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Testimony on:

H.R. 9969, to provide for a memorandum of understanding to address the impacts of a certain record of decision on the Upper Colorado River Basin Fund.

U.S. House Natural Resources Committee
Subcommittee on Water, Wildlife, and Fisheries

November 20, 2024

Chairman Bentz, Ranking Member Huffman, and Members of the Committee, thank you for the opportunity to testify today on this important bill.

Background Information:

Wyoming Municipal Power Agency (WMPA)

The Wyoming Municipal Power Agency (WMPA) is a joint powers board and not-for-profit entity formed under the laws of the State of Wyoming to provide electricity to its member communities. WMPA's members are the municipalities of Cody, Fort Laramie, Guernsey, Lingle, Lusk, Pine Bluffs, Powell, and Wheatland. These members supply power to approximately 25,000 residents of the approximately 584,000 residents of the State of Wyoming. The joint powers agreement directs WMPA to obtain power and energy required to meet the needs of its members and their residents in the "most economical and feasible manner."

What is the Colorado River Storage Project (CRSP)?

CRSP was authorized in the Colorado River Storage Project Act of 1956 (P.L. 485, 84th Cong., 70 Stat. 50) as a multi-purpose federal project that provides flood control, water storage for irrigation, municipal and industrial purposes, in addition to the generation of electricity. The Bureau of Reclamation (Reclamation) operates the hydropower generation facilities of the CRSP, while the Western Area Power Administration (WAPA) operates the transmission facilities and markets the hydropower to 155 wholesale customers in the Colorado River Basin. WAPA is a federal organization under the Department of Energy that markets and delivers power from federal hydroelectric dams, including Glen Canyon Dam on Lake Powell. Glen Canyon Dam, located near Page, Arizona, is the largest CRSP hydropower facility, and just completed its 60th year of generating carbon-free renewable hydropower. WMPA receives cost-based hydropower electricity from CRSP.

Who benefits from the Glen Canyon Dam Generation?

Cities, towns, rural electric cooperatives, tribes, state and federal agencies, irrigation districts, and public utility districts called *preference customers* buy the electricity generated from Glen Canyon Dam and other CRSP generators. According to Reclamation's website the *preference customers* are not-for-profit and are often in disadvantaged markets due to their location or dispersed population base. The CRSP *preference customers* including WMPA executed long-term contracts with WAPA to purchase CRSP power to serve five million people who live in the Colorado River Basin.

What costs do *Preference Customers* pay?

Preference customers pay the direct operations and maintenance costs as well as repaying the federal government for its original investment in the generation and transmission facilities plus interest, capital replacements, and purchase power costs. WAPA incurs replacement power costs when Glen Canyon Dam cannot generate sufficient capacity and energy to meet its federal government contractual obligations. This typically occurs when drought, regulatory requirements, or experiments restrict generation. *Preference customers* pay for the contractual amount of capacity whether received or not and pay for the actual amount of energy used. *Preference customers* fund non-power statutory obligations.

What role does WAPA play?

WAPA sells generation from Reclamation's operation and management of the federal hydroelectric dams. WAPA deposits the revenue from *preference customers* into the Upper Colorado River Basin Fund (Basin Fund).

How has drought affected the Glen Canyon Dam?

During the prolonged drought, CRSP hydropower dams produced much less power compared to pre-drought levels. Overall, the average annual generation at CRSP facilities during the drought (2000-2023) was 18% lower than pre-drought (1988-1999) generation levels. Decreased generation is more pronounced now as reservoir levels have dwindled to unprecedented lows. Environmental experiments further reduce or restrict the generation of this carbon-free resource.

Due to the drought conditions, Lake Powell's elevation level resulted in warmer water, which is conducive to non-native fish species spawning. Non-native fish species are known predators of and competitors with the threatened humpback chub. Following years of action and millions of dollars spent, the humpback chub in 2021 was downlisted from

endangered to threatened under the Endangered Species Act (ESA). The largest population of humpback chub live in the Grand Canyon.

The Smallmouth Bass Experiment

In the summer of 2022, the National Park Service discovered non-native invasive smallmouth bass in the Colorado River below Glen Canyon Dam. Reclamation began an environmental assessment process, which later resulted in an environmental impact statement (EIS) and record of decision (ROD) titled “Supplement to the 2016 Glen Canyon Dam Long-Term Experimental and Management Plan Record of Decision” and issued July 3, 2024. The implementation of that Decision resulted in an experiment designed to cool down the river sixty-one miles below Glen Canyon Dam. To cool the river, Reclamation released water from the lower outlet works of the dam, drawing colder water in to mix with the higher elevation, warmer water. This “cool mix” experiment results in water bypassing the generators, therefore not producing hydropower.

