Dear Chairman Yost:

In May 2018, the Northwest Power and Conservation Council ("Council") requested recommendations for amendments to the Council’s Columbia River Basin Fish and Wildlife Program ("Program"). We are pleased to share the Bonneville Power Administration’s ("Bonneville") recommendations, which have been coordinated with the U.S. Army Corps of Engineers, the U.S. Bureau of Reclamation, and all of our tribal and state partners under the recently extended Columbia Basin Fish Accord agreements.

At the outset, we want to express our appreciation for the Council, tribes, fish and wildlife agencies and organizations, federal partners and others across the region that are so critical to developing, guiding, and implementing the mitigation work that has helped Bonneville meet its important responsibilities under the Northwest Power Act. For almost forty years, the region has worked diligently to ensure lasting benefits for fish and wildlife.

We also appreciate the excellent coordination between Bonneville and the Council over the last four years of the current Program. We have enjoyed many recent successes in advancing important programs and projects even as we managed through some significant budget uncertainty. The Council and regional fish and wildlife managers have been very proactive in understanding Bonneville’s competitiveness concerns and collaborative in directly working through budget reduction and prioritization efforts.

Overall, it has been a big four years for Bonneville. In 2018 alone, we introduced an updated strategic direction and related financial plan, extended the Columbia Basin Fish Accords, completed another Integrated Program Review, managed through approximately $140 million in cost reductions across the agency, and supported the U.S. Department of State in initiating Columbia River Treaty negotiations with Canada. We also, at the deadline for Program recommendations, are engaged in productive discussions with regional sovereigns about potential alternatives for operational flexibility.

These factors helped inform and shape our recommendations. As did our pride and sense of accomplishment in all of our investments and work over the last several decades. In short,
Bonneville’s recommendations generally focus on documenting historic Program accomplishments, prioritizing Program measures and objectives, understanding cost-effective mitigation alternatives, and tracking statutory responsibilities.

Bonneville also recommends that the Council retain, in large part, the existing 2014 Program while incorporating the Accord extensions, and other new fish and wildlife mitigation agreements, as existing and future fish and wildlife activities of Federal and regional state and tribal fish and wildlife managers. As the enclosure discusses in greater detail, the cumulative scope and scale of the Program’s achievements to protect, mitigate, and enhance fish and wildlife are tremendous and should be recognized and taken into account before the Program is changed or expanded in any significant way. To the extent that the Council does undertake changes to the Program, Bonneville recommends that the Council’s supporting analysis for such changes address the issues and context discussed in the enclosure.

Thank you for the opportunity to submit these recommendations for amendments to the Program. We look forward to working with you on these important issues throughout the rest of the amendment process.

Sincerely,

Scott G. Armentrout
Executive Vice President, Environment, Fish and Wildlife

Enclosure:
BPA Recommendations to Council Fish and Wildlife Program Amendment
I. Context for Bonneville's Recommendations

Bonneville’s recommendations hew to the notion of effective, economic fish and wildlife mitigation that also accounts for the demands of Bonneville’s other responsibilities and the limited resources available to address them in concert. More specifically, in developing its recommendations, Bonneville has focused on the Northwest Power Act’s criteria for minimum cost alternatives to achieve those sound biological objectives, and whether they can be achieved in a manner consistent with the purposes of the Act, in particular to assure the Pacific Northwest an adequate, efficient, economical, and reliable power supply (“AEERPS”). This focus on cost-effective fish and wildlife mitigation dovetails with the present financial reality that Bonneville faces in all its program areas and has consistently kept the region apprised of over the last few years. By now, the Council and Bonneville’s other regional partners are well aware of the market conditions and other various external factors prompting Bonneville’s enhanced focus on financial discipline.

