# UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

In Re: Application for Temporary Variance of Flow Requirements

FERC Project No. 77-313

# MOTION TO INTERVENE AND COMMENTS BY FRIENDS OF THE EEL RIVER, TROUT UNLIMITED, CALIFORNIA TROUT, PACIFIC COAST FEDERATION OF FISHERMEN'S ASSOCIATIONS, AND INSTITUTE FOR FISHERIES RESOURCES REGARDING PACIFIC GAS AND ELECTRIC COMPANY'S APPLICATION FOR TEMPORARY VARIANCE OF FLOW REQUIREMENTS

Alicia Hamann Friends of the Eel River PO Box 4945 Arcata, CA 95518 alicia@eelriver.org Tel: (707) 798-6345

Redgie Collins California Trout 360 Pine Street, 4<sup>th</sup> Floor San Francisco, CA 94104 rcollins@caltrout.org Tel: (415)392-8887 Matt Clifford Trout Unlimited 5950 Doyle Street, Suite 2 Emeryville, CA 94608 mclifford@tu.org Tel: (510) 280-5392

Glen Spain Pacific Coast Federation of Fishermen's Associations and Institute for Fisheries Resources Northwest Regional Office P.O. Box 11170 Eugene, OR 97440-3370 fish1ifr@aol.com Tel: (541) 689-2000

# **INTRODUCTION**

Pursuant to 18 C.F.R. § 385.214, Friends of the Eel River, Trout Unlimited, California

Trout, Pacific Coast Federation of Fishermen's Associations, and Institute for Fisheries

Resources (collectively "Movant-Intervenors") hereby move to intervene and provide comments

in response to the Commission's July 5, 2023, Notice of Application Accepted for Filing and

Soliciting Comments, Motions to Intervene, and Protests ("Notice)"<sup>1</sup>. The Notice addresses Pacific Gas and Electric Company's ("PG&E") application for a temporary variance of flow requirements for the Potter Valley Project, No. 77 ("PVP" or "Project").

Movant-Intervenors request that the Commission grant their motion to intervene. Movant-Intervenors further respectfully urge the Commission to approve the variance immediately on an emergency basis to protect Eel River salmon and steelhead listed under the Endangered Species Act ("ESA").<sup>2</sup> In view of the extraordinary circumstances facing the Project, Movant-Intervenors also urgently request that PG&E immediately consult with the Agencies and begin reducing flows to the East Branch Russian River as needed to protect the limited and important cold-water resource in the Upper Eel River before it is too late to do so this summer.

## I. MOTION TO INTERVENE

# A. MOVANT-INTERVENORS' POSITION IN THIS PROCEEDING, AND THE BASIS IN LAW AND FACT FOR THAT POSITION (18 C.F.R. § 385.214(b)(1)).

For the reasons set forth below, Movant-Intervenors support immediate implementation of the variance. To avoid unpermitted take of listed species, PG&E must immediately begin reducing flows to the East Branch Russian River as needed to protect the cold-water resource in the Lake Pillsbury reservoir that is vital to ESA-listed steelhead in the Eel River as long as Scott Dam blocks access to upstream habitat. The Commission must act immediately to facilitate this urgent action.

<sup>&</sup>lt;sup>1</sup> FERC, Notice of Application Accepted for Filing and Soliciting Comments, Motions to Intervene, and Protests (FERC Docket No. P-77-313) (July 5, 2023) Doc. Accession No. 20230705-3003.

<sup>&</sup>lt;sup>2</sup> Chinook salmon and steelhead populations in the Upper Eel River are listed as "threatened" under the federal Endangered Species Act. *See* 65 FR 36 074 (August 7, 2000) (listing Northern California steelhead); 64 FR 50, 394 (Sept. 16, 1999) (listing California Coastal Chinook).

It is also Movant-Intervenors' position that under the current Annual License, the Commission has violated and is violating section 7(a)(1) of the ESA, 16 U.S.C. § 1536(a)(1), by failing to ensure operation of the Project is consistent with the conservation of California Coastal (CC) Chinook salmon and Northern California (NC) steelhead trout listed as Threatened under the ESA. It is also Movant-Intervenors' position that the Commission violated and is violating section 7(a)(2) of the ESA, 16 U.S.C. § 1536(a)(2), by failing to ensure operation of the Project is not likely to jeopardize the continued existence of these listed species or destroy or adversely modify their critical habitat. It is also Movant-Intervenors' position that FERC violated and is violating Section 7(a)(2) of the ESA, 16 U.S.C. § 1536(a)(2), by issuing the Annual License without initiating or reinitiating consultation with the National Marine Fisheries Service ("NMFS") regarding the Project's effects on the listed species and their designated critical habitat, and that FERC violated and is violating Section 9(a)(1)(B) of the ESA, 16 U.S.C. § 1538(a)(1)(B), by authorizing an activity that harms, kills, and otherwise causes take of listed species.

In their Request and Petition for Rehearing, Reconsideration, and/or Discretionary Action filed on May 20, 2022 ("Request for Rehearing"),<sup>3</sup> Movant-Intervenors set forth the legal and factual basis for each of these positions. In sum, the Commission issued the Annual License for continued operation of the Potter Valley Project under terms and conditions that harm, kill, or otherwise take ESA-listed salmonid species, including by delaying and impeding their migration and spawning and causing increased predation. Issuance of the Annual License without additional protections for Eel River fisheries is not consistent with the conservation of the listed

<sup>&</sup>lt;sup>3</sup> Friends of the Eel River, Pac. Coast Fed'n of Fishermen's Ass'ns, Inst. of Fisheries Res., Trout Unlimited, Cal. Trout, *Motion to Intervene and Request and Petition for Rehearing, Reconsideration, and/or Discretionary Action* (May 20, 2022), Doc. Accession No. 20220520-5256 (hereinafter "Request for Rehearing").

species, but rather is likely to jeopardize their continued existence and adversely modify their designated critical habitat.

