2-cent-per kilowatt-hour market.

The Management Committee has challenged Bonneville and other agencies of the power system (U.S. Army Corps of Engineers (Corps), the Bureau of Reclamation (Bureau), and the Supply System) to beat that goal by a substantial margin. The Management Committee believes that the goal of pricing power well below market expectations will enable Bonneville to return to its roots as envisioned by the Comprehensive Review. Those roots are a focus on Bonneville's core missions of marketing and transmitting the firm power output of the FCRPS for relatively long terms to regional customers, and of meeting its environmental responsibilities. This is a role that is sustainable, both competitively and politically. While Bonneville will continue short-term marketing of nonfirm power, the emphasis on long-term firm contracts will allow Bonneville to reduce staff and expenses associated with many marketing and related support activities. In this environment, Bonneville will not be engaged in acquiring additional power resources to meet the load growth of customers. Nor will it have a large responsibility for the development of conservation and renewable resources. Staffing and other expenses related to these activities can be reduced. These directions all are consistent with the recommendations of the Comprehensive Review of the Northwest Energy System.

The Committee's Starting Point: FCRPS "Cost Baselines" (October 1997)

Since late 1993, Bonneville has made substantial strides in reengineering its operations and reducing its planned costs. Indeed, FCRPS financial results for FY 1997 and reductions to date in Bonneville staffing demonstrate new, aggressive cost management practices. Bonneville staffing today is the lowest it has been since 1965. Recent efforts of the Bureau and the Supply System to reduce costs and improve financial margins likewise reflect responsiveness to the marketplace for wholesale power.

In August and September of 1997, Bonneville completed its annual planning and budget process. This process covered the remaining four years of the current rate period (FY 1998-2001) and the initial five-year subscription period (FY 2002-2006). Bonneville already planned a number of cost-cutting actions beyond those reflected in the 1996 Rate Filing. These actions would result in average annual power expenses in the FY 2002-2006 period that are \$89 million lower than the expenses planned to be recovered through Bonneville's rates for FYs 1997-2001. The results constitute the "Cost Baselines" that Bonneville proposed to the Management Committee for review and recommendation last October.

Included were these cost management objectives in support of the Cost Baselines:

- **Hold** operations and maintenance (O&M) in the Power Business Line (PBL), including other entities' O&M, flat over the nine-year (FY 1998-2006) horizon
- **Manage** WNP-2 operational costs to 19 mills/kWh by 2000 and continue operation of project only if economic
- **Limit** renewable resource losses to no more than \$15 million annually
- **Pursue** direct funding for future Corps/Bureau O&M and revenue-producing investments to enhance FCRPS market responsiveness
- **Rigorously evaluate**, prioritize, and manage revenue-producing Federal investments in hydro
- **Constrain** Bonneville-funded Federal investments to levels commensurate with the availability of low-cost sources of capital
- **Reduce** short- and long-term debt service costs through:
 1. Refinancing whenever financial market conditions warrant,
 2. Accelerated repayment of Federal debt or use of revenue financing when risk tolerances permit
- **Manage** relationships and fish costs to achieve measurable results in preserving and restoring Pacific Northwest salmon
- **Redesign** information technology and accounting/financial reporting systems and services, to reduce overhead costs substantially while ensuring responsiveness to business needs
- **Redesign** other corporate services to reduce costs and increase value substantially
- **Reduce** Federal and contractor staffing per reengineering plans and corporate redesign targets
- **Reduce** funding for the Council by 27 percent
- **Reduce** Energy Efficiency cost and staffing in order to achieve financial self-sufficiency by the end of 1999
- **Continue** implementation of a reliability-centered maintenance strategy for transmission
- **Continue** to shift from a long-run system expansion strategy to a customer request-based strategy for transmission investments
- **Achieve** superior performance compared to Western States Coordinating Council (WSCC) transmission providers (top one third), through operational efficiencies, and tighter control on timing, and prioritization of capital investments. This will result in a reduction to the fully allocated cost per hour of transmission maintenance service of 30 percent by 2001.

Included in the baselines for FYs 2002-2006 are assumptions that the costs of the Residential Exchange program are either eliminated statutorily or minimized through the "in lieu" provisions of the current statute, and that fish and wildlife costs remain stable. The Management Committee adopted these Cost Baselines as it's starting point.

FCRPS Cost Management Challenges and Opportunities

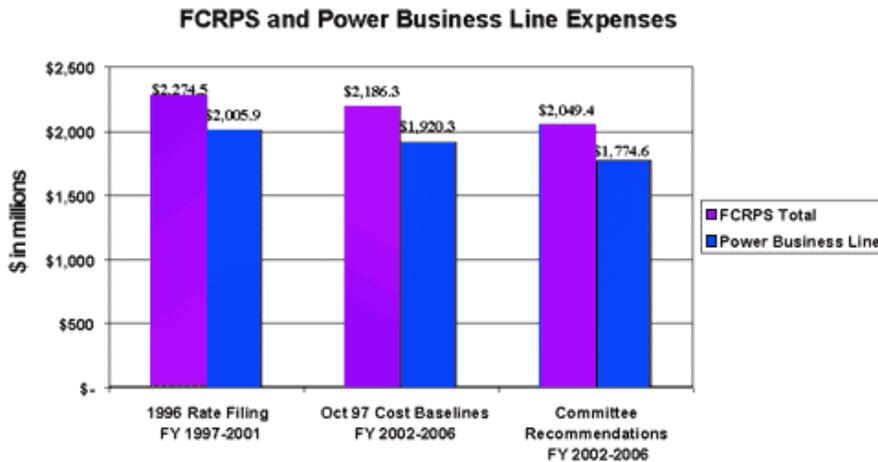
The Management Committee recognizes that Bonneville faces significant challenges and opportunities in achieving further savings; for example:

- **System capability** has suffered in recent years, in large part due to aging hydroelectric facilities and inadequate levels of appropriations funding. Improving productivity will require significant new investments that must be designed and managed to yield higher production and lower O&M costs.
- **Unlike** in a typical business enterprise, control over power production in the FCRPS resides largely with entities (i.e., Corps, Bureau, and Supply System) other than the entity responsible for marketing the products and recovering the costs (Bonneville). Almost half of power O&M costs and virtually all projected capital investments are managed by entities other than Bonneville. A consolidated, integrated strategy directed at maximizing FCRPS asset returns (financial results and public benefits) for the region is lacking.
- **The Supply System** has done an exemplary job in reducing its costs and increasing its production. It now projects that WNP-2 operating costs will be at or even slightly below expected market prices in the year 2000. However, beginning in 2002, the plant's costs may begin to increase, primarily due to a need to purchase fuel as the current inventory is depleted. These cost increases, as well as any unplanned expenditures, will need to be managed aggressively to minimize their impact.
- **Most FCRPS** expenditures for fish and wildlife, and other public responsibilities like the residential exchange, conservation, and renewable resource development, are borne by Bonneville's PBL, representing about 20 percent of this business line's (BL) expenses.
- **Most of Bonneville's** financial risks also fall to the PBL. At the same time, about 57 percent of this BL's expenses are attributable to relatively fixed debt service and depreciation expenses, due in large part to 100 percent debt financing of past capital investments.
- **Bonneville's** corporate functions and overheads generally are less efficient than "best practices" in other enterprises would indicate is possible.

The Management Committee's Recommendations

Bonneville should undertake extraordinary efforts in its power, corporate and transmission organizations to reduce the costs of its commercial operations and constrain the costs of its public benefit programs. Similarly, other agencies of the FCRPS -- Corps, Bureau, and Supply System -- should act in concert with Bonneville by taking aggressive action to maximize the value of the FCRPS (financial returns and public benefits) by reducing O&M costs and improving asset productivity.

