

The Future Role of the Bonneville Power Administration in Power Supply

INTRODUCTION

The crown jewel of the Northwest Power System is the federal Columbia River Power System (FCRPS). The FCRPS consists of 31 dams on the Columbia River and its tributaries. On average, it supplies approximately 45 percent of the region's power. This federal hydropower is priced at cost and is sold by the Bonneville Power Administration primarily to publicly owned electric utilities. While the federal government financed construction of the FCRPS, the debt is repaid by Northwest electricity users. Interest rates on the federal debt are now equal to market rates.

Despite the fact that Bonneville has not deferred any payments to the U.S. Treasury since the early 1980s, it is continually attacked by organizations like the Northeast-Midwest Institute¹ and its congressional allies as being subsidized by the federal government. Critics advocate privatizing Bonneville or requiring Bonneville to sell its power at market prices to benefit U.S. taxpayers as opposed to selling at cost to Northwest consumers who are paying for the system and are paying to restore fish and wildlife affected by the dams. While these proposals have not yet gained sufficient political support to move ahead, fighting them has been a continuing battle for Bonneville, the region's utilities, governors, the Council and the congressional delegation. Moreover, each time Bonneville finds itself in financial difficulties with Treasury repayment at risk, the pressure for "reform," such as privatization, intensifies.

Over the last decade, the difference between the cost of Bonneville's power and market rates for wholesale power has frequently not been large. In fact, at some times it has been disadvantageous to Bonneville's customers. Nonetheless, the existing system of federal hydropower is likely to be a low-cost resource for many years to come. Preserving this benefit for the Northwest consumers who pay for it should be a high priority for the region. However, preserving the benefit in the face of recurring financial crises at Bonneville will be difficult.

Bonneville's financial vulnerability arises in part from its dependence on a highly variable hydroelectric base and the effects of a sometimes very volatile wholesale power market. Another source of vulnerability arises from the uncertainty created by the nature of the relationships between Bonneville and many of its customers and how Bonneville has historically chosen to implement its obligations. These vulnerabilities are exacerbated by Bonneville's high fixed costs for its debt on the Federal Columbia River Power System and the three nuclear plants that were undertaken with Bonneville backing by the Washington Public Power Supply System, now Energy Northwest.² At times, these vulnerabilities can cause Bonneville to incur high costs that must be passed on to customers and ultimately to the region's consumers. If those costs are

1 E.g. see Rethinking Bonneville – Why BPA Must Be Reformed, Richard Munson, Northeast-Midwest Institute, 2001, <http://www.nemw.org/rethinkingbonneville.pdf>

2 Of the three plants, only one, Columbia Generating Station, is operating. The other two were terminated before construction was complete. However, Bonneville still has responsibility for paying off the debt incurred during construction.

not passed on to customers, Bonneville risks being unable to make Treasury payments. Rate increases cause economic hardship in the region; not making a Treasury payment risks a political backlash from outside the region that could cause the Northwest to lose the long-term benefits of power from the federal system.

As noted above, one source of Bonneville's financial vulnerability is the uncertainty created by the nature of its relationship with its different customer groups. For example:

- Bonneville has a legal obligation to sell power to publicly owned utilities at cost if asked. However, Bonneville's public customers do not have a legal obligation to buy from Bonneville until they have signed a contract.
- Bonneville does not have a legal obligation to sell to the direct-service industries, but there are powerful political and local economic pressures to do so.
- For investor-owned utilities, Bonneville has an obligation to provide benefits to existing residential and small farm customers but has struggled to find a means of doing so that is satisfactory to all parties. It also has a legal obligation to meet the load growth of investor-owned utilities if requested, although no such requests ever have been made.

How Bonneville has historically carried out its responsibility in power supply has also been a source of vulnerability. It has served the net requirements of its preference customers and DSIs at "melded" rates, i.e. it has averaged costs of the low-cost existing federal system with that of more expensive new resources required to meet loads beyond the capability of that system. This has had several adverse effects:

- It frequently had the effect of making Bonneville's power appear inexpensive relative to the cost of the new resources needed to serve growing loads. This can attract loads to Bonneville that might be more efficiently served in other ways.
- It has diluted the benefits of the low-cost existing system and, when wholesale power prices are low, has made Bonneville appear uncompetitive.
- This artificially low cost has been a disincentive for utility investment in cost-effective conservation and local generating options.

