



MEMORANDUM
EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners McRae, Barofsky, Schlossberg, Brown, and Carlson
FROM: Brian Booth, Chief Energy Resources Officer; Megan Capper, Energy Resources Manager; Aaron Bush, Senior Energy Resource Analyst;
DATE: September 3, 2024
SUBJECT: Trail Bridge: BPA Exhibit A Updates
OBJECTIVE: Action

Issue

Staff is recommending that the Board authorize a resolution affirming EWEB's future actions to reduce and subsequently halt generation for power supply at the Trail Bridge Plant by a specific date. A background Correspondence Memorandum was provided to Commissioners, with similar content contained herein, at the August 6, 2024, Board Meeting packet (Linked [HERE](#)).

Summary

- EWEB is required to halt generation at Trail Bridge to benefit fish and needs to articulate a clear plan of action so that we may be eligible for replacement power from BPA.
- Timely removal of Trail Bridge from our BPA contract will likely result in additional Tier 1 cost-based power (between 1.5 to 3.3 aMW) from BPA through at least 2044.
- The attached resolution affirms EWEB's commitment to implement interim spill measures at Trail Bridge before September 30, 2025, as well as its commitment to long-term operational and structural changes for downstream fish passage that will result in ceasing generation at Trail Bridge for power supply purposes.

Background

As part of the 2019 FERC license for the Carmen-Smith Project, EWEB is required to halt generation at Trail Bridge to allow for downstream fish passage. Downstream fish passage, and cessation of generation, have been delayed due to unforeseen dam safety issues at the Project, resulting in protracted design and construction timelines.

When Trail Bridge is no longer generating, EWEB should be eligible for replacement power from BPA. However, the timing of this change, and the way it's communicated to BPA, will have an impact on the energy product that EWEB is eligible to receive. Staff are working to ensure the best outcome for EWEB's customers, and Board action will be required.

In fall 2024, BPA will begin processes to determine customer eligibility for both Tier 1 cost-based system power for the remaining three years of the current Regional Dialogue Slice contract (2026-2028 power deliveries), as well as the post-2028 Provider of Choice Contract. These processes require BPA customers, like EWEB, to declare changes (reductions) to the resources dedicated to serve their loads in Exhibit A of their BPA power contract by October 2024 to be eligible to receive replacement Tier 1 power. To make this declaration, staff will need to submit to BPA a Board-approved resolution that articulates EWEB's intent and plan of action. Declarations made after October 2024 may still be eligible to receive BPA power but not from the cost-based Tier 1 system.

BPA Requirements and Dedicated Resources

As a federal agency created by federal statute, BPA is subject to the 'rules and procedures' stipulated in those statutes. For this issue, the relevant statute is the Northwest Power Act of 1980, which requires BPA to serve preference customer load *net* of customers' own resources dedicated to serve that load. EWEB is a BPA preference customer and Trail Bridge is a 'dedicated resource' in Exhibit A of our BPA contract. This means that EWEB cannot purchase replacement power for Trail Bridge from BPA until it is removed from the contract. To do so, EWEB must meet the statutory resource removal requirements of the Northwest Power Act, discussed more below.

Loss, Retirement, and Obsolescence

To obtain replacement power, EWEB must successfully demonstrate that Trail Bridge meets at least one of the criteria below. Barring that outcome, EWEB may petition the BPA Administrator to use his discretion to nonetheless grant removal of Trail Bridge as a dedicated resource under EWEB's BPA contract, which would likely require a public process and comment period.

- Loss – the resource can no longer be used due to factors outside of EWEB's control, such as regulatory requirements or forces of nature.
- Retirement – the resource is no longer economically viable to operate. Operating costs, maintenance, or repair are greater than the cost to obtain replacement power and decommission the resource.
- Obsolescence – the resource can no longer be operated because it has deteriorated beyond operable condition, and/or replacement parts or fuel cannot be sourced to operate it.

