

BPA facts

INFORMATION IS FOR FISCAL YEAR 2016, UNLESS OTHERWISE NOTED.

Profile

The Bonneville Power Administration is a nonprofit federal power marketing administration based in the Pacific Northwest. Although BPA is part of the U.S. Department of Energy, it is self-funding and covers its costs by selling its products and services. BPA markets wholesale electrical power from 31 federal hydroelectric projects in the Northwest, one nonfederal nuclear plant and several small nonfederal power plants. The dams are operated by the U.S. Army Corps of Engineers and the Bureau of Reclamation. The nonfederal nuclear plant, Columbia Generating Station, is owned and operated by Energy Northwest, a joint operating agency of the state of Washington. BPA provides about 28 percent of the electric power used in the Northwest and its resources — primarily hydroelectric — make BPA power nearly carbon free.

BPA also operates and maintains about three-fourths of the high-voltage transmission in its service territory. BPA's territory includes Idaho, Oregon, Washington, western Montana and small parts of eastern Montana, California, Nevada, Utah and Wyoming.

BPA promotes energy efficiency, renewable resources and new technologies that improve its ability to deliver on its mission. It also funds regional efforts to protect and rebuild fish and wildlife populations affected by hydropower development in the Columbia River Basin.

BPA is committed to public service and seeks to make its decisions in a manner that provides opportunities for input from all stakeholders. In its vision statement, BPA dedicates itself to providing high system reliability, low rates consistent with sound business principles, environmental stewardship and accountability.

Mission

The BPA's mission as a public service organization is to create and deliver the best value for our customers and constituents as we act in concert with others to assure the Pacific Northwest:

- An adequate, efficient, economical and reliable power supply.
- A transmission system capable of integrating and transmitting power from federal and nonfederal generating units, providing service to BPA's customers, providing interregional interconnections, and maintaining electrical reliability and stability.
- Mitigation of the Federal Columbia River Power System's impacts on fish and wildlife.

BPA is committed to cost-based rates and public and regional preference in its marketing of power. BPA will set its rates as low as possible consistent with sound business principles and the full recovery of all of its costs, including timely repayment of the federal investment in the system.

Core Values

SAFETY

We value safety in everything we do. Together, our actions result in people being safe each day, every day. At work, at home and at play, we all contribute to a safe community for ourselves and others.

TRUSTWORTHY STEWARDSHIP

As stewards of the Federal Columbia River Power System, we are entrusted with the responsibility to manage resources of great value for the benefit of others. We are trusted when others believe in and are willing to rely upon our integrity and ability.

COLLABORATIVE RELATIONSHIPS

Trustworthiness grows out of a collaborative approach to relationships. Internally we must collaborate across organizational lines to maximize the value we bring to the region. Externally we work with many stakeholders who have conflicting needs and interests. Through collaboration we discover and implement the best possible long-term solutions.

OPERATIONAL EXCELLENCE

Operational excellence is a cornerstone of delivering on our vision (system reliability, low rates, environmental stewardship and regional accountability) and will place us among the best electric utilities in the nation.

General Information

BPA established	1937
Service area size (square miles)	300,000
Pacific Northwest population	13,505,582
Transmission line (circuit miles)	15,238
BPA substations	260
Employees (FTE)	3,100 ^{1/}

^{1/} FTE estimate for fiscal year 2017 from the FY 2017 Congressional Budget.

Customers

Cooperatives	54
Municipalities	42
Public utility districts	28
Federal agencies	7
Investor-owned utilities	6
Direct-service industries	2
Port districts	1
Tribal utilities	2
Total	142

Marketers (power and transmission) ^{2/}	218
Transmission customers	511

^{2/} As of February 2017.

Rates

Wholesale power rates^{3/} (fiscal years 2016–2017)

Priority Firm Tier 1 (average ^{4/} , undelivered)	3.38 cents/kWh
Priority Firm Avg. Tier 1 + Tier 2 (undelivered)	3.51 cents/kWh
Priority Firm Exchange (average, undelivered)	5.87 cents/kWh

Industrial Firm 4.19 cents/kWh (average, undelivered)

New Resources 7.38 cents/kWh (average, undelivered)

^{3/} The rates shown do not include the cost of transmission. They also do not include the application of the conservation rate credit.

