TESTIMONY OF JOHN HAIRSTON ADMINISTRATOR AND CHIEF EXECUTIVE OFFICER BONNEVILLE POWER ADMINISTRATION

HEARING ON H.R. 4045 HYDROPOWER CLEAN ENERGY FUTURE ACT

BEFORE THE SUBCOMMITTEE ON ENERGY, CLIMATE AND GRID SECURITY COMMITTEE ON ENERGY AND COMMERCE

SEPTEMBER 20, 2023

Good morning, Mr. Chairman. My name is John Hairston and I am the Administrator of the Bonneville Power Administration. Bonneville is a Federal Power Marketing Administration within the United States Department of Energy and is headquartered in Portland, Oregon.

HR 4045 primarily focuses on the Federal Energy Regulatory Commission licensing process for non-Federal hydropower facilities, and therefore pertains to matters that are largely outside of the Bonneville Power Administration (BPA) authorities. However, I am able to speak to the operations of, and investments in, Federal hydropower in the Pacific Northwest that provides significant economic and clean energy benefits to our region.

Bonneville serves a 300,000 square mile area that includes Oregon, Washington, Idaho, western Montana, and parts of northern California, Nevada, Utah, and Wyoming. Bonneville markets the electric power produced from 31 Federal hydroelectric projects operated by the U.S. Army Corps

of Engineers (Corps) and the Bureau of Reclamation (Reclamation). Bonneville also acquires non-Federal power generation to meet the needs of its customer utilities, including the power from one nuclear power plant, the Columbia Generating Station, located just north of Richland, Washington.

OVERVIEW OF FEDERAL HYDRO OPERATIONS AND FISH AND WILDLIFE MITIGATION

Congress authorized the Corps and Reclamation to construct, operate, and maintain the 31 Federal dams of the Federal Columbia River Power System (FCRPS). These dams are operated to meet multiple specified purposes, including flood risk management, navigation, hydropower generation, irrigation, fish and wildlife, recreation, and municipal and industrial water supply.

BPA is authorized to market and transmit the power generated by coordinated system operations and to mitigate the effect of their construction and operation on fish and wildlife.

It is important to emphasize that Bonneville is not for profit. Bonneville finances capital expenditures for the joint costs and power facilities of the FCRPS through the U.S. Treasury and repays that financing at market interest rates from sales to its customers. Bonneville finances its operations with a business-type budget based on the self-financing authority, including U.S. Treasury borrowing authority, provided by the Federal Columbia River Transmission System Act of 1974 (Transmission Act, Public Law 93-454) and other various legislation for energy conservation, renewable energy resources, capital fish facilities, and other purposes. Bonneville does not receive annual appropriations.

Built and put into service between 1938 and 1976, the FCRPS provides valuable social and economic benefits to the region: flood risk management, navigation, water supply, and 8,500 average megawatts of power (equivalent to the power needs of eight cities the size of Seattle). Each of these services support both the regional and national economy. And of importance to Bonneville, the system is the source of affordable, reliable, and renewable carbon pollution-free power generation while providing the region with some of the least carbon intensive electricity in the country.

While the system brings benefits to the region, the FCRPS also has adverse impacts on salmon, steelhead, and other native fish populations in the Columbia River Basin. These fish are a tremendous value to the region and to the Tribal Nations in the Basin. As a result, the FCRPS made extensive modifications and operational changes to mitigate the impacts of the system's construction and continued operation on fish and wildlife. Since the 1980 Northwest Electric Power Planning and Conservation Act, Bonneville has invested billions of dollars in improved configuration and operation of the dams, as well as in offsite restoration efforts for the benefit of fish and wildlife sponsored by Tribes, States, other Federal agencies, and rural communities.

VALUE OF HYDROPOWER IN EVOLVING WESTERN ELECTRICITY MARKET

I'd like to call attention to three particular attributes of hydropower that make it especially valuable in the evolving Western electricity market.

- *Hydropower is highly reliable and dispatchable:* Columbia River hydropower provides dependable electricity generation around the clock and through every season of the year. For example, here in the Pacific Northwest, our coldest weather can last for many days as high-

pressure systems stagnate over the region. Similarly, heat waves, such as what our region experienced this summer, drive peak electrical demand requiring sustained generation for days.

The hydro system is planned for and capable of meeting sustained periods of high demand – keeping the region warm in winter and cool in summer.

As a large amount of wind generation develops in the region, the Federal hydropower system compensates for the variable nature of wind and preserves reliability during periods of low wind generation, which often coincide with extreme heat or cold weather conditions.

The FCRPS also supplies carbon pollution-free peaking capacity that is difficult to replace with alternative renewable resources. The 8,500 average megawatts of renewable carbon pollution-free electricity reduces the need to use higher carbon-emitting resources, like natural gas and coal plants.

- Hydropower is important to the regional economy: Low-cost Federal hydropower has brought major benefits and opportunities to this region's economy since the times of the Great Depression and World War II. Today, Federal power continues to serve many remote rural communities across the Northwest with few other economic advantages to offer industry and businesses. The new manufacturing economy in much of the Northwest is more technologically advanced than ever, and these manufacturers depend on reliable electricity with stable voltage and near-zero interruptions.
- *Hydropower contributes clean energy:* Responding to state mandates, Federal incentives and the declining cost of technology, much of the West is attempting to meet clean electricity goals through other renewable resources, particularly wind and solar. As these variable resources

grow in the Western Interconnection, hydro offers adaptable operational capability to integrate them reliably and at low cost.

In conclusion, Mr. Chairman, I am pleased to say that Federal hydropower remains the cornerstone of the Pacific Northwest's clean energy economy. It will continue that role for decades to come through prudent investment and stewardship.