So, too, is the Council aware of the responsive steps Bonneville has taken to address these external pressures, with a goal of ensuring its long-term viability to continue fulfilling its statutory responsibilities and purposes. For example, Bonneville has adopted a Strategic Plan with the objective of holding all of its program costs at or below the rate of inflation through 2028. Bonneville has also adopted a Financial Reserves policy and a Leverage Policy to improve the agency’s financial resiliency and bolster credit ratings, significantly reduced its projected costs for the next rate period, and moved towards a biological investment portfolio model under a unified fish and wildlife budget, where increased fish operation costs will primarily be offset by decreased fish and wildlife spending. These agency-wide efforts, among others, are designed to enhance Bonneville’s competitive position for its long-term objective of

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2 See, e.g., BONNEVILLE POWER ADMIN., ADMINISTRATOR’S DECISION, IMPLEMENTATION OF THE FY 2018 SPILL SURCHARGE, at 1-5 (June 2018), available at https://www.bpa.gov/Finance/RateCases/surcharge18/surcharge18documents/Spool_Surchage_Implementation_FY2018_06-21-2018.pdf (discussing energy market conditions, cost of court-ordered spill, and other factors as contributing to Bonneville’s precarious financial condition and its corresponding need to implement cost-management actions across the agency) [hereinafter “Spill Surcharge”].
5 See id. at 3 ("Our final projected costs for fiscal years 2020 and 2021 are $66 million lower per year compared to the FY 2018-2019 rate period. This is a significant step toward our cost-management objective to keep program costs at or below the rate of inflation, which we committed to in the BPA 2018-2023 Strategic Plan. And in fact, it exceeds the additional target we set for this IPR to hold program costs flat in nominal terms.").
6 See Spill Surcharge at 5 (describing the cost of fish passage spill as a Fish and Wildlife cost to be offset by reductions to fish and wildlife spending); see also IPR Report at 11.
retaining preference customers after 2028 when their current long-term power sales contracts expire.⁷

These steps and corrective measures also recognize, in part, that the cumulative effect of historic, incremental increases to Bonneville’s fish and wildlife costs is likely unsustainable. And the historic upward trend threatens not only Bonneville’s ability to fulfill its multiple public purpose responsibilities, but also the purposes of the Northwest Power Act—in particular that the Program provide fish and wildlife mitigation measures while “assuring the Pacific Northwest, an adequate, efficient, economical, and reliable power supply.”⁸

In analyzing the Program’s effect on the economic prong of AEERPS, the Council has typically considered “whether the newly amended program represents an additional increment of costs to the power system, and if so, whether and how that changes the consideration of the economical nature of the region’s power supply.”⁹ However, this approach assumes that the costs of the previous Program were economical.¹⁰ In 2014, the Council supported its “economical” determination with a conclusion that fish and wildlife program costs would not differ significantly from the previous Program’s, and that Bonneville “is not currently in difficult financial circumstances.” As noted above, that is no longer the case.¹¹

Bonneville therefore recommends that future AEERPS analysis look beyond the incremental costs anticipated from new program amendments. The energy market has changed, the law governing operation of the Columbia River System has changed, and Bonneville’s financial condition has changed. It can no longer be said, as was stated in the 2014 Program, that Bonneville is not in difficult financial circumstances. In this amendment process, Bonneville

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⁷ See Strategic Plan at 36.
⁸ 16 U.S.C. § 839b(h)(5). Bonneville recognizes that the Council has the statutory responsibility for developing a Power Plan and Fish and Wildlife Program that assure an adequate, efficient, economical, reliable power supply. However, AEERPS is also a purpose of the Act that Bonneville must be consistent with, and Bonneville’s fish and wildlife costs, indeed all of its costs, affect the economics of the power it markets and ultimately, its business operations and flexibility. It is therefore incumbent upon Bonneville to take steps to safeguard the economic component of the power it supplies. See Northwest Power and Conservation Council, Columbia River Basin Fish and Wildlife Program, app. R, at 218 (2014) (“Bonneville always has to be diligent in protecting its financial status to maintain a viable operation.”) [hereinafter “2014 Program”].
¹⁰ As of 2018, Bonneville’s fish and wildlife costs accounted for nearly a quarter of the overall program costs for Power Services. See Strategic Plan at 13.
¹¹ See Spill Surcharge at 3-4 (discussing a volatile market’s effects on Bonneville’s long-term financial health, depleted financial reserves, and concerns of third-party financial rating agencies); see also Strategic Plan at 35 (indicating competitive pressure of the comparative decline in wholesale market prices); id. at 6 (“Our power customers have expressed significant concerns that BPA’s recent pattern of rising costs and rates is unsustainable. They have noted that the resurgence of competition in power markets will provide them with alternatives when their long-term wholesale power contracts with BPA expire in 2028. For these reasons, one of BPA’s principal strategic goals is to provide competitive power products and services.”).
would appreciate the Council’s AEERPS analysis taking into account the Bonneville Fish and Wildlife Program’s need to manage to the Strategic Plan objective of holding overall program costs at or below the rate of inflation through 2023.