Most recently (early 2024), BPA granted removal of the Leaburg Plant generators from EWEB's Exhibit A documentation. The path to removal of the Trail Bridge Plant from Exhibit A will be different than Leaburg. When EWEB petitioned BPA for Leaburg's removal, Leaburg was already non-operational and on a clear path to retirement due to the economic infeasibility of both repairing the canal and continuing operations at the plant.

In contrast, Trail Bridge is currently operational, will remain in an operational condition due to FERC license requirements, and is not currently slated for early retirement. As such, its path to removal is different than Leaburg because, although the plant will remain in an operational condition, in all but the rarest circumstances, it will be prohibited from generating under its FERC license.

While EWEB staff believes that there is a strong case that Trail Bridge meets several of the criteria above, the ultimate determination of whether Trail Bridge meets such criteria is for BPA to make. Further, should Trail Bridge removal be granted, BPA may choose to make their decision conditional, pending EWEB's ability to meet our commitments and cease generation as scheduled. BPA's process of determination requires a clear understanding of EWEB's plan for Trail Bridge, which necessitates the proposed Trail Bridge resolution. EWEB needs to assure BPA and others that we have a clear plan of action to meet the terms of the license and timelines we have agreed to.

Discussion and Timelines

Trail Bridge

Trail Bridge is a 10 MW nameplate re-regulation facility for EWEB's Carmen-Smith Hydroelectric Project. Under Exhibit A of our BPA contract, Trail Bridge is considered a dedicated (to load service) resource listed at 3.3 aMW of generation during 'critical' water conditions.

Downstream Passage

As part of the 2019 Carmen-Smith FERC relicense, EWEB is required to shut down generation at Trail Bridge and instead pass water through the modified spillway to support downstream fish passage. Dam safety concerns associated with the 2021 discovery of sinkholes with Trail Bridge Reservoir have delayed progress on completing design and implementing fish passage improvements. Once the dam safety issues are addressed and progress resumes, permanent downstream passage facilities are scheduled to be constructed over a two-year period as soon as construction of the upstream passage facilities is completed.

Interim Downstream Passage

Because the downstream fish passage improvements have been delayed, EWEB will implement interim measures by or before September 30, 2025. Those interim measures will reduce power production at Trail Bridge to minimum generation levels and pass all remaining water through the spillway. These measures will remain in effect until permanent downstream passage is in place. Staff have already carried out minimum generation testing and notified the FERC of the planned operational changes.

FERC Operational and Safety Requirements

When permanent downstream passage is in place, FERC will require EWEB to maintain reliable low-level outlet facilities for Trail Bridge Dam for the purposes of managing potential dam safety related incidents. In addition, reliable low-level outlet facilities will be needed whenever the spillway facilities are out of service for maintenance, repair, or construction of improvements. Flow through the low-level outlet can be routed through either of two paths: the generating unit or an energy dissipation valve. While fish cannot survive passage through the energy dissipation valve, there is potential for survival through the generating unit. The energy dissipation valve was also not designed for continuous, long-term operation. It is only intended for short duration operations to minimize excessive ramping of river flows in the event that the generating unit trips.

For these reasons, EWEB will keep the Trail Bridge generator operational for flow passage when the spillway is out of service. This means that the Trail Bridge generator will remain operational, and that on some occasions water will be passed through it to meet various operational and FERC requirements, even though power generation will no longer be a specific purpose of the plant. As mentioned above, to protect fish, EWEB would send water through the turbine during transmission outages, as well as due to maintenance of the spillway. These operations would be a result from FERC and fish requirements, with power generation as an unintended consequence.

Load Bank

EWEB plans to install a load bank adjacent to the Trail Bridge to receive generation from the plant during extreme circumstances where (i) water is run through the Trail Bridge generator for flow passage when the spillway is out of service and (ii) the transmission line connecting Trail Bridge to the bulk grid is down. EWEB will work with BPA to identify appropriate Exhibit A and operations updates that reflect future operational and environmental considerations related to load bank energy dissipation.