^{4/} The actual rate paid by an individual customer will vary according to the shape of the load and the products and services purchased.

Transmission rates^{5/} (fiscal years 2016–2017)

Network rates

Long-Term Firm	\$1.489/kWh/mo
Short-Term	0.428 cents/kWh

Southern Intertie rates

Long-Term Firm	\$1.230/kWh/mo
Short-Term	0.353 cents/kWh

^{5/} Reflects the rates for point-to-point transmission service. All short-term firm and nonfirm rates are downwardly flexible.

2016 Financial Highlights*

For the Federal Columbia River Power System (\$ in millions)

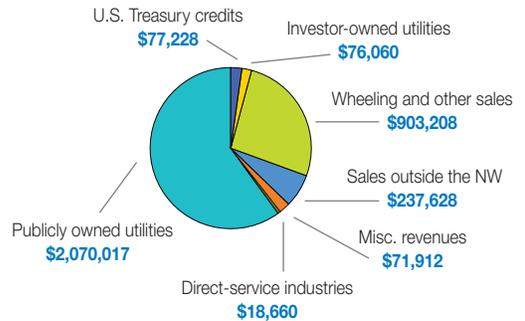
Total operating revenues ^{6/}	\$3,432.6
Total operating expenses	2,857.3
Net operating revenues	575.3
Net interest expense	298.1
Net revenues	\$ 277.2

^{6/} Includes both power and transmission revenues.

*This information is consistent with BPA's 2016 Annual Report.

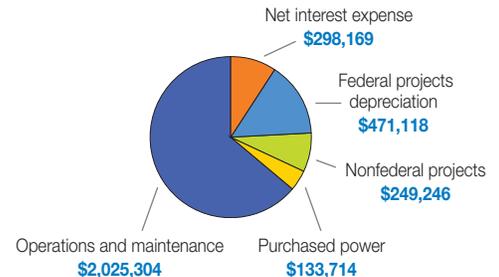
Sources of revenue^{7/}

(\$ in thousands)



Disposition of revenue^{7/}

(\$ in thousands)



^{7/} Does not reflect bookouts of -\$22,064.



Transmission System

Operating voltage	Circuit miles
1,100 kV	1
1,000 kV	264 ^{8/}
500 kV	4,869
345 kV	570
287 kV	229
230 kV	5,328
161 kV	119
138 kV	56
115 kV	3,520
below 115 kV	282
Total^{9/}	15,238

^{8/} BPA's portion of the PNW/PSW direct-current intertie. The total length of this line from The Dalles, Oregon, to Los Angeles is 846 miles.
^{9/} Total circuit miles as of Feb. 2, 2017.

Federal Hydro Projects

Name	River, state	In service	Max capacity
Albeni Falls	Pend Oreille, ID	1955	49 MW
Anderson Ranch	Boise, ID	1950	40 MW
Big Cliff	Santiam, OR	1953	21 MW
Black Canyon	Payette, ID	1925	10 MW
Boise River Diversion	Boise, ID	1912	3 MW
Bonneville	Columbia, OR/WA	1938	1,225 MW
Chandler	Yakima, WA	1956	12 MW
Chief Joseph	Columbia, WA	1958	2,614 MW
Cougar	McKenzie, OR	1963	28 MW
Detroit	Santiam, OR	1953	115 MW
Dexter	Willamette, OR	1954	17 MW
Dworshak	Clearwater, ID	1973	465 MW
Foster	Santiam, OR	1967	23 MW
Grand Coulee^{10/}	Columbia, WA	1942	7,079 MW
Green Peter	Santiam, OR	1967	92 MW
Green Springs	Emigrant Crk, OR	1960	17 MW
Hills Creek	Willamette, OR	1962	34 MW
Hungry Horse	Flathead, MT	1953	428 MW
Ice Harbor	Snake, WA	1962	693 MW
John Day	Columbia, OR/WA	1971	2,480 MW
Libby	Kootenai, MT	1975	605 MW
Little Goose	Snake, WA	1970	930 MW
Lookout Point	Willamette, OR	1953	138 MW
Lost Creek	Rogue, OR	1977	56 MW
Lower Granite	Snake, WA	1975	930 MW
Lower Monumental	Snake, WA	1969	930 MW
McNary	Columbia, OR/WA	1952	1,120 MW
Minidoka	Snake, ID	1909	28 MW
Palisades	Snake, ID	1958	177 MW
Roza	Yakima, WA	1958	13 MW
The Dalles	Columbia, OR/WA	1957	<u>2,086 MW</u>
Total (31 dams)			22,458 MW

