UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
West Coast Region
777 Sonoma Avenue, Room 325
Santa Rosa, California 95404-4731

March 16, 2022 **Refer to NMFS No:** SWR-2002-1652

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, D.C. 20426

Re: Endangered Species Act and Magnuson-Stevens Fishery Conservation and Management Act Consultations on the Potter Valley Project (P-77) on the Eel River, California

Dear Secretary Bose:

NOAA's National Marine Fisheries Service (NMFS) is concerned with insufficient coverage under the Endangered Species Act[1] (ESA) for incidental take of ESA-listed salmonids and adverse effects to Pacific Coast Salmon Essential Fish Habitat (EFH) resulting from operations of the Potter Valley Hydroelectric Project (P-77) (Project), located on the Eel River in California. Accordingly, the purpose of our letter is to: (1) identify areas of concern and remediation regarding specific reasonable and prudent alternatives (RPAs) included in NMFS' November 26, 2002 Biological Opinion (Opinion) for the proposed license amendment for the Project; (2) identify current activities not identified in the *Description of the Proposed Action* in the Opinion, where incidental take is unauthorized; (3) request the Federal Energy Regulatory Commission (Commission) to consider interim protective measures, which are intended to reduce take of ESA-listed salmonids; and (4) recommend that the Commission reinitiate consultation under section 7 of the ESA and reinitiate consultation under the EFH provisions of section 305(b) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) on the actions currently within its discretion.

NMFS' 2002 Opinion on the amendment to the Project license identified RPAs and provided incidental take authorization for implementing the proposed action for a 20-year period, which elapses on April 14, 2022. The 20-year duration of the proposed action is a central component of the Opinion. We relied upon this set duration to: (1) assess the effects of the proposed action; (2) develop the RPAs necessary to avoid jeopardy and the destruction or adverse modification of critical habitat; and (3) evaluate the effectiveness of the RPAs over the expected life of the proposed action. Based on information currently available, we conclude that the Project is causing take of ESA-listed salmonids in a manner not anticipated in the Opinion and from activities not described in the Opinion.

[1] Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.)

RPA Areas of Concern: The Summer Flow Component

At the time of the Opinion's issuance, we determined that the incidental take of Southern Oregon Northern California (SONCC) coho salmon, Central California Coast (CCC) coho salmon, California Coastal (CC) Chinook salmon, Northern California (NC) steelhead trout, and CCC steelhead trout was likely to occur, but would be difficult to detect. We, therefore, provided specific reasonable and prudent measures (RPMs) to evaluate the efficacy of specific RPAs over a set duration of time. In particular, the RPA summer flow component was designed to avoid jeopardy, and RPM 8/Element 13 (RPM 8/E13) was required to properly evaluate its effectiveness. RPM 8/E13 states:

> *After ten years of monitoring, the summer flow component of the RPA will be reevaluated based on results provided in the annual reports. If NMFS determines that the summer flow component of the Opinion's RPA is not providing the anticipated benefits to salmonids, then NMFS will re-evaluate this component of the RPA to determine if* ***additional measures or changes in flows are necessary.*** [Emphasis supplied.]

More specifically, the RPA summer flow component was intended to address concerns regarding reduced survival resulting from unfavorable habitat conditions and predation upon juvenile salmonids, especially to juvenile steelhead trout (*Oncorhynchus mykiss*). During the past several years, Pacific Gas and Electric (PG&E) implemented additional measures to further investigate the performance of the RPA summer flow component and to determine its adequacy to support summer rearing juvenile steelhead trout. The additional measures implemented under RPM8/E13 include:

1. 2014 to current: Vertical temperature arrays were added in Lake Pillsbury to better understand coldwater storage under various water year classifications that influence habitat conditions downstream of Scott Dam.

2. Summer 2017 and 2018: Juvenile steelhead trout summer rearing and density surveys were conducted at historic monitoring sites within select tributaries (*i.e.,* Garcia Creek, Thomas Creek, Benmore Creek, and Soda Creek) to determine potential changes in steelhead trout production within tributaries between Scott Dam and Cape Horn Dam and the mainstem Eel River located within the action area and over the term of the license.

3. 2020 to current: Dissolved oxygen vertical arrays were added in Lake Pillsbury to further investigate water quality conditions that influence juvenile steelhead habitat conditions below Scott Dam.

