



Via email address: – LTEMPSEIS@usbr.gov

November 3, 2023

U.S. Bureau of Reclamation
Attn: LTEMP SEIS Project Manager
125 South State Street, Suite 800
Salt Lake City, UT 84138

Subject: Notice Of Intent to prepare A Supplemental Environmental Impact Statement For the December 2016 Record Of Decision Entitled Glen Canyon Dam Long-Term Experimental And Management Plan, October 4, 2023

Dear LTEMP SEIS Project Manager,

On behalf of Utah Municipal Power Agency (UMPA), we submit the following comments in response to the NOI issued on October 4th, 2023.

Background

UMPA represents six Utah cities¹ receiving power and energy from contracts to the Colorado River Storage Project (CRSP) federal hydropower system. UMPA is a non-profit joint action agency under Utah's interlocal laws with the all-requirements and obligation to provide electricity to these six cities. UMPA is responsible for managing the CRSP contract and scheduling the federal hydropower. In 2020, the federal power was a major energy source for UMPA's member cities, supplying nearly 25% of its overall energy requirements.

Impacts from the drought have resulted in reducing our federal allocation by 40%, raising contract energy costs by 14%, and causing us to purchase replacement power in the energy market at higher prices and from gas fired sources. In 2022, UMPA's wholesale rates were increased by \$5.2 million, or about 11% increase caused from drought conditions. This impact along with other inflationary costs, supply chain challenges, and higher natural gas pricing are placing a strain on our ability to deliver reliable and affordable electricity to the customers.

UMPA's federal power is relatively minor compared to the more than five million customers across the regional states receiving federal power from CRSP. However, Glen Canyon Dam (GCD) and the federal facilities are major contributors to providing customers with clean, renewable (carbon-free) power to maintain the reliability of the grid and offer an affordable price

¹ UMPA member cities are Provo, Spanish Fork, Salem, Nephi, Levan, and Manti. These cities provide electrical service to over 60,000 residential and business customers.

to the consumers. Simply stated, any reduction in federal power from GCD compromises the integrity of the grid system and raises rates for our consumers.

UMPA and its largest member city, the City of Provo, are participating members in the Colorado River Energy Distributors Association (CREDA). We strongly support those comments filed by CREDA. We ask that those comments offered by CREDA supplement these comments for the record.

Establishment of Invasive Species.

UMPA is concerned that the invasive species and predators of the endangered fisheries are already established downstream. The slough continues to be a problem and has become a nursery for these invasive fish. Why is the focus on flows when this natural hatchery for invasive fishery is allowed to exist? Several attempts to fix the slough and chemical treat the fish over the years have yielded marginal results and failed to accomplish the end goal. Chemical treatments and the taking of life are discouraged by tribal partners. Until the slough is addressed appropriately based on technical recommendations by participating partners, results from the bypass flows or proposed Small Mouth Bass (SMB) flows offer little benefit.

UMPA is concerned that there is insufficient fishery data in many of the tributaries and springs feeding the Colorado River and providing warmer waters where existing breeding grounds offer refuge to these invasive species. More downstream assessments need to be conducted to better determine the establishment and population of the SMB and green sunfish. If these invasive species of fisheries are already established further downstream, then the proposed SMB flows being considered offer little value in protecting the endangered species. There are current statements that green sunfish already occur throughout the Grand Canyon in low numbers. Should we be concern about the potential impacts from dispersal? This seems to suggest that there is a lack of quantitative research on green sunfish movement or dispersal in response to flows. Is that showing the establishment of these predatory fishery?

Analyze SMB flow Options.

It is understandable that efforts are being made to protect the investment made to restore and promote the growth of endangered species. Millions of dollars have been spent from electric revenues and sound science provided by CRMRC over the years in protecting these fisheries. Although, there are several flows with mixing of the bypass tubes being analyzed to disrupt the spawning and reproduction cycles of these invasive species, the impacts to power production may not warrant the effort if the species are already established. With some of the higher flow patterns, there should be a concern that the invasive species are pushed downstream further into warm water conditions and no flows regime will be able to affect nor prevent their reproductive efforts. Pushing these invasive species further downstream is contrary to all prior efforts in protecting the populations of threatened humpback chub in and around the Little Colorado River and its confluence with the Colorado River mainstem.

If the Reclamation moves forward with a proposed flow to address the SMB what will the criteria for measuring success? It appears to us that there are still open discussions and debate among the experts on SMB and the benefits of the proposed flows. To the nonexpert, the proposed flow controls and justification is a based-on trial-and-error method. Without a good baseline of fishery data downstream, success could be a moving target with no clear outcomes. Any proposed flow patterns need to demonstrate clear and measurable objectives against the costs and other environmental attributes.

We propose that consideration be given to maintaining an elevation in Lake Powell to prevent the entrainment of these invasive species. If lake levels are high enough, this is clearly the best method to prevent entrainment. High lake levels help with better hydropower production with lesser flows.

