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to Congress and
Citizens of the Pacific Northwest

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Submitted to the

Committee on Energy and Natural Resources
United States Senate

Committee on Energy and Commerce
United States House of Representatives

and

Committee on Resources
United States House of Representatives

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The Northwest Power and Conservation Council was established pursuant to the Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Public Law 96-501) by the states of Idaho, Montana, Oregon, and Washington. The Act authorized the Council to serve as a comprehensive planning agency for energy policy and fish and wildlife policy in the Columbia River Basin, and to inform the public about energy and fish and wildlife issues and involve the public in decision-making.

This annual report has been developed pursuant to Section 4(h)(12)(A) of the Northwest Power Act. The Council's bylaws, which include its organizational structure, practices, and procedures, are available to the public at the Council's website: www.nwcouncil.org, as Document 2003-19.

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To Congress and the citizens of the Pacific Northwest:

In Fiscal Year 2006, the Council issued the first electricity resource adequacy standard for the Northwest, a standard that will guide Northwest utilities and Bonneville to ensure that the electricity supply remains affordable and reliable. The Council also began work with regional utilities and Bonneville to ensure that the region's rapidly developing supply of wind power is integrated into the baseload power supply in a manner that does not erode the reliability of the regional transmission system or the power supply.

In 2006, the Council also supervised the solicitation and independent scientific review of more than 500 project proposals to implement the Columbia River Basin Fish and Wildlife Program, which is designed to mitigate the impacts of hydropower dams on fish and wildlife. For the first time, beginning in Fiscal Year 2007 projects will be funded for three years at a time. This will provide project sponsors more surety about funding, and it also will provide the opportunity for projects to demonstrate progress toward objectives consistent with priorities identified in subbasin-specific plans adopted by the Council in 2005.

The Council provides Northwest citizens an opportunity unique in the nation to participate in and influence decision-making regarding the region's electricity supply and Columbia River Basin fish and wildlife. Through implementation of its performance-based fish and wildlife program, and through the careful and collaborative development of regional energy policy, the Council continues to ensure that Northwest electricity ratepayers enjoy the benefits of the low-cost federal hydropower system while responsibly addressing the impacts of the system on fish and wildlife populations, which have economic and cultural importance to the region.

I am pleased to submit this report on the Council's major activities in Fiscal Year 2006.

Tom Karier
Chair, 2006

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The Northwest Power and Conservation Council

The Council, known until 2003 as the Northwest Power Planning Council, is an agency of the states of Idaho, Montana, Oregon and Washington and was created as an interstate compact agency by the legislatures of the four states consistent with the Pacific Northwest Electric Power Planning and Conservation Act of 1980. The Council's first meeting was in April 1981.

The Northwest Power Act gives the Council three distinct responsibilities: 1) to assure the region an adequate, efficient, economical and reliable electric power supply; 2) to prepare a program to protect, mitigate and enhance fish and wildlife, and related spawning grounds and habitat, of the Columbia River Basin that have been affected by the development and operation of any hydroelectric project on the Columbia River and its tributaries; and 3) to inform the Pacific Northwest public about energy and fish and wildlife issues and involve the public in decision-making. This annual report is organized around the Council's three key responsibilities.

The Power Act created a special relationship between the Council and the federal agencies that operate and sell the electricity generated at dams in the Columbia River Basin. The Administrator of the Bonneville Power Administration, the federal power marketing agency that sells the output of the Federal Columbia River Power System (a system of 31 federal dams and one non-federal nuclear power plant) is required to make decisions in a manner consistent with the Council's Northwest Power Plan and its Columbia River Basin Fish and Wildlife Program. Other federal agencies with responsibilities for dams (the U.S. Army Corps of Engineers, U.S. Bureau of Reclamation, and Federal Energy Regulatory Commission) are required to take the Council's power plan and fish and wildlife program into account at every relevant stage of decision-making to the fullest extent practicable.

To put it simply, the Council's legal responsibility is to determine how the Columbia basin hydrosystem has adversely affected fish and wildlife, to develop and oversee a program to address those effects through protection and mitigation recommendations that the federal agencies operating the system have legal responsibilities to implement or take into account; and to do all of this in a highly public manner.

There are eight Council members, two from each state, appointed by the governors. A list of Council members and their office locations is at the end of this report.

The Council has its headquarters in Portland. Council member offices are located in Boise, Idaho; Portland, Astoria, and Milton-Freewater, Oregon; Helena, Montana; and Vancouver and Spokane, Washington.

Power Planning

A. The Regional Dialogue on the Future Role of Bonneville

Discussions in the region about the future role of the Bonneville Power Administration in Northwest power supply began following the 1996 Comprehensive Review of the Northwest Energy System. The Comprehensive Review was an effort initiated by the governors of Idaho, Montana, Oregon, and Washington to ensure that Northwest citizens would benefit from electricity industry competition while also continuing to enjoy the benefits of the Federal Columbia River Power System. Participants in the Comprehensive Review reached agreement on a path forward. However, little progress was made in implementing the recommendations.

In 2003, the governors issued recommendations on protecting Columbia River Basin fish and wildlife and preserving the benefits of the Federal Columbia River Power System. Among those recommendations, the governors asked the Council and Bonneville to reinitiate discussions in the region about the future role of Bonneville.