The Management Committee's recommendations are summarized in the following table and described in detail at the end of this document. If achieved by the FCRPS agencies, these cost reductions should permit Bonneville to price its subscription products significantly below currently expected market prices.



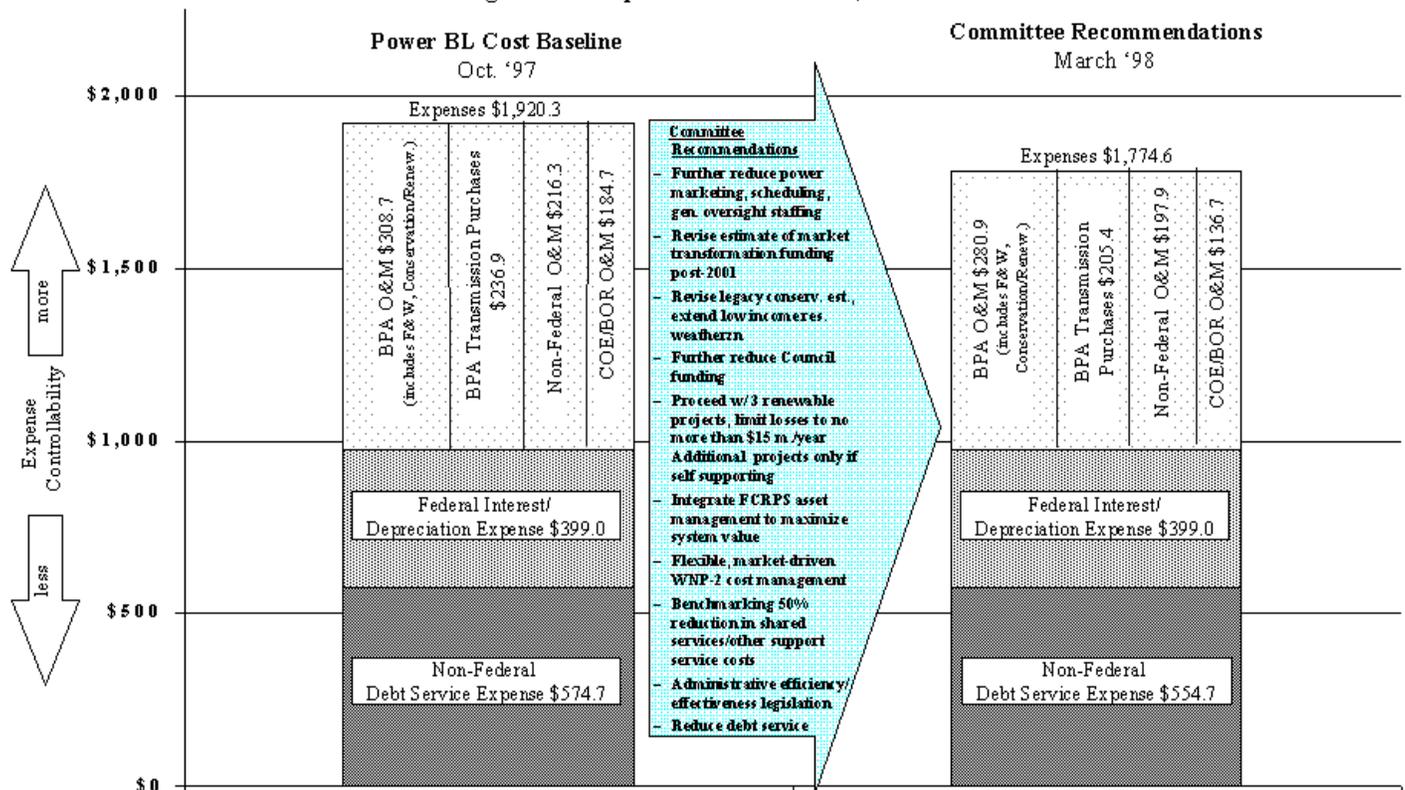
Recommendations	Average Annual Reductions FYs 2002-2006, \$ in millions	Average Annual Reductions FYs 2002-2006, \$ in millions
	Total Reductions	Power BL Expense Reductions
1. Further reduce staffing and support costs of power marketing and other PBL functions not directly related to operation of the Federal power system, through efficiency initiatives and reoriented long-term marketing efforts.	14.7	14.7
2. Fund regional conservation market transformation at a level proportional to the percent of regional firm load served by Bonneville, as called for in the Comprehensive Review. Recommended reduction brings the Cost Baseline into line with estimates of the firm power load served by Bonneville. Review the appropriateness of continued Bonneville support no later than 2004.	4.6	4.6
3. Reduce projected legacy conservation contract expenses to reflect historical under-spending. Do not modify or extend existing contracts, except that the State's low-income weatherization contract should be extended consistent with the end of the legacy commitment to utilities. Reduce associated staffing.	2.5	2.5
4. Further reduce funding for the NW Power Planning Council to reflect changes in Bonneville's regional role (i.e., curtail new resource acquisitions), carry out the Council role in power recommended by Comprehensive Review and the continued importance of fish and wildlife issues. Seek additional funding from other sources for Council activities that are of regional scope. Reductions assume one Council representative per state. A process should be carried out to determine both the functions the region wishes the Council to perform and how the functions should be funded.	1.1	1.1
5. Provide funding for costs of the three renewable resource projects that Bonneville currently is planning, and currently planned levels of renewable resource data collection and R&D. Annual net cost above project revenues should not exceed \$15 million per year, including the data collection and R&D costs. No additional renewable resource projects unless Bonneville's costs are recovered fully by project revenue.	2.2	2.2

6. Develop and implement a consolidated, integrated capital/asset management strategy for federal hydro directed at maximizing value, including both financial returns and public benefits. The strategy should encompass the operation and maintenance of the physical assets, a coordinated investment plan, potential consolidation of duplicative administrative support services among FCRPS agencies, and the creation of integrated performance measures. Performance should be measured explicitly and reported publicly, accountabilities established, and incentives created and applied FCRPS-wide. Estimates at right include a combination of reduced O&M expenses from the Cost Baseline and increased revenues from higher production.	Corps: 40.0 Bureau: 8.0	Corps: 40.0 Bureau: 8.0
7. Implement a strategy for WNP-2 that combines aggressive cost management with a flexible response to market conditions and unforeseen costs. Manage annual operating costs to annual revenues achievable at market prices. In BPA's subscription process and upcoming rate case, determine how to allocate the plant's costs in Bonneville rates and market a portion of the Federal Base System (FBS) equivalent to the planned output of WNP-2 priced in a manner that ensures recovery of the plant's operating costs while allowing a lower price for the rest of the FBS, unless legal or other issues prevent doing so. To the extent revenues exceed operating costs, use a portion of the resulting net operating revenues to build up the decommissioning fund. Biennially subject the plant to a market test. Evaluate termination in the event operating costs are projected to exceed revenues significantly if uneconomical at market prices. Estimated reduction includes a combination of reduced O&M expense from the Cost Baseline and potential increased revenues.	19.0	19.0
8. Further reduce the cost of Bonneville administrative and other internal support service costs including financial, human resources, information management, procurement, strategic planning, public affairs, legal services and other internal service costs, by an aggregate 50 percent from 1996 actual levels. Achieve through benchmarking, adopting "best practices," enterprise software, and outsourcing of non-core functions where economic.	31.7	14.5
9. Obtain legislative changes in the areas of personnel management and procurement to improve administrative flexibility and ability to manage internal costs.	10.0	7.0
10. Further reduce transmission internal O&M expenses through improved efficiencies.	2.5	1.5
11. Conform to Federal Power Act requirements, adjusting and correcting functionalization (allocation) of costs between Power and Transmission BLs.	0.0	30.0
12. Further reduce federal and non-federal debt service expenses through refinancings, greater reliance on variable rate debt, and other debt reduction actions	20.0	20.0
13. Targeted, but unspecified reductions already included in Power Cost Baseline.	(19.4)	(19.4)
TOTAL	136.9	145.7

In addition, the TBL should meet the cost management objectives in its baseline, in particular: · Obtain operational efficiencies, tighter control on timing and prioritization of capital investments to achieve superior performance compared to the WSCC transmission providers (top one-third); · Reduce fully allocated hourly costs of transmission maintenance service by 20 to 30 percent by 2001; and · Increase flexibility of cost structure.

