

2011 Annual Report

Year in Review

Securing the Future



Table of Contents

1	2011 Financial Highlights
2	Letter to the President
4	[Section 1] A new deal for our customers
6	[Section 2] Making the most of the federal system
8	[Section 3] Building transmission infrastructure
10	[Section 4] Something's going right for fish
12	[Section 5] Wind boom necessitates invention
14	[Section 6] BPA innovation helps create tomorrow's system
16	[Section 7] Solid fundamentals
18	Performance Target Results
22	BPA Profile
23	BPA Executives
24	Offices

2011 Financial Highlights

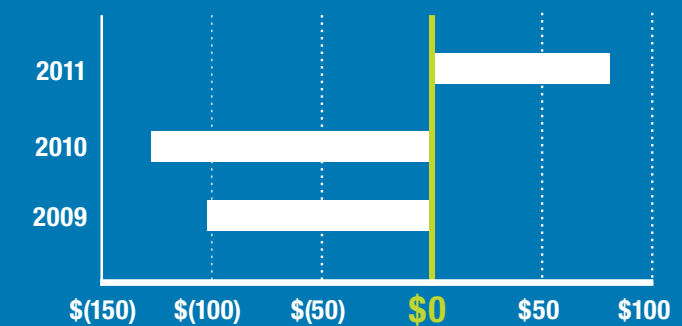
For the Federal Columbia River Power System

Thousands of dollars

Total operating revenues	\$3,284,774
Total operating expenses	2,930,733
Net operating revenues	354,041
Net interest expense	272,359
Net revenues	<u>\$ 81,682</u>

Net revenues (expenses)

Millions of dollars



Unless otherwise noted, all annual dates in this report refer to the federal fiscal year, which begins Oct. 1 and runs through Sept. 30. For example, fiscal year 2011 began Oct. 1, 2010, and concluded Sept. 30, 2011.



Steve Wright
Administrator and CEO

Letter to the President

Dear Mr. President:

This year, the Bonneville Power Administration began a new chapter in our service to the Pacific Northwest. We set tiered power rates and launched new Regional Dialogue power sales contracts.

Regional Dialogue contracts secure Northwest publicly owned utilities' access to low-cost federal power for the next generation.

Tiered rates provide clear price signals on the cost of new resources, distinguishing the cost of federal hydropower and energy efficiency from that of new generating resources.

All interests in the Northwest power system worked together to reach this day.

Long-term contract benefits

The fact that we established tiered rates with general consensus speaks well of the dedication of our customers and stakeholders, who

devoted thousands of hours working out the details to assure equitable and effective distribution of Columbia River benefits. Our customers have resolved or set aside decades of disagreement to achieve this outcome.

Customers removed substantial risk from BPA's power rates when the vast majority settled distribution of billions of dollars under the Residential Exchange Program through 2028, subject to court confirmation. I was pleased to adopt the settlement as part of BPA power rates for fiscal years 2012–2013.

Long-lived infrastructure investments

BPA invested more than \$1 billion this year in Northwest transmission, hydropower, fish and wildlife, and energy efficiency infrastructure that will serve the region for decades.

Our transmission system is in a highly dynamic period of expansion and adaptation. We provide open-access transmission service to

“Our achievements this year will benefit the region for decades.”

any qualified transmission user on a non-discriminatory basis. So far, we have offered transmission service for 9,300 megawatts of wind power.

We are in our largest transmission expansion program in decades and are building or reviewing proposals for several major 500-kilovolt transmission projects. This year, we completed an upgrade of the 4,800-megawatt alternating current intertie to California to make fuller use of that valuable federal asset and increase its availability for interregional power transfers.

Explosive wind power growth

Wind power connected to our transmission grid is 10 years ahead of expectations. We are learning a great deal, very quickly, about how to integrate large volumes of wind power in a relatively small balancing authority. We continue to encourage cost-effective new renewable energy resources while maintaining reliability and assuring that investment costs are repaid by those who benefit. BPA has established a national example for wind integration.

This spring and summer, with a greatly increased wind fleet and extremely high water, we found it necessary to take extensive steps to maintain safe river conditions for fish. As a last resort, we developed an interim policy called environmental redispatch. This one-year policy made it possible to meet fish protection requirements by replacing thermal and wind generation with free federal hydropower when other options were exhausted. Environmental redispatch does not compensate wind projects for the loss of federal tax credits or failing to qualify for state renewable energy credits, and we are working with wind developers, utilities and environmental

interests to seek long-term solutions that equitably meet the needs of all parties.

Better salmon returns

Salmon are returning to Columbia Basin streams in numbers not seen and to places they haven't been in decades. Regional collaboration encouraged by the district court built the strong strategy we have today. Fish passage has been improved and habitat restored in partnership with tribes, states and federal agencies through the Columbia Basin Fish Accords. While the court again remanded the biological opinion on Columbia River hydro operations, seeking greater certainty on habitat restoration measures beyond 2013, it upheld the biological opinion through 2013. We believe we're on the right path. We will continue to look to the best science, focus on the fish and work hard for even more success in building strong salmon returns.

Committed stewardship

We at the Bonneville Power Administration are proud of our achievements this year and the benefits this work will bring the region for decades to come. We appreciate the deep engagement of our customers, tribes, state and local governments, other federal agencies, and citizens in all that we do.