Bonneville is, of necessity, moving to manage its environmental compliance costs for the management and operation of the federal hydropower system as a single budget. Cost increases in one part of the portfolio are expected to primarily be covered by shifting funding from another portion of the portfolio. Consequently, Bonneville also needs the Council’s help to classify appropriately the various components of the Program so that Bonneville can distinguish more sharply between mitigation responsibilities for the impacts of the federal hydropower system and discretionary actions. After decades of bottom up fish and wildlife budgeting, Bonneville needs to apply the same business principles in Bonneville’s fish and wildlife program as apply to transmission services and power marketing—that means top down budgeting. We would appreciate the Council’s consideration of this change as it considers amendments to the Program.

II. Inventory and Recognition of Accomplishments

One critical part of the context for amending the Program and guiding Bonneville’s mitigation over the next five years is considering and documenting what we have already accomplished. Bonneville believes that this is the first step, and the most necessary step, that needs to be taken before any new or additional measures are amended into the Council’s program.

During its next iteration, the Council’s Program will turn 40 years old. Once again, Bonneville encourages the Council and the region to reflect in some detail on the full suite of mitigation accomplishments to date and weigh them against what the Northwest Power Act requires. For its part, Bonneville has steadily followed the program’s guidance and believes many of the Act’s fish and wildlife purposes have been largely achieved.

Since the 1990s, the federal agencies have overhauled the system, achieving juvenile dam passage survival that meets or exceeds performance standards of 96% and 93% for spring and summer migrants respectively, a marked improvement. The recent extensions to the Columbia Basin Fish Accords recognized these improvements as successfully addressing the broad anadromous fish mandates in the Northwest Power Act, as compared to when Congress passed the Act and the estimated average juvenile mortality at each main-stem dam and reservoir

12 See IPR Report at 11.
14 See, e.g., Lower River Tribes Accord Extension, § II.A; Colville Tribes Accord Extension, § II.A.
15 The Northwest Power Act calls for Program measures for anadromous fish that “provide for improved survival” at the dams and “flows of sufficient quality and quantity . . . to improve production, migration, and survival of such fish as necessary to meet sound biological objectives.” 16 U.S.C. § 839b(h)(6)(E).
complex was 15-20% with losses recorded as high as 30%. These operation-based improvements harken back to one of the original purposes of the Act—to mitigate for fish by providing suitable environmental conditions that are substantially obtainable from the management and operation of the system.

Other actions contributing to the success of migrating adult and juvenile salmon and steelhead include the installation of turbine intake screens and bypass systems, modifications and installation of fish friendlier turbines, and spillway modifications (e.g., flow deflectors, surface spill weirs, and modified surface spill structures). Additional modifications to fish ladders have also been underway to increase passage of adult lamprey, including the installation of specialized lamprey passage structures at Bonneville, The Dalles and McNary dams.

While other laws may yet ask more of the system, for Northwest Power Act purposes, these improvements and successful performance standards should serve not as a new base from which to expand the Program, but rather as a reminder of how near the ceiling we are after almost 40 years. Survival has been improved, and the Act itself does not specify any quantifiable success threshold for anadromous fish, such as the Program’s five million fish goal or smolt-to-adult return rates of two to six percent. And as the Independent Scientific Advisory Board (ISAB) has noted, “[i]f the Program continues to set a Basin-wide numerical goal for adult returns, this goal needs to account for recent large variations in climate and ocean conditions that are affecting survival of juvenile fish.” Bonneville suggests that the ISAB’s observation and all other relevant analyses be considered if the Council revisits this aspect of the Program during the amendment process.

Hatcheries and other propagation techniques such as kelt reconditioning, also continue to provide mitigation, species protection, population conservation, harvest opportunities, and research to inform the effectiveness of supplementation as a mitigation tool. Since the last Program Amendment process in 2014, most of Bonneville’s hatchery programs have updated their Hatchery and Genetic Management Plans, incorporating Hatchery Scientific Review Group recommendations, and now have completed Endangered Species Act consultations. Additionally,
several hatchery programs have undergone the Council’s 3-Step process in order to be consistent with the hatchery propagation principles identified in the last Program Amendment process.