# B. MOVANT-INTERVENORS' INTERESTS WILL BE DIRECTLY AFFECTED BY THE OUTCOME OF THE PROCEEDING AND THEIR INTERVENTION IS IN THE PUBLIC INTEREST (18 C.F.R. § 385.214(b)(2)(ii) & (iii)).

All the Movant-Intervenors are non-profit groups with an interest in protecting salmonid fishery resources in the Eel River. The PVP and its operation pursuant to the terms and conditions of the annual license issued to PG&E on April 21, 2022 ("Annual License")<sup>4</sup> adversely impact ESA-listed Eel River salmonids in a number of ways. As fully detailed in Movant-Intervenor's Request for Rehearing, the PVP is harming and killing salmonids, and the Commission has failed and is failing to ensure that continued operation of the Project is consistent with conservation of listed species and is not likely to jeopardize their continued existence or destroy or adversely modify their designated critical habitat.

To remedy these failures, Movant-Intervenors would like to see Scott Dam removed to restore access to the cool headwaters of the mainstream Eel River to help restore severely depleted runs of mainstem Eel River salmon and steelhead. Movant-Intervenors would also like to see Cape Horn Dam removed due to its impacts on fish passage. Both actions should be included as part of the decommissioning of the PVP. In the interim, FERC and PG&E must immediately implement the eight interim protective measures outlined in NMFS' March 16, 2022 letter to FERC.<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> FERC, *Notice of Authorization for Continued Project Operation* (April 21, 2022), Doc. Accession No. 20220421-3034 (hereinafter "Annual License").

<sup>&</sup>lt;sup>5</sup> NMFS, Endangered Species Act and Magnuson-Stevens Fishery Conservation and Management Act Consultations on the Potter Valley Project (P-77) on the Eel River, California (March 16, 2022) Doc. Accession No. 20220317-5064.

The proposed action could potentially affect Movant-Intervenors' ongoing interests in the conservation and recovery of native Eel River fisheries, as well as the public's interest in recovery of ESA-listed species. Ensuring that the PVP is decommissioned and the Eel River dams are removed expeditiously, their settings are fully restored, and full protective measures for Eel River salmon and steelhead are in place in the interim, is in both Movant-Intervenors' interest and the public interest.

Movant-Intervenors' position is not adequately represented by current parties to the proceeding because they are the only parties to have taken action against the Commission in federal court regarding the Annual License. They also offer unique perspectives regarding the resources in the Eel River watershed. The specific interests of each Petitioner are discussed below.

#### 1. Friends of the Eel River

Friends of the Eel River ("FOER") is a nonprofit citizens' group that advocates for policies and practices consistent with the protection and recovery of the Wild and Scenic Eel River's outstanding resource values, particularly the salmonid species protected under the federal and California Endangered Species Acts. Founded in 1998 and headquartered in Eureka, California, FOER is a membership organization of thousands of concerned conservationists from Humboldt, Mendocino, Sonoma, Marin and other counties who are dedicated to protecting and restoring the Eel River watershed and its dependent fish and wildlife. FOER and its supporters use and enjoy the Eel River in the areas surrounding the Project and in Project-affected areas for recreational, aesthetic, and educational purposes, including but not limited to fishing, viewing, and enjoyment of the outdoors. FOER has actively participated in prior proceedings related to PG&E's license for operation of the Potter Valley Project, and FOER has repeatedly raised serious concerns with the Commission regarding the Project's ongoing impacts to listed salmonids.

### 2. Trout Unlimited

Trout Unlimited ("TU") is North America's leading coldwater fisheries conservation organization, dedicated to the conservation, protection and restoration of trout and salmon fisheries and their watersheds. TU's vision is that trout and salmon will be restored throughout their native range so that the next generation can enjoy healthy fisheries in their home waters. To accomplish this vision, TU works to protect, reconnect, and restore fish populations and their habitat, and to sustain this work by building a diverse movement of businesses, people, and communities dedicated to its mission. The Eel River is one of TU's highest priorities. TU's staff and partners have invested close to \$10 million dollars in habitat restoration throughout the Eel River basin, through dozens of separate fisheries restoration projects.

### 3. California Trout

California Trout ("CalTrout") is a nonprofit organization that works to ensure healthy waters and resilient wild fish for a better California by driving innovative, science-based solutions that work for the diverse interests of fish, farms, commerce, and people; building partnerships in key geographies where wild fish influence the community; and using project successes to establish precedent and influence statewide policy. CalTrout has participated actively in both formal and informal proceedings related to the Potter Valley Project for many years.

# 4. Pacific Coast Federation of Fishermen's Associations

Pacific Coast Federation of Fishermen's Associations ("PCFFA") is a California nonprofit organization and the west coast's largest trade organization for commercial fishing vessel owners and family commercial fishing operations. Collectively, PCFFA's members represent nearly 800 commercial fishing families, most of whom are small and mid-sized commercial fishing boat owners and operators. Many commercial salmon harvests along the West Coast are influenced or managed in accordance with Eel River-origin salmon run abundance levels and thus the livelihoods of PCFFA's members who rely on ocean harvest of Pacific salmon are greatly affected by the health and abundance (or lack thereof) of once numerous Eel River-origin salmon. For over thirty years, PCFFA has advocated to ensure the rights of individual fishermen and to fight for the long-term survival of commercial fishing as a livelihood and way of life. PCFFA has actively participated in the Potter Valley Project's licensing process at various levels, including reviewing and providing written comments on major scoping, draft and final NEPA documents, and providing economic and socioeconomic information.

