March 8, 2025

Position on Bills at 2025 Session of Oregon Legislature:

HB 3247 : Oppose

The Independent Party of Oregon opposes HB 3247, which would prohibit the Oregon Public Utility Commission (PUC) from authorizing or approving a plan by an electric company to retire an electric power generating facility that provides reliable or dispatchable electricity unless the electric company has acquired a presently available generating resource that can provide reliable or dispatchable electricity in an amount that is equal to or greater than the amount of reliable or dispatchable electricity that is provided by the electric power generating facility that the electric company proposes to retire.

HB 3247 seeks to destroy the deployment of renewable electricity generation resources feeding into the systems of Oregon's privately-owned utilities by erecting an entirely unnecessary "dispatchability" or “reliability” requirement for new resources, as existing fossil fueled power plants are retired.

The Pacific Northwest is adding large quantities of solar and wind generating resources. Considered individually, they are not "reliable" in the bill's definition (80% performance standard). Collectively, they are quite reliable. They are dispersed over wide areas, from Canada in the north to the border of Mexico in the south. When the wind is not blowing in the Columbia Gorge, it may well be blowing in the San Gorgonio Pass and elsewhere. Pacific Northwest utilities have access to California's solar and wind generation due to the Pacific Intertie transmission system. One of my projects while staff director of a subcommittee of the U.S. Congress in the 1980s was to expand that system with a third high capacity AC transmission line from the Oregon border into central California. It was built. A map of the interconnected grid follows my testimony.

Further, the Pacific Northwest can accept huge quantities of intermittent solar and wind generation due to its enormous storage batteries--the huge reservoirs behind dams on the Columbia River and Peace River in Canada. These are among the largest reservoirs in the world. They are dispatchable and can fill in energy, if solar and wind are underperforming. If existing hydroelectric output were ever insufficient, existing facilities could be supplemented with pumped storage systems to pump water uphill back into the reservoir when solar and wind power are plentiful.

The incomplete chart offered by John Charles proves the point. When solar and wind are underperforming, the hydropower system fills in the gap. John's chart is incomplete, because it graphs only BPA loads and resources, not Pacific Northwest regional loads and resources. BPA's load is about 8,000 average megawatts (aMW); PNW load

is 26,000 aMW. BPA has under contract only 33 MW of wind generation capacity; PNW utilities have 2,238 MW of wind, 479 MW of solar, and 158 MW of other renewable generating capacity. So his chart displays a very partial snapshot. Also, his chart leaves off "Interchange" transactions. The BPA chart following my testimony shows that such transactions--mostly with California utilities--are very significant.

Also, the Northwest Power Planning Council (NPPC) charts below it are much more complete snapshots of PNW loads and resources (during the July 2024 heatwave and during the January 2024 winter storm). Notice how the hydroelectric system balances the loads and resources by fluctuating widely during each day. Also notice that in summer the PNW is exporting large amounts of power to California, while in winter the PNW is importing large amounts of power.

Further, solar and wind facilities can be backed up with chemical batteries, although that is not necessary in the Pacific Northwest due to the large hydroelectric reservoirs. Even when the cost of batteries is included, new wind generation is no more expensive that new gas-fired generation, according to Lazard, the international financial advisor and asset management firm (see table after my testimony).

There is no reason to replace retiring fossil-fueled or nuclear plants with more of the same. HB 3247 is a gas company bailout bill.

