

# BPA facts

INFORMATION IS FOR FISCAL YEAR 2017, 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

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 impacts on fish and wildlife from the federally owned hydroelectric projects from which BPA markets power.

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	13,712,171
Transmission line (circuit miles)	15,238
BPA substations	260
Employees (FTE)	2,891 <sup>1/</sup>

<sup>1/</sup> 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	3
Total	143

Marketers (power and transmission) <sup>2/</sup>	200
Transmission customers	532

<sup>2/</sup> As of February 2018.

## Rates

### Wholesale power rates<sup>3/</sup> (fiscal years 2018–2019)

Priority Firm Tier 1 (average <sup>4/</sup> , undelivered)	3.56 cents/kWh
Priority Firm Avg. Tier 1 + Tier 2 (undelivered)	3.70 cents/kWh
Priority Firm Exchange (average, undelivered)	6.19 cents/kWh

Industrial Firm . . . . . 4.35 cents/kWh (average, undelivered)

New Resources . . . . . 7.90 cents/kWh (average, undelivered)

<sup>3/</sup> The rates shown do not include the cost of transmission. They also do not include the application of the conservation rate credit.

<sup>4/</sup> 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<sup>5/</sup> (fiscal years 2018–2019)

#### Network rates

Long-Term Firm	\$1.471/kW-month
Short-Term	0.423 cents/kWh

#### Southern Intertie rates

Long-Term Firm	\$1.038/kW-month
Short-Term	0.956 cents/kWh

<sup>5/</sup> Reflects the rates for point-to-point transmission service. All short-term firm and nonfirm rates are downwardly flexible.

## 2017 Financial Highlights\*

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

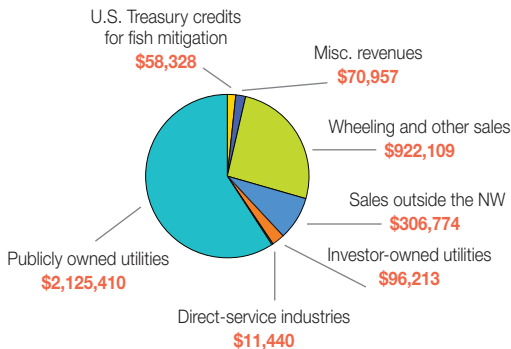
Total operating revenues <sup>6/</sup>	\$3,569.8
Total operating expenses	2,984.4
Net operating revenues	585.4
Net interest expense	246.8
Net revenues	\$ 338.6

<sup>6/</sup> Includes both power and transmission revenues.

\*This information is consistent with BPA's 2017 Annual Report.

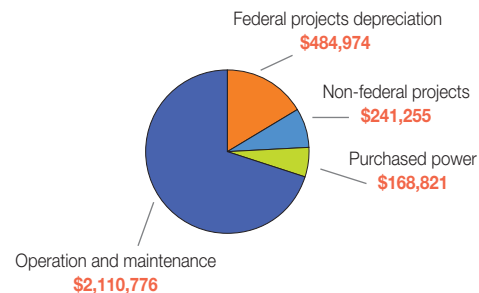
### Sources of Revenues<sup>7/</sup>

(\$ in thousands)



### Disposition of Revenues

(\$ in thousands)



<sup>7/</sup> Does not reflect bookouts of -\$21,453.



# Transmission System

Operating voltage	Circuit miles
1,100 kV	1
1,000 kV	264 <sup>8/</sup>
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
<b>Total<sup>9/</sup></b>	<b>15,238</b>

<sup>8/</sup> 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.  
<sup>9/</sup> Total circuit miles as of February 2018.

# Federal Hydro Projects

Name	River, state	In service	Max capacity
Albeni Falls	Pend Oreille, ID	1955	49 MW
<b>Anderson Ranch</b>	<b>Boise, ID</b>	<b>1950</b>	<b>40 MW</b>
Big Cliff	Santiam, OR	1953	21 MW
<b>Black Canyon</b>	<b>Payette, ID</b>	<b>1925</b>	<b>10 MW</b>
<b>Boise River Diversion</b>	<b>Boise, ID</b>	<b>1912</b>	<b>3 MW</b>
Bonneville	Columbia, OR/WA	1938	1,225 MW
<b>Chandler</b>	<b>Yakima, WA</b>	<b>1956</b>	<b>12 MW</b>
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
<b>Grand Coulee<sup>10/</sup></b>	<b>Columbia, WA</b>	<b>1942</b>	<b>7,079 MW</b>
Green Peter	Santiam, OR	1967	92 MW
<b>Green Springs</b>	<b>Emigrant Crk, OR</b>	<b>1960</b>	<b>17 MW</b>
Hills Creek	Willamette, OR	1962	34 MW
<b>Hungry Horse</b>	<b>Flathead, MT</b>	<b>1953</b>	<b>428 MW</b>
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
<b>Minidoka</b>	<b>Snake, ID</b>	<b>1909</b>	<b>28 MW</b>
<b>Palisades</b>	<b>Snake, ID</b>	<b>1958</b>	<b>177 MW</b>
<b>Roza</b>	<b>Yakima, WA</b>	<b>1958</b>	<b>13 MW</b>
The Dalles	Columbia, OR/WA	1957	<u>2,086 MW</u>
<b>Total (31 dams)</b>			<b>22,458 MW</b>

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)**  
<sup>10/</sup> Includes pump generation.