#### 5. Institute for Fisheries Resources

The Institute for Fisheries Resources ("IFR"), which was originally founded by PCFFA in 1992, is separate from but still closely affiliated with PCFFA, and is a nonprofit public interest marine resources protection and conservation organization dedicated to protecting the natural resources and seafood bounty of the Pacific Ocean along the western seaboard of North America. IFR also runs an active salmon watershed protection and restoration program, and its members, most of whom are commercial salmon fishermen or women, also have personal interests in the restoration of salmon. Along with PCFFA, IFR has actively participated in the Project's licensing process at various levels, including reviewing and providing written comments on major scoping, draft and final NEPA documents, and providing economic and socioeconomic information.

### II. COMMENTS

# A. Pending Decommissioning, The Potter Valley Project Must Be Managed to Prevent Further Harms to Eel River Salmon and Steelhead

PG&E owns and operates the Potter Valley Project ("PVP" or "Project"), which includes Scott and Cape Horn Dams on the upper mainstem Eel River. While PG&E initially sought to relicense the Project, in 2019 the utility announced it would instead surrender the Project license. PG&E has stated its intent to file a draft decommissioning plan in November of 2023.<sup>6</sup> FERC has approved that schedule.<sup>7</sup>

Over the last decade, PG&E has repeatedly had to seek variances for Project operations due to inability to meet flows set by the 2003 Reasonable and Prudent Alternative ("RPA").<sup>8</sup> Multiple constraints already facing Project managers, and significant risks to Eel River fish species listed under the ESA, were reviewed and summarized in the Commission's July 27, 2022 Order granting a prior variance.<sup>9</sup> Those constraints included the potential for sediment accumulating behind Scott Dam to block the dam's only low-level outlet. This has led PG&E to establish a minimum reservoir level of 12,000 AF and to restrict the rate of reservoir drawdown.

However, the Commission's analysis of Project impacts on listed salmonids in the upper Eel River in its July 2022 Order was seriously weakened by misidentification of the species present in the upper Eel River. The Order discusses spring-run Chinook: "Both spring-run Chinook salmon and steelhead trout are likely to occur in the affected area during the proposed

<sup>&</sup>lt;sup>6</sup> PG&E, Potter Valley Hydroelectric Project, FERC No. 77-164-CA Response to Request for Plan and Schedule for the Surrender Application (July 8, 2022) Doc. Accession No. 20220708-5267.

<sup>&</sup>lt;sup>7</sup> FERC, Schedule for filing surrender application and designation of non-federal representative for consultation (July 29, 2022) Doc. Accession No. 20220729-3016.

<sup>&</sup>lt;sup>8</sup> This will be the ninth variance of flow requirements at the project. See FERC, *Order Modifying and Approving Temporary Variance of Flow Requirements Under License Article 52* (July 27, 2022) Doc. Accession No. 20220727-3048, at p. 8 footnote 24 ("PG&E has previously been granted seven variances of flow requirements at the project.").

<sup>&</sup>lt;sup>9</sup> FERC, Order Modifying and Approving Temporary Variance of Flow Requirements Under License Article 52 (July 27, 2022) Doc. Accession No. 20220727-3048 ("July 2022 Order").

variance implementation period in one or more life stages.<sup>10</sup> There are no spring-run Chinook in the Eel River system. The California Coastal Chinook Evolutionarily Significant Unit ("ESU") listed under the ESA consists of fall-run fish, which ascend the river as fall rains permit.<sup>11</sup> Chinook juveniles move to the ocean with the spring flows of their first year. Thus, while juvenile Chinook are unlikely to be affected by Project operations during the summer, the availability of cold water to supplement flows in fall may affect adult Chinook as they migrate upriver.

Similarly, the Commission's July 2022 Order discusses both summer and winter-run steelhead. "Both summer- and winter-run steelhead trout may be present, with the latter being predominant."<sup>12</sup> While it is indeed true that the Northern California Steelhead ESU listed under the ESA includes both winter and summer-run steelhead, summer steelhead have not been found in the Project area recently.

The southernmost run of summer steelhead on the planet did occur in the Project area and above Scott Dam until the dam was constructed a century ago. But as NMFS has noted, nearly all of the upper Eel River summer steelhead habitat is now inaccessible behind an impassable dam: "Currently, only 1.3 miles of habitat is accessible for this steelhead population due to the construction of Scott Dam."<sup>13</sup> Rainbow trout with the genetic heritage that would allow summer steelhead to return to the upper Eel River do survive above Scott Dam.<sup>14</sup> But those fish cannot

<sup>&</sup>lt;sup>10</sup> *Id.*, p. 12, para 29.

<sup>&</sup>lt;sup>11</sup> See 64 FR 50, 394 (Sept. 16, 1999) (listing California Coastal Chinook).

<sup>&</sup>lt;sup>12</sup> FERC, Order Modifying and Approving Temporary Variance of Flow Requirements Under License Article 52 (July 27, 2022) Doc. Accession No. 20220727-3048, p. 12 para 29.

<sup>&</sup>lt;sup>13</sup> National Marine Fisheries Service. 2016. Final Coastal Multispecies Recovery Plan. National Marine Fisheries Service, West Coast Region, Santa Rosa, California, Volume III, Northern California Steelhead, p. 484.

