

RESOLUTION NO. 2505

June 25, 2019

**A RESOLUTION OF PUBLIC UTILITY DISTRICT NO. 1 OF BENTON COUNTY, WASHINGTON IN
SUPPORT OF THE FEDERAL COLUMBIA RIVER POWER SYSTEM AND
THE FOUR LOWER SNAKE RIVER DAMS**

WHEREAS, Customers of Public Utility District No. 1 of Benton County, Washington, hereinafter referred to as “the District,” receive 82 percent of their power from hydroelectricity produced by the Federal Columbia River Power System (FCRPS); AND

ENERGY, CAPACITY & FLEXIBILITY

WHEREAS, the useful output of a power station is measured in two ways: energy and capacity and, by either measure, the Lower Snake River Dams are major power plants; AND

WHEREAS, The Lower Snake River Dams produce approximately 1,000 aMW of carbon-free power annually, nearly enough to serve 450,000 Northwest businesses, industries and households over the course of a year, representing a city approximately the size of the City of Seattle; AND

WHEREAS, the Bonneville Power Administration (BPA) markets power from 31 federal dams of the FCRPS, including the Lower Snake River Dams; AND

WHEREAS, BPA has identified the Lower Snake River Dams to be critical in supporting peak power generation most of the year, providing up to one quarter of BPA’s operating reserves. BPA is required to hold these reserves to ensure the reliability of the grid; AND

WHEREAS, Only the 10 largest of the 31 federal dams, including the Lower Snake River Dams, have Automatic Generation Control (AGC), a critical generation feature which provides automatic signals to these few dams to instantly increase or decrease generation in order to maintain the constant balance of generation and loads, or electrical demand, which is necessary for power system reliability; AND

WHEREAS, Out of the 31 dams in the federal system, the Lower Snake River Dams are some of the least expensive to operate and therefore provide some of the greatest value for BPA ratepayers. According to BPA, the cost of power from these dams, ranging from \$10 to \$14 per megawatt-hour, makes them some of the most affordable power resources in the federal power system; AND

HIGH-VOLTAGE TRANSMISSION SYSTEM VALUE

WHEREAS, Because of their location on the east side of the Cascades and the size of their generators, the Lower Snake River Dams are critical links in the carefully synchronized operation of the Northwest's hydropower system; AND

WHEREAS, The 500-kilovolt transmission lines that run from western Montana to eastern Washington were designed to integrate the Lower Snake River Dams to keep energy flowing and the electric grid stable; AND

WHEREAS, According to BPA, Ice Harbor Dam is critical for transmission operations because it provides support in both power and voltage to the Tri-Cities area especially during high-demand periods. If Ice Harbor Dam were breached, either costly new generation or significant transmission reinforcements would be needed to meet Tri-Cities power loads, especially during the high-demand periods of the summer; AND

CARBON-FREE RESOURCE VALUE

WHEREAS, The State of Washington has passed legislation calling for 100% of all electric utility retail sales to be supplied by carbon-free resources by 2045 with an intermediate goal of 80% of retail sales to be supplied by carbon-free resources by 2030; AND

WHEREAS, An extensive study conducted by Energy & Environmental Economics (E3) titled Pacific Northwest Low Carbon Scenario Analysis (E3 Low Carbon Analysis) was published in December 2017 to evaluate the Pacific Northwest's deep decarbonization goals and how best to achieve least-cost carbon emission reductions within the electric sector; AND

WHEREAS, The E3 Low Carbon Analysis studied many scenarios, one of which evaluated the cost to replace 2,000 aMW of existing carbon-free hydroelectric or nuclear resources including replacement of both the energy (the total amount of generation produced over the course of the year) and the capacity (the ability to produce power over sustained periods when needed for system reliability) associated with those resources; AND

WHEREAS, The E3 Low Carbon Analysis, under a scenario where a goal has been set to achieve an 80% reduction in carbon emissions from 1990 levels by 2050, determined that 5,600 MW of wind and solar would be required to produce the equivalent energy from the retiring resources, and an additional 1,900 MW of new natural gas turbines would be required to provide a comparable level of capacity. The cost of these replacement resources would be an additional \$1.6 billion per year in 2050; AND

RESOURCE ADEQUACY VALUE

WHEREAS, under the sponsorship of 3 investor-owned utilities and 10 public utilities, E3 published a second study in March 2019 titled *Resource Adequacy in the Pacific Northwest* (E3 Resource Adequacy Study) which found that 8,000 MW of new firm capacity is needed by 2030 to meet load growth and to replace 3,000 MW of coal generation retirements planned by 2030; if all coal is retired in the region, then 16,000 MW of new firm capacity would be required; AND