These issues have been the topic of several public and internal processes over the last decade. These include: the Comprehensive Review of the Northwest Energy System, carried out in 1996 in response to a request from the region's governors; the follow-on Bonneville Cost Review; the Joint Customer Proposal of 2002 and the subsequent Regional Dialogue and Council recommendations; an internal Bonneville review of the lessons learned from the 2001 electricity crisis; and, most recently, the Regional Dialogue discussions in the fall of 2003 and early 2004.³

³ *Comprehensive Review of the Northwest Energy System -- Final Report: Toward a Competitive Electric Power Industry for the 21st Century*, Comprehensive Review Document CR 96-26, December 1996. <http://www.nwcouncil.org/library/1996/cr96-26.htm>; *Cost Review of the Federal Columbia River Power System -- Management Committee Recommendations*, Document CR 98-2, March 10, 1998. <http://www.nwcouncil.org/library/1998/cr98-2.htm>; *Investor-Owned Utility/Preference Utility Proposal For The Future Role Of The Bonneville Power Administration*, October 29, 2002 draft; *What Led to the Current BPA Financial Crisis? A BPA Report to the Region*, also known as "The Lessons Learned" report, Bonneville Power Administration, April 2003; *Northwest Power Planning Council Recommendations on the Future Role of Bonneville in Power Supply*, Council Document 2002-19, December 17, 2002. <http://www.nwcouncil.org/library/2002/2002-19.htm>; *The Future Role of Bonneville in Power Supply*, Council Document 2003-18, October 2003, <http://www.nwcouncil.org/library/2003/2003-18.htm>

The recommendations coming from these processes have several common elements:

- Bonneville should sell the federal power through long-term contracts (20 years) to reduce uncertainty and help protect the region from external efforts to appropriate the benefits of the FCRPS.
- A means should be found of satisfying Bonneville's obligation to provide benefits to the residential and small farm customers of the region's investor-owned utilities that is equitable and predictable.
- Bonneville's and the region's exposure to risks of the wholesale power market should be limited, and clarity regarding responsibility for meeting load growth should be improved by limiting Bonneville's role in serving loads beyond the capability of the existing FCRPS to those customers who are willing to pay the costs of the additional resources required.

THE TIME TO RESOLVE THESE ISSUES IS NOW

Most Bonneville customers' contracts do not expire until 2011. Nonetheless, there is relatively little time to resolve issues and implement solutions. Commitments to new resource development will have to be made in the latter part of this decade. If uncertainty regarding how Bonneville will carry out its role in power supply persists, needed resource development could be impeded. The Bonneville Power Administration has initiated a policy process during the summer and fall of 2004, primarily to resolve issues related to the last five years under the current contracts. Many of the issues, however, relate to Bonneville's longer-term role. The Council has urged Bonneville to use this opportunity to establish a schedule for making decisions about its longer-term role that will permit it to offer new contracts by October of 2007. While the new contracts need not be effective until 2011, having new contracts in place by 2007 will provide Bonneville and its customers the certainty the need to undertake needed resource actions.

COUNCIL RECOMMENDATIONS

The Council has made recommendations to Bonneville regarding its future role in power supply. The recommendations were made with the following goals in mind:

- Preserve and enhance the benefits of the Federal Columbia River Power System for the Northwest;
- Not increase and, preferably, reduce the risk to the U.S. Treasury and taxpayers;
- Achieve an equitable sharing of the benefits of the federal power system;
- Develop and maintain widespread support for the federal system and reduce conflicts within the region;
- Align the costs and benefits of access to federal power;
- Maintain and improve the adequacy and reliability of the Northwest power system;
- Make clear who will be responsible for meeting load growth and on what terms;
- Provide clear signals regarding the value of new energy resources;
- Lessen Bonneville's exposure to market risk;

- Lessen Bonneville's impact on the market;
- Satisfy Bonneville's responsibilities for conservation and renewable resource development;
- Satisfy Bonneville's responsibilities with respect to fish and wildlife; and
- Accomplish all these goals efficiently and at as low as possible a cost to the region's consumers.