Recommendations would reduce Power BL expense projections by about \$146 million

Average Annual Expenses - FY 2002-2006, \$ in millions



Notes: Actual FY 1997 PBL expenses = \$1,871.5 million
 PBL cost baseline for FY 1997-2001 in the 1996 rate filing = \$2,005.9 million
 Committee recommendations for Corps, Bureau and WNP-2 are a combination of expense reductions and increased revenues. These are reflected here as a reduction in expenses only.

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For several reasons, it is critical that Bonneville, the Corps, the Supply System, and the Bureau begin implementing these recommendations and the cost reductions already around in the October Cost Baselines as quickly as possible. Doing so will demonstrate to customers and other interests the commitment to aggressive cost cutting. Implementing some of the recommendations will entail new investment in systems and up-front costs to reduce staffing levels that can be paid for, in part, with near-term cost savings from early implementation. A large proportion of the savings is associated with implementation of an integrated asset management strategy. Forging such a strategy will take a concerted effort on the part of all the FCRPS agencies and is critical to improving the productivity of the FCRPS. Bonneville should move quickly to obtain Administration support for legislation to improve its administrative effectiveness and efficiency.

The Management Committee has not addressed fish and wildlife costs. The Management Committee believes there are opportunities for improved efficiencies in the planning and implementation of fish and wildlife measures on the part of Bonneville, the Council, the Corps, the Bureau, the National Marine Fisheries Service, the Fish and Wildlife Service, state agencies, and the tribes. A management review of the contracting processes for implementing the fish and wildlife program was recently completed at the request of the Council. This review identified recommendations for planning, procurement, contract administration, and monitoring that should result in a more cost-effective planning and implementation process. The same sort of scrutiny should be applied to the rest of the fish and wildlife activities. Efficiencies in fish and wildlife programs should be obtained with the same aggressiveness as the Committee is recommending in other functions of the FCRPS. Greater efficiency can only benefit fish and wildlife.

Several commentors expressed concern about follow-through on the Management Committee's recommendations. Bonneville's rate setting process will be the vehicle for implementation of many of the recommendations. That process provides opportunity for interested parties to see that the recommendations are being implemented. Other facets of the Management Committee's recommendations will require continuing attention over the long term. Bonneville and the Council should devise an approach for expert review and advice on long-term FCRPS cost management.

The Risks

Bonneville and the region face many risks in achieving the cost reductions discussed above. Implementing many of the recommendations will

be difficult and success is not assured. There is no antidote for that, other than the skill and dedication of the managers and employees of Bonneville and the other FCRPS agencies. It is essential that these people be given the statutory authority and other tools necessary to be able to implement the cost reductions while maintaining the effectiveness of the agencies in carrying out their core functions.

Bonneville's financial risks are substantial. For the remainder of the current FY 1997-2001 rate period, hydro and thermal resource costs are the greatest risks to FCRPS net revenues. Market price risk during this period is limited due to sales contracts that are largely fixed. Financial risks are substantially greater post 2001, with added hydro risk, fish recovery and enhancement cost risk, and market price risk. The magnitude of the risks can be as much as \$200 million or more in a given year. Bonneville can reduce its risk profile significantly by reducing its power costs and by creating greater flexibility in its cost structure over time. The Cost Baselines and the Management Committee's recommendations do not include two key elements of a Bonneville revenue requirement for power. They are: (1) a planned margin (planned net revenues) for risk; and (2) acceleration of repayment, as recommended by the Comprehensive Review when certain pricing conditions occur; i.e., when option fees are paid and when Bonneville's power costs are below market.

There is a risk that the sense of urgency in the need to reduce costs and improve productivity is not shared fully throughout the FCRPS agencies. Bonneville has been forced to confront this need by the realities of the market. Others have been insulated from those realities to varying degrees. In particular, the Management Committee concludes that the Corps must be more aggressive in reducing expenses and improving productivity. Implementation of an integrated capital/asset management strategy is essential if the FCRPS is to maximize asset value for the region.

The Supply System has made great strides in reducing costs and increasing availability. The Committee can anticipate a viable market for the power from WNP-2. However, the Supply System must reduce costs further to meet and sustain its year 2000 cost target, and the Management Committee has challenged it to produce even more savings. Toward this end, the Management Committee recommends the Supply System continue its examination of additional cost reduction measures and initiatives, including the potential adoption of a twenty-four-month fuel cycle, improved outage planning, industry benchmarking of "best practices", and the use of other fuel options. Unforeseen costs lower than expected market prices or performance problems could alter the situation. Increasing flexibility to deal with such circumstances should be a priority. If the plant is operated and marketed in a way that results in the generation of net operating revenues, the decommissioning fund should be built up to improve flexibility in the event the plant cannot recover its operating costs in the future.

Under the Northwest Power Act, Northwest utilities have the right to sell to Bonneville an amount of power equal to that required to serve their residential and small farm customers at their average system costs, and to receive an equal amount of power at Bonneville's average system cost (ASC). In reality, this has been an accounting transaction. The exchange was intended as a means of allowing wider access to the benefits of the federal hydro system. In the past, the exchange has been a major cost to Bonneville, but it cannot be allowed to be so in the future. The Comprehensive Review suggested an alternative way of providing access to the benefits of the federal system. It recommended that the residential and small farm customers of exchanging investor owned utilities be given the opportunity of being served with Bonneville power. Access to that power would be on a priority basis second only to public agencies. The Management Committee believes this can meet the objective of providing wide access to the benefits of federal power.

Bonneville now faces competition. Competitive markets mean price volatility, product innovation and aggressive marketing. Bonneville can limit its risks most appropriately in this environment by constraining its costs to levels that permit it to offer prices below market. The recommendations of the Cost Review will translate into low power prices only if subsidies and cost transfers inherent in the 1980 Northwest Power Act and in past Bonneville practices are held in check. At the time the Act passed, the argument was that these subsidies and cost transfers were affordable and necessary because Bonneville's costs were so far below market. The Management Committee's recommendations, seriously pursued, are designed to recreate those circumstances, but in a substantially changed market environment. Today's more competitive markets make discounts and subsidies less effective and less appropriate forms of public policy.

Finally, the Management Committee would like to conclude with a note of caution. The Management Committee realizes there are many calls on Bonneville's funds. But there is a need for restraint. To the extent the Management Committee's cost reductions are absorbed by increased expenditures for other purposes, the value of this Cost Review will have been diminished significantly. Driving Bonneville's costs back up to or above market levels will discourage subscription and jeopardize the fundamental goal of securing the long-term economic benefits of the federal system for the region. It will confirm to potential subscribers that Bonneville's costs are not manageable. Relying on stranded cost recovery mechanisms as an alternative to cost management is a high-risk path. If a high level of long-term subscription is achieved, long-term funding for fish recovery and other public benefits will be more stable; the U.S. Treasury and other creditors will be more secure; stranded cost recovery mechanisms likely will be avoided; and, most importantly, the benefits of the FCRPS will be retained in the Northwest.