<sup>&</sup>lt;sup>14</sup> Samantha H. Kannry et al., On the Ecology and Distribution of Steelhead (Oncorhynchus Mykiss) in California's Eel River, 111 Journal of Heredity 548-563 (2020).

migrate to the Pacific, much less return to spawn in the cold headwaters of the Eel River, until Scott Dam is removed.

The winter-run steelhead which do return above Cape Horn Dam spawn below Scott Dam, in the Eel River or its tributaries. Unlike Chinook, juvenile steelhead must spend at least a year, and often more, in freshwater before they can run downriver to the Pacific. During their time in freshwater, juvenile steelhead will move upriver and between tributaries seeking cooler habitat and better feeding conditions. However, Scott Dam blocks access to nearly all of the potential habitat in the upper Eel River juvenile steelhead would otherwise occupy. Thus, juvenile steelhead in the upper Eel River are directly at risk from increased summer water temperatures in the Project area, and dependent on Project operations in a way they would not be if the Project had not been constructed as it was.

The risks Project operations pose to Eel River fall-run Chinook salmon and winter-run steelhead which do survive in the Project area, and the Project's inability to meet RPA flows, have been exacerbated by recent events. Since the summer of 2022, the public has learned of additional factors affecting the Project. On March 17, 2023, PG&E notified FERC and the public that a new analysis of the seismic risks to Scott Dam had led the utility to conclude that the gates atop Scott Dam should remain open to reduce significant risk to the dam in the event of an earthquake generated by the Bartlett Springs Fault, which runs under the dam and its reservoir.<sup>15</sup> PG&E has stated that it continues to study the seismic risks, and indicated it may need to take further measures, including accelerating dam removal.<sup>16</sup>

<sup>&</sup>lt;sup>15</sup> PG&E, Potter Valley Hydroelectric Project, FERC No. 77-CA Scott Dam, NATDAM No. CA00398 Results of Simplified Seismic Stability Analysis and Proposed Interim Risk-Reduction Measure (March 17, 2023) Doc. Accession No. 20230317-5114.

<sup>&</sup>lt;sup>16</sup> PG&E, Water Levels at Lake Pillsbury to Be Lower this Year (March 16, 2023),

https://www.pgecurrents.com/articles/3687-water-levels-lake-pillsbury-lower-year.

The Commission's notice notes that PG&E "does not intend to close the dam's gates."<sup>17</sup> At this point, it would be more accurate to say the company has been ordered *not* to close the gates. The California Division of Safety of Dams (DSOD) has barred PG&E from operating Scott Dam with the gates raised. DSOD wrote to PG&E on April 12, 2023, stating in part that:

Based on dam safety, DSOD concurs with PG&E's proposed 10-foot reservoir restriction as an interim risk reduction measure. **Therefore, DSOD is restricting the year-round operation of the reservoir of Scott Dam to Elevation 1900.00, the spillway crest**, which is 24.58 feet below the dam crest. This reservoir restriction may be revisited as conditions warrant and will remain in effect until PG&E receives DSOD's written approval authorizing a different level of reservoir storage.<sup>18</sup>

It also became clear in the spring of 2023 that the PVP will never function as a hydroelectric project again. The transformer at the Potter Valley powerhouse apparently failed in July of 2021. It was not until March 23, 2023 that PG&E informed the Commission it "no longer intends to replace the Potter Valley transformer."<sup>19</sup> As the Project will no longer produce even limited amounts of hydroelectric power, its substantial operations and maintenance costs will not be offset by any revenue. Nor is there any need to divert water from the Eel River to a powerhouse unable to generate electricity.

Movant-Intervenors note these factors to highlight that the PVP now requires judicious end of life care to reduce the Project's impacts on listed species and the Eel River ecosystem while PG&E works to decommission the Project. Project operations and conditions were already

<sup>&</sup>lt;sup>17</sup> PG&E, Potter Valley Hydroelectric Project, FERC No. 77-CA 2023 Flow Variance Request Due to Limited Storage Capacity (May 22, 2023) Doc. Accession No. 20230523-5020.

<sup>&</sup>lt;sup>18</sup> See Letter from Sharon K. Tapia, P.E., California Department of Water Resources, Division of Safety of Dams, to Jan Nimick, PG&E, Re: Scott Dam, No. 97-101 at 1 (April 12, 2023) (emphasis added).

<sup>&</sup>lt;sup>19</sup> PG&E, Potter Valley Hydroelectric Project, FERC No. 77-CA Potter Valley Powerhouse Transformer Replacement – Follow-up (March 22, 2023) Doc. Accession No. 20230323-5013.

causing take of ESA-listed salmonids prior to any of the above developments.<sup>20</sup> The PVP no

longer provides benefits for the Project owner or ratepayers, only costs.

# **B.** Reducing Diversions to the East Branch Russian River Under the Proposed Variance is Necessary to Protect Water Temperatures in the Reservoir

The variance would change minimum flow requirements set by the RPA for the East

Branch Russian River (EBRR). As PG&E explains,

In coordination with Agencies, PG&E will adjust flows in EBRR between the range of 25 and 5 cfs for the period of mid-July through September 30, informed by observed release water temperatures as measured at E-2, as needed to preserve cooler temperatures releases from the reservoir in support of ESA listed species in the Eel River downstream of Scott Dam.<sup>21</sup>

Specifically, PG&E proposes that diversions to the East Branch Russian River be reduced

beginning when the daily average water temperature of releases from Scott Dam exceeds 16°

C.<sup>22</sup>

As PG&E explains, in the absence of the variance, the RPA flow schedule would

otherwise require diversions to the Russian River of 75 cfs until mid-September.

