proud moments in BPA's 70 years

Aug. 20, 1937 – The Bonneville Power Administration is born as the Bonneville Project Act is signed into law. At the time, BPA was part of the Department of the Interior but was transferred to the Department of Energy when DOE was created in 1977.

June 8, 1938 – The Federal Power Commission approves BPA's initial power rates of \$17.50 kilowatt-year (equivalent to 2 mills per kilowatt-hour). The rates were famously referred to as "postage stamp" rates because distance did not influence the rate. BPA would not see a rate increase for 27 years.

July 9, 1938 – BPA's first transmission line is energized. The single-circuit line delivered power from Bonneville Dam to BPA's first customer, the city of Cascade Locks, 3.5 miles away.

Dec. 1, 1939 – Power is delivered to Portland General Electric Company over BPA's first major transmission line – a 230-kilovolt line from Bonneville Dam to St. Johns Substation at Portland, via Vancouver (now J.D. Ross) Substation.

Dec. 20, 1939 – BPA signs its first power sales contract with an industrial firm – Aluminum Company of America, which is locating in the Pacific Northwest.

March 23, 1941 – The 238-mile Bonneville-Grand Coulee line is energized – two years ahead of schedule.

June 22, 1941 – While employed by BPA, Woody Guthrie writes the iconic "Roll On Columbia." BPA had hired the young folksinger for 30 days to help tell the Columbia River saga. During that time Guthrie wrote 26 songs, many of which became part of Northwest history.

July 16, 1942 – BPA completes linking the transmission grid from Bonneville and Grand Coulee dams to four major Northwest cities – Seattle, Portland, Tacoma and Spokane.

Fall 1942 – During a disastrous drought, BPA operates without reserves and overloads federal generators and lines by up to 20 percent to keep the lights on and the war effort humming.

Oct. 3, 1945 – BPA becomes the first federal agency to extend Social Security benefits to all non-Civil Service employees and to provide unemployment insurance to all hourly employees.

1940s

BPA rises to new challenges during the war years of 1941 to 1945, delivering more electricity -26 billion kilowatt hours - than all the other power systems in the region had developed and marketed in the preceding 50 years. By 1945, BPA's high-voltage transmission system, which had grown from 37.4 miles in 1939 to 2,270 miles in 1945, becomes the second largest power grid in the nation. A short BPA 115-kV line from Ross Substation to the Kaiser shipyard in Vancouver, Wash., facilitated construction of one aircraft carrier per week during 1943. The shift to war loads required many changes in the construction of lines radiating from the main grid, but every requirement was met on schedule even with the loss of many skilled workers to the armed forces. Some 1,155 BPA employees were called into service, with 12 dying in action.



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Aug. 1, 1947 – BPA and British Columbia Electric Company complete construction of a 230-kV line linking the two power systems at Blaine, Wash. The line was built under a joint agreement permitting the exchange of surplus power with Canada.

1950s

March 30, 1950 – BPA publishes its first set of objectives. They stress widespread use, economic development and full repayment of the federal investment.

April 17, 1951 – BPA completes its first underwater cable to serve the San Juan Islands off the coast of Washington state. It is considered another technological achievement.

Oct. 20, 1953 – BPA signs its first 20-year power sales contracts with investor-owned utilities. The contracts include a five-year pull-back notice if power is needed by preference customers.

Aug. 26, 1957 – President Eisenhower signs a bill into law allowing BPA to wheel power (transmit power owned by nonfederal generators over BPA lines for a fee). This expands construction of BPA's grid and leads to the 345-kV line from McNary Dam to Portland and Vancouver – the first ultra-high-voltage transmission line west of the Rockies.

1960s

Jan. 17, 1961 – Canada and the United States sign the Columbia River Treaty. (It would be ratified in 1964.) The treaty provided flood control and upstream storage, which increased downstream power benefits. Under the treaty, Canada built three major storage projects on its side of the border while the U.S. was permitted to build Libby Dam, which backs water into Canada. The two countries shared the power benefits. BPA represents the United States on power matters, while the U.S. Army Corps of Engineers represents the nation on flood control matters related to the treaty.

Sept. 15, 1964 – BPA, the Corps of Engineers and 144 nonfederal generating Northwest utilities sign the Pacific Northwest Coordination Agreement. This agreement allows operation of the hydro system as if it had one owner, thus producing maximum efficiency.