RECOMMENDATIONS

Recommendation #1:

Further reduce staffing and support costs of power marketing and other Power Business Line functions not directly related to operation of the Federal power system

Baseline:

- \$50.0 million/year (2002-06 annual average)
- PBL Staff & Support Costs: \$34.0 million/yr.
- Legal & Environmental Support: 3.3 million/yr.
- Other Contracts: 12.7 million/yr.

Recommendation:

\$35.3 million/year (2002-06 annual average)

Annual savings:

\$14.7 million/year (2002-06 annual average)

- PBL Staff & Support Costs: (\$12.0) million/yr.
- Legal & Environmental Support: (\$1.2) million/yr.
- Other Contracts: (\$1.5) million/yr.

Recommendation:

Reduce by approximately 50 percent the staffing for power marketing and other Bonneville PBL functions not directly related to core operations (e.g., generation scheduling, resource optimization, and bulk hub activities necessary to maximize net revenues from the hydro system in commodity and spot markets.) This would result in an overall reduction of about 125 full time employees (FTE), or about 1/3 of total PBL staffing. Also reduce related staff support costs (supplies, travel, training, support service contracts, etc.), legal and environmental services, and technical contracts.

Rationale:

The underlying assumption is that as a result of implementing the cost cutting recommendations, the price of federal power in 2002 and thereafter will be significantly lower than market alternatives, and therefore a less aggressive long-term marketing and customer relations effort would be necessary. There would continue to be a need for a core staff to operate the system and buy and sell power to match resource output with regional loads, even with the longer-term firm load carrying capability of the system fully subscribed. This core team would not need the kind of management, market intelligence, product development, and analytic capability that currently are needed to make the initial subscription successful. Remaining staff would perform the following basic services: duty and interchange scheduling, generation schedule and short term operations planning, weather and streamflow forecasting, regional system operational coordination, sales and purchase of power (trading), transmission acquisition and scheduling, billing, sales of reserve services, and contract administration. Traditional account servicing would be reduced substantially.

Implementation:

Transition to this kind of operation would begin in 2000, if subscription has achieved very high levels of Northwest commitment to Bonneville's long-term firm power products. Investment in new technology would begin earlier, however, and would focus on developing generic marketing tools, automating risk analyses, automating customer bills, etc.

Cost to Implement:

Prior to 2002, additional unplanned expenditures likely will be needed for severance packages and new technology investment and implementation. The amounts are not yet defined.

Implications:

This recommendation would change the relationship between Bonneville and its long-term power customers. Many traditional customer support services no longer would be provided. Power Marketing would focus on maximizing the value from the seasonal and monthly changes in the hydro system.

Risks:

- Market Conditions and/or Bonneville costs:

If market prices are expected to be close to the prices for federal power, either as a result of projected low market prices or inability to hold targeted cost levels (either in 2002 or later), then the Agency likely would lose revenue due to a lack of competitiveness (estimated risk: \$50-150 million/year). With federal power prices of 18 mills/kWh or less (delivered), this imposes a minimal risk; with federal prices of 20 mills/kWh or more (delivered), this risk is substantial.

- Deregulation and Restructuring:

A greatly reduced staff may not be able to respond to the many upcoming changes in the power business such as new market flexibilities, scheduling protocols, and new independent system operators (ISOs). Complex and highly tailored products and support services would not be offered.

- Billing, scheduling, and inventory systems will need to be significantly simplified.
- The entire industry must adopt simplifying technology advances, as Bonneville must interface successfully with many other operators.

- FERC compliance/functional separation:

Developments on this front are forcing increased and sometimes redundant staffing.

- Statutory obligation: Northwest customers cannot exercise their statutory right to obligate Bonneville to provide new resources and expanded service if this recommendation is to hold.

- Implementation: There is plenty of time to accomplish the initial subscription, note the changed operating environment that results from it, and re-focus the PBL marketing effort accordingly.

- Technology: If the technology does not lead to anticipated efficiency improvements, there is a risk that some of the anticipated staff reductions will not be achieved.

- Operation Analysis Some market analysis, particularly for purposes of managing river operations in relation to both fish and excess power,

may need to increase, not decrease, depending on how overall industry restructuring affects operations of the FCRPS. It is anticipated that fewer analysts will be required in the future for this function, but this is very tentative.

Recommendation #2

Fund regional conservation market transformation at a level proportional to the percent of the regional firm load served by Bonneville. Carry out a review of the need for, and the appropriateness of, continued Bonneville support beyond the 10-year life establish in Comprehensive Review.

Market Transformation:

Baseline:

\$14.6 million/year (2002-06 annual average)

Recommendation

\$10.0 million/year

Annual savings:

\$ 4.6 million/year

Recommendation:

Fund regional conservation market transformation at a level proportional to the percent of the regional firm load served by Bonneville, as called for in the Comprehensive Review. Reductions shown reflect correction to Bonneville's baseline funding. Work with retail utilities and states to secure funding for conservation market transformation through state public purpose funds, as recommended by the Comprehensive Review. By not later than 2004, carry out a review of the funding available for this activity from other sources and the appropriateness of continued Bonneville funding beyond the 10-year minimum life established in the Comprehensive Review.

Rationale:

Bonneville currently is contributing \$14.6 million per year to the operation of the Northwest Energy Efficiency Alliance (Alliance). The Alliance is a non-profit organization funded by Bonneville on behalf of the public utilities in the region, and proportionately by the IOUs of the region. The purpose of the Alliance is to make targeted interventions on a regional scale in the markets for promising efficiency technologies, services or practices. The intent is to transform those markets; that is, to induce permanent positive changes so that the target efficiency products can maintain or build market share without further utility support.

The Management Committee intends that Bonneville honor the provisions of the Comprehensive Review. The Comprehensive Review included provisions for the long term funding of market transformation by Bonneville in proportion to the amount of regional firm load served by Bonneville. The Comprehensive Review recommended funding through Bonneville (as well as the regional IOUs) because it thought funding of such a regional effort directly by states and utilities would be administratively difficult. Bonneville's share of this regional effort would be approximately \$10 million. The recommended reductions are corrections to Bonneville's Cost Baseline based on the regional firm load served by Bonneville.

The availability of other funding for market transformation and the appropriateness of continued Bonneville funding should be reviewed by 2004. The Committee believes that market transformation, along with other conservation, is most appropriately supported through the state public purpose funds called for by the Comprehensive Review. Consequently, Bonneville should work with other interests to secure such funding for the period beyond the 10-year minimum life of the activity established in the Comprehensive Review, unless there is regional consensus that Bonneville funding should continue

Risks:

If the States pass legislation recommended by the Comprehensive Review that mandates that retail utilities support public purposes, then Bonneville's inclusion of these costs in its power rates need not put it at a competitive disadvantage. This is because public utilities purchasing Bonneville power can take credit for the contributions it is making to Market Transformation as part of their mandated public purposes responsibilities. However, if the States do not pass such legislation, Bonneville may face competitors that do not have these costs in their rates, which would place Bonneville at a competitive disadvantage.

Recommendation #3:

Reduce projection of legacy conservation contract and staffing expenses. Allow Bonneville to extend low-income weatherization contracts with the states to be consistent with the end of the legacy contract commitments to the utilities.

Legacy

Baseline:

\$10.0 million/year (2002-06 annual average)

Recommendation

\$7.5 million/year

Annual savings:

\$2.5 million/year

Recommendation:

Bonneville funding for conservation "legacy" commitments (conservation contracts already in place prior to the Comprehensive Review) are estimated in the Cost Baseline based on the maximum contract value. Given historical spending patterns, utilities likely will not spend the

maximum contract amounts. If that occurs, further staffing cost reductions can occur. Thus, Bonneville should reduce its projections of future expenses associated with the existing conservation contracts. Bonneville has received a request to modify one group of the set of over 250 active contracts.