In 2006, these renewed discussions, which came to be known as the Regional Dialogue, resulted in draft policy proposals by Bonneville. Following a public comment period, Bonneville planned to make a final decision on the Regional Dialogue policy proposals in January 2007. The policies would be implemented beginning in 2011.

In its comments to Bonneville, the Council noted the general consistency of the Regional Dialogue proposals with the Council's Fifth Northwest Power Plan and also commended Bonneville for committing to acquire its share of the conservation and renewable resources in the plan.

In its proposal, Bonneville calls for allocating the output of the Federal Columbia River Power System to its customers and selling any additional power to customers who request it at the price Bonneville pays to acquire it on their behalf. The proposal also calls for 20-year power

sales contracts. Both of these proposals are similar to recommendations of the 1996 Comprehensive Review.

Bonneville proposes to provide rate relief to the residential and small farm customers of investor-owned utilities -- an important rate-leveling requirement of the Northwest Power Act of 1980. In its comments, the Council encouraged investor-owned utilities and public utilities to reach a financial settlement of their residential exchange rights. The exact form and amount of these settlements is a matter of equity for agreement among utilities and state regulators, the Council commented.

Bonneville commits in its proposal to continue acquiring energy conservation and renewable resources, as noted above, and the Council urged Bonneville to commit also to consistency with the other resource priorities in the Council's power plan if additional resource acquisition is necessary after the Federal Columbia River Power System is allocated among Bonneville customers. The Council also asked Bonneville for a clear commitment to implement the Council's fish and wildlife program as part of Bonneville's stewardship obligations.

Bonneville proposes a range of options for providing electricity or cash to Bonneville's direct-service customers, which primarily are aluminum smelters. The proposal also seeks public comments on an element of the President's Fiscal Year 2007 budget that provides that Bonneville would use any surplus power sales (net secondary) revenues in a given year above $500 million to make early payments to the U.S. Treasury. The intent would be to give Bonneville financial flexibility to invest in the energy infrastructure, energy conservation, and fish and wildlife protection. In its comments, the Council reiterates its opposition to the budget proposal because of its potential adverse effects on Bonneville's rates and on the regional economy. The Council notes that Bonneville has voluntarily made early payments on its debt as

part of an integrated business plan for coordinating financial reserves, power rates, and Treasury repayment.

As noted above, Bonneville's policy proposals are consistent with many of goals for the Regional Dialogue in the Council's Fifth Northwest Power Plan, including:

- Preserve and enhance the benefits of the FCRPS 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

If Bonneville adopts the policies as presented for public comment, this would be a landmark in regional energy policy and would fundamentally change the relationship between Bonneville and its customer utilities for the first time since passage of the 1980 Northwest Power Act.

B. Electricity generating resource adequacy

The West Coast energy crisis of 2000 and 2001 dramatically demonstrated the value of an adequacy standard for the electricity supply -- and the chaos that can erupt without one. "Resource adequacy" means having enough electricity to avoid blackouts, brownouts, and exposure to unacceptably high power prices in the wholesale power market.

Today, as electricity ratepayers continue to pay for the high-price power utilities had to buy during the crisis, the Council, Bonneville Power Administration, and Northwest utilities are working to develop a resource adequacy standard. The standard would be voluntary, but the Council would use it in its energy planning and Bonneville might incorporate it into its power sales contracts. With regionwide agreement on what constitutes an adequate power supply, utilities that grow short of power would face pressure from other utilities to fix the problem. The goal of establishing a standard is to be able to assess the regional power supply and demand and take action if it appears another energy crisis is developing.

In 2000, there was no West Coast-wide standard for power system adequacy. The Western Electricity Coordinating Council, which coordinates electric system reliability in North America west of the Continental Divide, had a standard for capacity -- a recommendation for reserve power to meet sudden, short-term spikes in demand -- but not a West-wide standard for long-term power system adequacy.

This proved to be problematic, as there was little warning of an impending crisis of long-term supply and demand. By mid-2000, demand for electricity had been increasing steadily on the West Coast but the power supply had not kept pace. Utility by utility throughout the interconnected power generation and transmission grid, some had an adequate long-term power supply and others did not. Systemwide, the gap between demand and supply was widening. Together, the gap plus California's then-failing wholesale power market, and a drought in the Pacific Northwest that reduced the hydropower supply, sent wholesale power prices throughout

the West rocketing to ten times the normal price, and higher. Prices didn't approach normal again for about seven months, until June of 2001, and by then the damage was done. Consumers faced double-digit rate increases to pay for the expensive wholesale power their utilities had to purchase, and many businesses and industries foundered on the high cost of power. Some failed.

In 2003, the Federal Energy Regulatory Commission concluded in a report on the causes of the California problems that a reduced supply of Northwest hydropower played a role along with manipulation of the California market by energy traders. According to Congressional testimony by Pat Wood, then chairman of FERC: "… for the first two years of its operation, the California market performed well and saved the state's customers billions of dollars. But after the Pacific Northwest could no longer provide abundant supplies of low-cost hydropower to the regional market, the effects of too little infrastructure and inefficient market rules adversely affected wholesale prices."

