

Department of Energy Bonneville Power Administration P.O. Box 3621 Portland, Oregon 97208-3621

POWER SERVICES

February 28, 2019

In reply refer to: PGA-6

Via E-Mail

Heather Bartlett Water Quality Program Manager Washington State Department of Ecology P.O. Box 47600 Olympia, WA 98504-7600

Subject: Comments on the Draft Environmental Impact Statement for the Short-term modification of the total dissolved gas criteria in the Snake and Columbia Rivers

Dear Ms. Bartlett:

The Bonneville Power Administration (Bonneville) appreciates the opportunity to provide comments on the Draft Environmental Impact Statement (EIS) for the short-term modification of the total dissolved gas criteria in the Snake and Columbia Rivers. Bonneville's comments focus on clarifying language in the EIS and ensuring consistency with the State of Oregon's total dissolved gas criteria.

First, Bonneville would like to emphasize spilling due to lack of market does not necessarily represent a negative market condition, consequently, we recommend revising the following language on page 19:

"Operational spills often occur during dam maintenance for when the ability to pass water through turbines is limited or in a negative market when power demand is low."

And replacing it with: "Operational spills occur when the ability to pass water through the turbines is limited; this could be due to turbine availability or lack of market."

Second, Bonneville suggests replacing "voluntary spill" throughout the EIS with "juvenile fish passage spill," which more accurately represents the purpose of the spill operations.

Third, the ladders on the lower Columbia and Snake rivers are predominantly pool and weir (with deep openings referred to as orifices). When observing fish moving in a ladder with pools and weirs, it is easier to observe surface passage behavior moving from pool to pool via weir "jumping" or surface swimming acceleration. Due to limited water transparency, it is more difficult, however, to observe fish using the submerged deep orifices, which fish also use to move from pool to pool. Thus, Bonneville proposes revising the language on page 35:

## "Observations have indicated that fish frequently move towards the surface in fish ways."

And replacing it with: "Upstream movement through fish ways (e.g., pool and weirs) can occur by surface passage at weirs or through deep passage orifices between each progressive pool."

In terms of the applicability of the total dissolved gas criteria, since the short-term modification will only apply during the spring spill season, Bonneville recommends clarifying that the existing total dissolved gas criteria adjustment will be applicable during summer spill fish passage. Additionally, Bonneville noticed the EIS and the draft Administrative Order to Modify Adjusted Total Dissolved Gas Criteria (Order) do not currently align on the treatment of the 125% total dissolved gas criteria in the short-term modification. The EIS mentions 125% total dissolved gas will be measured on a one-hour basis, while the Order says it will be measured on a two-hour basis. Washington State Department of Ecology (Ecology) staff stated at the February 13, 2019 public hearing that the intent was to align with Oregon's two-hour basis; thus, Bonneville recommends addressing this inconsistency in the EIS.

Finally, Bonneville would like Ecology to consider adopting the State of Oregon's 105% total dissolved gas shallow water standard with the short-term modification to protect aquatic species in shallow spawning areas. Hamilton Creek and the lves Island area, downstream of Bonneville Dam on the Washington side, are common spawning areas for Chum and Chinook (see first paragraph on page 23 of the EIS). Adopting the 105% total dissolved gas shallow water standard ensures consistency of water quality standards between Oregon and Washington during the spring spill operation.

Bonneville appreciates the opportunity to provide comments. Please feel free to contact me or Kim Johnson at kojohnson@bpa.gov or 503-230-3902 if you have any questions or need more information.

Sincerely,

Pam Van Calcar on behalf of: Kieran Connolly Vice President of Generation Asset Management Bonneville Power Administration

cc: Becca Conklin, WA Ecology, Water Quality Standards Project Manager (swqa@ecy.wa.gov)