While a full evaluation of the RPA summer flow component is too complex to include here, the data generated by these additional measures indicate that juvenile steelhead trout have continued to experience reduced production below Scott Dam despite implementation of the RPA. Reduced overall steelhead trout production below Scott Dam is primarily due to unfavorable summer habitat conditions caused by elevated temperature of water released from Lake Pillsbury in some

years, further exacerbating inter-specific competition between juvenile steelhead trout and Sacramento pikeminnow (*Ptychocheilus grandis*) and increasing predation risk by invasive fish species (*i.e.*, Sacramento pikeminnow and black bass species (*Micropterus spp.*)). Therefore, we have concluded that the RPA summer flow component is not providing the anticipated benefits to ESA-listed salmonids. Changes in flows are also necessary to promote suitable water temperatures for juvenile salmonids during the dry season in order to improve their ability to survive, grow, and outcompete warmer-water invasive fish species.

Project Activities Not Described in NMFS' 2002 Opinion

The Opinion assessed only those activities described in the *Description of the Proposed Action,* and the *Incidental Take Statement* (ITS) explicitly excludes coverage for activities not described in the Opinion. Cape Horn Dam, the associated infrastructure, fishway maintenance, and flow operations to achieve fish passage at the passage facility are neither described within the *Description of the Proposed Action*, nor are their effects to listed species assessed within the Opinion. Consequently, we did not authorize incidental take resulting from these effects (e.g., delayed or blocked migration and predation of ESA-listed salmonids caused by the configuration and full operation of the Cape Horn Dam fish passage facility). Similarly, the Commission's subsequent approval of modifications and operations of this facility has not undergone ESA or EFH consultation.

Additionally, the Project overlaps with Habitat Areas of Particular Concern (HAPC) for federally managed fish species (CC Chinook salmon and SONCC coho salmon) under the Pacific Coast Salmon Fishery Management Plan, both within the immediate area of the Project and further downstream where Project flows affect habitat in the Eel River. Regulations implementing the MSA provide that fishery management plans should identify specific types or areas of habitat within EFH, based on one or more of the following considerations: the importance of the ecological function provided by the habitat; the extent to which the habitat is sensitive to human-induced environmental degradation; whether, and to what extent, development activities are, or will be stressing the habitat type; and the rarity of the habitat type (50 CFR 600.815(a)(8)). Federal projects with potential adverse impacts to HAPCs are more carefully scrutinized during the consultation process. Based on the information currently available, NMFS concludes that the following HAPC identified by the Pacific Fishery Management Council are likely being adversely affected by the Project's reservoir and flow schedule: complex channels and floodplains; thermal refugia; and spawning habitat (PFMC 2021).

Interim Protective Measures

We are available to provide technical assistance to the Commission to promote a timely and efficient ESA and MSA consultation process. However, we recognize that the procedural complexities associated with the impending license expiration and uncertainty regarding the status of a future license proceeding may delay such consultation. Therefore, because of the current status of ESA-listed salmonids in the Eel River, the ongoing impacts to these species, and the anticipated delays in developing a Biological Assessment and EFH Assessment, NMFS requests that the Commission amend the Project license to incorporate interim protective measures. These protective measures are necessary to minimize and avoid further take of ESA-listed salmonids

pending a final determination ordered by the Commission regarding the future of the Potter Valley Project and completion of a subsequent ESA and EFH consultation.[2]

Interim Protective Measures:

1. Full implementation of the Cape Horn Dam Fish Passage Facility Winter Operations Procedure (dated November 13, 2020) and continuation of the Commission Order Approving Temporary Operation of the Sediment Exclusion Doors (dated December 13, 2021). An annual evaluation and any necessary adjustments to these interim passage operations will require the review and approval of NMFS. The Biological Assessment provided to NMFS during the consultation process will require a thorough evaluation of the full Cape Horn Dam fish passage facility to ensure current NMFS fish passage standards are met.

2. In consultation with NMFS, California Department of Fish and Wildlife (CDFW), Round Valley Indian Tribes (RVIT) and United States Fish and Wildlife Service (USFWS), and within 90 days of issuance of this letter, develop and implement a water temperature management plan that provides suitable seasonal water temperatures for adult Chinook salmon (fall), juvenile CC Chinook salmon, and NC steelhead trout outmigration (spring), and juvenile NC steelhead rearing (summer), below Scott Dam. The water temperature management plan will require the review and approval of NMFS.

3. In consultation with NMFS, CDFW, RVIT, and USFWS, re-evaluate and revise the summer flow component of the RPA, incorporating Lake Pillsbury coldwater pool management (dry season reservoir storage targets) and operate project releases to ensure suitable summer rearing temperatures and physical habitat conditions for salmonids below Scott Dam. Proposed changes to the summer flow component of the RPA will require the review and approval of NMFS prior to implementation.