Thus hydropower from the Northwest propped up the power supply in California, and perhaps elsewhere in the West, essentially taking the place of power plants that should have been built but were not. Then, as the hydropower supply dried up, prices for the diminished supply of electricity in the face of steady demand jumped up to levels never seen before. For weeks on end in early 2001 the wholesale price hovered above $200 per megawatt-hour -- compared to $30 or less before the crisis.

In response both FERC and California regulators recommended a resource adequacy standard for the state to ensure that the power supply remains adequate to avoid blackouts, brownouts and volatile high prices. Others, including the Council, were thinking along the same line. Resource adequacy is a key element of the Council's Fifth Northwest Power Plan, which the Council began developing in the wake of the power crisis and completed in December 2004.

The power plan recognizes that hydropower is the largest single source of electricity in the Northwest and that the Bonneville Power Administration is the largest single supplier of electricity -- most of it hydropower. Most of the hydropower sold to utilities in California and the desert Southwest is sold by Bonneville and is surplus to Northwest needs. The Northwest and Southwest are linked by high-voltage transmission lines and regularly share power -- this occurred to a limited extent even during the energy crisis. The power plan recognizes this interdependence in proposing the collaborative development of a voluntary resource adequacy standard. According to the plan: "This is not merely a regional issue, because the Northwest is part of an interconnected Western system. This means the region must work with other interests in the West to develop a system that will assure adequacy, recognize the legitimate differences within the West, and ensure that all of the responsible entities bear their share of the responsibility. The region should address these issues soon."

While the Western Electricity Coordinating Council works to establish a West-wide resource adequacy standard, the Council is implementing two action items in the Fifth Power Plan: One is to establish reporting standards for assessing power system adequacy, and the other is to improve consideration of risk -- the risk of exposure to unacceptably high power prices, for example -- in integrated resource planning. To that end, the Council and Bonneville established the Pacific Northwest Resource Adequacy Forum to develop a resource adequacy standard for the region. The Forum has nearly 90 members who represent utilities, utility associations, electricity consumer groups, and others.

In January 2006, the Forum issued a paper with its proposal for a standard. The standard proposed by the Forum consists of a metric (a unit of measurement) and target (a measurable amount or value) for both energy and capacity.

The Council accepted public comments on the energy standard through April and then approved it in May. The capacity standard required more time to develop. The Council planned to release a proposal in September and consider approval later in the fall. The Council and Bonneville will propose the energy and capacity standard to the Western Electricity Coordinating Council for inclusion in its West-wide effort.

C. Wind power confirmation

The rapid proliferation of wind power plants in the Pacific Northwest will diversify the region's electricity supply with environmentally clean renewable energy, but it also highlights a difficult and as-yet unresolved issue: How can the regional power system be planned, operated and configured to integrate in a cost-effective manner the large amounts of wind power and other renewable resources called for in the Council's Fifth Northwest Power Plan?

In the summer and fall of 2006, the Council and the Bonneville Power Administration convened a high-level policy steering committee in a series of public meetings to explore the technical and energy-policy issues that arise from the rapid integration of renewable resources into the region's power supply. Representatives of electric utilities, renewable energy developers and proponents, environmental groups, state public utility commissions, and others took part. The wind-integration project is addressing the following questions: How much wind power and other intermittent resources can the regional power system currently absorb? What additional integration capability might be secured through a revised or new policy, or through operational and market mechanisms? And finally, what generating, transmission, and other equipment upgrades are available to extend renewable resource integration capability in a cost-effective manner?

The Council's Fifth Northwest Power Plan, completed in December 2004, calls for construction of up to 5,000 megawatts of new wind power capacity during the 20 years ending in

2024. Since adoption of the plan, wind power development has been occurring at a much faster pace than envisioned. Several factors are working in favor of wind power at the moment. The federal production tax credit for wind power has been extended, some states have adopted or are considering renewable energy portfolio standards, and utilities increasingly are recognizing the fuel-price and environmental-risk-mitigation benefits of wind power.

Between January 2005 and August 2006 more than 970 megawatts of wind power were completed or were under construction in the Northwest. Construction of at least another 660 megawatts or more was expected to begin within the next year. Developers had requested integration services and facilities from transmission owners to add more than 3,000 additional megawatts of wind power over the next several years.

Wind power is a desirable resource for several reasons: its fuel is free, it does not pollute, and, particularly with the federal tax credit, its cost is competitive with other new resources. However, unlike thermal plants, the fuel supply -- wind -- is intermittent. Moreover, wind plants must be developed where the good wind resources are located. This is expected to require extension and reinforcement of the transmission system.

The power plan asserts that uncertainties such as the long-term cost of wind power, the capacity value of wind, transmission availability, the ability to shape intermittent wind output to meet load requirements, benefits of geographic diversity of wind projects, and the impact of the intermittent output of wind on other functions of the hydropower system need to be resolved in order to confirm the potential role of wind power in the Northwest supply. These uncertainties could be resolved by developing commercial-scale pilot projects at promising windy areas. The power plan envisioned that this would occur over about a five-year period, but the current pace of wind power development accelerates the need to resolve these uncertainties.