The required flows at E-16 are 75 cfs for the summer. This required flow is a significant drain on the limited storage in the reservoir and could make it impossible to maintain adequate storage in the reservoir under drier scenarios.<sup>23</sup>

PG&E explains that the purpose of the proposed change in operations is to "preserve

Lake Pillsbury storage and maintain cooler release water temperatures."<sup>24</sup> As the variance

<sup>&</sup>lt;sup>20</sup> NMFS concluded in their March 16, 2022 letter that the Project is causing take of ESA-listed salmonids in a manner not anticipated in the Biological Opinion and from activities not described in the Opinion. NMFS, *Endangered Species Act and Magnuson-Stevens Fishery Conservation and Management Act Consultations on the Potter Valley Project (P-77) on the Eel River, California* (March 16, 2022) Doc. Accession No. 20220317-5064, (p. 1, para 2).

<sup>&</sup>lt;sup>21</sup> PG&E, Potter Valley Hydroelectric Project, FERC No. 77-CA 2023 Flow Variance Request Due to Limited Storage Capacity (May 22, 2023) Doc. Accession No. 20230523-5020.

<sup>&</sup>lt;sup>22</sup> *Id.* at p. 7 ("Gaging Station E-16 flows will be reclassified initially as Dry (25 cfs), as soon as FERC grants the variance request, and then will be adjusted between 5 cfs and 25 cfs based on PG&E and agency determination when daily average reservoir release water temperatures at E-2 exceeds 16 degrees Celsius.") <sup>23</sup> *Id.* at p. 3.

documents, reductions in releases from the Lake Pillsbury reservoir are the only tool available to moderate water temperature in the reservoir, and thus in releases from the reservoir. Those releases are also a key driver of water temperature increases because high diversion volumes speed the mixing of cold and warm water in the reservoir:

The water temperature analysis concluded that there are limited tools for mitigating high water temperature in the release from Lake Pillsbury. The small storage volume present in the deeper portions of the reservoir means that there is a limited supply of cooler water that is continuously being mixed with warmer surface water via discharges from the low-level outlet. This results in gradually warming discharges (as measured at gage E-2), especially during periods of highvolume releases.

The conclusion of the PG&E water temperature analysis was that managing releases was the only tool available to moderate water temperature releases from the reservoir.<sup>25</sup>

The variance proposes no changes to RPA required flows in the Eel River below Cape

Horn Dam. Movant-Intervenors concur it would not be appropriate to reduce flow levels in the

Eel River further than that. Thus, the only flows in the RPA scheme that can practicably be

reduced are those scheduled for the East Branch Russian River.

# C. The Variance is Necessary to Protect Listed Steelhead from High Water Temperatures Below Scott Dam

These comments principally address impacts on juvenile steelhead because juvenile

Chinook migrate to the Pacific Ocean before the period relevant to the variance. Steelhead, however, must spend at least a year, and often more, in freshwater before they migrate to the sea. Because Scott Dam completely blocks access to cold-water tributaries critical to steelhead, protection of cold water in the Lake Pillsbury reservoir for release to the upper Eel River in late summer and early fall is the primary object of the variance. As NMFS explained in its March 16, 2022 letter requesting interim protective measures, (J)uvenile 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 ESAlisted 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.<sup>26</sup>

To protect juvenile steelhead from high water temperatures below Scott Dam, NMFS therefore

requested:

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.<sup>27</sup>

Annual returns of Eel River steelhead indicate that the run is critically imperiled. During

the winter of 2022-23 only 145 adult steelhead trout have been counted at Van Arsdale Fisheries

Station at Cape Horn Dam.<sup>28</sup> At best, seventy females may have produced a few thousand

juvenile steelhead in the interdam reach, which must now survive pikeminnow predation and

high summer water temperatures.

The variance seeks changes to flows originally specified by the RPA issued by NMFS in

November 2002. The RPA was written to protect aquatic resources because NMFS' Biological

Opinion found FERC had granted PG&E a license that would have risked driving Eel River

<sup>&</sup>lt;sup>26</sup> NMFS, Endangered Species Act and Magnuson-Stevens Fishery Conservation and Management Act Consultations on the Potter Valley Project (P-77) on the Eel River, California (March 16, 2022) Doc. Accession No. 20220317-5064, at pp. 2-3.

<sup>&</sup>lt;sup>27</sup> *Id.,* p. 4.

<sup>&</sup>lt;sup>28</sup> PG&E, Potter Valley Hydroelectric Project, FERC No. 77-CA 2023 Flow Variance Request Due to Limited Storage Capacity (May 22, 2023) Doc. Accession No. 20230523-5020, at p.8, para 3.

salmon and steelhead extinct.<sup>29</sup> As the Commission noted in its July 2022 Order, the constant need for variances has shown that the RPA was not entirely prescient in anticipating the challenges of the 2010s, let alone 2023:

[T]he RPA requires PG&E to release minimum flows into the East Branch Russian River, based on water-year classifications, for the protection of environmental aquatic resources; however, due to the persistent drought conditions and made apparent by the need for multiple variances, the water year classification alone is not an accurate indicator of the flows necessary to protect aquatic resources each year.<sup>30</sup>

Indeed, because of the potentially late implementation of this year's flow variance and dramatically rising temperatures in the Lake Pillsbury Reservoir, even though 2023 has been a notably wet year, the actual conditions confronting steelhead in the Project area during the dry months of late summer and early fall may well be closer to those of a hot, dry year.