Together, we are stewards of the Federal Columbia River Power System. Together, we serve the Pacific Northwest.

Stephen J. Wright
Administrator and CEO

1 A new deal for our customers

The Regional Dialogue contracts clarify the value of the region's federal hydropower system and secure that value through 2028. Our Northwest customers now know what they can expect from the federal system. They have clear responsibility and choices for meeting their power needs beyond what the federal system and energy efficiency supply.

It has taken the region 15 years to reach this day. The Northwest Governors' Comprehensive Review of the Northwest Power System of 1996 called for tiered rates and limits on BPA's role in Northwest power supply.

Our customers know what they can expect from the federal system.

The region reconfirmed this direction for BPA in Regional Dialogue policy discussions concluding in 2007, culminating in Regional Dialogue contracts signed by BPA's regional customers in 2008. We are operating under this new approach through 2028.

Tiered rates reflect the will of the region

We have devoted considerable resources to developing the tiered rate structure called for in the Regional Dialogue policy and contracts. There was little controversy on

the implementation of the new tiered rate methodology in this year's rate case, a strong signal of the regional consensus on this issue.

Tier 1 rates recover costs of federal system resources and energy efficiency. Tier 2 rates recover costs of new resource acquisitions. Our publicly owned utility customers may purchase only a set amount of power at Tier 1 rates. They pay Tier 2 rates for any additional BPA purchases they choose to make to meet their power requirements.

This year, we worked with our customers to establish how much power each utility could purchase at Tier 1 rates. We also added Jefferson County Public Utility District in western Washington as a new preference customer; it qualified for just over 40 megawatts of service at Tier 1 rates.

New systems support new contracts

More than 1,900 business processes support the Regional Dialogue contracts and tiered rates, touching nearly all parts of BPA. Developing and launching the systems to manage these contracts is among the largest program integration efforts BPA has ever undertaken.

In the past two years, more than 900 BPA employees and contractors have been involved in building and moving to a new, integrated set of 13 major information



GO TO VIDEO ▶

“We're locking in the benefits of the federal power system ... load growth after that is the responsibility of each utility.”

systems to support Regional Dialogue contracts and tiered rate implementation. In October 2011, our customers first logged onto their new portal for all customer data, including contract management, billing, load forecasting and much more.

Utilities settle 30 years of differences

As of June 3, nearly all the region's utilities had approved a 2012 Residential Exchange Program Settlement Agreement that defines how federal hydro system costs and benefits under the program should be shared among the region's publicly owned and investor-owned utilities through 2028 and resolves claims and cross-claims on past costs and benefits. If upheld by the courts, the settlement will resolve 30 years of legal challenges among BPA customer groups. It provides long-term certainty on the level of Columbia River system benefits paid to residential and small-farm consumers served by the region's investor-owned utilities. It settles Residential Exchange Program costs paid by public power. Together, supporters of the settlement provide about 93 percent of power consumed in the Pacific Northwest. Our 2012–2013 power rates reflect this historic agreement.

Industrial service adds jobs

BPA continues to offer power sales contracts to remaining direct-service industries. This year, Alcoa reopened a second potline at its Intalco aluminum plant in Ferndale, Wash., bringing to 560 the jobs provided by that company using BPA power. Similarly, we extended service to Port Townsend Paper Company for two years, helping to save 300 family-wage jobs in a community of 8,300 residents. We're now reviewing a similar proposed agreement with Columbia Falls Aluminum Company near Kalispell, Mont. The plant, which has been closed since 2009, could reopen two potlines, reviving hundreds of family-wage jobs in Montana's Flathead Valley.

2 Making the most of the federal system

Existing hydropower is the region's cheapest, most flexible energy source. Our job is to make the federal hydropower system reliably provide the widest service at lowest cost.

Energy efficiency allows existing resources to serve more consumers.

Conservation beats its target — again

Energy efficiency allows existing resources to serve more consumers and is cheaper than building new power plants. The Northwest Power and Conservation Council expects the region to meet 85 percent of its load growth through 2030 with energy efficiency. For the next few years, at least, BPA plans to meet all of its incremental energy needs through expanded energy efficiency and market purchases.

Our track record gives us confidence that we and our utility partners together will succeed. In 2011, we acquired more than 117 average megawatts of energy savings. This is the largest amount acquired in a single year by public power since the Northwest Power Act passed.

With our customers and stakeholders, we have adopted a new approach to energy

efficiency. Starting Oct. 1, 2011, each customer receives a set level of funds it can draw on as it achieves energy conservation in its service area. Our customers' energy savings will help the region preserve and stretch the tremendous value of the Columbia River system. That's good for the economy, and it's good for the environment.

BPA continues to fund regional programs in areas that benefit from economies of scale, such as the Energy Smart Industrial program and the Simple Steps, Smart Savings light bulb and showerhead replacement program.

We continue to fund regional energy efficiency infrastructure, including the Council-sponsored Regional Technical Forum and Northwest Energy Efficiency Alliance. We fund state and tribal low-income weatherization programs and invest in new, emerging energy efficiency technologies.

Tiered rates promote energy saving

Tiered rates give our customers even more reasons to save energy. Every kilowatt-hour saved by a utility reduces its need to add new resources or purchase power from BPA at higher Tier 2 rates. Our 2012–2013 rates also include incentives to reduce and control utilities' peak power use. Our customers are already exploring ways to encourage their consumers to shift power consumption to lower demand

periods, making the best use of valuable power from our existing system.