The four states have an active request to extend their low-income residential weatherization contracts. The Management Committee believes that this extended funding horizon will help to create a bridge for the states to fund these programs. Bonneville estimates show that the cost of extending these contracts will be no more than \$500 thousand per year in additional debt service in the post 2001 period. The Comprehensive Review recommended that the region's retail distribution utilities allocate funds from a system benefit charge to fund low-income weatherization. The Management Committee strongly recommends that no additional funding for this program come from Bonneville, and that the states develop funding through retail utilities' collection of public purposes money or other tax sources. This recommendation assumes only that existing funding commitments occur over a longer period of time.

Rationale:

The legacy program is work done in support of existing conservation acquisition contracts in the region that still are active. Most of Bonneville's incentive-based legacy contracts terminate on or before 2000, but the debt service payment streams continue for up to 20 years. These contracts represent commitments made under Bonneville's earlier resource acquisition program. No new contracts have been signed or funded since 1994, except for low-income weatherization. As contracts close out, active management and oversight will decrease. Associated staffing should be reduced.

Normally, Bonneville's budget estimates include the maximum amount available to be spent under the contracts. Nevertheless, utilities generally under-spend the contracts. Estimates of under-spending are based on Bonneville's past experience. Bonneville's funding of the low income weatherization program is meant to act as a bridge to allow states to fund programs from either a system benefit charge or from other tax sources. The Management Committee agrees that it is appropriate to extend the funding of this program to be consistent with the end of the legacy contract commitments to the utilities.

Based on Bonneville's estimates, the Management Committee expects that approximately \$ 3 million in annual savings will accrue from under-spending of these legacy conservation contracts due to reduced debt service and from further reduced staffing. The Management Committee recommends that Bonneville extend funding to the low-income residential weatherization, which will cost Bonneville approximately \$500,000 per year in additional debt service in the years 2001 to 2006. Thus, the net cost savings to Bonneville will be \$2.5 million per year.

Risks:

The legacy contract estimates are based on the maximum amount of the contract balances. Bonneville has committed to this maximum amount. If utilities are able to spend at a higher level within the terms of the existing contract, Bonneville is committed to pay for the higher level of spending.

Recommendation #4:

Further reduce staffing/funding for Northwest Power Planning Council

Baseline:

\$6.2 million (2002-06 annual average)

Recommendation:

\$5.1 million/year (2002-06 annual average)

Annual savings:

\$1.1 million/year (2002-06 annual average)

Recommendation:

Further reduce funding to reflect the continued importance of fish and wildlife issues, the changes in Bonneville's role in the region, and, as a consequence, the Council's altered role in power planning activities. Targeted reductions and an overall streamlining of the Council will be required. The recommended reductions reflect an 18 percent reduction from the 2002-06 baseline and a 37 percent reduction from the 1996 budget. Accomplishing these levels will require: significant reduction in staffing in the Power Division; reductions in Administration, Legal and Public Affairs; reductions in contracting, travel and facilities; probable consolidation of management responsibilities; significant reductions in state staffing; and reduction in the number of Council members per state from two to one.

Cuts of this magnitude bear the risk of impairing the effectiveness of the Council. A public process should be convened to determine the future role and funding sources of the Council. The possibility of additional funding from other sources to support Council activities of regional scope should be investigated.

Rationale:

The Council was created in 1981 as a consequence of the passage of the Pacific Northwest Electric Power Planning and Conservation Act of 1980 (the Power Act). The Council is responsible for the development of long-range regional power plans to guide the resource acquisitions of Bonneville, the development of a program to protect, mitigate and enhance the fish and wildlife resources of the Columbia Basin, and provide for the participation and consultation of the states, tribes, interested groups, and the general public within the region. Council staffing and budgets have been developed to fulfill these responsibilities and facilitate their implementation.

Looking forward, the continued high importance of fish and wildlife issues argues for maintaining the necessary capability. For example,

annually the Council plays a key role in assuring accountability by providing congressionally mandated scientific and policy reviews of proposals for more than \$125 million in Bonneville fish and wildlife funding. Congress has also asked the Council to carry out reviews to assist Congress in making decisions on major appropriations decisions. The Council anticipates further assignments of this nature. The Council is also spearheading efforts to establish a strong scientific foundation for fish and wildlife policy in the basin. All three tasks involve significant assistance from the Council's public affairs, power and legal divisions in addition to fish and wildlife staff. Reductions in staffing in these areas must not impair the Council's ability to complete work in these three areas.

On the power side, the onset of a competitive generation market and the restricted resource acquisition role for Bonneville means the Council's planning function should be reduced and reoriented. However, the importance of Bonneville to the economies of the Northwest states means that maintaining a capability for continued oversight of Bonneville is required. In addition, the Comprehensive Review recommended that at least for a transition period, analytic capability be maintained to monitor and evaluate the transition to competitive electricity markets and facilitate the development of conservation and renewables in those markets.

Council members can rely to a greater extent on central staff for staff support. Having two Council members per state reflects Congress and the states' desire to have broad representation on the Council. In some states, requirements for geographical representation have been included. This level of representation would have to be sacrificed in order to achieve the greater efficiency required by these budget levels.

Cost to Implement:

There may be some near-term investment in information/telecommunications technology (e.g., video conferencing) to facilitate reduced travel budgets and the need for greater state-central coordination.

Implications:

Because the Council was created by Congress and actions of the state legislatures, federal and state legislation may be necessary to realign the mission and responsibilities of the Council and, if necessary, change the representation.

Risks:

Necessary legislation may not pass. Effectiveness of Council may be impaired.

Recommendation #5:

Renewable resource projects: new projects beyond those currently committed must be supported by incremental revenues that cover the additional costs.

Baseline:

- \$24.9 million/year expense (2002-06 annual average)
- o \$21.6 million/yr. - current projects (two wind, one geothermal)
- o \$ 3.1 million/yr. - potential additional renewable resource project
- o \$ 0.2 million/yr. - data collection, research (\$10.0 million/yr. revenues at "green" market prices)

Recommendation:

- \$22.7 million/year expense (2002-06 annual average)
- o \$22.5 million/yr. - current projects
- o \$ 0.2 million/yr. - continued solar & wind data collection, research

Annual savings:

\$2.2 million/year (2002-06 annual average)

Note: these savings are based on current projections of the costs and revenues of the three current projects. Bonneville is committed to funding up to \$15 million per year in costs above the revenues obtainable from the projects (including the costs of the data collection and research and development [R&D]).

Recommendation:

Conform with agreements reached in the Comprehensive Review whereby Bonneville will fund three renewable resource projects currently underway, and current levels of data collection and R&D, up to a maximum of \$15 million in any one year above the revenues obtainable from the three projects. If current cost and revenue projections hold, this would reduce projected costs from the baseline; it also will result in minor staff reductions in the PBL and related support costs, already included in Management Committee Recommendation #1. New projects should be undertaken only if project costs are supported fully by incremental revenues.

Rationale:

The underlying assumption is that Bonneville should honor its previous commitments, but its core business strategy should not include development of new renewable resources or additional related research. Therefore, costs associated with new renewable projects should not be incurred unless they would be recovered fully by resulting revenues.

Implications/Risks:

Potential legal challenge to this interpretation of Bonneville's responsibility under the Act. The recommendation also could contribute to privatization efforts of some members of Congress.

