NW Energy Coalition

Biden Administration salmon recovery and tribal commitment supports an affordable and reliable power system

The energy provisions of the Biden Administration's recent Columbia River salmon recovery agreement charts a path toward improving power system reliability, maintaining affordability, and achieving our climate goals. The agreement also pauses litigation that could lead to greater uncertainty.

Providing federal support to advance new Tribal energy development and analysis of regional energy needs and reliability are the lead energy commitments. These two components lay the groundwork so the region is ready to meet its salmon recovery obligations and address hydro system changes necessary to support recovery, and meet climate and clean energy goals.

All the efforts detailed below will improve power system reliability, enhance efficient use of resources and transmission lines, support decarbonization and salmon recovery. The region has a history of successfully managing these types of transitions before, such as adding 10,700 megawatts of wind and solar over the past 20 years to phase out fossil fuels. Planning for change is the critical first step. These commitments explicitly call for comprehensive planning, analysis and development efforts to ensure that the next wave of new clean and renewable resources effectively support salmon recovery efforts, tribal interests, decarbonization of the grid, and maintains a reliable energy system.

Clean energy resources are under development and will cost less than the status quo

- The agreement commits the Administration to provide assistance and funding to Northwest Tribal nations in developing 1,000 – 3,000 megawatts of new clean energy and storage resources for the Northwest. Federal support for these and other projects can help maintain affordable power rates by distributing the cost of new and replacement resources away from Bonneville Power Administration (BPA) customers.

- These new resources are in addition to significant clean energy development by the region's investor-owned utilities and some public power utilities, which by 2033 plan to acquire over 18,000 megawatts of wind, solar, storage, hydro upgrades, and customer-side resources[1]. Together, all of these new resources are to meet growing electric loads, closing fossil fuel generation, and replacing the energy services of the lower Snake River (LSR) dams, if Congress authorizes breach of those dams. The new resource development underway is many times more than the output of the LSR dams and is more than the projected load growth and expected fossil resource retirements in 2032.

- The costs of new wind, solar, and storage have dropped by 50% over the past five years, a trend expected to continue[2]. The cost estimate for new resources must always be compared to the cost of the status quo. For example, existing hydropower turbines in the LSR dams start reaching the end of their operating life

[1] Northwest Regional Forecast of Loads and Resources August 2023-July 2033, Pacific Northwest Utility Coordinating Committee, May 2023.
[2] 2023 Electricity Annual Technology Baseline, National Renewable Energy Laboratory. https://atb.nrel.gov/electricity/2023/index

over the next decade, replacement of the turbines is anticipated eventually to cost over $1 billion. In addition, BPA's current annual fish and wildlife program budget is almost $500 million. BPA estimates that the direct cost, BPA is committing $30 million a year for ten years, of the additional lower Columbia & Snake fish and wildlife portions of this agreement for BPA will be a 0.7 percent increase in BPA's annual wholesale power rates. This roughly translates into 25 cents per month for BPA's full requirements customers and less than that for customers who only get a portion of their power from BPA.

Transmission Upgrades, New Power Markets and Better Energy Planning will ensure a reliable, affordable grid, and support salmon and Tribes

- The Western Resource Adequacy Program is a first-of-its-kind regional collaboration amongst utilities, resource developers, BPA, states, and stakeholders to plan and coordinate to meet adequacy and capacity needs.

- There is a West-wide transmission upgrade and planning conversation underway today to map out and plan for improvements to the existing power grid and identify new transmission line needs. And BPA is moving forward with near term transmission system upgrades and improvements to support new clean energy projects and to make the system more efficient. This will be an ongoing need and an important part of ensuring reliability and access to affordable new resources.

- There is a major effort going into developing a West-wide power market that will increase the efficient and economic use of clean energy resources across the West. Creating a broader market for utilities and BPA to more effectively sell and buy resources to meet customer demands is key to taking pressure off of federal hydropower resources. A West-wide market is important to providing resiliency during extreme weather events, such as winter cold snaps and summer heat waves.

A diverse portfolio of clean energy resources maintains and improves reliability

- Climate change is impacting precipitation and therefore increasingly low hydro flows, particularly during late-summer peaks, are putting BPA at risk[3]. A diverse portfolio of wind, solar, storage, and customer-side resources (energy efficiency, demand response, and rooftop solar) to supplement variable hydropower, will help reduce costs and increase price stability.

- Salmon recovery efforts will require federal hydrosystem changes as outlined in the Biden Administration and Six Sovereigns commitments. Planning now to address forthcoming changes and being prepared with new clean energy resources to improve electric system services is key to affordability.

- The commitments launch a comprehensive regional energy needs analysis that expands on the regional planning done by the Northwest Power and Conservation Council. This far-reaching analysis will examine what the Northwest power system needs when we address salmon recovery and decarbonization compared to what we currently have which will not meet our needs in the future. For example, LSR power generation is highly seasonal: 51% of the LSR dams' annual output is from March to June. New clean energy resources can improve these energy services, boosting output to meet late-summer and mid-winter peaks, when power is most needed, resulting in better year-round reliability.

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[3] https://www.seattletimes.com/seattle-news/environment/wa-drinking-water-hydropower-at-risk-as-pnw-snowpack-shrinks/