Independent Party of Oregon

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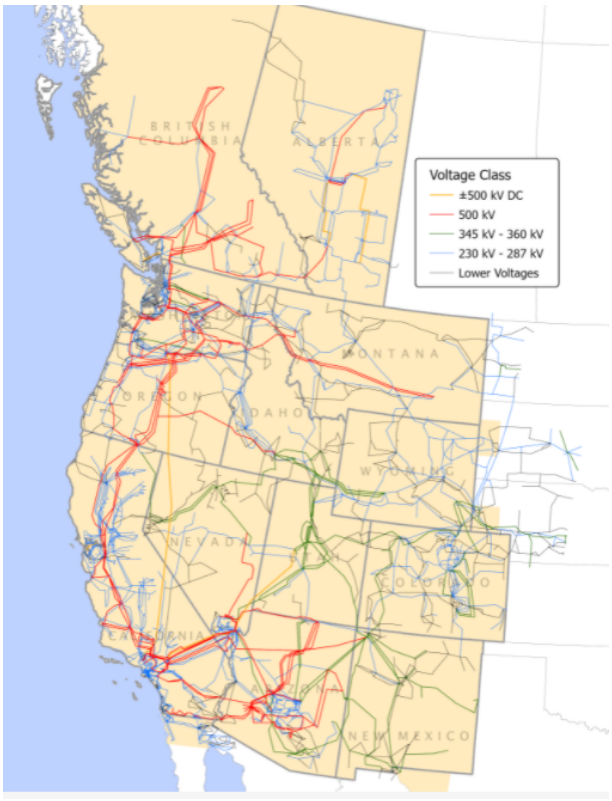