Investments sustain hydro's value

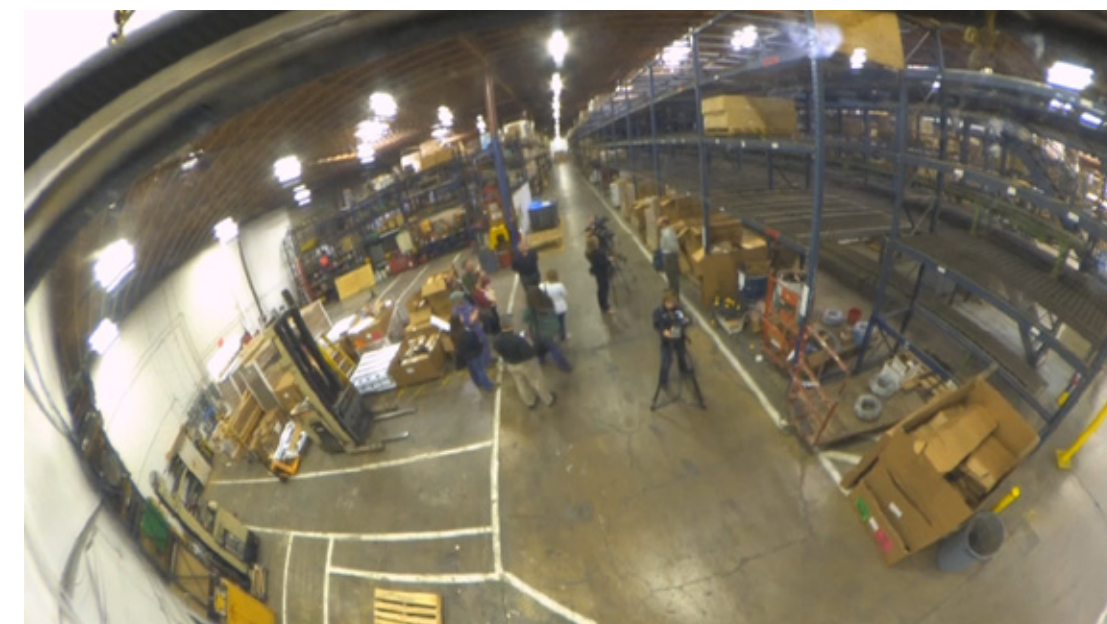
We're also improving the efficiency and extending the life of the federal hydropower system itself. Direct BPA funding of Federal Columbia River Power System investments continues to pay off; BPA works with the U.S. Army Corps of Engineers and the Bureau of Reclamation to set priorities for projects to cost-effectively maintain the reliability and improve the efficiency of federal assets.

This year, Reclamation completed a 10-year, \$96-million, direct-funded rehabilitation of the 18 original turbines in Grand Coulee Dam, increasing the dam's output by 40 average megawatts. It has begun an even larger project at Grand Coulee, major rehabilitation of the Third Powerhouse.

The Corps finished refurbishing the original 1938 Bonneville Dam powerhouse. This 15-year, \$153-million project rehabilitated 10 power generators and transformers dating from the 1930s and installed minimum gap

runners on the turbines that provide safer fish passage. The Corps also replaced seven main unit transformers at McNary Dam and upgraded electrical systems at The Dalles Dam, improving reliability of both projects.

BPA rates recover the costs of these and all other Federal Columbia River Power System investments. BPA regularly confers with the Corps, Reclamation, customers and other interested parties on asset management priorities through its Integrated Business Review public process.



GO TO VIDEO

BPA energy efficiency programs help power the Northwest and save consumers money. Here, one hardware warehouse saves enough power for 113 homes.

3 Building transmission infrastructure

New lines reinforce the network

Three new 500-kilovolt transmission lines BPA is building through the heart of the hydro system will increase transmission capacity for expanding Columbia Gorge wind power.

Our McNary-John Day transmission line was energized Nov. 1, 2011, under budget and months ahead of schedule. This 79-mile, \$216-million line runs along the Columbia River east of the gorge.

A second line is under construction. Big Eddy-Knight, a 28-mile, \$185-million project through Klickitat County, Wash., to The Dalles, Ore., should be completed in February 2013.

Upgrading interties strengthens the grid and allows better use of surplus energy.

A third 500-kilovolt project has completed environmental review. The Central Ferry-Lower Monumental transmission line is expected to run 38 miles along the Snake River in southeast Washington. For the moment, BPA has deferred awarding the construction contract for this line, as wind projects that hold preliminary agreements

to use the transmission indicated their loads are growing more slowly than expected.

A fourth project to reinforce transmission in the I-5 corridor west of the Cascade Range is in environmental review. It would add a new 500-kilovolt line in a fast-growing area of southwest Washington where none has been built for nearly 40 years.

The construction projects will create hundreds of family-waged jobs for skilled workers.

BPA is equally focused on maintaining its existing assets. Close to half of our transmission assets are past the end of their design life. Weather, woodpeckers and wear have taken their toll on wood pole lines more than 50 years old. To maintain reliability, we are systematically replacing lines and equipment that are at greatest risk.

