Retain Columbia Generating Station through Its Lifecycle

WHEREAS Columbia Generating Station (Columbia) is a public power nuclear facility operated since 1984 by a joint action agency formed by the Washington State legislature in 1957, and is capable of delivering 1,190 megawatts (gross) of continuously available power to the grid, sufficient for 750,000 homes, or a city the size of Seattle and some of its outlying communities¹, while emitting virtually no greenhouse gases;

WHEREAS Columbia's power is generated at a cost of 4.7 – 5.2 cents per KWh (estimated through 2043) and provided at cost to the Bonneville Power Administration;

WHEREAS the used nuclear fuel from Columbia is safely and securely stored on site;

WHEREAS the Army Corps of Engineers recently revalidated Columbia, which sits three miles from and 90 feet above the Columbia River, as a "dry site" in the event of the area's worst-case flooding scenario, and recent evaluations conducted at the Hanford Site^{2,3} for the Nuclear Regulatory Commission are concluding that Columbia, including its used fuel storage systems, are at very low risk of failure due to credible seismic events;

WHEREAS Columbia is designed to operate safely for a 60-year lifecycle or more, and the Nuclear Regulatory Commission after a five-year license renewal application process was confident enough in the safety of Columbia's operation in 2012 to approve extension of Columbia's 40-year license, which was based solely on the typical amortization period for electric power plants, for an additional 20 years, thereby extending operation through 2043;

WHEREAS Columbia is third-largest source of carbon-free electricity in the State of Washington, after only Grand Coulee and Chief Joseph Dams, producing nearly 10 percent of the power generated within Washington State and representing 54 percent of Washington's non-hydro low-carbon power⁴;

WHEREAS Columbia power is continuously available regardless of weather conditions, and is therefore well suited to support reliable power grid baseload and capacity demand, including backing up increasing levels of intermittent renewable wind and solar power;

WHEREAS hydro, solar and wind electricity production is likely to become more dependent on weather conditions, snowmelt and streamflow patterns, thereby making more important power generation methodologies independent of these factors to support the grid and keep it resilient against failure;

¹ http://www.seattle.gov/light/pubs/annualrpt/2015/flipbook/index.html?page=1 (Seattle City Light's load is about 9.1 million megawatt-hours annually; Columbia averaged more than 9.5 million megawatt-hours annually during 2015 and 2016)

² http://www.nrc.gov/docs/ML1507/ML15078A243.pdf

³ http://adamswebsearch2.nrc.gov/webSearch2/view?AccessionNumber=ML15154B396

⁴ http://www.eia.gov/state/?sid=wa

WHEREAS Columbia's baseload power does not require a continuous fuel stream like coal and gas, making the facility less susceptible to disruption due to fuel supply breakdowns during extreme inclement weather conditions and other natural events that disrupt supply;

WHEREAS Columbia's output is roughly equivalent to three new baseload combined-cycle natural gas plants^{5,6}, which equates to a carbon-equivalent savings of keeping 600,000 cars off the road annually⁷;

WHEREAS replacement of Columbia's output would likely result in an immediate shift of 8.2 percent of our power to CO₂ power sources such as natural gas to support power grid baseload; potentially doubling the state's CO₂ emissions from natural gas by adding more than 3,000,000 tons of carbon to the atmosphere each year⁸, making attainment of Washington's greenhouse gas emission goals more difficult,

WHEREAS Columbia provides Washington State nearly 1,000 direct jobs and three times that number of indirect jobs; and 2015 and 2016 privilege tax payments averaging more than \$4.6 million annually that goes directly toward supporting community schools, fire and library districts, and other city and county services;

WHEREAS Columbia represents an investment in a large, continuously upgraded, and successfully operating low-carbon electrical power plant with at least a twenty-six-year expected remaining lifetime;

THEREFORE BE IT RESOLVED that Washington State Republicans acknowledge Columbia as a critical part of low-carbon electrical power generation in Washington State and the Pacific Northwest, for the above reasons; and

BE IT FURTHER RESOLVED that the Washington State Republicans recognize Columbia as contributing a "best value" to the state economy compared to all power replacement options;

THEREFORE BE IT FINALLY RESOLVED that the Washington State Republicans urge the Washington State legislature to support the retention of the Columbia Generating Station nuclear power plant through its useful life.

Signed by JM

Bill Berkman, Chairman, Benton County Republican Party

Submitted to the Benton County Republican Party January 17, 2017 Adopted by the Benton County Republican Party, Central Committee March 2, 2017.

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⁵ BPA

⁶ According to a 20144 study by HIS Cambridge Energy Research Associates, Boston, Mass., Columbia prevents 3.6 million metric tons of carbon dioxide emissions annually compared to the most feasible replacement option of efficient natural gas-fired generation.

⁷ http://www.southwestclimatechange.org/solutions/reducing-emissions/mmtco2-e: "One metric ton of CO2 is released to the atmosphere for every 103 gallons of gasoline used. Using a car that gets 25 miles to the gallon, that's just a bit more than 2,500 miles—about two months of driving for many Americans."

⁸ 8,760 hours x 90% capacity factor x 1,190 MWe x 700 lbs CO2 per MWh from the most efficient CCGT.