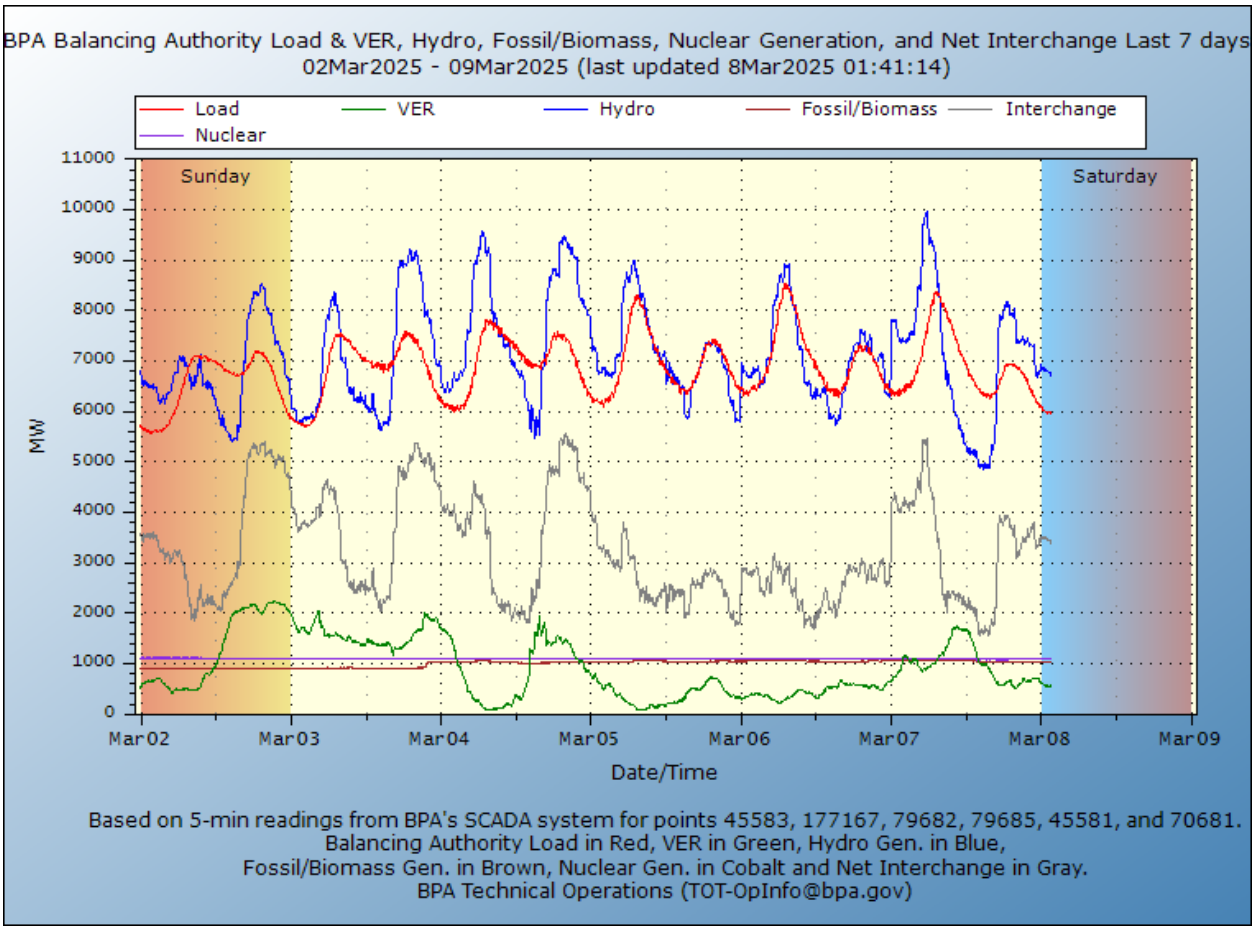
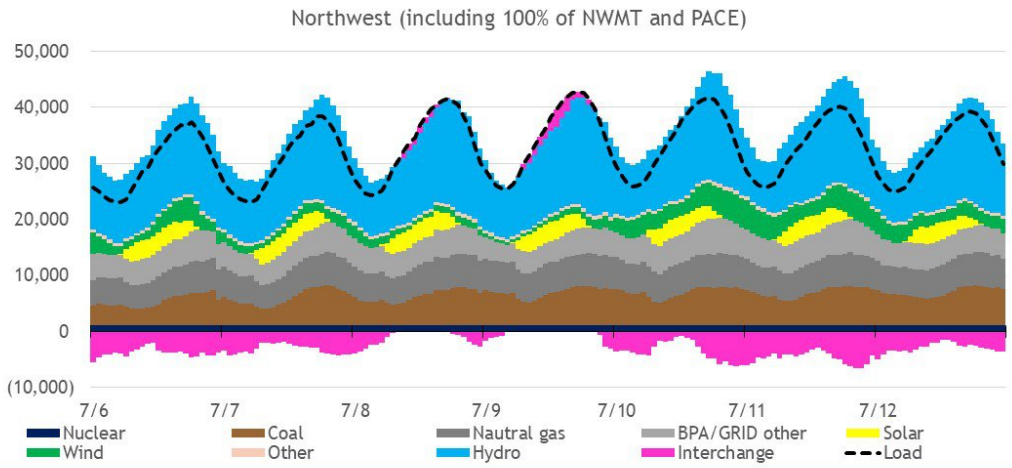