The graph below was downloaded from the website of the California Data Exchange Center, operated by the California Department of Water Resources, on July 27, 2023.<sup>31</sup> It reflects the discharges from Scott Dam to the Upper Eel River (at gage E-2) referenced in the variance. As the graph indicates, the temperature of releases from Scott Dam are over the 16 degree C trigger proposed in the variance. The water temperature is rising at a rate of approximately one degree C per week. By the time Commission staff read these comments, it is probable that the temperature of Scott Dam releases will already have begun to climb into ranges less viable for steelhead.

<sup>&</sup>lt;sup>29</sup> National Marine Fisheries Service, *Biological Opinion for the proposed license amendment for the Potter Valley Project (Federal Energy Regulatory Commission Project Number 77-110)* (Nov. 29, 2002), Doc. Accession No. 20021202-0257, at p. 81.

<sup>&</sup>lt;sup>30</sup> FERC, Order Modifying and Approving Temporary Variance of Flow Requirements Under License Article 52 (July 27, 2022) Doc. Accession No. 20220727-3048, p. 21 para 55.

 $<sup>^{31}</sup> https://cdec.water.ca.gov/jspplot/jspPlotServlet.jsp?sensor_no=14585\&end=07/27/2023\%2000:00\&geom=small&interval=40\&cookies=cdec0111000000$ 



# D. The Commission Has Already Considered Many of the Issues Presented by the Variance

FERC's review should be accelerated in this instance because the Commission has already reviewed key elements of the variance over previous years. While lowering the Lake Pillsbury reservoir level to reduce seismic risks is an additional element of the situation this year, its effect on operations is, as PG&E points out, analytically parallel to previous drought years which similarly reduced available storage.

As well, FERC has already addressed in prior years' variances limits on Project operations necessary to protect Eel River fisheries from increased temperatures and to protect Scott Dam's low-water outlet from sediment. Indeed, given those decisions, there would appear little basis for a denial of the variance. The Commission explained in the July 2022 Order that a conservative approach to cold water management was warranted to protect listed species:

The conservative approach of initially releasing flows of at least 5 cfs [at E16] is more prudent at this time, because it will ensure that PG&E can continue to safely

operate the project and accomplish all project purposes, including preventing jeopardy to federally-threatened species.<sup>32</sup>

Diversions to the East Branch Russian River were provided in the RPA to ensure flows for the recreational trout fishery planted in that reach by the California Department of Fish & Wildlife ("DFW"). As the Commission discussed in the July 2022 Order, the hatchery trout fishery in the EBRR is a low priority when Eel River water is at a premium:

...reduced flows in the East Branch Russian River would result in reduced aquatic habitat and increased water temperatures, which would become increasingly severe in the warmer summer months, likely leading to elevated stress and possible stocked and resident rainbow trout mortality. These effects, however, would be mitigated by regular future fish stocking in the Upper East Branch Russian River, which are conducted at least annually by the California DFW. <sup>33</sup>

The EBRR fishery is replanted by DFW. The unique genetics of wild steelhead in the upper Eel River cannot be replaced. The Commission approved a variance in July 2022 with similar flow

requirements for the EBRR.<sup>34</sup> In the order, the Commission noted that NMFS, which has

jurisdiction over both the Eel River and Russian River species, indicated that the proposed

variance would "benefit the Eel River salmonids without endangering Russian River

populations."35

# E. PG&E's Contractual Diversions of Eel River Water to the Potter Valley Irrigation District Are Not Exempt from The Endangered Species Act

PG&E's proposed flow variance, in order to preserve Lake Pillsbury storage and maintain cooler release water temperatures, would focus on meeting Eel River RPA flow requirements (as measured at E-11), and reducing flows to the EBRR (at E-16) in response to

<sup>&</sup>lt;sup>32</sup> FERC, Order Modifying and Approving Temporary Variance of Flow Requirements Under License Article 52 (July 27, 2022) Doc. Accession No. 20220727-3048, p. 18 para 41.

<sup>&</sup>lt;sup>33</sup> FERC, Order Modifying and Approving Temporary Variance of Flow Requirements Under License Article 52 (July 27, 2022) Doc. Accession No. 20220727-3048, p. 12 para 28.

<sup>&</sup>lt;sup>34</sup> Id.

<sup>&</sup>lt;sup>35</sup> *Id.* at p. 13 para. 33.

Lake Pillsbury release temperatures (as measured at E-2). As noted above, PG&E concluded in its water temperature analysis that managing releases from the Lake Pillsbury reservoir is the only tool available to moderate water temperature.<sup>36</sup>

The proposed flows released from Scott Dam (E-2) will be the combined releases for the Eel River below Cape Horn Dam (E-11), East Branch Russian River (E-16), and the Potter Valley Irrigation District ("PVID"), with a floor set by the minimum opening of the low-level outlet (approximately 35 cfs). However, in the proposed variance, PG&E makes no mention of what PVID flows will be, only noting that they will be at PG&Es discretion and outside the scope of this variance.<sup>37</sup>

We encourage the Commission to explicitly state that PVID contract flows must be reduced by PG&E as necessary to prevent harm to federally-threatened species in the Eel River. If cold water storage in Lake Pillsbury is dependent on the sum of flows released from Scott Dam, PVID contract flows cannot be ignored as a critical component in maintaining a cold-water pool, especially when PVID flows are likely to be higher than flows below Cape Horn Dam (E-11) and EBRR (E-16) flows. Therefore, we disagree that PVID water deliveries are outside of the scope of this and any future flow variance requests that seek to maintain cold water in the Lake Pillsbury Reservoir.