For resident fish, too, the Program continues to protect, mitigate, and enhance through numerous projects. For example, in Montana, work to protect resident fish habitat in tributaries has progressed as ongoing mitigation for historic stream and river reaches that were inundated after construction of Libby and Hungry Horse dams. In addition, actions in the Kootenai River established a native burbot population and helped to prevent extinction of the Kootenai River white sturgeon. Bonneville continues to explore cost-effective options for resident fish mitigation, including identifying previously uncredited mitigation for consideration in potential settlement agreements.

Wildlife Mitigation for Construction and Inundation

Bonneville believes that construction and inundation mitigation for wildlife is now mostly addressed, excepting a few thousand acres in southern Idaho. With the construction of the dams and resulting inundation by the reservoirs behind them, about 350,000 acres of terrestrial habitat was lost. To date, Bonneville has implemented wildlife habitat projects on over 750,000 acres. Therefore, Bonneville recommends that the Council focus the wildlife elements of the program on operational impacts and maintenance of the existing wildlife projects.

Work in the Willamette, estuary, and northern and southern Idaho already expressly addresses operational impacts on wildlife. New operational impact analysis is underway in the development of the draft Columbia River System Operation (CRSO) Environmental Impact Statement. And several legal and policy issues need to be resolved regarding the extent of further operational impact mitigation required by the Act. Those issues include crediting of the pre-Act mitigation done for John Day Dam and Reservoir against operational impacts as recommended by the Council in its 1989 Wildlife Rule; the interplay of wildlife mitigation and fish mitigation; and whether construction and inundation has been over-mitigated and a portion of that effort should be considered to address some operational impacts as well. When the system-wide analysis is completed and these questions have been addressed, Bonneville would proceed to address any remaining wildlife operational impact mitigation obligations.

III. Prioritization

With increasingly constrained resources for fish and wildlife mitigation and ongoing pressure to manage costs across the agency, a prioritization framework to help guide investment of

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20 White sturgeon and burbot have also benefitted from hatchery supplementation, increased access to spawning habitat, and modified flows.
21 See 2014 Program at 88.
Bonneville’s finite resources is sensible. In fact, Bonneville has already begun an internal, agency-wide effort to address the needs of its existing assets, including fish and wildlife mitigation assets. Through this internal process, Bonneville has developed Strategic Asset Management Plans for fish and wildlife lands and water investments, and will do the same for hatcheries and fish screens as well. Applying these plans to fish and wildlife investments will require planning within Bonneville’s fish and wildlife program, in coordination with the Council and other affected parties, similar to the considerable hatchery and fish screen assessment and prioritization effort that Bonneville and the Council collaborated on over the last two years.

The accomplishments described above show the extent to which Bonneville has fulfilled much of the Act’s mitigation mandate through its extensive investments in the Program over the years. In Appendix P to the 2014 Program, the Council determined that “adequate and dependable operation and maintenance support is needed to ensure ongoing proper functioning” of existing fish and wildlife mitigation assets, including fish screens, fishways and traps, hatcheries, lands, and habitat actions. The 2014 Program recognized “that ratepayer funding requires some basic controls and that there is not unlimited funding to address every need for fish and wildlife affected by the development of the federal hydrosystem, all at once,” and Bonneville’s budget has limited flexibility to accommodate new or expanded work, and indeed has “only limited capacity for maintenance of past investments.”

In a very real sense then, developing a strategy for prioritizing funding for the operation and maintenance needs of existing mitigation investments within the constraints of a fixed budget is one of the most pressing priorities that the Program faces. The Council recognized as much in the 2014 Program, when it listed “funding long-term maintenance of the assets that have been created by prior Program investments” as its number one emerging priority and devoted an entire Program appendix to the issue. And this is the first of only two remaining Program amendment cycles in which to address the issue before Bonneville’s long-term power sales contracts expire, potentially bringing greater uncertainty to overall Program funding levels.