Recommendation #6:

Develop/implement a consolidated/integrated capital/asset management strategy for the FCRPS, including transmission

Corps of Engineers

Baseline:

\$116.7 million/year (2002-06 annual average) - O&M

Recommendation:

\$86.7 million/year (2002-06 annual average) - O&M

Annual Savings:

\$30.0 million/year (2002-06 annual average) - O&M

\$10.0 million/year (2002-06 annual average) - enhanced revenue

Note: The Management Committee recommends that the Corps increase its operating margins by \$40 million, of which \$30 million is assumed to be obtained from operation and maintenance expense reductions and the remainder from improved revenues as a result of increased project availability. The \$30 million reduction from O&M projections in the baseline would require that the Corps hold average annual O&M in FYs 2002-2006 to FY 1996 actual levels. These savings approximate the efficiencies already accomplished or planned by the Bureau, the Supply System, and Bonneville. Actual efficiencies should be obtained through benchmarking and adoption of industry "best practices", and through the FCRPS asset management strategy outlined below.

Bureau of Reclamation

Baseline:

\$50.9 million/year (2002-06 annual average) - O&M

Recommendation:

\$47.9 million/year (2002-06 annual average) - O&M

Annual Savings:

\$3.0 million (2002-06 annual average) - O&M

\$5.0 million/year (2002-06 annual average) - enhanced revenue

Note: The Management Committee recommends that the Bureau increase its operating margins by \$8 million, of which \$2 to \$3 million is assumed to be obtained from operation and maintenance expense reductions and the remainder from improved revenues as a result of increased project availability.

Recommendation:

Collaboratively forge and implement a consolidated, integrated capital/asset management strategy directed at maximizing value, including both financial returns and public benefits. The strategy should encompass the O&M of the FCRPS, including transmission, physical assets, a coordinated investment plan (including new investment, disinvestment, and asset divestiture actions), and the creation of integrated performance measures. Each element would be directed at maximizing the value (financial returns, public benefits) of the physical assets. Performance should be measured explicitly and reported publicly. Accountabilities should be established and incentives created to ensure the asset management success of the FCRPS.

- Establish a joint committee composed of the Corps, Bureau, and Bonneville to facilitate the development and implementation of this strategy.
- Benchmark all O&M aspects of the FCRPS assets, both power and transmission, against industry practices, and adopt and implement "best practices" collaboratively.
- Collaboratively investigate prospects for consolidating and integrating administrative services including accounting and financial reporting, human resource services, and information technology systems, to minimize operating costs.
- Rigorously analyze investment, disinvestment, and divestiture opportunities to maximize asset value.
- Establish common means of defining and measuring "value".

Rationale:

As it currently operates, the FCRPS is essentially a single accounting entity composed of three distinct federal agencies: Bonneville in the Department of Energy (DOE), the Corps in the Department of Defense, and the Bureau in the Department of Interior. Each agency has its own unique set of multiple (and at times, competing) objectives. Prior to the onset of competition in the electric power industry, these multiple objectives were at times inconvenient and possibly awkward, but did not threaten the basic mission of the participating agencies because Bonneville enjoyed a substantial cost advantage over alternative sources of power. The increasingly competitive market for power has changed that equation dramatically. No longer can each agency pursue its own objectives independently without threatening the financial health of the entire FCRPS. The economic margins that once allowed the luxury of some level of strategic misalignment within the FCRPS no longer are possible. This is true especially when considering that the agencies having control over the cost and quality of production are largely separated from the marketing and cost recovery responsibilities.

It is essential that the FCRPS adapt the business model to its particular purposes if it is to maximize the value of its assets both for the Pacific Northwest and for the taxpayers of the United States. Survival (long-term cost recovery) in a competitive marketplace requires it. This calls for a capital/asset management strategy that is both integrated - that is, directed toward value maximization; and consolidated - that is, involving all entities in the FCRPS working together toward that end.

Simply adapting the business model to meet the needs of the FCRPS is not sufficient to ensure success. A crucial factor for success is to connect the management of the capital and asset base directly to business strategy. Once this alignment has been made, creating appropriate

incentives along with key accountabilities is relatively straightforward.

The participating agencies of the FCRPS must work together to improve margins. To that end the Corps and Bureau must continue their efforts to find additional expense reductions and increase availability. The Bureau is recognized for having undertaken productive efforts to reduce expenses to date. Therefore, only incremental expense reductions are requested. The Management Committee concludes that the Corps must be more aggressive in reducing expenses and improving productivity. Therefore, larger expense reductions are expected from the Corps. In addition to these expense reductions, the Corps and Bureau are expected to provide greater project availability (weighted by generation capacity).

Implementation:

The FCRPS should participate in industry-wide benchmarking studies to identify "best practices" for both the power and transmission functions. The work accomplished to date is an excellent start, but all agencies within the FCRPS should be participating in these studies. The agencies of the FCRPS should work together in adopting and implementing "best practices".

A key opportunity for achieving a consolidated integrated capital/asset management strategy for the FCRPS would be the establishment of a Joint Operating Committee. This Committee would develop common objectives for guiding power-related planning, budgeting, operational, and investment decisions of the FCRPS. These common objectives, criteria, and controls should take into account constraints imposed by the non-power purposes of the Federal projects. In addition, the Committee would establish common controls (i.e., financial and operational reporting mechanisms) and means of measuring accountability.

The FCRPS should investigate areas where savings could be gained by consolidating services that currently are provided in triplicate. Given Bonneville's experience with reductions in the cost of providing shared services, it appears that the greatest areas for consolidation might be accounting and financial systems, human resources, and information technology systems. Such steps should be directed toward eliminating redundancies and reducing overhead costs, while ensuring that planning, control and accountability systems support the objective of maximizing asset value.

Costs to Implement:

Capital investments may be required to produce the expected increases in project availability, although adopting "best practices" and potential benefits from increased coordination should be able to produce improvements. If capital funds are needed, they may be obtained by reprioritizing existing capital investments or possibly increasing capital investments. The expected increases in revenues are stated net of any increase in costs. Also, any change in the capital investment plan should bring additional savings in operation and maintenance expenses.

Risks:

If long lead times are necessary to obtain these expected savings; they may not be produced by FY 2002. The expected increases in revenues from improved availability may not occur if streamflows are inadequate.

Recommendation #7:

WNP-2: Aggressive cost management, flexible response to market conditions

Baseline:

\$172.5 million/year operating expenses (2002-06 annual average)
o \$127.8 million/yr. - O&M Expenses
o \$ 33.8 million/yr. - Nuclear Fuel o \$ 4.8 million/yr. - Capital
o \$ 6.1 million/yr. - Other
\$153.8 million/yr. Revenues (878 aMW @ 20 mills/kWh)

Recommended Improvement in Annual Net Operating Revenues:

About \$19 million/year (2002-06 annual average)

Recommendation:

The overriding intent of the Committee's recommendations regarding WNP-2 is to ensure, insofar as possible, that the operations of the plant not be insulated from the discipline of the marketplace. In order to accomplish this, the Management Committee recommends:

1. Subject WNP-2 to a market test biennially: annual revenues at market price recover annual operating costs, accounting for hydro firming value provided by the plant.
2. Implement a strategy that combines aggressive cost management with a flexible response to market conditions and unforeseen costs.
3. In Bonneville's subscription process and 1998 Rate Case, determine how to allocate the plant's costs in rates and market a portion of the FBS equivalent to the plant's expected output priced in a manner that ensures the recovery of the plant's operating costs and allows a lower price for the rest of the FBS, unless legal or other issues prevent doing so.
4. To the extent that plant revenues exceed operating expenses, use a portion of the resulting net operating revenues first to build up the decommissioning fund to improve future financial flexibility.
5. Re-evaluate plant termination in the event that operating costs are projected to exceed revenues achievable at market prices by more than the termination costs (i.e., terminate if termination is more economical than continued operation, taking into consideration hydro-firming

value of the plant and termination costs).