The small mouth bass experiment has also had impacts beyond those experienced by the Basin Fund, as replacement power that WAPA purchases on the open market has CO2 impacts because renewable, zero-carbon hydropower generation is replaced with power that comes from a wide array of generation sources. As outlined in the Final Supplemental Environmental Impact Statement (FSEIS), over a 20-year period, this impact is equivalent to the annual CO2 emissions of 76,126 metric tons (gas replacement) to 242,271 metric tons (coal replacement), which translates to the emissions of 18,118 to 57,661 passenger vehicles.

To meet its contractual obligations, WAPA purchases power to replace generation not produced during the environmental experiments that bypass the Glen Canyon Dam generators. WAPA pays the cost of the replacement power with funds from the Basin Fund to meet its contractual obligations.

The primary source of power to replace lost generation during the first experiments conducted this year was thermal power bought on the open market during the middle of the hottest Arizona summer on record. WAPA has approximated the added cost this summer/fall to be \$20,000,000.

What is the Upper Colorado Basin Fund?

The Upper Colorado River Basin Fund (Basin Fund), authorized by Congress under the CRSP Act as a separate revolving fund in the United States Treasury, pays for operations and maintenance costs, repays the federal government for its initial and ongoing investment in the generation and transmission facilities plus interest, capital replacements, irrigation

costs that exceed the irrigators' ability to pay, the Salinity program, purchased power costs, and environmental programs. The Basin Fund does not rely on federal appropriations.

Due to the extended extreme drought in the Colorado River Basin, the Basin Fund has been at risk of deficiency due to reduced generation levels and replacement power costs. Further, WAPA pays environmental experiment costs from the Basin Fund, managed by WAPA and funded primarily by revenue earned from *preference customers*. These added costs reduce the amount of funds available in the Basin Fund to pay for infrastructure and maintenance.

How does Glen Canyon Dam generation help provide reliable electricity?

People want reliable electricity but seldom discuss how and what reliability means from the electrical grid perspective. Reliability depends not only on infrastructure and maintenance, but on dispatchable generation. Glen Canyon Dam is a source of clean, dispatchable electricity.

Reliability in the electrical grid sense means that as generation must always exactly match customer usage. This is physics; there are no exceptions. When generation cannot increase to match customer usage, then a utility must turn off power to enough customers to reduce usage to match the generation available. This situation happened during winter storm Uri in Texas and had very tragic results.

Not all electrical generators can adjust the electricity needs of customers. Historically, utilities controlled the fuel supply of generators to match their customers' demands. Fuel types such as coal, oil, gas, nuclear, and water adjust to the amount of electricity that customers want. The industry calls these dispatchable resources. Utilities cannot control the fuel supply of wind and solar resources, so it is impossible to use these generators to exactly match customers' demands. The industry calls these non-dispatchable resources. While people tend to become politically divided on types of resources, the purpose of this explanation is to provide information about the physical abilities of different resources to respond to customers' electrical usage.

As the generation mix in our country changes, the importance and economic value of clean, dispatchable resources such as hydropower becomes greater. Glen Canyon Dam is an excellent resource because it is clean, dispatchable, and affordable! Our nation needs to preserve this value and seek innovative ways to improve the value of Glen Canyon Dam.

Proposed Legislation

What purpose does this bill serve?

The purpose of H. R. 9969, introduced by Representative Hageman of Wyoming, is to require Reclamation and WAPA to consult with relevant Glen Canyon Dam stakeholders to address the impacts of a certain record of decision on the Upper Colorado River Basin Fund.

This legislation requires that Reclamation and WAPA, in consultation with the Glen Canyon Dam Adaptive Management Work Group, enter into a memorandum of understanding to explore and address establish a plan to address the affects that Reclamation's environmental experiment now underway will have on Basin Fund obligations and the impacts on hydropower generation and grid reliability. This legislation requires the plan to identify the impact that the ROD has on endangered or threatened species.

As the primary source of funding for the Basin Fund, hydropower customers are concerned about the ability of the Fund to meet its obligations that include routine operations, maintenance, and replacement of critical infrastructure that help ensure the long-term integrity of this resource. WMPA's members are especially concerned about diminished hydropower production and the resultant replacement costs to consumers. The impacts on not-for-profit utilities and their customers are significant.

Additionally, there is a concern about resource adequacy during summer months when surplus electricity generation is scarce and the possibility of inadequate supply to meet peak demand may result in rolling blackouts to balance the power grid and prevent a system failure.

H.R. 9969 recognizes these concerns and would require the federal agencies to consult with hydropower stakeholders to make a plan that addresses the numerous consequences of bypassing Glen Canyon Dam generators. Consumers feel these impacts already and the impending costs over the next three years are a significant concern to Basin Fund solvency and its ability to meet obligations.

What are WMPA's goals?

Preference customers are not-for-profit entities who must collect all costs incurred with providing electric service from the ratepayers. There are no shareholders. WMPA and other *preference customers* believe that these ESA-related costs should be borne or mitigated by non-power funding sources.

In conclusion,

Thank you for the opportunity to appear before the Subcommittee on this timely legislation.