Interregional connections expand

This summer, BPA, PacifiCorp and Portland General Electric upgraded the alternating current intertie to California so it can operate at its full 4,800-megawatt capacity more often. This strengthens the grid and allows better use of surplus energy.

This spring, we responded to 3,759 megawatts of transmission requests in our 2010 network open season. We found we could accommodate most requests through projects in progress



GO TO VIDEO

BPA flies some transmission towers to their footings to avoid damaging fragile soil and to increase worker safety in tough terrain.

and by upgrading two existing 500-kilovolt transmission paths: the Colstrip line west from Montana to eastern Washington, and the Northern Intertie path from western Washington to British Columbia. Engineering and environmental review should take one to two years.

This summer, after offering contracts for nearly 7,000 megawatts of new transmission in three years, we delayed the next network open season to further examine the net impacts of all service requests to the network.

Tower design up for industry "Oscar"

New BPA 500-kilovolt transmission tower designs and design software have been named a finalist for the "Commercial Technology of the Year" in Platts Global Energy Awards, often called the "Oscar" of the power industry. The award recognizes practical applications of new technology for efficiency, emissions reduction, reliability and commercial success. The designs by BPA engineers cost 25 percent less and are stronger, easier to build and more durable. They already have saved BPA \$18 million on two transmission projects. In some cases, the new towers' greater strength allows use of fewer towers per

circuit-mile, reducing environmental impacts of line construction. Special rigging points on the lighter towers allow helicopters to fly towers to their footings in one piece instead of two smaller sections, reducing construction costs and time and minimizing the environmental disturbance of line construction. See page 14 for more on this in-house innovation.

4 Something's going right for fish

GO TO VIDEO

Today, chinook and steelhead can spawn in 25 miles of reopened pristine headwaters in central Oregon's Bridge Creek, in just one project among hundreds across the Columbia Basin.



Record numbers of Snake River chinook returned to Idaho's Clearwater Basin this year. Biologists monitoring the salmon have counted more nests, called redds, than ever in key areas of the Clearwater, a good sign for future generations of the threatened species. Idaho sport anglers harvested more than 7,600 chinook in the Clearwater Basin this spring and summer and more than 40,000 statewide.

Sockeye salmon are spawning once more in Redfish Lake. In 1990, no sockeye returned to Idaho's Stanley Basin, and only 16 returned between 1991 and 1998. For 20 years, BPA has supported a captive

broodstock program to save this most-endangered population; this year, more than 1,000 adults returned to the basin. While some were culled for captive broodstock, most spawned naturally.

Throughout the Northwest, local communities, state governments, tribes and federal agencies are working together to help save Columbia River salmon. More fish are surviving at the dams. Creeks are being reopened, habitat protected and restored, and fish are returning to streams where they've been absent for decades.

Many actions help juvenile salmon

Federal dam improvements completed last year are proving effective in providing safe passage for young fish in their downstream migration. Results are on track to meet passage standards at all federal Columbia and Snake river hydro projects — meaning, at each dam, 93 to 96 percent of migrating juvenile salmon pass safely.

BPA funded scores of fish habitat actions in the Columbia River Basin. In tributary rivers and streams, more than 430 miles of instream and riparian habitat were improved in 2011. New irrigation screens installed by BPA and its partners save hundreds of thousands of salmon, steelhead, cutthroat trout and other fish each year by keeping them out of irrigation channels. For the first time in more than 100 years, a 96-acre shallow tidal wetland in the Columbia River estuary has been opened to again offer juvenile salmon a refuge from predators and a place to feed and accustom their bodies to salt water.

Agreements save more habitat

In October 2010, Oregon Gov. Ted Kulongoski and BPA Administrator Steve Wright signed a landmark agreement that will protect nearly 20,000 acres of Willamette Basin wildlife habitat, more than twice the area of Oregon's largest state park. The agreement dedicates stable funding from electric ratepayers for 15 years to safeguard native wildlife and fish species, fulfilling BPA's responsibility to offset the impacts of Willamette River federal hydropower dams. Implementation partners include the Grand Ronde, Siletz and Warm Springs tribes, state and federal agencies, and land conservation groups.

On the mainstem Columbia River, the Confederated Tribes of the Colville Reservation, Grant County Public Utility District and BPA began construction of

the Chief Joseph Hatchery. The Colville Tribes will manage the hatchery to increase abundance of chinook salmon in the upper Columbia and Okanogan rivers and reintroduce chinook to some Okanogan habitats where the fish have long been absent.

Legal uncertainty remains

BPA funding for fish and wildlife protection supports a wide range of projects across the Pacific Northwest. A cost recovery adjustment clause in BPA's 2012–2013 rates assures BPA can recover fish and wildlife costs if they increase due to court or legislative action.

Salmon are returning to Columbia Basin streams where they've been absent for decades.

On Aug. 2, 2011, federal judge James Redden remanded the most recent NOAA Fisheries biological opinion on federal hydro system operation. The judge concluded that habitat mitigation measures and benefits beyond 2013 were not reasonably certain to occur. He called on NOAA Fisheries to produce a new or supplemental biological opinion by Jan. 1, 2014. Until then, the 2010 biological opinion that is the framework for the region's collaborative fish and wildlife efforts remains in effect under the supervision of the court.