The product of this confirmation effort will be a renewable resources action plan. The action plan will set forth the findings and recommendations of the confirmation effort for the policy steering committee to endorse. To the extent possible, policy and operational recommendations will be structured to facilitate immediate implementation. Some recommendations may require additional analysis, complex contractual agreements, or equipment installation and will take longer to implement.

D. Implementing the Fifth Northwest Power Plan

The Northwest Power Act directs the Council to prepare a power plan to assure the region an adequate, efficient, economical, and reliable power supply. The Act also directs the Council to review the plan at least every five years. In December 2004, the Council approved the Fifth Northwest Power Plan, the fifth revision of the plan since it first was adopted in 1983.

The Council has been monitoring implementation of action items in the plan and updating information that was used in the modeling that underlies many of the action items. The plan commits the Council to publish a biennial monitoring report beginning in December 2006.

In September 2006, when this draft annual report was made available for public comment, the Council was gathering information to include in the monitoring report. The report will include an assessment of the key assumptions in the plan, such as the 20-year forecast of power demand, assumptions about the future prices of oil, natural gas, and coal, and assumptions about future electricity prices and the costs of various generating resources. The report also will address the status of implementing specific actions in the plan, such as conservation achievement; the future role of the Bonneville Power Administration in power supply, an issue addressed separately in this draft report; a standard for electricity generating resource adequacy, which also is addressed in this draft report; the status of utility least-cost resource plans in the Northwest, and actions related to demand response and transmission. The report also will

address the status of policy developments including climate change research and policy, state energy policies, and energy legislation at the state and federal levels.

E. Transmission issues

In 2006, the Council continued to track and participate in regional discussions about how to keep the regional high-voltage transmission system reliable, affordable, and efficient, including the effort to create a regional, independent transmission organization and the work of the Northwest Transmission Assessment Committee.

Regarding a transmission organization, in January 2006 the parties that were attempting to create Grid West as an independent transmission operator voted to dissolve the organization after failing to agree on a plan for going forward. Key to the demise of Grid West was the decision by Bonneville not to participate. Bonneville operates about 75 percent of the high-voltage transmission in the Northwest. Many of its utility customers urged Bonneville to oppose further work on the Grid West concept, citing concerns over the potential for higher costs and ceding too much control of the Bonneville system to a new organization. Without Bonneville's participation, the other Grid West participants decided the organization could not be viable.

Following the demise of Grid West, an alternative group, called Columbia Grid, was organized by some of the utilities that opposed Grid West. Columbia Grid, like its predecessor Transmission Integration Group, which had formed as an alternative to Grid West, plans an alternative method for integrating operation of the region's transmission system. Initial members include Bonneville, Seattle City Light, Puget Sound Energy, Avista Utilities, and the public utility districts of Grant and Chelan counties in Washington. Columbia Grid members plan to prepare a series of functional agreements. The first, regarding planning and expansion of the transmission system, was scheduled for completion in the fall of 2006.

Columbia Grid differs from Grid West in two important ways: first, Columbia Grid would have a very limited scope of responsibilities that would be defined in the functional agreements, and second, Bonneville would not turn over any of its transmission control-area functions unless another utility that owns a large transmission grid joins the organization.

In 2006, the Council also worked with the Northwest Transmission Assessment Committee (NTAC) of the Northwest Power Pool to develop assessments of the cost and feasibility of new long-distance transmission lines and reinforcements to access new generating plants. For example, the committee studied the cost and feasibility of transmitting electricity from new generating plants in Canada to the Northwest, California, and Nevada. The study suggested that the cost of that power would be about the same as the cost of electricity from a new combined-cycle combustion turbine plant in the Northwest. The Council's staff will continue to participate in the Columbia Grid process and the NTAC study groups.

F. ESA recovery planning

The Council is recognized throughout the Northwest for its expertise and objectivity in analyzing operations of the Columbia and Snake river hydropower system. From time to time the Council is asked to provide input to various parties that are investigating operational changes in the hydrosystem. This has included proposals by NOAA Fisheries and other parties in response to litigation over the 2004 Biological Opinion on Operations of the Federal Columbia River Power System.

Under order of the U.S. District Court of Oregon, parties to the litigation are working on a new biological opinion. In November 2005, the court ordered operational changes for the summer of 2006, following on similar operations in the summer of 2005. Not surprisingly, proponents and opponents of the changed operations disagreed on the potential costs and

impacts, and so the Council staff conducted an analysis and reported the results publicly in December 2005.

The Council staff will continue to assist the parties developing the new biological opinion with analyses of proposed hydropower operations as requested.

Fish and wildlife planning

A. Columbia River Basin Fish and Wildlife Program

1. Project solicitation, review, and funding recommendations

a. Project-funding recommendations

Beginning in Fiscal Year 2007, projects that implement the fish and wildlife program will be funded for three years instead of one, as they were in the past. Proposals for projects to implement the program in Fiscal Years 2007-2009 were submitted to the Council and Bonneville in early 2006. Building on the local input in subbasin plans adopted by the Council in 2005, the Council sought comments and advice from local groups throughout the Columbia Basin on which project proposals addressed the highest priorities in subbasin plans and should be funded in the 2007-2009 period.