EWEB Timeline and Plan

As described above, EWEB will implement interim spill measures in the near-term future. The utility will then complete upstream fish passage facilities before starting downstream passage work. Consistent with the attached Board resolution, EWEB fully intends to carry out these actions, and will work with BPA to identify appropriate adjustments to EWEB's BPA contract for both Provider of Choice and Regional Dialogue contracts. Attachment 1 includes a summary of EWEB's commitments and plans for Trail Bridge operations.

Recommendation & Requested Board Action

Staff recommends that the Board adopt attached Resolution No. 2414 affirming EWEB's obligation to halt generation at Trail Bridge and laying out a clear plan of action to accomplish this goal. This resolution and plan of action to halt Trail Bridge generation do not represent a change of course for EWEB or the Board – the resolution reaffirms our commitment to actions that are already required under the Carmen-Smith FERC License.

EWEB Trail Bridge Operational Commitments September 2024

As part of the 2019 FERC license for the Carmen-Smith Project, EWEB is required to halt generation at Trail Bridge to allow for downstream fish passage. EWEB has identified the following actions to meet short and long-term FERC license requirements and benefit fish. EWEB will carry out these actions and work with the Bonneville Power Administration to determine appropriate adjustments to our BPA contract resource amounts. As determined in Resolution 2414, EWEB commits to:

- **2025-2028 - Interim Spill**
 - Implement interim spill on or before September 30, 2025, until permanent downstream passage is in place.
 - During the interim spill period, Trail Bridge generation will be reduced to minimum.
 - EWEB staff will work with BPA to identify appropriate adjustments to BPA contract amounts.
- **2027- Load Bank Construction**
 - Install a load bank prior to October 2028. The load bank will receive generation from the Trail Bridge during extreme circumstances when (i) water is run through the Trail Bridge generator for flow passage when the spillway is out of service and (ii) the transmission line connecting Trail Bridge to the bulk grid is down.
- **2029/2030– Permanent Downstream Fish Passage**
 - Construct permanent downstream passage by 2030. Construction is projected to begin in 2028/2029 and be complete by 2030. Once downstream passage is in place, EWEB will only run water through the turbine for testing, maintenance, and spillway construction purposes.
 - EWEB acknowledges that construction timelines for downstream fish passage may create the need to send water through the turbines after the October 2028 Provider of Choice contract initiation. EWEB will work with BPA to identify the appropriate Contract High Water Mark and Exhibit A documentation to reflect this short-term ‘byproduct’ generation.

**RESOLUTION NO. 2414
SEPTEMBER 2024**

**EUGENE WATER & ELECTRIC BOARD
COMMITMENT TO CEASING GENERATION AND IMPLEMENTING
DOWNSTREAM FISH PASSAGE AT THE TRAIL BRIDGE PROJECT**

WHEREAS, EWEB’s 2019 Federal Energy Regulatory Commission license for the Carmen-Smith project requires that EWEB cease generation at the Trail Bridge Plant and pass flows through the modified spillway to aid downstream fish passage; and

WHEREAS, EWEB will work with the Bonneville Power Administration to determine appropriate adjustments to EWEB’s Exhibit A documentation and Provider of Choice Contract High Water Mark due to operational changes for fish passage and FERC license requirements,

NOW, THEREFORE, BE IT RESOLVED by the Eugene Water & Electric Board, that EWEB will carry out the commitments of this resolution to implement interim spill, permanent downstream passage, and generation dissipation as described in the September 2024 Trail Bridge Exhibit A Board memo and EWEB Trail Bridge Operational Commitments document.

DATED this 3rd day of September 2024.

THE CITY OF EUGENE, OREGON
Acting by and through the
Eugene Water & Electric Board

President

I, ANNE M. KAH, the duly appointed, qualified, and acting Assistant Secretary of the Eugene Water & Electric Board, do hereby certify that the above is a true and exact copy of the Resolution adopted by the Board at its September 3, 2024 Regular Board Meeting.

Assistant Secretary