Sept. 20, 1968 – BPA energizes the first leg of the first of three alternating-current lines of the Pacific Northwest-Pacific Southwest Intertie. Construction involved a capital investment of \$700 million and coordination among two federal agencies, five private utilities and the City of Los Angeles. The second AC line was energized in May 1968, and the third AC was completed in 1993.

1950s

A golden age of technological achievement begins. BPA develops the nation's first microwave system for communicating signals to the relays that trigger equipmentprotection devices. BPA engineers also succeed in developing a program for calculating power flows with digital computers, which prove to be faster, more accurate and more flexible than previous analog approaches. Many BPA inventions and developments go on to become standards for the rest of the industry.

1970s

May 21, 1970 – BPA energizes the direct-current line of the Pacific Northwest-Pacific Southwest Intertie. It was the first and longest ultra-high-voltage (800-kV) DC line in the nation. Its building contributed significantly to DC technology throughout the world. Total project capacity exceeded 3.4 million kilowatts and included nearly 4,200 towers on the DC span running 845 miles.

Aug. 25, 1970 – BPA dedicates the Celilo Converter Station at The Dalles. As the northern terminus of the DC line, it converts alternating current into direct current, which is a cheaper way to move electricity over long distances.

Oct. 9, 1970 – BPA holds a regionwide public meeting on its first environmental impact statement just one year after Congress had passed the National Environmental Policy Act. The EIS covered 42 separate facility projects and was the beginning of work to formally incorporate environmental sensitivity into all of BPA's basic procedures, policies and standards. The following year BPA established an environmental office.

Oct. 18, 1974 – BPA becomes a self-financing agency as President Ford signs the Columbia River Transmission System Act.

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Dec. 1, 1974 – The Dittmer Control Center at Vancouver, Wash., is energized. It houses BPA's power dispatching center, a central computer complex, and power system control circuits and terminals. It would come to be called the "O'Hare Airport" of dispatch centers, handling over 2,500 energy transactions each day.

1980s

May 18, 1980 – Following the eruption of Mount St. Helens, BPA crews work around the clock dusting, blowing and washing ash deposits from substation and transmission equipment. Thanks to these efforts, BPA's high-voltage system suffered no outages or equipment damage as a direct result of the ash fallout.

Jan. 2, 1981 – The Department of Energy approves BPA's Final Role EIS, a major environmental impact statement that considers alternative roles BPA could play in the Northwest's power supply picture under the newly passed Northwest Power Act. It serves as a model and point of reference for future EISs.

March 19, 1981 – BPA announces plans for a \$400 million, five-year program to acquire the equivalent of 300 megawatts of conservation. The following July, BPA kicked off its first major conservation program, weatherization of existing homes. A dozen years later, more than 250,000 residences had been weatherized through BPA programs.

Aug. 28, 1981 – After eight months of negotiations, BPA offers 296 customer-specific, long-term power sales contracts, the first under the Northwest Power Act. The contracts were key to implementing many of the Act's provisions.

1960s

An era of interconnection with other regions begins thanks to a historic treaty with Canada and development of the interties that connect the Northwest with the Southwest. These interties, the largest transmission projects ever undertaken in the United States at the time. were hailed as engineering marvels. They took advantage of the fact that the Northwest and Southwest traditionally had different peaking times, winter and summer respectively, which allowed for the exchange of power and minimized each region's need to build resources.

1970s

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BPA fully enters the age of real-time control as it achieves across-theboard digital computer support for day-to-day system operations replacing the analog-supported manual system. BPA engineers devise a fast, accurate and flexible digital computer program that can represent and evaluate fleeting moments of power system behavior. Previous programs had captured only continuing and stable conditions, not the transient and momentary fluctuations of the transmission system. Digitally controlled data gives Dittmer dispatchers complete information about system performance and centralized remote switching capability for implementing operational decisions.

May 30, 1982 – BPA establishes a division of fish and wildlife. In just two years, BPAfunded fish and wildlife projects would grow from 30 to 142.

April 23, 1983 – The Water Budget is officially implemented. Later known as flow augmentation, the operational regime releases water from reservoirs to help fish migrate downstream.

Sept. 30, 1983 – After missing payments to the U.S. Treasury, BPA makes its payment in full and on time and would never again miss a payment. The following year, BPA pays all deferred debt a year early.