Owned and operated by the U.S. Army Corps of Engineers (21 dams, 14,651 MW)
Owned and operated by the Bureau of Reclamation (10 dams, 7,807 MW)
^{10/} Includes pump generation.

BPA Resources^{11/}

(for operating year 2017 under 1937 water conditions)

Sustained 120-hour peak capacity (January)	11,736 MW
Hydro	9,920 MW (84.5%)
Nuclear	1,144 MW (9.7%)
Firm contracts and other resources	.673 MW (5.7%)
Renewables	.0 MW (0.0%)

Firm energy (12-month annual avg.)	8,135 aMW
Hydro	6,550 aMW (80.5%)
Nuclear	1,100 aMW (13.5%)
Firm contracts and other resources	.427 aMW (5.2%)
Renewables	.58 aMW (0.7%)

Regional Resources^{11/}

(for operating year 2017 under 1937 water conditions)

Sustained 120-hour peak capacity (January)	38,598 MW
Hydro	20,571 MW (53.3%)
Combustion turbines	6,837 MW (17.7%)
Coal	5,856 MW (15.2%)
Cogeneration	2,720 MW (7.0%)
Imports	1,216 MW (3.1%)
Nuclear	1,144 MW (2.9%)
Renewables	.162 MW (0.4%)
Other miscellaneous resources	.92 MW (0.2%)

Firm energy (12-month annual avg.)	28,863 aMW
Hydro	11,826 aMW (41.0%)
Combustion turbines	5,826 aMW (20.2%)
Coal	5,155 aMW (17.8%)
Cogeneration	2,300 aMW (8.0%)
Renewables	1,953 aMW (6.8%)
Nuclear	1,100 aMW (3.8%)
Imports	.667 aMW (2.3%)
Other miscellaneous resources	.36 aMW (0.1%)

^{11/} Forecast figures from BPA's "2016 Pacific Northwest Loads & Resources Study." Firm resource projections before adjustment for reserves, maintenance and transmission losses. The hydro capacity is reduced by an operational "idle capacity" adjustment to estimate the monthly maximum operational capability that is available to meet the 120-hour peak load for 1937 critical-water conditions. For January 2018 the reduction is -7,898. Totals may not equal sum of components due to rounding.

Federal Generation

Hydro generation	7,919 aMW
Total generation	9,089 aMW
60-min. hydro peak generation	13,599 MW
60-min. total peak generation	14,840 MW
All-time 60-min. total peak generation record (June 2002)	18,139 MW

Fish and Wildlife

(\$ in millions)

BPA F&W program expense (does not include \$51.4 million capital)	\$258.1
Direct funded expenditures	88.2
Interest, depreciation and amortization expenses	148.2
Total direct costs	\$494.6

Operational costs:	
Replacement power purchases	50.3
Estimated forgone power revenues	76.6

Total F&W costs for FY 2016^{12/} \$621.5

BPA has committed nearly \$15.9 billion since 1978 to support Northwest fish and wildlife recovery.

^{12/} Program expenses include integrated program and action plan/high priority. Totals may not equal sum of components due to rounding.