The 540 proposals were reviewed for the Council by the Independent Scientific Review Panel (ISRP), consistent with section 4.(h)(10)(D) of the Northwest Power Act. The ISRP submitted its initial review of projects to the Council in June. The ISRP asked some project sponsors to respond to questions in advance of a funding recommendation. Those sponsors had two months to respond, and the ISRP submitted its final recommendations to the Council at the end of August.

At the same time as the ISRP review, a separate project review was conducted at the subbasin level and coordinated through the Council's state offices. Participants in this review included state and tribal fish and wildlife managers and other federal, local and non-profit organizations that have been involved in the fish and wildlife program, in developing subbasin plans, and, in some cases, in ESA recovery planning.

The Council planned to make its project-funding recommendations to Bonneville in October. Projects on the Council's priority list will have broad public support and also scientific

credibility because of the ISRP review. The list of projects should be helpful to Bonneville, the Corps of Engineers, and NOAA Fisheries in writing the next Biological Opinion on Hydropower Operations. Collectively, projects the Council recommends will represent an effective, scientifically credible list of offsite mitigation actions that can be incorporated into the next biological opinion.

Meanwhile, the Council completed program funding recommendations for Fiscal Year 2006 for $157 million in expense projects and $56 million in capital projects. A list of the projects plus links to the project reviews and other information is on the Council's Web site, www.nwcouncil.org.

b. Ongoing project reviews

In addition to recommending projects to Bonneville to implement the program in future years, the Council also monitors the ongoing implementation of projects throughout the year.

The Council, Bonneville and the Columbia Basin Fish and Wildlife Authority formed a Budget Oversight Group to conduct an ongoing budget-tracking process. The group uses Bonneville's first quarter (January) and second quarter (April) project review meetings of each fiscal year to initiate a prioritization process to establish which budget adjustment requests will be met with the available funding in Bonneville's spending reserve account. The process includes a public comment period.

In Fiscal Year 2006, the Council managed numerous within-year budget adjustments -- 15 through August 2006 -- incorporating where appropriate newly defined requirements for projects that implement the biological opinions on hydropower operations under the Endangered Species Act.

c. Step review process for major capital projects

Major capital construction projects, such as building a new fish hatchery, are developed and funded over time as the projects proceed through engineering and environmental studies and

designs, and environmental permitting processes. The Council follows the progress of the major capital facilities it recommends to Bonneville for funding. This sequenced review process is intended to ensure fiscal responsibility and provide checkpoints for decision-makers to ensure the scope and intent of each project are being met as the project evolves.

The review process has three steps: 1) conceptual planning; 2) preliminary design and cost estimation, and environmental (NEPA and ESA) review; and 3) final design review prior to construction. Independent scientific review of the proposed project is part of the review process.

In Fiscal Year 2006, the Council reviewed progress on one major project and recommended it proceed to construction. The $16.4 million Northeast Oregon Hatchery is proposed as a collection of facilities to enhance production of spring Chinook in the Grand Ronde River Basin, a threatened species. The project has been under development through the Council's program since 1987. Restoring the Grand Ronde Basin spring Chinook is a component of a larger, long-term planning effort by state and federal fishery managers for Snake River Basin salmon and steelhead. The new facilities would augment fish production that already is occurring at Lookingglass Hatchery, which is operated by the Oregon Department of Fish and Wildlife as part of the Lower Snake River Compensation Plan of the U.S. Fish and Wildlife Service.

While the Council recommended the Northeast Oregon Hatchery to Bonneville in May, Bonneville has not proceeded with the project. In June, Bonneville determined that the hatchery construction could not begin because the project had not completed what Bonneville termed a "full ESA review." In a letter to the Nez Perce Tribe of Idaho, one of the project sponsors, Bonneville explained that such a review would address "the effects of the artificial propagation and the indirect effects of the hatchery program on harvest by-catch." In addition, Bonneville announced that a further condition of proceeding with construction would be "an assessment of

the overall biological benefits of the project." This assessment would result in a decision by NOAA Fisheries as to how much "credit" Bonneville would receive for the project against its recovery obligation under the Endangered Species Act for the ESA-listed spring Chinook. In September, when the Council issued this draft annual report for public comment, neither the ESA review nor the assessment had taken place.

In addition, to the NEOH Hatchery decision, in 2006 the Council staff also tracked the progress of 47 projects and/or project elements that triggered the major review process in recent years.[1]

2. Biological objectives at the ecological province level

In May 2005 the Council prepared a plan for developing and adding biological objectives to the fish and wildlife program. These objectives will express in quantitative terms the nature of the changes the program seeks to achieve in key fish and wildlife populations and their habitats in the different ecological provinces of the Columbia River Basin. Objectives of this type would add significantly to the Council's ability to guide program expenditures in the most efficient direction and evaluate the success of the program's activities over time. Adding biological objectives to the program will be the last step in the program-amendment process that began in 2000.