March 14, 1984 – BPA introduces the world's first ultra-high-voltage circuit breaker, which allows operation of multi-terminal long-distance DC lines. It is considered a major technological breakthrough that will influence transmission systems throughout the world.

April 9, 1984 – BPA and BC Hydro and others complete signing a multi-year Non-Treaty Storage Agreement that allows cooperative use of water storage in British Columbia. It was renewed and expanded in 1990 to include additional storage behind Canada's Mica Dam. This generated an additional 300 average megawatts of energy for the two parties to share and did so without any significant construction. (The very first one-year NTS agreement was an "Agreement to Enhance Filling of Mica Reservoir" dated April 26, 1978.)

Sept. 4, 1984 – BPA launches its Super Good Cents marketing program to encourage construction of energy-efficient buildings throughout the Northwest. Fifteen months later, BPA would kick off "Energy Smart" workshops for architects, engineers, designers and contractors. The workshops illustrated how to design energy-efficient buildings without increasing costs. Together, the marketing program and workshops turned aside builder opposition to model conservation standards and paved the way for states to adopt tighter building standards.

Oct. 24, 1984 – BPA launches the Yakima River Basin Project, one of the first and most successful projects to restore a basin's fish runs. The Yakima was considered ideal for restoration because fish habitat remained relatively intact, but passage had been blocked by irrigation works. In 2005, the BPA-funded Cle Elum fish hatchery on the Yakima River opened.

Dec. 12, 1984 – BPA-backed Columbia Generating Station (then called WNP-2) begins commercial operation. The nuclear project is owned by a consortium of utilities known as Energy Northwest (formerly the Washington Public Power Supply System). BPA's agreement to purchase and market power from the plant makes its completion and operation possible.

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April 1, 1985 – BPA engineers unveil a new trapezoidal wire conductor design that cuts transmission line losses by 20 percent. It is nicknamed the trap-line.

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Oct. 1, 1985 – The Montana section of the Colstrip transmission project is energized. It links the Colstrip coal-fired projects in eastern Montana to western Montana. The project will eventually link with Bell Substation in Spokane, Wash.

Dec. 31, 1985 – BPA's Hood River (Ore.) conservation project is completed as more than 3,000 electrically heated homes are weatherized. The project was designed to show what kind of energy savings could be accomplished if a large block of homes was weatherized.

July 21, 1986 – BPA adopts a formal policy for public involvement in all major decisions. Two years later, BPA would launch Programs in Perspective, an outreach effort to involve the region in BPA's strategic and financial planning. It was considered unprecedented for a government agency and raised the bar for BPA's and other agencies' future public involvement efforts.

June 1, 1987 – BPA introduces its conservation/modernization program to the direct-service industries. With BPA paying part of the cost, all 10 of BPA's aluminum customers agree to modernize to save energy.

May 17, 1988 – BPA adopts a long-term Intertie Access Policy to spread costs and benefits equitably among all parties.

Feb. 1, 1989 – Extreme low temperatures at Montana's Garrison Substation lower gas pressure in bypass switches for series capacitors, causing switches to lock out. Transfer capacity from the Colstrip plant to Puget Sound area drops precipitously. BPA crews plow up to Garrison, which is at 5,020 feet, in temperatures of minus 37 degrees and 40-mph winds. It is so cold that gas liquefies in the hoses. Crews handle the challenge, restoring full use of the line to Puget Sound. This entry marks just one of multiple examples of field crews keeping lights on under extreme conditions.

April 27, 1989 – The DC intertie is expanded from 2,000 MW to 3,100 MW.

Sept. 21, 1989 – Energy Northwest, then known as WPPSS, sells the first package of bonds in a refinancing program that later becomes known as BPA's debt optimization program. The program saves ratepayers tens of millions of dollars in debt service as BPA and Energy Northwest refinance bonds at lower interest, allowing BPA to retire some of its higher-cost Treasury debt.

Oct. 16, 1989 – BPA's investment in fish and wildlife reaches the \$1 billion mark.

1990s

May 24, 1990 – BPA kicks off its first reward program for predator control. Under the program, BPA pays fishers to catch northern pikeminnow, a voracious fish that preys on young salmon. As of 2006, the program had removed 2.7 million pikeminnow, saving an estimated three million juvenile salmon annually.