Operation of the Project in a manner likely to harm steelhead listed under the ESA is a take. Neither PG&E nor FERC has received authorization from NMFS for such incidental take. Thus, it is imperative both PG&E and FERC take all necessary measures to avoid take of Eel River steelhead. To that end, we applaud PG&E's commitment to finalize the Lake Pillsbury CE-

 <sup>&</sup>lt;sup>36</sup> PG&E, Potter Valley Hydroelectric Project, FERC No. 77-CA 2023 Flow Variance Request Due to Limited Storage Capacity (May 22, 2023) Doc. Accession No. 20230523-5020, Water Temperature Evaluation, p. 3.
<sup>37</sup> PG&E, Potter Valley Hydroelectric Project, FERC No. 77-CA 2023 Flow Variance Request Due to Limited Storage Capacity (May 22, 2023) Doc. Accession No. 20230523-5020, p. 3.

QUAL water temperature model as it will be helpful in better understanding how flow releases impact water release temperatures.

# F. The Commission Should Approve Immediate Implementation of This Flow Variance on an Emergency Basis

The undersigned organizations support the proposed variance. The variance is appropriate, necessary, and required by the ESA to minimize likely harms to listed species in light of changing conditions at the PVP. However, any further delay in the variance's implementation threatens to vitiate its purpose.

Therefore, we respectfully request both PG&E and the Commission take immediate action to protect Eel River fisheries. We urge PG&E to immediately consult with the Agencies and RVIT, and to begin reducing flows to the EBRR as appropriate to protect the limited and important cold-water resource behind Scott Dam. We urge the Commission to immediately approve implementation of the variance on an emergency basis.

As PG&E pointed out in the variance proposal in May 2023, continuing to divert 75 cfs to the East Branch Russian River "is a significant drain on the limited storage in the reservoir and could make it impossible to maintain adequate storage in the reservoir."<sup>38</sup> Diversion of 75 cfs to the EBRR is now likely to continue at least until August 4, when comments on the proposed variance are due, and beyond that date until FERC decides to approve the proposed variance. Every day of diversion prior to variance approval will not only deplete the limited amount of cold water available in the Lake Pillsbury reservoir, but also warm the water that does remain as long as the "period of high-volume releases" continues.

The Commission was correct to note in its July 2022 Order that,

[T]he coldwater pool is critical and cannot be restored once it is depleted, in part due to high air temperatures over the summer months. Moreover, other variables, such as storage buffers for projection errors, evapotranspiration, leakage, and block water calls by resource agencies, could exacerbate conditions at Lake Pillsbury.<sup>39</sup>

As discussed above, water temperatures below Scott Dam (at E-2) are already above the 16°C

trigger proposed in the variance request, and are continuing to rise by roughly one degree C each

week. Thus, it is critical that PG&E and the Commission take immediate steps to protect the

coldwater pool in the Lake Pillsbury reservoir from unnecessary depletion.

# G. Variances Must Be Implemented Earlier in the Season to be Effective

The Commission has previously emphasized that adverse impacts could result from

delayed action, reminding PG&E to submit future variances "as soon as possible":

We remind PG&E of the importance of planning for potential variance requests early and filing future variance requests as soon as possible in order to better enable the Commission to act on any such request in a timely manner given the adverse impacts that may result from delayed action.<sup>40</sup>

PG&E's variance request is dated May 22, 2023, and was filed May 23, 2023. PG&E

requested expedited review of the variance.<sup>41</sup> Thirty-seven days later, on July 5, FERC

announced a public comment period extending through August 4, 2023.42 The Commission did

not state a date by which it will determine whether to grant the variance.

PG&E's May 23 filing contemplated that the variance would begin by mid-July:

In coordination with Agencies, PG&E will adjust flows in EBRR between the range of 25 and 5 cfs for the period of mid-July through September 30, informed by observed release water temperatures as measured at E-2, as needed to preserve

<sup>&</sup>lt;sup>39</sup> FERC, Order Modifying and Approving Temporary Variance of Flow Requirements Under License Article 52 (July 27, 2022) Doc. Accession No. 20220727-3048, p. 18, para 41.

<sup>&</sup>lt;sup>40</sup> FERC, Order Modifying and Approving Temporary Variance of Flow Requirements Under License Article 52 (July 27, 2022) Doc. Accession No. 20220727-3048, p. 21, para 56.

<sup>&</sup>lt;sup>41</sup> PG&E, Potter Valley Hydroelectric Project, FERC No. 77-CA 2023 Flow Variance Request Due to Limited Storage Capacity (May 22, 2023) Doc. Accession No. 20230523-5020, p. 1, para 3.

<sup>&</sup>lt;sup>42</sup> FERC, Notice of Application Accepted for Filing and Soliciting Comments, Motions to Intervene, and Protests (July 5, 2023) Doc. Accession No. 20230705-3003.

cooler temperatures releases from the reservoir in support of ESA listed species in the Eel River downstream of Scott Dam.<sup>43</sup>

Upon approval of previous flow variances, the Commission has reserved its authority to modify its order based on any new information received or as conditions may warrant. In practice, however, the dynamic watershed conditions in the Eel River would require deliberation and implementation in a matter of days or perhaps weeks rather than months.<sup>44</sup> Resource agencies and the Project owner are well positioned to react to changing conditions on the ground and implement changes, but FERC's process is much more lengthy and cumbersome. As a result, variances must be in place soon enough to allow for resource agencies and the Licensee to react to changing conditions and to implement critical terms such as the 16°C trigger without delay.