Analyze new information regarding the sediment accounting window and HFE.

We concur with the efforts to better understand the changes and benefits of evaluating the added information regarding the sediment accounting window associated with the LTEMP High-Flow Experiment (HFE) protocol. Again, consideration should be focused on protecting the elevation of the lake for numerous reasons. Reclamation reported cavitation in the bypass tubes during the last HFE when the lake levels were low. The bypass tubes are an integral piece to the operations of the facilities and every effort to protect them should be considered.

Not only should conducting an HFE consider the sediment loads in the river but should consider the elevation of the lake. Any HFE during low lake levels, even with the use of the bypass, will promote the entrainment of these evasive species through the turbine tubes. Any operations that add to entrainment should be avoided.

The impacts by droughts and low inflow of water years should be appropriately applied to protect the lake levels in managing the water flows between the two dams. The lake level is becoming a significant driver in decision for HFE and managing the evasive species. HFE should not increase the risk of reaching minimum power pool. We should avoid any HFE during low elevation for the opportunity for entrainment of these evasive species.

In evaluating the impacts to power supply, the study should consider conducting Spring HFE during low consumptive months defined as shoulder months in the industry. There is a high likelihood of available replacement power and costs tend to be lower. It has been reported that Spring HFEs could be beneficial to the trout fisheries and detrimental to the spawning of these evasive species if they are not established.

Impacts to Hydropower and Basin Fund.

Any lost generation due to operating the bypass tubes for either SMB flows or HFEs will need to be replaced from power purchased on the market. The lost power generation will have a direct impact on regional market prices, transmission constraints, and financial basin obligations. As

shown in the past, CRSP power customers will be forced to replace the hydropower with more expensive replacement power. These financial burdens will significantly impact our communities for years and with no clear path to resolve the matter. UMPA's members serve regions that are considered underserved and disadvantaged populations.

The impacts caused by the drought in the West have resulted in higher power rates. We are concerned that conducting costly experiments will further expand this negative impact to consumers. One of the main missions of the GCD is to provide reliable and economic power to the region. Some of the proposed efforts to change flows and operations may undermine this important benefit to our business and residents.

Any replacement power from the loss of hydropower will not be solar or renewable energy. Utilities already subscribe to taking all the intermittent energy sources like wind and solar whenever it is available and utilities back down or ramp down the dispatchable power supplies from either coal fired or natural gas. If clean and renewable hydropower is not available, utilities are ramping up power supplies from carbon-based facilities contributing to greenhouse gases and air pollutants. Is the benefit worth trading the environment attributes and benefits of renewable hydropower with those generated by fossil fuels?

WAPA is the balancing authority for the operating region and must maintain sufficient generating capacity to continue serving its customer load. This is to ensure reliable power availability and uninterrupted service. As shown in the past, this is particularly important for emergency situations. In the event of a large loss of generation capacity, WAPA is called upon to provide emergency reserves within minutes. WAPA's ability to supply emergency assistance and maintain its anchor source for stabilizing the grid in the West are critical missions.

WAPA's basin fund cannot support the cost for the replacement power impacted by the proposed SMB flow options. The results will be passed on to the customers of WAPA. Besides UMPA members, other municipalities, rural co-operatives, and tribes will be impacted by additional costs. The study must fully examine these impacts on the utility consumers. Prior statements have been made to suggest that these impacts will be small caused by the new SMB flows. However, the replacement power costs may be grossly underestimated given all the different drivers affecting market rates. Prices will increase for all utilities in the market from the constraint of energy supplies, transmission path congestion and fuel conditions.

The impact to the "Basin Fund" managed by WAPA has not been adequately addressed. Failure to identify the funding for purchasing the replacement power required to offset the impact of the flow options is lacking. Protecting the endangered fishery below GCD is in the best interest of all the parties. However, placing the burden for funding these experimental fish flow options on the backs of the power customers is unfair. The power customer did not introduce the small mouth bass, a non-native fish, into Lake Powell. No one anticipated low lake elevation and entrainment of fish. The federal agencies should seek federal funding or use their federal budgets to address

this matter if the decision to proceed with by-pass flow happens. We ask that the study examine the beneficiary use and pay structure of GCD caused by the impacts of the drought. There are several beneficial uses with GCD not being recovered through an appropriate pay structure.

If low lake levels are predicted in the future, Reclamation should immediately begin the work on a barrier device in the forebay as discussed for the long-term solution to this challenge. The prior effort is deficient by only focusing on the mixing of flows using the bypass tubes to address the SMB matter and did not seriously examine other options.

We recognize the challenge for Reclamation in balancing the complex issues related to operating the dam. We support these efforts to address the interest of protecting the hydropower resource in balance with other social, cultural, tribal, and environmental purposes.

Respectfully,

Kevin Garlick
Kevin Garlick,
UMPA – SVP Generation
AMWG Member

Cc: Leslie James, CREDA