WHEREAS, per the E3 Resource Adequacy Study, it would be extremely costly and impractical to replace this magnitude of firm generating capacity with solar, wind and storage due to the significant renewable overbuild and required transmission construction needed to maintain adequacy; AND

WHEREAS, removing up to 2,000 MW of 120 hour average sustainable winter capacity associated with the Lower Snake River Dams would only add to the forecasted Northwest resource capacity shortfall identified in the E3 Resource Adequacy Study; AND

ECONOMIC. NAVIGATION, IRRIGATION VALUE

WHEREAS, High technology firms have located facilities in the Pacific Northwest because of the availability of reliable, carbon-free hydropower, creating jobs and boosting local economies; AND

WHEREAS, The Federal hydro system enables irrigation for over 7 million acres of farmland producing \$8 billion in agricultural income; AND

WHEREAS, The Lower Snake River Dams enabled barging of approximately 9 million tons of cargo in 2014 valued at over \$3 billion; AND

WHEREAS, The Columbia Snake River System is the top wheat export gateway in the U.S. and in 2016, nearly 10% of all U.S. wheat exports moved through the Lower Snake River Dams. The 465-mile federal waterway provides access to internal markets for farmers as far as the Midwest; AND

WHEREAS, Over 3.5 million tons of cargo were barged on 244 four-barge tows on the Snake River in 2017, a year when the locks were closed for three months for maintenance. In comparison, it would have taken over 35,140 rail cars or 135,000 semi-trucks to carry this same cargo; AND

FISH & WILDLIFE

WHEREAS, The federal agencies responsible for the management of the FCRPS (BPA, Army Corps of Engineers, Bureau of Reclamation) operate the dams in compliance with the Biological Opinions (BiOps) approved by NOAA Fisheries in 2008/2010 (as supplemented in 2014), and in 2019; AND

WHEREAS, BPA has spent nearly \$17 billion in total spending on infrastructure and other fish restoration projects since 1978 including projects that address hydroelectric operations, habitat, hatcheries, and harvest; AND

WHEREAS, Investments made in accordance with the BiOps have successfully improved fish runs resulting in at least 96 percent of young salmon making it past each of the dams; AND

WHEREAS, In 2014, there were more chinook, sockeye, and coho salmon that returned to Bonneville Dam than any year since the first lower mainstream dam was built at Bonneville in 1938; AND

WHEREAS, Since 2017 there have been declines in salmon returns in rivers up and down the west coast that have been largely attributed to poor ocean conditions in preceding years. According to a 2019 NOAA Fisheries report, the ocean off the West Coast is shifting from several years of unusually warm conditions, toward a cooler and more productive regime that may begin to boost salmon returns in 2020; AND

WHEREAS, Relative to questions raised by the Southern Resident Orca Task Force, NOAA Fisheries issued a fact sheet in 2018 titled *Southern Resident Killer Whales and West Coast Chinook Salmon*. In that report, NOAA noted that in the last decade more Columbia/Snake River chinook salmon have returned past Bonneville Dam than at any other time since the dam was completed in 1938, while Puget Sound chinook salmon stocks are not showing improvement; AND

WHEREAS, The most recent Washington State budget set aside \$750,000 to study the economic and social impacts of the potential breaching or removal of the Lower Snake River Dams; AND


WHEREAS, The proposed study duplicates a more comprehensive effort that is several years underway by the federal agencies in the Columbia River Systems Operations Environmental Impact Statement (CRSO EIS) process.

NOW, THEREFORE BE IT HEREBY RESOLVED That the Commission of Public Utility District No. 1 of Benton County, Washington, supports the continued operation of the Lower Snake River Dams due to their importance to the reliability of the Northwest electric grid as well as for the carbon-free, renewable, reliable, and low-cost energy they provide making them an important component of a clean energy future.

BE IT FURTHER RESOLVED That, based on earlier studies and BiOps conducted by NOAA Fisheries, the Commission believes that salmon and dams can coexist. Public education must be undertaken as to other factors that have an impact on salmon survival including lost habitat, predation, and ocean conditions, as well as factors that have a more immediate impact on Orca survival such as vessel noise and pollution much of which occurs in the Puget Sound region.

BE IT FURTHER RESOLVED That, given that the CRSO EIS process is well-underway and expected to be concluded in 2020, the Commission believes the \$750,000 allocated to study the impacts of the removal of the Lower Snake River Dams to be duplicative and wasteful and should be reallocated to science-based, high-priority salmon restoration projects in the Puget Sound region that will have a direct impact on Orca survival in their primary habitat.

ADOPTED at an open meeting as required by law this 25th day of June 2019.



Jeffrey D. Hall, President

ATTEST:



Barry A. Bush, Secretary