1980s

Passage of the Northwest Power Act brings new responsibilities to BPA, particularly in the areas of energy efficiency and fish and wildlife. In this decade, BPA becomes a national leader in energy efficiency and changes the image of conservation from curtailment (wearing a sweater and using less heat) to one of preserving all the amenities (no need to wear that sweater) by using energy more efficiently. BPA also makes a gutwrenching but smart decision to call a stop to construction on two partially completed nuclear projects.

1990s

Wholesale deregulation comes to the electrical energy industry. For the first time BPA faces competition as new independent energy marketers attract BPA customers with lower prices. BPA responds with its Competitiveness Project. The project's themes are "market driven, customer focused, cost conscious and results oriented." BPA is reorganized around types of customers served rather than geographic areas. The reorganization creates account executives and constituent account executives, providing customers, states and interest groups with more direct links to BPA. (Tribal account executives are added in 2002.) It also unbundles products and simplifies contracts. BPA would receive an award from Vice President Al Gore for its Competitiveness Project recognizing BPA as a government agency focused on "doing more at less cost."

53.

April 20, 1990 – On Earth Day, the Natural Resources Defense Council honors BPA for a "decade of environmental achievement."

March 6, 1991 – BPA and Southern California Edison agree to the first solely environmental exchange of power. The exchange of 200 MW helps reduce Los Angeles' smog and bolsters Northwest fish runs.

July 19, 1995 – BPA's public involvement process is recognized as the first "benchmark of excellence" by the Council for Excellence in Government. The council is a nonpartisan organization working to improve the performance of public-sector institutions.

Aug. 25, 1995 – BPA publishes its Business Plan, which includes a Business Plan environmental impact statement describing alternative directions available to BPA along with the impacts of these alternatives. BPA opted to adopt a market-driven approach and ever since has used the business plan to guide its business decisions. In 2007, BPA conducted a complete review of the Business Plan EIS and determined it remains relevant and continues to provide adequate coverage for BPA's business decisions under the National Environmental Policy Act.

Feb. 6, 1996 – Flooding in the Columbia River threatens downtown Portland with seven feet of water. With BPA's agreement, the Bureau of Reclamation almost entirely shut off flows from Grand Coulee Dam. BPA power marketers made over 100 replacement power purchases within six hours to keep the lights on. Thanks to interagency action, Portland was spared, averting an estimated \$3 billion in damage.

March 26, 1996 – BPA and 13 Columbia Basin tribes sign BPA's Tribal Policy. It recognizes the tribes' sovereign status and provides a framework for government-to-government relationships. In the policy, BPA acknowledged historic treaties, statutes and federal Indian case laws that define the extent of BPA's trust responsibility. Consultation is an important component of the policy.

Sept. 13, 1996 – Over the following three days, BPA and other federal agencies sign a memorandum of agreement to implement joint administration-congressional direction on BPA fish and wildlife funding. Developed with the region's tribes and the Northwest Power and Conservation Council, the MOA includes a six-year funding plan of \$252 million a year for program measures, plus costs of hydro operations for fish listed as threatened or endangered. The MOA also establishes terms for use of an estimated \$325 million contingency fund to be drawn as credits against BPA's repayment to the Treasury. This fund represents money BPA has already spent on fish and wildlife costs associated with nonpower uses of the federal dams.

Oct. 10, 1996 – BPA and the Environmental Protection Agency celebrate removal of the 250-acre Ross Complex in Vancouver, Wash., from the National Priorities (Superfund) List. EPA lauded BPA for its quick action after groundwater at the facility had tested positive for traces of solvents. In December of the same year, EPA completed its review of cleanup activities at the Eugene Starr Complex at The Dalles, Ore. The complex had been under review because of historical releases of mercury. EPA concluded no further remedial action was needed. By avoiding a Superfund listing, BPA saved millions of dollars in procedural and remedial actions.

Dec. 12, 1996 – BPA concludes a direct-funding agreement with the Bureau of Reclamation aimed at cutting the time and red tape it takes to make needed maintenance and repairs to Reclamation hydropower projects in the Basin. A similar agreement would follow 14 months later with the Corps of Engineers.

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Nov. 16, 1999 – The Federal Caucus, a partnership of nine federal agencies (including BPA), releases a draft working paper titled "Conservation of Columbia Basin Fish, Building a Conceptual Recovery Plan with the Four-H's." The paper strongly argues that there is no "silver bullet" and changes in hydroelectric operations alone will not save endangered fish. The new direction described in the paper brings renewed focus on the other H's – habitat, hatcheries and harvest.