The Council's recommendations are presented in full Council Document 2004-5, *Recommendations on the Future Role of the Bonneville Power Administration in Regional Power Supply*. The key recommendations are described below.

A fundamental change in how Bonneville carries out its role in power supply

Resolving the problems that have afflicted Bonneville and the region requires a fundamental change in how Bonneville executes its role in power supply consistent with the Northwest Power Act of 1980 (the Act). Under the Council's recommendations, Bonneville would sell electricity from the existing Federal Columbia River Power System to eligible customers at its cost. Customers that request more power than Bonneville can provide from the existing federal system would pay the additional cost of providing that service. This change would clarify who would exercise responsibility for resource development; it would result in an equitable distribution of the costs of growth; and it would prevent the value of the existing federal system from being diluted by the higher costs of new resources. This change in role ultimately should be implemented through long-term (preferably 20-year) contracts and compatible rate structures.

This change in Bonneville's future role *does not* alter Bonneville's fundamental responsibility to serve the loads of those qualifying customers who choose to place load on Bonneville; it *does not* alter Bonneville's responsibility for ensuring the acquisition of Bonneville's share of all cost effective conservation and renewable power identified in the Council's Northwest Power and Conservation Plan (Plan); and it *does not* alter Bonneville's responsibility to fulfill its fish and wildlife obligations under the Act and the Council's fish and wildlife program. It *does* represent a change in the way Bonneville traditionally has carried out those responsibilities.

Define a clear and durable policy framework for contracts and rate-making

The Council believes that debate in the region over the future role of Bonneville is less about the end-state, a limited role for Bonneville in power supply, than about how to reach that end-state. The Council acknowledges that both new long-term contracts and a revised pricing structure will be necessary to fully implement a new role for Bonneville. The Council believes, however, that a clearly articulated and durable policy regarding Bonneville's future role must guide the necessary contract negotiations with customers and future rate cases.

The Council remains concerned that the policy process Bonneville has undertaken will not provide the durability necessary to meet expectations for long-term contract negotiations and associated rate processes, and the region's expectations for conservation and renewable resource development. To improve the durability of the policy, it must include clear identification of the

priority issues that are to be resolved, the process by which they will be addressed, and an aggressive schedule for doing so. That schedule should result in offering new long-term contracts by October of 2007.

If this process proves incapable of resolving issues within the established schedule, alternative processes should be considered. Bonneville and the Council should first determine if substantive rulemaking could be a vehicle for resolving the outstanding issues. If rulemaking is considered inappropriate, Bonneville and the Council should work together to identify specific legislation and seek comments from the public. Legislation should not be considered if there is not broad regional support including consensus among the region's governors.

Offer long-term contracts as soon as possible

Only long-term contracts will provide the certainty, continuity, and durability that customers need to make long-term resource commitments; the stability that Bonneville needs to be able to ensure Treasury repayment; and the protection the region needs for one of its most significant assets. Bonneville should offer such contracts no later than October of 2007.

The biggest impediment to long-term contracts is that Bonneville's customers are concerned they would lose the major means by which they can exercise discipline on Bonneville's costs and business practices – their ability to take load off Bonneville. Because long-term contracts have benefits for the parties and the entire region, all parties need to be open to examining ways to overcome concerns such as allocation of power, cost segregation, cost control, contract enforceability, dispute resolution, Bonneville business practices in general, and possible adverse impacts to Bonneville's public responsibilities under the Act. The Council commits to work with Bonneville, its customers, and others to identify a workable resolution of problems that may arise.

Allocation of the existing system

Fundamental to implementing changes in Bonneville's role in power supply is allocating the power from the existing federal system among eligible customers. Any allocation should be done in such a way as to minimize opportunities for gaming the process.

Tiered rates under existing contracts

Tiered rates would be the clearest practical indication of how Bonneville will be carrying out its role in the future.⁴ If Bonneville defines its role as the Council recommends, and if critical issues are resolved in a timeframe consistent with the schedule established in Bonneville's policy; and if new contracts are negotiated and offered by October of 2007; then the Council would not press for tiered rates under the current contracts for the next rate period. However, the Council reserves the right to reconsider this recommendation if those conditions are not met.