Voltage Class
±500 kV DC
500 kV
345 kV - 360 kV
230 kV - 287 kV
Lower Voltages
BRITISH COLUMBIA
ALBERTA
MONTANA
OREGON
IDAHO
WYOMING
NEVADA
COLORADO
CALIFORNIA
NEW MEXICO

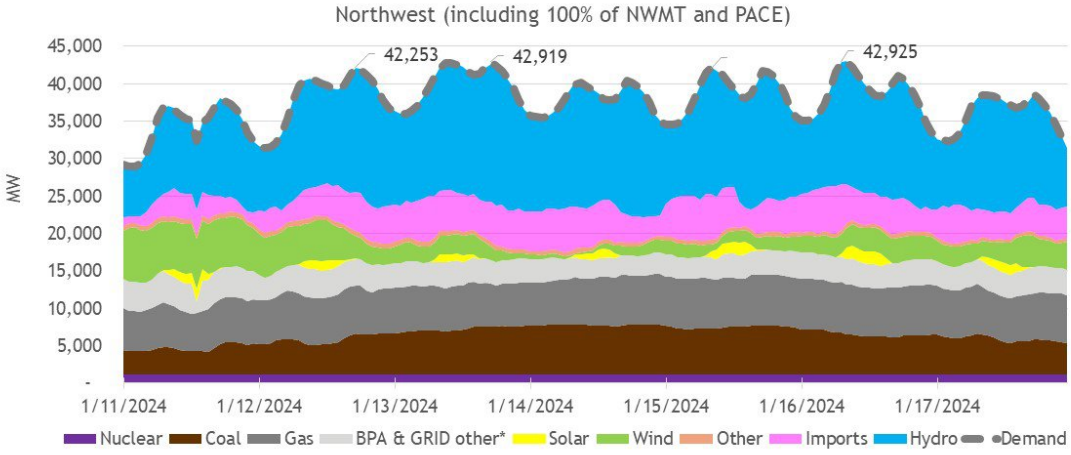

BPA Balancing Authority Load & VER, Hydro, Fossil/Biomass, Nuclear Generation, and Net Interchange Last 7 days
02Mar2025 - 09Mar2025 (last updated 8Mar2025 01:41:14)
Load
VER
Hydro
Fossil/Biomass
Interchange
Nuclear
Sunday
Saturday
MW
11000
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
Mar02
Mar03
Mar04
Mar05
Mar06
Mar07
Mar08
Mar09
Date/Time
Based on 5-min readings from BPA's SCADA system for points 45583, 177167, 79682, 79685, 45581, and 70681.
Balancing Authority Load in Red, VER in Green, Hydro Gen. in Blue,
Fossil/Biomass Gen. in Brown, Nuclear Gen. in Cobalt and Net Interchange in Gray.
BPA Technical Operations (TOT-OpInfo@bpa.gov)

Northwest resource usage *(larger area than NWPCC)*



EIA form 930 data. Data have been edited to address discrepancies; some discrepancies may still exist. Includes the BAs of PACE, PACW, PGE, BPAT, SCL, TWPR, PSEI, CHPD, DOPD, GCPD, AVA, AVRN, IPCO, NWMT, WWA, GWA, plus the coal and BPA import portion of GRID.

Resource stack (*approximate*)