2000

Jan. 1, 2000 – The year opens with a "nonevent," which is the best news possible. When the clocks roll over to the new century, BPA's power and transmission systems continue to perform safely and reliably, thanks to five years of work in preparing for the year 2000 (Y2K).

June 14, 2000 – BPA employees receive the first employee survey co-developed by the Great Place to Work Institute. The survey initiates measurable indicators to chart progress toward becoming a high-performing organization.

Oct. 31, 2000 – Preference customers complete signing power Subscription contracts for up to 10 years.

January-March 2001 – BPA helps California avoid power blackouts during the West Coast energy crisis by arranging one-for-two power exchanges. For every megawatt BPA sends south, California must return two megawatts.

June 29, 2001 – BPA announces its efforts to avoid a triple-digit power rate increase have been successful. Customers had placed over 3,000 MW of load on BPA beyond what the Federal Base System could provide at a time when market prices were soaring and water levels were far below normal. BPA instituted a load reduction program that reduced its load commitments by 2,277 average megawatts. The result was that a forecast 250 percent rate increase dropped to 46 percent.

Oct. 1, 2001 – The Umpqua Indian Utility Cooperative becomes BPA's first tribal utility customer. It is operated by the Cow Creek Band of the Umpqua Tribe of Indians and serves the tribe's casino near Canyonville, Ore. The Yakama Nation had signed a contract with BPA in 2000, but waived its right to buy power from BPA in 2001 when BPA was undergoing a load-reduction program. Yakama Power, in Toppenish, Wash., began taking service from BPA in 2006.

Sept. 30, 2002 – The tally for wildlife acres BPA has protected since 1990 approaches a half million. Land under protection specifically for fish is measured in both acres and river miles, and that tally reaches nearly 15,000 acres and 420 river miles.

2000

The decade opens with a West Coast energy crisis that sends electric power market prices soaring and BPA revenues dipping. BPA applied stringent cost management and efficiency initiatives and was again operating in the black by fiscal year 2003, despite consecutive low-water years. After losing more than \$700 million during the energy crisis, BPA had largely made it back from those losses by 2006. The final chapter of the decade remains to be written as BPA balances multiple issues including allocation of the Federal Base System, fish and wildlife mitigation, increased transmission reliability requirements and – in a new focus – the need to determine BPA's role in mitigating climate change and bolstering the nation's energy independence.



Dec. 31, 2003 – The Kangley-Echo Lake 500-kV line is energized on New Year's Eve, just in time to meet near-record high loads in the Puget Sound area. It is the first major transmission line BPA has built since 1987. Because the line runs through the Cedar River Watershed, which supplies drinking water to Seattle, innovative precautions are taken to protect the watershed. The line is the first of several transmission infrastructure improvements, including the new Grand Coulee-Bell and Schultz-Wautoma 500-kV lines that were dedicated in December 2004 and December 2005, respectively.



March 12, 2004 – BPA respecifies its long-term vision, releasing its long-term Strategic Direction paper and adopting four pillars of its business: high reliability, low rates, environmental stewardship and regional accountability.

June 2, 2004 – BPA celebrates modernization of the Celilo Converter Station. The project replaced 30-year-old mercury arc valves with state-of-the-art solid state converters. The modernization is expected to maintain the 3,100-MW Direct Current Intertie capacity for another 30 years.

Dec. 9, 2004 – BPA is presented with the "Star of Energy" from the Alliance to Save Energy for being the premier public power entity engaged in energy efficiency. The prestigious Natural Resource Defense Council had nominated BPA for the honor.

Sept. 8, 2005 – BPA sends six large portable generators to the Oregon National Guard for delivery to Louisiana to help power health facilities in the areas devastated by Hurricane Katrina. BPA also lends staff help to the restoration effort.

Oct. 1, 2005 – A new power rate goes into effect that is 7.5 percent lower than the previous year's rate, clear evidence that BPA has recovered financial stability after the West Coast energy crisis.

June 14, 2007 – A long-standing agency tradition is honored as BPA's Science Bowl receives a communications management award from the Oregon Columbia International Association of Business communicators. The judges noted the "impressive volunteerism" involved and called it a "model" for other companies taking on an annual activity. Dozens of BPA employees and others volunteer each year to host over 500 middle and high school students. The Science Bowl encourages students to excel in math and science.