4. In consultation with NMFS, CDFW, RVIT, and USFWS, re-evaluate and revise NMFS' Opinion RPA Operating Rule E.5 to implement a reservoir storage-based coldwater pool management strategy for Lake Pillsbury targeting suitable summer water temperatures for salmonids below Scott Dam, while managing water storage demands in the Russian River. Proposed changes to RPA Operating Rule E.5 will require the review and approval of NMFS prior to implementation.

5. In consultation with NMFS, CDFW, RVIT, and USFWS, re-evaluate and revise the water year classifications for project operations included in NMFS' 2002 Opinion to more appropriately handle extreme drought conditions, while providing beneficial habitat conditions for ESA-listed salmonids. A revised water year classification scheme will require the review and approval of NMFS.

[2] We note that authority for the Commission to implement our recommended interim protective measures is contained in Standard License Article (L Form Article) 15 as well as article 46 of the Commission's Opinion and Order Denying Appeal, Approving Settlement, and Issuing New License (Major) (Issued October 4, 1983).

6. In consultation with NMFS, CDFW, RVIT, and USFWS, develop and implement an adult escapement monitoring plan for CC Chinook salmon, NC steelhead trout, and SONCC coho salmon for the Eel River upstream of the South Fork Eel River, including select sub-watersheds within this geographic area. An adult salmonid escapement monitoring plan will require the review and approval of NMFS.

7. In consultation with NMFS, CDFW, RVIT, and USFWS, continue to implement the annual Sacramento Pikeminnow Suppression Plan. The annual suppression plan will continue to require the review and approval of NMFS.

8. In consultation with NMFS, CDFW, RVIT, and USFWS, develop and implement a stream gauging plan to more accurately monitor cumulative inflow into Lake Pillsbury, above Scott Dam, and Tomki Creek. The stream gauging plan will require the review and approval of NMFS.

Reinitiation of Consultation

NMFS reiterates the need to reinitiate consultation under section 7 of the ESA and section 305(b) of the MSA regarding the effects of the Project on ESA-listed anadromous salmonids and their designated critical habitat. This consultation would include effects associated with the Cape Horn Dam fish passage facility and new information regarding the effects associated with the performance of the Project's RPAs. To avoid or minimize unauthorized take of ESA-listed salmonids prior to completion of consultation, we recommend FERC amend the license to include the interim protective measures listed above.[3]

NMFS is available to work with the Commission complete an efficient and timely ESA and EFH consultation process. Should you have any questions regarding this letter, please contact Mr. Joshua Fuller via email Joshua.Fuller@noaa.gov or by phone at 707-575-6096.

Sincerely,

Alecia Van Atta
Assistant Regional Administrator
California Coastal Office

[3]A review of FERC relicensing in California indicates that FERC can take 15 years or more to issue a new license or decommissioning order (the following relicensing and decommissioning actions have been pending before FERC for over 15 years:P-1962, P-2105, P-2082, P-606, P-344, etc.).

cc: Allan Renger, California Department of Fish and Wildlife, Allan.Renger@wildlife.ca.gov
Matt Meyer, California Department of Fish and Wildlife, Matt.Meyers@wildlife.ca.gov
Kathleen Willits, Round Valley Indian Tribes, Katwillits@rvit.org
Josh Boyce, United States Fish and Wildlife Service, Josh_Boyce@fws.gov
Jackie Pope, Pacific Gas and Electric, JHPL@pge.com
Andrew Anderson, Pacific Gas and Electric, A5AK@pge.com
Copy to file: 151422SWR2002SR6412

References

Pacific Fishery Management Council (PFMC). 2021. Pacific Coast Salmon Fishery Management Plan for Commercial and Recreational Salmon Fisheries off the Coasts of Washington, Oregon, and California as Revised through Amendment 21. PFMC, Portland, OR. 83 p.

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Potter Valley Project	)	Project No. P-77

CERTIFICATE OF SERVICE

I hereby certify that I have this day served, by first class mail or electronic mail, a letter to Secretary Bose, Federal Energy Regulatory Commission, the NOAA's National Marine Fisheries Service's Comments, and this Certificate of Service upon each person designated on the official service list compiled by the Commission in the above-captioned proceeding.

Dated this 16th day of March 2022

Andrea Berry

Andrea Berry
National Marine Fisheries Service
North Central Coast Office