5 Wind boom necessitates invention

BPA has connected more than 3,500 megawatts of wind generation to its transmission system, beating regional targets by a decade. For several years, we have worked intensively to develop new business practices, power and transmission products, and technical tools to support additional wind power.

New wires will carry wind power

BPA's transmission expansion policies have been an important catalyst for Northwest wind power development. New BPA facilities will carry wind power to market.

BPA transmission expansion policies have been an important catalyst for Northwest wind power development.

BPA expects to have about 6,000 megawatts of wind generation connected to our system in 2013, so our wind integration efforts continue unabated. Most of this wind power moves across our transmission grid to consumers in other parts of the Northwest and the Western Interconnection.

Climbing a steep learning curve

Wind is hard to forecast and schedule; we are adapting our power and transmission

operations to allow the region to make the most of wind power when it's available. More than 40 employees are working on the projects of our Wind Integration Team.

Wind generators consume balancing reserves when their production doesn't match their schedules within each hour. The wind fleet in BPA's grid today can swing more than 1,000 megawatts from its scheduled output within an hour, consuming the federal hydro system's balancing capability.

To make sure the power supply always matches demand, we are improving wind forecasting, scheduling power inside each hour, seeking additional reserves and giving wind operators choices of services and service providers.

For example, we have expanded a pilot that allows the participating wind power company, Iberdrola Renewables, to provide its own reserves through 2013. Iberdrola now can call on balancing reserves once each hour from generating resources inside and outside BPA's balancing authority. This expands its reserve resource options and conserves the system's scarce dynamic transfer capability.

Another way to keep wind power schedules closer to actual production is to change the schedules more often. Historically, power is scheduled by the hour. This July, we joined other western utilities in launching a common 30-minute scheduling platform. This is a major



GO TO VIDEO ▶

BPA's innovative wind tracking software helps power dispatchers make better use of variable energy resources.

step toward changing the whole face of western power management. We are in the third phase of our own intra-hour scheduling pilot project.

BPA's rate for variable energy resource integration is slightly lower now than in the last two years, because we gave customers a choice of the level of service they wish to pay for. For those parties that want a higher level of balancing reserves, we have developed a supplemental service that allows wind projects to purchase additional reserves from non-federal resources, at their option.

World-class wind integration

BPA's wind integration tools are among the nine best-practice systems in use today to integrate and manage wind energy, according to a worldwide survey of wind integration techniques performed for the U.S. Department of Energy by Alstom Grid Inc.

The global best practices report focused on our integrated curtailment and redispatch system (iCRS). Developed in-house over the last several years, this tool has allowed BPA to maintain system reliability while accommodating increasing wind penetration.

It is also fundamental to our current second and third generation wind-integration initiatives. For example, we are offering customers an opportunity to commit to scheduling their wind output by the half-hour instead of the hour. Participants get a significant reduction in their rate for BPA generation balancing services. To participate, wind projects must meet scheduling accuracy metrics — measured by iCRS.

We also are working with other utilities across the Western Interconnection to advance the art of wind integration. For example, we and the California Independent System Operator have launched a pilot on intra-hour scheduling on the California-Oregon intertie.

6 BPA innovation helps create tomorrow's system



Better tower designs invented by BPA engineers are saving the agency tens of millions of dollars — and could save utilities across the globe hundreds of millions.



BPA has a proud history of transmission system innovation. Today, we're inventing new tools, techniques and institutions to improve high-voltage transmission, wind integration, energy efficiency and more.

Staff inventions improve the world

In Vancouver, Wash., David Hesse, a BPA structural engineer and self-taught software designer, developed a computer program that allows engineers to design better transmission towers in days instead of months. Our engineers used it to create dramatically stronger, less-expensive and more durable tower designs. Utilities around the world are requesting Hesse's program. As a federal

agency, BPA is making this groundbreaking software available at no cost to electric utilities, potentially saving the industry hundreds of millions of dollars a year.

In Portland, Ore., Scott Winner, a BPA public utilities specialist, invented a revolutionary computer display that shows patterns of wind generation across BPA's system in real time. Users can tell at a glance if a power source is ramping up or down and how close it is to maximum generation. This is tremendously useful as dispatchers balance power output to keep the grid stable. Other utilities and vendors have expressed interest in licensing the patent-pending invention.

Structured R&D targets system needs

Since 2006, BPA has systematically invested in tightly focused technology innovation.

Our 2011 R&D portfolio sponsored, among other projects, two major smart grid initiatives and a test of storing excess wind energy in residential water heaters.

BPA's innovation program seeds technologies needed for tomorrow's power system. For example, BPA funding of feasibility and location studies preceded a \$10 million grant to Snohomish County PUD from the U.S. Department of Energy to develop and install two tidal generators in Puget Sound. This will be one of the nation's first tidal power projects.

Advancing transmission partnerships

The North American transmission grid is increasingly interdependent, and BPA is exploring new transmission partnerships that could increase value to consumers.

BPA works with the Western Interconnection's regional transmission organizations — California Independent System Operator, ColumbiaGrid, WestConnect and Northern Tier Transmission Group — to promote 30-minute power scheduling and to explore the potential costs and benefits of a western energy imbalance market to support wind, solar and other variable energy resources.