The Council envisioned moving ahead more quickly, but the schedule changed because the necessary technical preparation has not been completed. Meanwhile, NOAA Fisheries is conducting a review of hatcheries in the Columbia River Basin. The NOAA review is proceeding in two phases. The first phase, currently in progress, addresses Columbia River subbasins downstream of Bonneville Dam. The second phase, scheduled to begin in 2007 and be completed in 2008, will address those above Bonneville -- the subbasins of most interest for the

[1] For example, production initiatives will trigger a review when a project proposes any one of the following: (a) construct significant new production facilities; (b) begin planting fish in waters where fish have not been planted

Council's program. NOAA Fisheries also is working, in collaboration with other parties to litigation in federal court, on a new biological opinion on operations of the Federal Columbia River Power System.

In the summer of 2006, the Council issued a discussion paper on the proposed amendment process for biological objectives and sought public comments on whether to proceed or wait for the completion of the federal hatchery reviews and the new biological opinion. In September, when the draft of this annual report was released for public review, the comment period on the discussion paper was open. The Council planned to make a decision later in the fall.

3. Partnership funding opportunities

In 2006 the Council continued work it began in 2005 to facilitate cost-sharing of projects that implement the fish and wildlife program. Cost-sharing is not a requirement of the fish and wildlife program, but many projects already are funded by multiple sources in addition to the Bonneville Power Administration. As the result of a change in the project proposal forms, the Council now is able to track cost-sharing by funding source, funding provider, and status of the funds.

The total reported cost sharing for all categories of funding sources and levels of commitment for projects proposed for funding in the next funding period, fiscal years 2007-2009, is approximately $340 million. The total amount of funding identified for all of the proposed projects (540 projects were proposed) over three years is approximately $1 billion (the budget is about $150 million per year). Cost-sharing -- funding that would be provided by entities other than Bonneville -- represents about 33 percent of the total funding sought by

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before; (c) increase significantly the number of fish being introduced; (d) change stocks or the number of stocks; and/or (e) change the location of production facilities.

project sponsors. Most of the cost-sharing would come from grant programs administered by federal agencies.

The Council will continue to work with project sponsors to identify and pursue potential cost-sharing opportunities for projects that implement the program.

4. Research plan and guidance for monitoring and evaluation

a. Council research plan

In 2006, the Council completed a plan that identifies major research themes and critical uncertainties for research funded through the fish and wildlife program. The plan provides guidance for addressing key uncertainties that affect anadromous fish, resident fish, wildlife, and the ecosystems that support them. The research plan will help the Council manage the program by informing decision-making, facilitating scientific review, focusing project selection, providing a basis for redirecting future research, and making the program more effective. The Independent Scientific Advisory Board, which advises both the Council and NOAA Fisheries, gave the research plan a positive review.

In addition to improving implementation of the program, the research plan forges links to research activities of the many state, federal, and tribal parties that share responsibility for fish and wildlife management in the Columbia River Basin. The research plan is intended to improve communication among scientists, cooperation among institutions, and coordination of long-term biological monitoring.

b. Monitoring guidance document

As a complement to the research plan, in 2006 the Council also developed a guidance document for monitoring the progress and effectiveness of fish and wildlife projects. The guidance document explains the steps necessary for developing the capacity to collect monitoring information in a consistent, statistically valid manner. Over time, this will help the

Council develop a mechanism for evaluating the cumulative benefits of projects at the subbasin and province scales.

Also in 2006, the Council continued its work with a regional collaboration called the Northwest Environmental Database Partnership, which includes state and federal fish and wildlife and land-management agencies, and Indian tribes, to develop a unified data management structure. The Council also continued its work with the Pacific Northwest Aquatic Monitoring Partnership, which is working to unify data collection and management.

Collectively, the Council's research plan, monitoring guidance, and improved data management will help assess progress over time toward the basinwide goals and objectives of the program and, when they are completed, biological goals at the ecological province level.

Public affairs and public information

One of the Council's primary tasks is to fulfill the directive of the Northwest Power Act to inform and involve Northwest citizens regarding regional energy and fish and wildlife issues and the Council's activities. To involve the public, the Council meets monthly at different locations around the Columbia River Basin. All meetings are open to the public, and there is an opportunity for public comment on each agenda item. The Council also conducts periodic public hearings on major Council initiatives. The Public Affairs Division arranges consultations and public hearings separate from the regular Council meetings to discuss and explain key issues and also gathers public comments at these meetings and through mail, e-mail and telephone contacts.

To inform the public, the Council produces a quarterly newsletter, a monthly electronic newsletter, and special informational materials, media briefings, and news releases. The Council also regularly updates its website (www.nwcouncil.org) and uses other approaches to inform the public about fish, wildlife and energy issues, such as through videos. In 2006 the Council completed a 19-minute film, called "Power and Place -- the Evolution of the Northwest's Energy System." is available free of charge by calling the Council at 800-452-5161 or by sending an e-mail to info@nwcouncil.org. The film focuses on the development of the Northwest's power system from the construction of major dams along the Columbia River to the present day. It provides a comprehensive overview of the role of the Northwest Power and Conservation Council to reach a sustainable balance between the needs of fish and wildlife and the production of electricity.

In 2006 the Council also completed a revision of a brochure that describes power plants in the Northwest, including location, ownership, and maximum potential output. The brochure, entitled "Electricity Generation for the Pacific Northwest," includes all types of power plants. An online version of the brochure is posted on the Council's website, www.nwcouncil.org.