Rationale:

WNP-2 should continue to be operated only if it can meet a cost recovery test based on market prices. Currently, projected operating costs (defined as all costs except debt service) exceed projected revenues by about \$19 million per year. If costs can be managed so it can meet the market test, the plant should continue to be operated.

Separating a portion of the FBS equivalent to the planned output of WNP-2 from the rest of the subscription pool and selling it at rates which would cover the plant's operating costs would allow a lower subscription price for the rest of the federal system power. (Legislation would be necessary to actually separate WNP-2 from other Federal resources and sell its output at market, and such legislation would be risky and take longer than Bonneville's schedule for its 1998 Rate Case. This would mean that Bonneville would be unable to adopt the recommendation as written in the Management Committee's Draft Report when Bonneville sets rates for the FY 2002-2006 period.)

Implementation:

The biennial market test should compare current projections of annual revenues at market price to current projections of annual operating costs, accounting for hydro firming value.

As part of an evaluation of termination, if the plant fails to meet the market test, termination costs and effects on reliability of the federal system must be considered, particularly if there are significant additional reductions in capability of the federal hydro system as a result of fish enhancement and mitigation.

Implications/Risks:

The Northwest Power Act requires Bonneville to allocate the costs of the FBS resources, including WNP-2, to the rate or rates established for power sold to meet the general requirements of preference customers and the loads of utilities participating in the residential exchange program. The separate marketing of WNP-2 at market prices is not consistent with current law or policy. In addition, subtracting a quantity of power equivalent to the amount expected to be produced by WNP-2 from a subscription product sold significantly below market would exacerbate potential over-subscription of that product. This could mean that the residential customers of the region's (IOUs) will not get all the benefits of federal power that they may expect as a result of the Comprehensive Review recommendation on subscription, unless some alternative allocation scheme is devised. This creates a significant public policy issue beyond the scope of the Cost Review. To the extent WNP-2's operating costs are lower than the market replacement cost, by keeping the plant an integral part of the FBS, the resulting benefits can be combined with other FBS resources and extended to more regional consumers.

There is some risk that WNP-2 will face significant unplanned costs, either from failure of major pieces of equipment or from increased regulatory requirements. There also is some risk that market prices will be significantly lower than currently assumed. In the event of major unplanned costs, reductions in output or reliability, or a significant reduction in expected market prices, Bonneville and the Supply System should consider terminating WNP-2. A termination analysis should take into account the potential impact on revenues and Bonneville costs during the period, including termination costs not covered by the decommissioning fund and costs of any major equipment failure. While the analysis should focus on implications for federal system reliability, it also must consider effects on the region as a whole due to load/resource or reserve deficits, particularly if John Day or Lower Snake Dams (or both) have been or are expected to be breached or significantly reduced in output for purposes of fish enhancement and mitigation.

Recommendation #8

Reduce Administrative and Other Internal Support Service Costs

Baseline

- PBL portion of Corporate Overheads:
\$15.4 million/year (02-06 annual ave.)

Recommendation

- PBL portion of Corporate:
\$6.4 million/year (02-06 annual ave.)

Annual direct PBL savings:

\$9.0 million/year (02-06 annual ave.)

Annual PBL savings from lower Trans. Costs:

\$5.5 million/year (02-06 annual ave.)

Total PBL savings:

\$14.5 million/year (02-06 annual ave.)

Note: These figures combine both the direct and indirect reductions to PBL expenses due to administrative and other internal support services savings. The entire reduction goal is \$31.7 million. \$9.0 million of these reductions are estimated to benefit power directly through reduced corporate and PBL administrative costs. The remaining \$22.7 million are estimated reduce transmission expense and capital costs. These transmission savings result in an indirect PBL reduction of \$5.5 million through lower transmission rates.

Recommendation:

Bonneville's goal is to reduce the aggregate of its administrative and other internal support service costs by 50 percent from 1996 actual levels. Administrative and other internal support services include financial planning, accounting, and reporting services, human resources,

information resources management, procurement, general administration services, legal services, public affairs, and pollution abatement, among others.

This goal will be accomplished through several efforts. The first is a shared services review Bonneville currently has underway. Upon the completion in 1998 of this effort, reductions will be identified as a result of corporate overhead or business line efficiencies gained through the redesign of financial, information, procurement, and human resource management, and other processes, adoption of formalized benchmarking techniques, and implementation of private sector-based "best practices". Implementation of "shared services" review recommendations also will identify activities that may be provided more efficiently through outsourcing.

In addition to the shared services review, Bonneville also is currently investigating "enterprise software." While implementation of such software agency wide will require substantial investments in the near term, it has the promise of yielding great long-term savings, which are integral to the goal of reducing shared services costs by 50 percent.

The Management Committee's recommendation calls for reductions of 50 percent, in aggregate, of administrative and other internal support service costs from FY 1996 levels. Excluded are administrative and support service costs for fish and wildlife recovery and enhancement.

The cost reductions outlined here are shown as reductions to the overheads charged to the BLs by corporate. The allocation of these reductions to the BLs is assumed to be proportional to current distribution of corporate internal services.

Rationale:

Companies redesigning their "shared services" are finding that infrastructure costs can be reduced substantially by eliminating services, updating and integrating systems, streamlining processes, and sharing service delivery to BLs. In addition, companies that have implemented enterprise software are finding that they can reduce their information technology costs substantially.

Implementation Scheme:

After the shared services studies are complete in July 1998, Bonneville will proceed to implement study recommendations as quickly as possible, with a projected one to two years for complete implementation. In addition to shared services recommendations, Bonneville also will be implementing Enterprise software, which will result in additional process changes and subsequent cost reductions. The purchase of enterprise software should be completed by July 1998 and implemented by July 2000.

Cost to Implement:

Implementation costs for the recommendations identified via the "shared services" review will be identified as a part of each study. These costs could include the costs associated with possible downsizing (severance packages, voluntary separation incentives, and lost productivity during implementation). To the extent outsourcing opportunities are identified, the cost of such outsourcing is assumed to be more than offset by anticipated staffing and other savings. On the other hand, Enterprise software will require a significant up-front investment, with preliminary estimates of up to \$50 million, over costs currently in the baseline. It will take approximately 3-5 years to recover the investment.

Risks:

- The cost and implementation time of enterprise software may be greater than shown here.
- Reductions to corporate communications and regional relations may hamper Bonneville's ability to respond quickly and effectively to customer, constituent, and Executive/ Congressional requests and inquiries.

Recommendation #9

Obtain legislation to improve administrative effectiveness and efficiency

Annual savings due to recommendations (FY 2002-2006 annual averages)

Directly attributed to Power Business Line (PBL):

\$3.0 million/year

Indirect savings to PBL through reduced transmission rates:

\$4.0 million/year

Total PBL savings:

\$7.0 million/year

Note: Cost reductions due to these legislative changes apply to both BLs within Bonneville. As shown, the direct impact on the PBL cost baseline is estimated to be \$3.0 million. The direct impact on transmission is estimated to be \$7.0 million, of which an estimated \$4.0 million will be "passed through" indirectly to PBL through lower transmission rates.

Recommendation:

If Bonneville is to minimize its costs, it must have the internal administrative flexibilities and efficiencies available to other participants in the electricity industry. In particular, to optimize the size, quality, composition, and use of its workforce, Bonneville must establish flexible, business-like human resource policies and practices - currently made difficult or prohibited by government-wide civil service laws and requirements. The following recommended changes are necessary to accomplish this end:

- Exempt Bonneville -- and potentially the other federal agencies of the FCRPS -- from certain federal administrative laws in areas such as appropriation law, procurement and property management, information resources, and real estate, particularly those laws and procedures that currently have been lifted by administrative waivers and other actions. Establish new procedures based on sound business practices, directed

toward minimizing costs.