Nationally, BPA is engaged in discussions before FERC on rules for integrating variable energy resources. BPA supports FERC's efforts to remedy technical and operational issues. We believe two principles should be paramount: reliability must not be compromised, and costs should follow causation.

Expanding international partnerships

Since 1964, the Columbia River Treaty has provided significant benefits to the United

States and Canada through coordinated river management by the two countries, including flood control in this wet year.

This year, we negotiated a one-year supplemental operating agreement with Canada to store 1 million acre-feet of winter streamflows for release during the spring and summer, providing benefits to fisheries

BPA is one of the lowest-emitting utilities in the United States.

operations. We continue to work with the Corps and B.C. Hydro on joint technical studies on options for the long-term future of the Columbia River Treaty in coordination with regional representatives of federal agencies, states, tribes and stakeholders.

Thinking globally and locally

In decades to come, climate change is expected to bring the Columbia River higher streamflows in January through April and lower flows in June through August, with more extreme wet and dry periods. BPA, the Corps and Reclamation are now considering these potential effects in our risk management for fish protection, flood control and power production. BPA sent its first annual calculation of its greenhouse gas emissions to The Climate Registry in November 2010. The report confirms BPA as one of the lowest-emitting utilities in the United States.

7 Solid fundamentals

After two years in the red, this year was solidly in the black. With net revenues of \$82 million, BPA met its financial targets. We paid the U.S. Treasury \$830 million this year.

Our customers have input into our spending priorities.

We had a very good water year, but the positive effect of streamflows on net secondary revenue was tempered by low market prices. Sustained high water forced market power prices down for much of the spring and summer. Between May 11 and June 30, BPA sold about 250,000 megawatt-hours of power for zero dollars to keep the hydro system safe and minimize environmental redispach. Longer than expected maintenance outages at Columbia Generating Station nuclear plant and Grand Coulee Dam cost the agency an estimated \$65 million in lost power sales. Transmission continued a several-year trend of healthy financial performance.

Diligent cost control offset some of the market and operational effects. BPA's operating costs came in at about 95 percent of the start-of-year budget. Our financial reserves of \$1.01 billion leave the agency in roughly the same financial condition as a year earlier.

We continue to manage our debt portfolio. This year, Energy Northwest and BPA restructured \$1.1 billion in municipal bonds to provide rate relief in 2012–2013.

Customers' input helped control rates

BPA reviewed costs to be paid from its 2012–2013 rates with customers and interested parties before this year's rate case. Our customers know what we're spending and have input into our spending priorities.

The average 7.8 percent power rate increase for fiscal years 2012–2013 that went into effect Oct. 1, 2011, supports much-needed maintenance and refurbishment of federal system hydroelectric and Energy Northwest nuclear generation. It provides for habitat restoration for Northwest salmon and steelhead. Our general transmission rates remain flat.

In preparing for this year's rate case, BPA customers helped reduce cost pressures that might have pushed power rates up. For example, they supported restructuring of Energy Northwest debt, which reduced cost pressure about 5 percent.

Managing capital requirements

BPA finances capital investments primarily through its limited authority to borrow from the U.S. Treasury and through third-party financing. Even with the addition of

\$3.25 billion in Treasury borrowing authority in 2009, BPA projects current capital investment needs could exhaust our borrowing authority by 2016 if we do not find additional tools. Forecasts have risen primarily for transmission network reinforcement projects, major overhaul of the Grand Coulee Dam Third Powerhouse, investment in three major hatcheries and other fish and wildlife projects, and to meet energy efficiency targets set by the Northwest Power and Conservation Council.

We have launched discussions with our customers and interested parties to consider competing demands for capital and alternative funding tools to stretch available Treasury borrowing authority.

Discipline assures value

BPA routinely shares clear and transparent information on its policies, business practices and performance results. We discipline ourselves to think through impacts of each decision and to confer appropriately with the region. We review our performance with customers and constituents each quarter. We frequently conduct "lessons learned" analyses of completed projects and public involvement processes, to make the next ones better and more responsive to the region's needs.

Committed to public service

From green roofs to composted cafeteria trash, BPA is growing greener from the inside out. Sustainability initiatives permeate our daily work.

This Earth Day, BPA volunteers hit the dirt, planting trees and installing nesting boxes at a wildlife area north of Portland, which BPA purchased in 1991 in one of its first habitat acquisitions. Now managed by the Oregon Department of Fish and Wildlife, the restored wetland is home to painted turtles, Pacific tree frogs, endangered northern red-legged frogs, and a host of songbirds and waterfowl. The site is named for John Palensky, a longtime BPA employee and former director of our Fish and Wildlife Division.

These actions reflect the fundamental nature of BPA. We are stewards of some of the most valuable public assets in the Pacific Northwest.



GO TO VIDEO

BPA employees care about the region we serve.

Performance Target Results

BPA sets Key Agency Targets that measure the agency's annual performance toward meeting its mission and achieving its strategic objectives. In 2011, 19 of 23 Key Agency Targets were met.

Stakeholder Perspective

Transmission System Infrastructure

TARGET NOT MET. BPA met one of three sub-targets for transmission infrastructure. BPA achieved transmission system infrastructure investments of \$312 million, exceeding the target threshold of \$262 million. BPA slightly missed its target for planned in-service dates, achieving 76 percent against the target of meeting at least 80 percent of planned in-service dates. Of BPA's largest transmission projects, 21 out of 28 projects, or 75 percent, were on track to meet end-of-project completion targets for cost, schedule and scope, falling short of the 80 percent target.