The Council also issued its fifth annual report to Northwest governors on expenditures of the Bonneville Power Administration to implement the Council's fish and wildlife program. The report details expenditures from 1978 through 2005 and also includes information on the status of Columbia River Basin salmon and steelhead runs.

A. Canadian relations

In recognition of the fact that the Columbia River and several of its major tributaries begin in Canada and flow across the international border, and consistent with direction in the Northwest Power Act to treat the entire Columbia River as a system for planning purposes, the Council maintains regular contact with planning entities in British Columbia. The Columbia Basin Trust, a Crown corporation of the province, is the Council's closest counterpart agency in the Canadian portion of the Columbia River Basin. Since 1996, a year after the Trust was created, Council members and staff have met at least annually with the Trust and, in 2000, the two agencies formalized a relationship and designated the vice chairs as official liaisons. The Trust and Council exchange visits twice a year to discuss Columbia River issues of mutual concern. In 2006, the Council hosted a delegation of board members and staff of the Columbia Basin Trust at a Council meeting in Walla Walla, Washington, in May.

The Council and Trust are collaborating on the development of an international partnership to share information about the Columbia River system in Canada and the United States. Tentatively called The Columbia River Center of Knowledge, the concept is an Internet-based repository of information on Columbia River history, water uses, resources, issues and policies (treaties and state, provincial and federal laws, and intergovernmental agreements).

The Council and the Trust produced an issue paper on the subject in 2006 (www.nwcouncil.org/library/2006/2006-8.htm) and convened a committee of American and Canadian experts on Columbia River matters to assist the development of the Web site.

Administration

A. Council budget

1. Budget formulation

The Northwest Power Act establishes a formula to determine an annual funding limitation threshold for the Council. The Bonneville Power Administration provides this funding through ratepayer revenues.

The funding limitation is calculated on the basis of .02 mill multiplied by the kilowatt hours of firm power forecast to be sold by Bonneville during the year to be funded. The limitation may be increased to .10 mill, provided the Council makes an annual showing that that the increase is necessary. Congress assumed in the Act that Bonneville would serve all anticipated load growth in the region in the future.

The Council continues to be conscious of the need for healthy financial conditions for Bonneville. Since 1997, the Council has negotiated annual budget ceilings with Bonneville that cover specific Bonneville rate periods. These agreements account for various constraints including the need to:

- Maintain current-level service budgets from the preceding budget period
- Restrict cost-of-living adjustments for personal services expenditures
- Identify efficiencies in operations and administration to limit annual inflationary increases to an average of 3 percent
- Reallocate staffing where possible to absorb new workload without increasing the number of full-time employees
- Re-prioritize resources as necessary and reschedule or postpone work anticipated during the budget-development process in order to respond to the most essential requests for studies and analyses

Applying these principles, the Council has limited annual budget growth to less than 3 percent per year over the last nine years (Fiscal Years 1998-2007), and by applying the same principles the Council plans to limit future budget growth during the next Bonneville rate period, Fiscal Years 2007-2009 to the same amount, on average. Here is a summary of the draft budgets for that period (reflecting current-level service from the Fiscal Year 2006-revised budget):

- Fiscal Year 2007 $9,085,000 (4.4 percent)
- Fiscal Year 2008 $9,276,000 (2.1 percent)
- Fiscal Year 2009 $9,467,000 (2.1 percent)

2. Funding methodology needs amendment

In 2006, following several years of discussion between Bonneville and the Council, Bonneville issued a proposed interpretation of Section 4(c)(10)(B) of the Northwest Power Act, the section that describes Bonneville's limitations when funding the Council. Bonneville sought public comments on the proposal and planned to issued a final interpretation. The public comment period closed at the end of June, but by September, when the Council issued this draft annual report for public comment, Bonneville had not issued its final interpretation.

This funding issue arose because over time Bonneville changed the way it provides benefits to the residential and small-farm customers of investor-owned utilities under the Northwest Power Act. The Act mandates that these customers pay the same price for electricity as customers of public utilities served by Bonneville.

Section 5(c) of the Act provides a mechanism, known as the residential exchange, by which investor-owned utilities may exchange with Bonneville an amount of power equal to their residential and small-farm customer load. Bonneville's power was less expensive, and so the effect of the residential exchange was to lower the cost of electricity for customers of the investor-owned utilities. The price difference was paid by direct-service customers of Bonneville in exchange for 20-year contracts for Bonneville power.

Over time, the 20-year contracts expired, the wholesale electricity market became deregulated and competitive, and the residential exchange increasingly was carried out through cash payments negotiated between Bonneville and each investor-owned utility in settlement agreements. Prior to the use of settlement agreements, power exchanged according to the provisions in section 5(c) was treated as a firm-power sale. With the use of the settlement agreements, however, some parties in the region questioned whether a negotiated cash settlement qualified as a firm-power sale. If not, this would have lowered Bonneville's firm-power sales forecast, thus lowering the Council's annual budget. The matter was not addressed by Bonneville in a formal policy until this year.