The issue of funding for emerging priorities came up at a recent Council meeting, in the context of a Council recommendation: “If budget actions from this set of project close-outs, mergers, or efficiencies occur and result in a contract savings of $50,000 or more, the Council expects that

22 See id., app. P, at 199.
23 See id. at 114.
the savings be directed to the Cost Savings pool for funding emerging priorities." 25 The Council inquired as to Bonneville’s position on this recommendation.

Bonneville generally supports prioritizing cost-savings to maintain existing mitigation assets, for the reasons generally outlined in Appendix P to the 2014 Program. Bonneville is also willing to set aside a portion of cost-savings for other emerging priorities. The use of any remaining cost-savings, however, needs to be considered on a case-by-case basis to address other legal responsibilities or internal budget priorities.

In addition, the 2014 Program suggests that Bonneville fund emerging Program priorities by “identifying savings within the current Program and as necessary, from additional expenditures.” 26 However, Bonneville hopes to continue working with the Council to manage these needs through prioritization of measures and objectives in a manner that informs Bonneville’s project- and budget-level funding decisions. This collaborative prioritization will be particularly important given Bonneville’s objective to hold fish and wildlife costs at or below the rate of inflation through 2023, including potentially absorbing unbudgeted fish and wildlife costs.

Another opportunity for prioritization within the Program is research, monitoring, and evaluation (“RME”), as RME represents about a third of Bonneville’s annual Program implementation costs. Therefore, in the same context of the financial constraints discussed above, prioritization and efficiency within that section of the Program would benefit from appropriate re-sizing. A logical first step in right-sizing the RME component of the Program is to ensure that data being collected is analyzed, and that such analysis informs on-the-ground resource management decisions with biological or physical benefits. 27 To that end, the burgeoning effort of the Council, Bonneville, and NOAA Fisheries to engage the region on development of an integrated, consistent RME strategy for actions taken under both the Northwest Power Act and the Endangered Species Act would be an appropriate avenue to explore whether such actions produce their intended physical or biological outcomes. A threshold issue would be to address

26 Id. at 116.
27 See Independent Scientific Review Panel, 2018 Research Project Status Review, at 5 (2018) (“The new RME strategy co-led by BPA, Council, and NOAA should include a detailed adaptive management framework with explicit guidance and requirements to ensure that research meets the needs of restoration practitioners and decision makers.”), available at https://www.nwcouncil.org/sites/default/files/ISRP%202018-08%20ResearchStatusReview28Sep.pdf; see also Wildland Hydrology, A Technical Review of the Columbia Habitat Monitoring Program’s Protocol, Data Quality & Implementation, at xxiii (Mar. 2018) (recommending future RME efforts that “use a more efficient, practical, and cost-effective watershed-based approach to produce more accurate data that is useful for both restoration and modeling applications.”).
data management issues, to ensure that research work that receives funding yields accessible data in a universally useful form.

IV. Economic Evaluation

Given the Council’s recent renewed interest in independent economic analyses, Bonneville would like to continue working with the Council to identify new or different ways to maximize mitigation outcomes and the value of investments. Bonneville believes that competitive processes in which sponsors propose projects for consideration under regionally-vetted criteria—such as the Columbia Basin Water Transactions Program and Willamette Wildlife Mitigation Program—promote creative mitigation approaches and greater return-on-investment. Bonneville recommends investigating whether this might be a more cost-effective model that could be introduced into other aspects of the Program, such as expanded habitat efforts or RME.

As habitat prioritization frameworks, like Atlas, continue to develop and evolve throughout the region, another worthwhile economic analysis would be to consider whether such frameworks increase the return-on-investment for mitigation funding and if their use should be expanded within the Program. Transitioning from an opportunistic habitat approach to a strategically-focused implementation model could improve mitigation outcomes. Pairing such frameworks with umbrella projects may also provide even greater results by allowing for consolidated habitat restoration actions under an overarching project that offers both administrative efficiency and a landscape-based habitat strategy.

Finally, in connection with the recommendation under “Prioritization,” the RME portion of the Program would also benefit from an economic analysis. There is a need to determine if and where RME funding fails to yield a sufficient return-on-investment in terms of informing resource management decisions that create positive biological impacts, and particularly where funded research data is unavailable or unused. Simply put, RME that isn’t used in a meaningful way necessary to fulfill Bonneville’s Northwest Power Act responsibilities should no longer be recommended. The analysis should also aim to identify the most cost-effective RME methods and tools for particular tasks, needs, or queries.