Hydro Generation System Infrastructure

TARGET MET. BPA made hydro generation infrastructure investments totaling \$187 million. BPA invested 99 percent of its hydro capital budget, exceeding the target of at least 85 percent. BPA met its milestone completion rate target of 80 percent; the result was 84 percent. Of the largest hydro investment projects, BPA was also on track to achieve 88 percent of its end-of-project completion targets for capital cost, schedule and scope, against a target of 80 percent.

Transmission Reliability

TARGET NOT MET. BPA had one instance of a technical violation with a high violation risk factor and a high violation severity level. In July 2011, BPA received an official Notice of Alleged Violation from the Western Electricity Coordinating Council alleging a violation identified during a November 2010 audit. BPA did not experience any involuntary curtailments of firm load due to a reliability violation, transmission system security breach or cascading outage originating on the BPA system. BPA also met all North American Electric Reliability Corporation (NERC) requirements for completion of mitigation plan milestones for technical compliance and documentation.

Transmission Availability

TARGET MET. BPA's most important transmission lines were available for service 98.3 percent of the time, exceeding the target of 98 percent.

Generation Reliability

TARGET MET. Power Services experienced no high-risk violations of reliability compliance standards at high or severe levels and experienced no involuntary curtailments of firm load due to inadequate power supply, a reliability violation or breach of generation system security. Power Services also was in compliance with NERC requirements for generation-related mitigation plans because no approved or revised plans needed to be submitted.

Generation Availability

TARGET MET. BPA and its Federal Columbia River Power System partners achieved 100.6 percent of planned heavy-load-hour availability, exceeding the target of 97.5 percent.

Columbia Generating Station Performance and Cost

TARGET MET. The cost of power at the Columbia Generating Station nuclear plant was \$57.23 per megawatt-hour, within the targeted range of \$56.42 to \$62.36. The overall plant performance index indicator was 60.34, above the target of 55.7 or greater.

BPA Rate Case

TARGET MET. New wholesale power rates and transmission and ancillary services rates for the 2012-2013 rate period went into effect on Oct. 1, 2011.

Energy Efficiency

TARGET MET. BPA achieved over 117 average megawatts of new conservation savings against a target of 99 average megawatts. The average cost was \$1.7 million per average megawatt, well below the targeted cost of \$2.2 million per average megawatt.

Renewable Resource Integration

TARGET MET. Wind integration cost allocation and recovery policies and methodologies were developed with stakeholder input and adopted for the 2012–2013 rate period. BPA accomplished additional milestones to facilitate integration of renewable resources. It extended and expanded the customer-supplied generation imbalance pilot, implemented the expansion of intra-hour scheduling, completed all dynamic transfer capacity deliverables and offered and awarded dynamic transfer capacity for the 2012–2013 rate period. BPA developed new operational and interim policy protocols for managing the wind fleet during high runoff conditions. BPA also actively participated in the Northwest/California Transmission Utilization Group's study of utilization of the California interties.

Pumped Storage

TARGET MET. Evaluation of a pumped storage application at Grand Coulee Dam is on track. The project would involve modernization of the existing Keys Pumping Plant and Banks Lake Project. Reservoir space availability has been screened and environmental assessment needs identified. BPA engaged preference customers on related cost and benefit allocation issues. BPA's Capital Allocation Board approved continued evaluation of the project, with the aim of making an investment decision in 2012.

Performance Target Results [continued]

Endangered Species Act Compliance

TARGET NOT MET. BPA met its implementation requirements for the 2008 Biological Opinion Reasonable and Prudent Alternative, Adaptive Management Implementation Plan and Fish Accords; however, the court ordered the federal agencies to continue court-ordered spring and summer spill hydro operations through 2013. These operations are valued at approximately \$15 million per year in unplanned net costs and for this reason, the target was not fully met.

Financial Perspective

Bond Rating

TARGET MET. BPA maintained ratings of "AA" from two of the three credit rating agencies for BPA-backed bonds as affirmed by Moody's (Aa1) and Fitch (AA). In August 2011, Standard & Poors downgraded BPA's rating to AA-. This downgrade was directly related to the downgrade of the U.S. government and therefore outside of BPA's control.

Net Revenue

TARGET MET. BPA realized net revenues of \$82 million, within the target range of \$5 to \$130 million.

Internal Operating Costs

TARGET MET. Actual internal operating costs of \$678 million were better than the targeted range of \$692 to \$710 million.

Treasury Payment

TARGET MET. BPA's 2011 payment to the U.S. Treasury of \$830 million was made on time and in full for the 28th consecutive year. The payment consisted of \$410 million in principal, \$382 million in interest and \$38 million for other obligations.

Internal Operations Perspective

Regional Enterprise Value

TARGET NOT MET. BPA successfully implemented important changes in processes and systems to support implementation of the new 20-year power sales agreements. The new tools and processes supporting planning, forecasting, rates, billing, customer data and communication also enable continued improvements in operational excellence by increasing efficiency, transparency and accuracy. Notwithstanding, the program did not fully meet its targets as the Slice computer application was delayed and two of 13 projects exceeded their budgets. The overall project came in under budget.