- Establish among the FCRPS agencies common, efficient procedures for procurement of equipment and services related to FCRPS electric power generation and fish and wildlife mitigation facilities. This may be accomplished through legislation, or by requiring the use of Bonneville's own procurement procedures. (Savings estimate not yet developed)
- Exempt Bonneville from most of Title 5, civil service personnel management provisions, and require Bonneville to establish human resource policies and mechanisms based on merit principles and sound business flexibilities and practices. These policies would include staffing, compensation, and other internal administrative tools to better control the size, quality, composition, and use of the Power, Transmission, and Corporate workforces. (Annual efficiencies of \$3.5 to \$6.1 million)

Rationale:

Bonneville's status as a federal agency means that it is encumbered by certain personnel management, procurement, and other administrative regulations and procedural requirements that create unnecessary cost and rate pressures. For example, the agency is subject to government-wide civil service requirements that often are cumbersome, time consuming, and ineffective, thus adding to administrative costs, impeding downsizing and staff redeployment objectives, and hampering the ability to use modern compensation practices.

In addition, federal requirements such as appropriations laws, procurement laws and property laws add limitations which are more conducive to truly governmental entities than to a self-financed agency charged with operating on a business-like basis in a competitive environment. Examples of burdensome procurement or property procedures that Bonneville must follow include: the current prohibition on the joint ownership of federal and non-federal transmission facilities, restrictions on self-representation in litigation, and requirements for the resolution of contractual disputes before governmental boards of contract appeals. Bonneville should be able to resolve bid protests and contract appeals under its own statutory authorities, including the use of alternative dispute resolution, without jurisdictional challenges. Bonneville also should determine the character and necessity of its expenditures and the manner in which they are incurred and paid. Such restrictions on the use of appropriations should not apply to a ratepayer-funded entity.

In addition, the current separation of power production and marketing functions between Bonneville, the Corps, and the Bureau result in duplicative and inefficient procurement processes. Efficiencies in the procurement of major equipment and maintenance services for federal generation facilities may be obtained if common, flexible and business-oriented procurement procedures are used by all three FCRPS federal agencies.

Implications:

These recommendations require changes to the statutory authorities of Bonneville, and in some cases, other FCRPS entities.

Risks:

New legislation requires both Executive and Congressional Branch initiative and approval. The current interest in electrical industry deregulation may make it either easier or more difficult to obtain this attention and approval, depending on the priority given to this legislation. Seeking legislation also may create the opportunity for further changes to Bonneville's statutory authority not anticipated by this committee.

Recommendations #10/11:

Federal Power Act (FPA) conformance (cost functionalization) and reduced transmission overhead costs

Baseline:

\$236.9 million/year (2002-06 annual average) - PBL Transmission Cost Forecast

Recommendation:

\$206.9 million/year (2002-06) annual average)

Annual savings - PBL:

\$30.0 million/year (2002-06) annual average) - cost functionalization

\$1.5 million/year (2002-06) annual average) - TBL overheads

Recommendation:

The cost baselines should be consistent with Federal Power Act guidelines and requirements for functionalizing transmission and power costs. This recommendation will not reduce Bonneville's total costs, but will have the effect of reducing the power cost baseline and increasing the transmission cost baseline.

Although the \$30 million estimate is based on early analysis only, types of costs currently in the power business baseline that may more properly be functionalized to transmission include, for example, Corps and Bureau generation integration and other transmission costs.

In addition, the Management Committee at this point recommends that the TBL seek additional internal expense reductions of \$2.5 million per year by reviewing activities such as aircraft, equipment maintenance, and transmission sales staff. \$1.5 million of this reduction would benefit power through reduced transmission rates. The other \$1.0 million would benefit other transmission service purchasers.

Rationale:

The objective is to ensure Bonneville's power and transmission cost baselines for FYs 2002-2006 aligns with industry practices and FERC regulatory guidelines under the Federal Power Act. Adjustments to cost baseline projections are recommended accordingly. Inconsistencies originated with Bonneville's recent reorganization when it functionally unbundled FCRPS transmission and generation activities and costs. Implementation of FERC's open access rule and Bonneville's understanding of FPA requirements have evolved and clarified over the last

year. The FCRPS cost baselines generally assumed that certain cost recovery assignments in the 1996 Transmission Settlement Agreement would remain in effect after the agreement expires in 2001, although that Agreement set no precedent.

Implementation:

Cost functionalization issues are decided through the rates hearing and filing process, and will be addressed with parties to the rate case at that time.

Cost to Implement:

The cost of this effort is negligible.

Implications:

This recommendation will reduce the effective cost of transmission for Bonneville's power customers and could lead to an increase in transmission costs for other wheeling customers.

Recommendation #12:

Further reduce federal and non-federal debt service

Baseline:

\$963 million/year (2002-06 annual average)

Recommendation:

\$943 million/year (2002-06 annual average)

Annual savings:

\$20 million/year (2002-06 annual average)

Recommendations:

Increase variable interest rate debt exposure, refinance debt whenever market interest rates allow prudent savings, and take other debt reduction actions, such as accelerated repayment and revenue financing for new investments, in order to restructure Bonneville's total debt portfolio (federal and non-federal) and reduce long-term debt service expense. These actions will reduce carrying charges and Bonneville's high level of fixed costs.

Implementation:

Over the next two to four years, Bonneville will work to secure any additional prudent variable interest rate debt exposure. In addition, Bonneville will take action to implement prudent debt reduction strategies which may include actions such as accelerating the repayment of higher interest debt and revenue funding a portion of new capital additions. Bonneville will forge and implement a capital investment strategy that gives rigorous evaluation to new investment proposals, disinvestment, and asset divestiture options. See recommendation #6, Capital/Asset Management Strategy for FCRPS.

Cost to Implement:

Refinancing and financial products transaction costs (included in savings estimate above) as well as Debt/Investment Management staff and advisor costs (already reflected in reduced corporate overhead spending projections).

Implications and Risks:

Rising interest rates: while variable interest rate debt historically carries marginally lower interest rates than Bonneville's fixed rate debt, variable interest rate debt is inherently riskier than fixed rate debt. To the extent the variable interest rate exposure is "capped", then Bonneville's exposure could be limited and estimated savings reduced somewhat.

Inasmuch as Bonneville's financial reserves are a key means of mitigating financial risks, any use of cash reserves to accelerate debt or to revenue finance a portion of new capital additions could reduce the probability of making annual Treasury payments on time and in full (the same is true of variable rate interest rate exposure).

These recommendations could affect Bonneville's ratemaking assumptions; e.g., planned net revenue for risk, in order to ensure revenues are adequate to meet scheduled Treasury payments.

Note: Interest expense projections in this Cost Review do not assume that repayment will be accelerated from current repayment policy and schedules. The Comprehensive Review recommended that Bonneville accelerate repayment when certain pricing conditions occur.

Recommendations #13:

Account for previously identified "undistributed reductions."

Rationale:

The PBL baseline expense projections from which the Management Committee's recommended cost reductions would be subtracted already included about \$19.4 million per year average "undistributed reductions." These are amounts by which the PBL already had planned to reduce its total expenses in order to meet its financial targets for the 2002-2006 period. The specific amount of "undistributed reduction" was not intended to be achieved in any particular program or organization, but was the expected result of concerted effort by all managers to achieve the cost management objectives noted earlier in this report (p.6.)

Since the cost baselines already assumed that a certain amount of unspecified cost reductions would be achieved, the total savings from the

Management Committee's recommendations must be adjusted to avoid "double counting." Thus, while the Management Committee's specific recommendations total approximately \$157 million for Bonneville as a whole and \$166 million for the PBL in particular, the net change from the cost baselines is the \$137.5 million total reductions and \$146.3 million PBL reductions shown on the summary table.