#### H. Future Flow Variance Needs

Finally, we understand that PG&E and the Agencies are engaged in discussions regarding a potential long-term variance. We encourage the Commission to set a schedule and deadlines for a potential long-term variance to ensure it is approved and in place as soon as possible and for that variance to include all of the Interim Protective Measures (IPMs) specified by NMFS as necessary to protect ESA-listed species in the Eel River pending removal of the Project dams.<sup>45</sup>

# **III. CONTACT INFORMATION**

Pursuant to FERC Rule 203(b), Movant-Intervenors request that all communications and service in this matter be directed to:

<sup>&</sup>lt;sup>43</sup> PG&E, Potter Valley Hydroelectric Project, FERC No. 77-CA 2023 Flow Variance Request Due to Limited Storage Capacity (May 22, 2023) Doc. Accession No. 20230523-5020, p. 7, para 3.

<sup>&</sup>lt;sup>44</sup> FERC, Order Modifying and Approving Temporary Variance of Flow Requirements Under License Article 52 (July 27, 2022) Doc. Accession No. 20220727-3048 p. 22, para 57.

<sup>&</sup>lt;sup>45</sup> NMFS, Endangered Species Act and Magnuson-Stevens Fishery Conservation and Management Act Consultations on the Potter Valley Project (P-77) on the Eel River, California (March 16, 2022) Doc. Accession No. 20220317-5064.

For Friends of the Eel River:

Alicia Hamann Friends of the Eel River PO Box 4945 Arcata, CA 95518 alicia@eelriver.org Tel: (707) 798-6345

For Trout Unlimited:

Matt Clifford Trout Unlimited 5950 Doyle Street, Suite 2 Emeryville, CA 94608 mclifford@tu.org Tel: (510) 280-5392

For California Trout:

Redgie Collins California Trout 360 Pine Street, 4<sup>th</sup> Floor San Francisco, CA 94104 rcollins@caltrout.org Tel: (415) 392-8887 / Fax: (415) 392-8895

For Pacific Coast Federation of Fishermen's Associations and Institute for Fisheries Resources:

Glen Spain Pacific Coast Federation of Fishermen's Associations (PCFFA) Institute for Fisheries Resources (IFR) Northwest Regional Office P.O. Box 11170 Eugene, OR 97440-3370 fish1ifr@aol.com Tel: (541) 689-2000

# IV. CONCLUSION

The undersigned organizations strongly support the proposed variance. However, because

we concur with PG&E's biologists that "... the proposed flow variance is necessary to conserve

water in Lake Pillsbury and provide adequate flow releases and suitable water quality

conditions for the long-term protection of Chinook salmon and steelhead trout in the

*watershed*,"<sup>46</sup> our principal purpose in writing now is to urgently request that both PG&E and the Commission take immediate action necessary to protect Eel River fisheries.

We urge PG&E to immediately consult with the Agencies and tribes and begin reducing flows to the EBRR as necessary to protect the limited and important cold-water resource behind Scott Dam. We respectfully urge the Commission to approve implementation of the variance on an emergency basis.

FERC's process has already caused a substantial delay in approving and implementing the variance. The proposed change in operations contemplated by the variance runs only until September 30. Any delay in implementing the variance is likely to result in irreversible losses of the limited cold-water pool available in the Lake Pillsbury reservoir.

The variance is clearly appropriate, necessary, and required by the ESA to minimize likely harms to listed species. Any further delay in approving the proposed variance may preclude essential protections for Eel River fish affected by the PVP and its operations.

Finally, we implore the Commission to set a schedule and deadlines for a potential longterm variance to ensure it is approved and in place prior to next spring. California's Mediterranean climate wet winters and dry summers requires water managers to plan ahead in their efforts to protect cold water species. When dams block access to critical cold water headwater streams, reservoir storage must be managed to provide the patterns of cool water that ESA listed species require for survival.

Thank you for your consideration of these comments and your prompt action on the proposed variance.

<sup>&</sup>lt;sup>46</sup> PG&E, Potter Valley Hydroelectric Project, FERC No. 77-CA 2023 Flow Variance Request Due to Limited Storage Capacity (May 22, 2023) Doc. Accession No. 20230523-5020

DATED: July 28, 2023

FRIENDS OF THE EEL RIVER

Hirint

By: Alicia Hamann Executive Director, Friends of the Eel River

CALIFORNIA TROUT

Jal Ali

By:

Walter "Redgie" Collins Legal and Policy Director, California Trout

TROUT UNLIMITED

By:

Brian J. Johnson California Director, Trout Unlimited

PACIFIC COAST FEDERATION OF FISHERMEN'S ASSOCIATIONS AND INSTITUTE FOR FISHERIES RESOURCES

By:

Glen Spain North West Regional Director, PCFFA

# UNITED STATES OF AMERICA

# FEDERAL ENERGY REGULATORY COMMISSION

In Re: Application for Temporary Variance of Flow Requirements

FERC Project No. 77-313

# **CERTIFICATE OF SERVICE**

I hereby certify that I have this day served, by first class mail or electronic mail, a Motion to Intervene and Comments by Friends of the Eel River, Trout Unlimited, California Trout, Pacific Coast Federation of Fishermen's Associations, and Institute of Fisheries Resources Regarding Pacific Gas and Electric Company's Application for Temporary Variance of Flow Requirements, FERC Project P-77-313, on each person designated on the official P-77-000 Service List compiled by the Commission in the abovecaptioned proceedings.

Dated this 28th day of July, 2023.

David Weibel

David Weibel Legal Secretary Shute, Mihaly & Weinberger LLP