Bonneville's proposed policy interpretation, which satisfies the Council, is consistent with longstanding informal agreements between Bonneville and the Council. From the very beginning of the Council, both Bonneville and the Council have understood section 4(c)(10)(B), especially when read together with the residential exchange provision in section 5(c) and the rate provision in section 7(b)(1), to require Bonneville's total firm power forecast to include the residential exchange load. Bonneville and the Council signed an agreement to that effect in 1981. And Bonneville and the Council have continued to agree on an understanding of the Council funding limit that includes the residential exchange load in the firm power sales forecast, notwithstanding the fact that Bonneville now uses settlement agreements to implement the residential exchange program. Therefore, the Council supports Bonneville's proposed official interpretation that the settlement agreements are the equivalent of the prior residential exchange purchase-and-sale arrangements even though the actual implementation of both types of agreements may involve a combination of both power deliveries and monetary benefits or even purely monetary benefits.

However, the proposed official interpretation of the residential exchange potentially resolves only one of several problems associated with the Council's funding formula. The Council believes that the formula is in need of amendment, considering the many changes that have occurred in the utility industry and the Northwest's energy system over the last 26 years. For example, the formula provides no mechanism to ensure that the Council's budget keeps pace with inflation. This omission is likely attributable to Congress' expectation in 1980 that Bonneville would acquire all resources necessary to meet the region's electrical load growth. Had Bonneville acquired the resources to meet regional growth, this would have boosted the agency's firm power sales and automatically increased the Council's budget cap. In reality, the Council's budget has not kept up with inflation. In fact, the Council's 2006 budget is about $4 million lower than it would be had an inflation factor been applied since 1981.

The inability of the Council's budget to keep up with inflation threatens the Council's independent planning capability. Historically, the Council's staffing capability was augmented by engaging independent contractors with special analytical expertise. In recent years, failing to keep up with inflation has forced the Council to halt or scale back some important projects that would have enhanced the Council's technical capabilities. For example, because of budget reductions in contracting and personnel, the Council stopped updating the data and economic forecasts in its Demand Forecasting System models and the models were abandoned. Falling behind inflation has also prevented the Council from providing others in the region with detailed economic and demand forecast data, which many in the region had relied on for years. While the Council is still the premier energy forecasting entity in the region, this slow erosion of capability someday will inhibit its ability to serve the region in the manner originally intended by Congress and the four Northwest states.

In 1985, the Council's staffing costs represented 31 percent of its budget, and contract costs were 24 percent. In 2007, the Council expects its staffing costs to be about 54 percent of its budget and contract costs only 4 percent. In addition, the Council has reduced the overall number of its full-time employees by approximately 10 percent since 1985.

There are other problems with the existing formula, as well. In 1980, Congress could not have foreseen the changes that have occurred in the electric utility industry and with regard to fish and wildlife recovery in the Northwest. These changes affected Bonneville's firm-power sales, and therefore calculation of the Council's budget. The changes also resulted in increased responsibilities for the Council, including:

- Bonneville load growth projections have not materialized as anticipated. Regional energy sales have increased by approximately 4,800 average megawatts since 1980. Of this increase, Bonneville's firm sales might have increased by nearly 2,800 average megawatts had Bonneville met the region's incremental load growth as envisioned by Congress in the Act.
- Because conservation is a resource under the Act, it could be argued that the conservation that has been achieved by Bonneville and its customers (880 average megawatts) should be considered in Bonneville's firm power sales.
- In addition to cost-effective conservation, changes in dam operations to improve fish passage have diminished power generation capability by approximately 935 average megawatts of potential firm-power sales.
- It cannot be determined from the legislative history of the Act whether Congress intended the 0.10-mill funding limitation to be in constant dollars. If this were the case, inflation would have to be added each year to get the nominal funding limitation. The limitation in

nominal dollars for 2005 would be about .20 mills, thereby providing an offset to the firm-power sales anomalies that have occurred over time.

- Approximately 60 percent of the Council's budget now supports planning and implementation of the Council's fish and wildlife program, compared to about 15 percent in 1982. Much of the Council's added fish and wildlife workload stems from the 1996 amendment to the Act that emphasized independent scientific review of fish and wildlife projects proposed for funding and the application of cost-effectiveness principles when recommending projects to Bonneville for funding. Basing the Council's funding methodology only on the forecasted sales of firm power ignores the new responsibilities related to fish and wildlife recovery that the Council must now budget.

These realities illustrate why it has been necessary for the Council to absorb nearly 75 percent in inflation costs from 1982 to 2004. The Council also has attempted to manage and accommodate growing workloads under its fish and wildlife responsibilities during this same period. These constraints, along with an outdated funding formula, have made it increasingly difficult for the Council to carry out its full responsibilities under the Act.

While the Council appreciates Bonneville's desire to clarify how it understands the role of the residential exchange in the calculation of the Council's budget, the Council also believes that the proposed interpretation addresses only one of a number of funding problems. The Council looks forward to working with Bonneville and others to resolve these problems, as well.

More Information

For additional information about the Northwest Power and Conservation Council's activities, budget, meetings, comment deadlines, policies or bylaws, call 1-800-452-5161 or visit our website at www.nwcouncil.org. Copies of Council publications are available at the website or by calling the Council. All Council publications are free.

Comments of the Bonneville Power Administration

This section is reserved for comments by Bonneville, which will be inserted into the final version of the report.

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