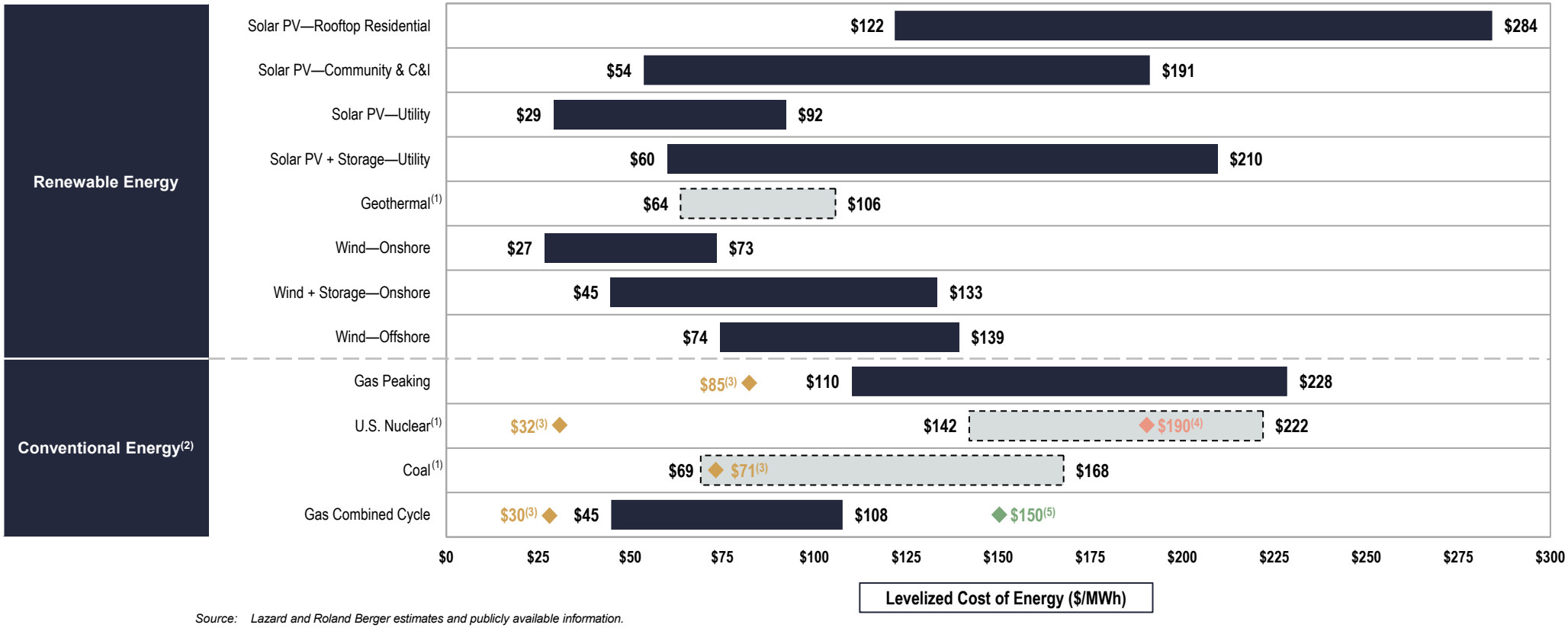


**"BPA & GRID other" is likely mostly natural gas plants*

EIA form 930 data. Data have been edited to address discrepancies; some discrepancies may still exist. Includes the BAs of PACE, PACW, PGE, BPAT, SCL, TWPR, PSEI, CHPD, DOPD, GCPD, AVA, AVRN, IPCO, NWMT, WWA, GWA, plus the BPA import portion of GRID.

Levelized Cost of Energy Comparison—Version 17.0

Selected renewable energy generation technologies remain cost-competitive with conventional generation technologies under certain circumstances



Source: *Lazard and Roland Berger estimates and publicly available information.*

Note: Here and throughout this analysis, unless otherwise indicated, the analysis assumes 60% debt at an 8% interest rate and 40% equity at a 12% cost. See page titled "Levelized Cost of Energy Comparison—Sensitivity to Cost of Capital" for cost of capital sensitivities.

(1) Given the limited public and/or observable data available for new-build geothermal, coal and nuclear projects the LCOE presented herein reflects Lazard's LCOE v14.0 results adjusted for inflation and, for nuclear, are based on then-estimated costs of the Vogtle Plant. Coal LCOE does not include cost of transportation and storage.

(2) The fuel cost assumptions for Lazard's LCOE analysis of gas-fired generation, coal-fired generation and nuclear generation resources are $3.45/MMBTU, $1.47/MMBTU and $0.85/MMBTU respectively, for year-over-year comparison purposes. See page titled "Levelized Cost of Energy Comparison—Sensitivity to Fuel Prices" for fuel price sensitivities.

(3) Reflects the average of the high and low LCOE marginal cost of operating fully depreciated gas peaking, gas combined cycle, coal and nuclear facilities, inclusive of decommissioning costs for nuclear facilities. Analysis assumes that the salvage value for a decommissioned gas or coal asset is equivalent to its decommissioning and site restoration costs. Inputs are derived from a benchmark of operating gas, coal and nuclear assets across the U.S. Capacity factors, fuel, variable and fixed operating expenses are based on upper- and lower-quartile estimates derived from Lazard's research. See page titled "Levelized Cost of Energy Comparison—New Build Renewable Energy vs. Marginal Cost of Existing Conventional Generation" for additional details.

(4) Represents the illustrative midpoint LCOE for Vogtle nuclear plant units 3 and 4 based on publicly available estimates. Total operating capacity of ~2.2 GW, total capital cost of ~$31.5 billion, capacity factor of ~97%, operating life of 60 – 80 years and other operating parameters estimated by Lazard's LCOE v14.0 results adjusted for inflation. See Appendix for more details.

(5) Reflects the LCOE of the observed high case gas combined cycle inputs using a 20% blend of green hydrogen by volume (i.e., hydrogen produced from an electrolyzer powered by a mix of wind and solar generation and stored in a nearby salt cavern). No plant modifications are assumed beyond a 2% increase to the plant's heat rate. The corresponding fuel cost is $6.66/MMBTU, assuming ~$5.25/kg for green hydrogen (unsubsidized PEM). See LCOH—Version 4.0 for additional information.