Energy Efficiency^{13/}

	FY 2016	Total ^{14/}
Residential Programs	17.8 aMW	480 aMW
Commercial Programs	14.2 aMW	367 aMW
Industrial Programs	20.1 aMW	264 aMW
Agricultural Programs	3.9 aMW	59 aMW
Multi-sector Programs	0.0 aMW	109 aMW
Federal ^{15/}	0.0 aMW	9 aMW
Utility System Efficiency	0.1 aMW	1 aMW
Improved Building Codes	0.0 aMW	189 aMW
Market Transformation	1.5 aMW	239 aMW
Momentum Savings	<u>80.4 aMW</u>	<u>437 aMW</u>
Total aMW Saved ^{16/}	138.0 aMW	2,153 aMW

^{13/} All figures are preliminary and subject to final revision.

^{14/} Cumulative total, FY1982-2016

^{15/} Federal program savings are being finalized and will increase.

^{16/} Data through 2014 aligns with the 2014 RED Book and may be adjusted from past versions of BPA facts. In 2016, BPA completed Momentum Savings research that significantly increased the historical figures for Momentum Savings.

Points of Contact

GENERAL BPA OFFICES AND WEBSITES

BPA Headquarters 905 N.E. 11th Ave., P.O. Box 3621, Portland, OR 97208; 503-230-3000; www.bpa.gov

BPA Visitor Center 905 N.E. 11th Ave., P.O. Box 3621, Portland, OR 97208; 503-230-INFO [4636]; 800-622-4520

Public Engagement P.O. Box 14428, Portland, OR 97293; 800-622-4519; www.bpa.gov/comment

Washington, D.C., Office Forrestal Bldg., Room 8G-061, 1000 Independence Ave. S.W., Washington, D.C. 20585; 202-586-5640

Crime Witness Program To report crimes to BPA property or personnel; 800-437-2744

TRANSMISSION SERVICES

Transmission Services Headquarters P.O. Box 491, Vancouver, WA 98666-0491; 503-230-3000

Covington District 28401 Covington Way S.E., Kent, WA 98402; 253-638-3704

Eugene District 86000 Hwy. 99 S., Eugene, OR 97405; 541-988-7400

Idaho Falls Regional Office 1350 Lindsay Blvd., Idaho Falls, ID 83402; 208-612-3100

Kalispell District 2520 U.S. Hwy. 2 E., Kalispell, MT 59901; 406-751-7802

Longview District 3750 Memorial Park Drive, Longview, WA 98632; 360-414-5600

Nekitpe District 2211 N. Commercial Ave., Pasco, WA 99301; 509-544-4701

Olympia Regional Office 5240 Trosper Road S.W., Olympia, WA 98512; 360-570-4351

Redmond District 3655 S.W. Highland Ave., Redmond, OR 97756; 541-516-3200

Salem District 2715 Tepper Lane N.E., Keizer, OR 97303; 503-304-5900

Snohomish District 914 Ave. D, Snohomish, WA 98290; 360-563-3600

Spokane District 2410 E. Hawthorne Road, Mead, WA 99201; 509-468-3002

The Dalles District 3920 Columbia View Drive E., The Dalles, OR 97058; 541-296-4694

Wenatchee District 13294 Lincoln Park Road, East Wenatchee, WA 98802; 509-886-6000

POWER SERVICES

Bend Customer Service Center 1011 S.W. Emkay Drive, Suite 211, Bend, OR 97702; 541-318-1680

Burley Customer Service Center 2700 Overland Ave., Burley, ID 83318; 208-677-6760

Eastern Area Customer Service Center P.O. Box 789, Mead, WA 99021; 509-822-4591

Montana Customer Service Center P.O. Box 640, Ronan, MT 59864; 406-676-2669

Nekitpe Maintenance Headquarters 2211 N. Commercial Ave., Pasco, WA 99301; 509-544-4771

Seattle Customer Service Center 909 First Ave., Suite 380, Seattle, WA 98104; 206-220-6770

Western Area Customer Service Center 905 N.E. 11th Ave., P.O. Box 3621, Portland, OR 97208; 503-230-5856