# BPA Resources<sup>11/</sup>

(for operating year 2019 under 1937 water conditions)

Sustained 120-hour peak capacity (January)	11,506 MW
Hydro	9,687 MW (84%)
Nuclear	1,144 MW (10%)
Firm contracts and other resources	676 MW (6%)
Renewables	0 MW (0.0%)

Firm energy (12-month annual avg.)	7,987 aMW
Hydro	6,613 aMW (82.8%)
Nuclear	937 aMW (11.7%)
Firm contracts and other resources	379 aMW (4.7%)
Renewables	.58 aMW (0.8%)

# Regional Resources<sup>11/</sup>

(for operating year 2019 under 1937 water conditions)

Sustained 120-hour peak capacity (January)	38,777 MW
Hydro	20,752 MW (53.5%)
Combustion turbines	6,837 MW (17.6%)
Coal	5,856 MW (15.1%)
Cogeneration	2,767 MW (7.2%)
Imports	1,174 MW (3.0%)
Nuclear	1,144 MW (3.0%)
Renewables	.164 MW (0.4%)
Other miscellaneous resources	.83 MW (0.2%)

Firm energy (12-month annual avg.)	28,812 aMW
Hydro	11,907 aMW (41.3%)
Combustion turbines	5,850 aMW (20.3%)
Coal	5,099 aMW (17.7%)
Cogeneration	2,372 aMW (8.2%)
Renewables	1,952 aMW (6.8%)
Nuclear	937 aMW (3.3%)
Imports	.658 aMW (2.3%)
Other miscellaneous resources	.37 aMW (0.1%)

<sup>11/</sup> Forecast figures from BPA's "2017 Pacific Northwest Loads & Resources Study," tables 2-4, 2-5, 3-2. 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 2019 the reduction is -7,550. Totals may not equal sum of components due to rounding.

# Federal Generation

Hydro generation	9,377 aMW
Total generation	10,313 aMW
60-min. hydro peak generation	14,192 MW
60-min. total peak generation	14,600 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 \$65.6 million capital)	\$254.7
Direct funded expenditures	85.2
Interest, depreciation and amortization expenses	121.4
Total direct costs	\$461.3

Operational costs:  
 Replacement power purchases (-20.5)  
 Estimated forgone power revenues 9.6  
 Total F&W costs for FY 2017<sup>12/</sup> \$450.4

BPA has committed nearly \$16.4 billion since 1978 to support Northwest fish and wildlife recovery.

<sup>12/</sup> Program expenses include integrated program and action plan/high priority. Totals may not equal sum of components due to rounding.

# Energy Efficiency<sup>13/</sup>

	FY 2017	Total <sup>14/</sup>
Residential programs	20 aMW	504 aMW
Commercial programs	19 aMW	389 aMW
Industrial programs	19 aMW	283 aMW
Agricultural programs	4 aMW	64 aMW
Multi-sector programs	0 aMW	109 aMW
Federal <sup>15/</sup>	TBD	10 aMW
Utility system efficiency	1 aMW	2 aMW
Improved building codes	0 aMW	189 aMW
Market transformation <sup>16/</sup>	TBD	239 aMW
Momentum savings <sup>17/</sup>	TBD	437 aMW
Total aMW saved <sup>18/</sup>	63 aMW	2,224 aMW

<sup>13/</sup> All figures are preliminary and subject to final revision.

<sup>14/</sup> Cumulative total, FY1982-2017

<sup>15/</sup> Federal program savings are being finalized and will increase.

<sup>16/</sup> Market Transformation savings being finalized

<sup>17/</sup> Momentum savings being finalized

<sup>18/</sup> Data through 2014 aligns with 2014 Resource Energy Data Book and may be adjusted from past versions of BPA facts.

# Points of Contact

## GENERAL BPA OFFICES AND WEBSITES

**BPA Headquarters** 905 N.E. 11<sup>th</sup> Ave., P.O. Box 3621, Portland, OR 97208; 503-230-3000; [www.bpa.gov](http://www.bpa.gov)

**BPA Visitor Center** 905 N.E. 11<sup>th</sup> 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](http://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 98042; 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

**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 99021; 509-468-3002

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

**Tri-Cities District** 2211 N. Commercial Ave., Pasco, WA 99301; 509-544-4702

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

## POWER SERVICES

**Boise Customer Service Center** 950 W. Bannock St., Suite 805, Boise, ID 83702; 208-670-7406

**Eastern Area Customer Service Center** P.O. Box 789, Mead, WA 99021; 509-822-4613

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

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

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