V. Bonneville’s Role and Interest in the Amendment Process

In the fall of 2018, the Council wrote the Administrator expressing concern that in the Accord Extensions Bonneville appeared to be deciding unilaterally what constitutes a measure in the Program. The issue has important ramifications because it gets to the extent of Bonneville’s

mitigation mandate and what it means to protect, mitigate, and enhance fish and wildlife in a manner consistent with the Program, the Power Plan, and the purposes of the Act. Likewise, Bonneville understands the Council’s interest in implementing and being clear on its statutory responsibilities.

Bonneville agrees that the Council has exclusive authority to decide what measures to include in the Program. For its part, Bonneville then must decide how to act consistent with the Program, which includes examining whether the “measures” constitute appropriate guidance for the Administrator to follow.\(^30\) Bonneville finds that while the Program includes many provisions—such as broadly stated goals, policies, implementation processes, and prospective initiatives—not all of them are measures that meet the substantive criteria established by the Act.\(^31\)

The bottom line is that Bonneville is committed to working with the Council and other parties in the region to ensure an appropriate understanding of the different provisions in the Program, including those provisions that the Council considers specific measures that comport with the substantive criteria of the Northwest Power Act. This will be important in many areas, including those related to the possible evolution of passage and reintroduction priorities. This policy matter is of critical importance to many entities in the region, and discussion of the specific biological objectives and least cost alternatives will be critical to informed decision-making.\(^32\)

As an additional matter, some parties in the region have noted that there is room for improvement in implementation of the Program because mitigation project spending is not always precisely categorized or clearly linked to a specific Endangered Species Act, biological opinion, Northwest Power Act, or other responsibility. Like these parties, Bonneville is also

\(^30\) See Nw. Res. Info. Ctr. v. Nat’l Marine Fisheries Serv., 25 F.3d 872, 874 (9th Cir. 1994) (“The Bonneville Power Administration must act consistently with the Council’s program but in the end has final authority to determine its own decisions.”) (citing Seattle Master Builders, 786 F.2d 1359, 1362); see also Nat’l Wildlife Federation v. F.E.R.C., 801 F.2d 1505, 1515 (9th Cir. 1986) (federal water management agencies must consider the Council’s Program in decision-making).

\(^31\) See 16 U.S.C. §§ 839b(b)(6); Nw. Res. Info. Ctr. v. Nw. Power Planning Council, 35 F.3d 1371, 1389 (9th Cir. 1994). In addition, where Bonneville interprets the Northwest Power Act in its decisions, it deserves “substantial deference” given “the complex subject matter and Bonneville’s factual and legal expertise.” See Confederated Tribes of the Umatilla Indian Reservation v. Bonneville Power Admin., 342 F.3d 924, 928 (9th Cir. 2003) (citing Aluminum Co. of Am. v. Central Lincoln People’s Util. Dist., 467 U.S. 380, 389 (1984)). And as a member of the Ad Hoc Committee formed by Congress in the spring of 1980 to provide advice in developing the Northwest Power Act, Bonneville played a direct role in promulgating the Act’s fish and wildlife provisions. See Ad Hoc Pacific Northwest Power/Fisheries Committee, Section-by-Section Analysis of Fisheries Provisions of the Northwest Regional Power Bill (S. 885) if Amended in Accordance with the Ad Hoc Committee Proposals (Aug. 22, 1980).

interested in exploring how, through the Program, it could better ensure that mitigation projects are tied to specific responsibilities.

VI. Timing and Ongoing Regional Processes

As the Council is aware, several regional processes concerning fish and wildlife issues in the Columbia River Basin are currently underway, some of which will yield new information and analyses during the term of this next Program. For example, the Columbia River System Operations EIS is examining alternatives for operating the system. Forthcoming biological opinions will address the effects of system operations on ESA-listed fish species. The federal agencies have also been engaged in recent discussions with regional sovereigns about potential alternatives for operational flexibility. Bonneville encourages the Council to leave the operations portions of the Program largely unchanged, and allow enough leeway to accommodate the outcomes and information from these other processes.