Transmission Process Improvement Program

TARGET MET. Transmission Services successfully implemented its 2011 Transmission Process Improvement Program roadmap and put in place an updated roadmap for 2012. The Transmission Asset System is now operational for some assets and is being populated with transmission asset data and information. Advancements were made in how BPA manages its

transmission field work for both maintenance and expansion across the entire system. Improved processes for analyzing and matching forecasted demand for labor resources with availability of resources were successfully launched, advancing BPA's ability to strategically plan for resourcing its transmission program.

RODS Replacement and Retirement Project

TARGET MET. All three essential 2011 project milestones were met. The Real Time Operations Dispatch and Scheduling system is a critical automated component of hydro and transmission dispatch in the Federal Columbia River Power System. The RODS Replacement Project successfully supported implementation of Regional Enterprise Value (REV) Program milestones via the development, integration testing and implementation of key data flows and architecture supporting new Regional Dialogue functionality.

Smart Grid

TARGET MET. BPA completed all milestones for the Pacific Northwest Smart Grid Demonstration Project and the Western Interconnection Synchrophasor Project. To support the smart grid project, BPA provided continuous, real-time, cyber-secure data streams of power system operations data to the project. This data will be utilized to enable Northwest power grid modeling that will test smart grid technologies. BPA also met its milestones to develop a business case that will evaluate the cost effectiveness of smart grid technologies. To support the synchrophasor project, BPA installed phasor measurement units at two beta sites, developed the standard unit designs and selected the engineer/procure/construct contractor to install the units at approximately 45 sites.

Business Continuity Program

TARGET MET. BPA continued to advance its business continuity objectives to enable the agency to continue operations or rapidly recover in the event of a major, disruptive event to the power and transmission system. Alternate workspace planning, information technology systems planning and program operations planning targets were all met.

People and Culture Perspective

Talent Management

TARGET MET. All milestones were met for performance management, Office of Personnel Management hiring reform, leadership development and metrics reporting.

Safety

TARGET MET. BPA achieved a lost-time accident frequency rate of 0.8 per 200,000 hours worked relative to the target accident frequency rate of 1.5. This was the lowest accident frequency rate since BPA began reporting this measure in 1996. There were no fatalities to BPA employees or contract staff working on BPA facilities.

BPA Profile

The Bonneville Power Administration is a federal agency based in the Pacific Northwest under the Department of Energy. BPA markets wholesale electrical power from 31 federal hydroelectric projects owned and operated by the U.S. Army Corps of Engineers and Bureau of Reclamation, one nonfederal nuclear plant and some small nonfederal resources. BPA supplies about 30 percent of the electric power used in the Northwest.

BPA also operates and maintains about three-fourths of the region's high-voltage transmission system and is a leader in integrating renewable resources, such as wind energy, into its grid. BPA's service area includes Oregon, Washington, Idaho, western Montana, and small parts of Wyoming, Nevada, Utah, California and eastern Montana.

As a self-funding agency, BPA covers its costs by selling wholesale power, transmission and related services at cost. Under federal law, BPA must meet the power needs of its preference customers, consumer-owned utilities that include public utility districts, people's utility districts, cooperatives, tribal utilities, municipalities and federal agencies. BPA also sells power to investor-owned utilities, some direct-service industries in the region and — when power in the Northwest is surplus — to marketers and utilities in Canada and the Western United States.

BPA promotes energy efficiency, renewable energy and new technologies. The agency funds regional efforts to protect and enhance fish and wildlife populations affected by federal hydropower development in the Columbia River Basin. BPA is committed to public service and seeks to make its decisions in a manner that provides financial transparency and opportunities for input from all stakeholders.



BPA Executives

SEATED, LEFT TO RIGHT

Robin R. Furrer
Vice President for Transmission
Field Services

Hardev S. Juj
Vice President for Planning
and Asset Management

Larry N. Bekkedahl
Vice President for Engineering
and Technical Services

Stephen J. Wright
Administrator and
Chief Executive Officer

Anita J. Decker
Chief Operating Officer

Kimberly A. Leathley
Executive Vice President for
Internal Business Services

Brian L. Silverstein
Senior Vice President for
Transmission Services

Suzanne B. Cooper
Vice President for Bulk Marketing

MIDDLE ROW, LEFT TO RIGHT

Stephen R. Oliver
Vice President for Generation
Asset Management

Larry D. Buttress
Chief Information Officer

Randy A. Roach
Executive Vice President for
General Counsel and General Counsel

Mark O. Gendron
Vice President for Northwest
Requirements Marketing

William K. Drummond
Deputy Administrator

BACK ROW, LEFT TO RIGHT

Elliot E. Mainzer
Executive Vice President for
Corporate Strategy

Michael J. Weedall
Vice President for Energy Efficiency

NOT PICTURED

Claudia R. Andrews, acting
Executive Vice President for Finance
and Chief Financial Officer

Lorri Bodi
Vice President for Environment,
Fish and Wildlife

Gregory K. Delwiche
Senior Vice President for
Power Services

Cathy L. Ehli
Vice President for Transmission
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Offices

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Tri-Cities District

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Longview District

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The Dalles District

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Check out the videos highlighted in this report
and others on our YouTube channel!

www.youtube.com/BonnevillePower



www.bpa.gov

BONNEVILLE POWER ADMINISTRATION

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