⁴ In this context, tiered rates mean a rate structure in which the rate charged for the first tier reflects the cost of the resources in the existing federal power system and the rate charged for the second tier reflects the cost of resources acquired to meet requirements beyond the capability of the existing system.

Products

Customers should have access to the full range of products that are currently available, such as requirements, block, and slice products. Importantly, the costs of each product should be confined to the purchasers of that product. Every effort should be made to eliminate cross-subsidies among products. In the process of negotiating new contracts, customers should have the opportunity to choose the products that best meet their needs.

Direct Service Industries (DSIs)

If a DSI has been a responsible customer of Bonneville, there may be an opportunity to provide a limited amount of power for a limited duration under specified terms and conditions. The existing federal system is roughly in load/resource balance. Consequently, some level of augmentation probably will be necessary to provide reasonably continuous service. If power is to be made available to DSIs, the amount and term should be limited; the cost impact on other customers should be minimized; and Bonneville should retain rights to interrupt service for purposes of maintaining system stability and addressing temporary power supply inadequacy.

Benefits for the residential and small farm customers of investor-owned utilities

The Council strongly supports resolution of the issue of benefits for the residential and small-farm customers of investor-owned utilities (IOUs) for a significant period. The Act established a mechanism for sharing benefits of access to low-cost federal power. That 24-year-old mechanism has operated in such a way that it satisfies no one. However, “fixing” that feature of the Act through legislation could have broad ramifications. Under a settlement, benefits could be provided in the form of power or dollars. The Council believes that providing the benefits in the form of power is more risky for Bonneville and could make the question of allocation more difficult. The Council continues to believe that however Bonneville treats the satisfaction of its exchange obligations for other accounting or financial reporting purposes, these benefits are appropriately included in the firm sales forecast called for under section 4(c)10(A) of the Act. The Council cannot judge what is an equitable settlement. However, the necessary characteristics of a settlement can be defined. A settlement must provide certainty, it must be transparent, and it must not be subject to manipulation. The proposed settlement that collapsed in early 2004 contained these elements and was supported by nearly all of Bonneville’s Northwest customers. The Council believes this could be the template for a long-term settlement.

Fulfilling responsibilities for conservation and renewables

The Council expects Bonneville and the region’s utilities to continue to acquire the cost-effective conservation and renewable resources identified in the Council’s power plans. Bonneville should employ mechanisms similar to the current Conservation and Renewables Discount (C&RD) program and provide essential support activities to encourage and facilitate utility action. Bonneville’s role could be substantially reduced to the extent that customers can meet these objectives. But if necessary, Bonneville must be prepared to use the full extent of its authorities to ensure that the cost-effective conservation and renewables identified in the

Council's power plan is achieved on all its customers' loads.. The C&RD program has been instrumental in motivating many utilities to pursue conservation and renewables activities. But the rate discount needs to be refined as outlined in the Council's December 2002 recommendations on the future role of Bonneville. The focus needs to be on determining how to reliably acquire all the cost-effective conservation at the lowest cost to the utility system. Bonneville and the Council should facilitate a collaborative process to refine the details of a rate discount and produce recommendations by early 2005.

The Act places a special emphasis on conservation. One of the fundamental premises of the Act is that by increasing the efficiency of *all* electricity consumption, from generation through transmission and distribution to its final end use, the region could extend the economic benefits of the region's low cost hydroelectric system. The Act created an ongoing responsibility for Bonneville to acquire conservation to "reduce load," not just meet load growth. And while the Council's recommendations may reduce Bonneville's responsibility for meeting load growth in the region, they would do so only for the duration of its contracts. Nothing prevents customers from bringing additional net requirements to Bonneville at the end of a contract period. For these reasons, the Council continues to support the conservation recommendations it first developed in December, 2002, as part of a public process inquiring into the future role of Bonneville, and then reconfirmed in May, 2004.⁵ In summary, those recommendations were:

- The system for conservation development should: 1) rely on the Council's Plan to define the cost-effective resource; 2) rely on proven delivery mechanisms; 3) provide stabilized and adequate funding for conservation over the duration of the new contracts; 4) reinforce the role and capabilities of the Regional Technical Forum; 5) provide a mechanism for ensuring that cost-effective conservation is implemented; and 6) capture conservation at as low a cost to the power system as possible.
- Bonneville should establish conservation budgets based on Bonneville's share of regional conservation potential identified in the Council's Plan and estimated program costs to capture that conservation. However, conservation savings targets, mechanisms and policies should be designed to *encourage* conservation on all loads of preference- customer utilities, not just the part served by Bonneville.
- Bonneville's obligations and authority with respect to IOU conservation is limited to the residential and small farm loads of those utilities that are subject to the residential exchange. The Council, however, will continue to encourage and support the work of the states' utility regulatory commissions to use their authorities and least-cost planning regulations to ensure that the cost-effective conservation on all IOU load is accomplished.

A rate discount should not necessarily be the only mechanism available to encourage utilities to acquire conservation and renewable resources. There are a number of activities that can be carried out more effectively if they are approached on a coordinated regional basis with local implementation. These include activities like market transformation, limited development and

⁵ "Northwest Power Planning Council Recommendations on the Future Role of Bonneville in Power Supply," Council Document No. 2002-19 (December 17, 2002); "Recommendations on the Future Role of the Bonneville Power Administration in Regional Power Supply," Council Document No. 2004-05 (May 2004).

demonstration activities, and program design and administration where there are significant economies of scale to be gained. Bonneville should continue these activities and, in addition, its support of low-income weatherization.

The region has benefited tremendously from the last 20 years of conservation development. It has reduced loads about 2,500 average megawatts at a cost less than half of that of adding similar amounts of generation. The Council's current plan identifies significant cost-effective conservation potential that the region should pursue. This conservation is valuable to the region regardless of whether the region is developing new generation or not. Bonneville should use the full extent of its authority to ensure that all cost-effective conservation is captured in an efficient, low-cost, and timely way; and Bonneville should retain a strong and active role in the coordinated planning and implementation of conservation efforts across the region.

The Council continues to believe that levels of renewable resource development should be guided by the Council's Plan. The C&RD could be used to support customer acquisition of renewable resources so long as cost-effective conservation is also acquired.

Bonneville is uniquely suited to pursue some renewable resources development that would not happen without its participation. These activities benefit all of Bonneville's customers, and their costs should be recovered from the existing system. These include activities such as: 1) removing barriers to cost-effective renewable resource development; 2) developing storage and shaping services, developing transmission re-dispatch products and making transmission acquisition for renewable resources easier; and 3) limited, region-specific research and demonstration. The purchaser should pay the costs of providing services like storage and shaping.

With regard to acquiring the output of new renewable resources, the Council believes Bonneville's activities should be consistent with the Plan. Bonneville should acquire new renewable output to meet new or replacement resource needs placed on the agency, provided resources are cost-effective after accounting for any risk reduction or other benefits the resources provide. The Council encourages those utilities that choose to take responsibility to meet their own load growth to use their best efforts to acquire renewables consistent with the Council's Plan and for Bonneville to use its capabilities to facilitate such acquisitions.

Resource adequacy

Even without changes in the way Bonneville carries out its role in power supply, the issue of resource adequacy, and the possible need for an adequacy standard or target to ensure that adequate power supplies are maintained, has been a major concern of the Council and others in the region. A change that results in more of the risk and responsibility of meeting future load obligations being borne by individual utilities instead of by Bonneville does not reduce overall risk. The Council is aware that new policies may be necessary to ensure that adequate information and safeguards exist to determine the power system's adequacy. In particular, the Council is concerned about the possibility that a severe deficit by any one utility could have detrimental effects on other utilities in the region. This risk can only be removed if all utilities ensure an adequate level of resources for their own load-serving responsibilities.

The Council is committed to working with Bonneville, utilities, the states, regulatory commissions, and other regional and West-wide organizations to ensure that appropriate adequacy policies are in place and that the data and other tools to implement the policies are available. The Council believes these policies need to be in place prior to the implementation of long-term contracts.

Fulfilling responsibilities for fish and wildlife

The Council believes these recommendations will not affect Bonneville's fish and wildlife obligations. Those obligations will be determined in a manner consistent with the requirements of the Act and the Council's Columbia River Basin Fish and Wildlife Program. Bonneville's mitigation costs should be allocated to the existing federal power system.