Federal Energy Regulatory Commission
Division of Hydropower Administration and Compliance
Attention: T.J. LoVullo, Chief, Aquatic Resources Branch
Washington, DC

via email to thomas.lovullo@ferc.gov

RE: Potter Valley Project P-77; Apparent violations of license conditions at Cape Horn Dam fish ladder; Potential take of listed species

Dear Mr. LoVullo,

We write to apprise you of apparent chronic violations of license conditions at the Cape Horn Dam, part of the Potter Valley Project (PVP), FERC Project P-77, where the fish passage facilities have repeatedly been rendered non-functional by high flows.

We request that FERC investigate PG&E’s failure to provide reliable fish passage at Cape Horn Dam under the procedures outlined in the FERC Division of Hydropower Administration and Compliance’s Compliance Handbook (Office of Energy Projects 2015). If violations are confirmed, we urge FERC require PG&E to quickly adopt measures to provide alternative fish passage options in the short term, and to prepare plans to reconstruct and/or redesign the structures in question “so as to minimize the likelihood such violations will recur” in future years, as the Handbook provides.

As we understand them, the facts of the situation include the following. The California Department of Fish and Wildlife operates the fish ladder at Cape Horn Dam, generally referred to as the Van Arsdale Fish Station. Scott Harris, an environmental scientist with CDFW, has overseen the fish station for approximately the last ten years. The bulk of the specific facts reported in the following are drawn from Mr. Harris’ regular emails reporting on the operation of the fish ladder, or from the author’s personal communication with Mr. Harris on Wednesday, March 6.

For the fourth time in the last three years, the fish ladder at Cape Horn Dam and Van Arsdale Reservoir has been rendered nonoperational for an extended period by sediment and debris carried by high winter flows on the upper Eel River. The ladder has been closed twice this year, and now will apparently remain closed for several weeks in the middle of steelhead migration.
Although recent, relatively high seasonal flows in the upper Eel River appear to be within the range of historic variation, they have repeatedly resulted in both the Cape Horn Dam fish ladder itself and the ‘fish hotel’ intake structure at the base of the fish ladder becoming clogged with sediment (including gravel and larger rocks) and woody debris. (See attached photographs, per Scott Harris CDFW)

When this happens, the fish ladder must be closed until the debris and sediment can be removed. When the fish hotel structure becomes impaired, the fish ladder cannot be made functional until the hotel can be cleaned by a dive team.

Thus, chinook salmon and steelhead (both listed as Threatened under the federal Endangered Species Act) are unable to pass through the fish ladder to reach spawning and rearing habitat above Cape Horn Dam. Because the ladder is the only way salmonids can surmount Cape Horn Dam, there is presently no fish passage at Cape Horn Dam.

It is clear that steelhead are now in the upper Eel River, attempting to pass upstream of Cape Horn Dam. Harris noted that steelhead typically continue to pass the Cape Horn fish ladder through the first week in April.

Steelhead were passing through the fish ladder prior to the recent closures. Harris’ regular email reports on the fish ladder noted 105 steelhead had passed through the ladder in the weeks prior to February 13.

The fish ladder was apparently first closed this year from February 13 to February 20 following flows of approximately 16,000 cfs in the upper Eel River. CDFW was able to remove accumulated logs and woody debris fairly quickly, and reopened the fish ladder.

Eight steelhead passed through the ladder in the week preceding February 13. Between February 20 and 24, the ladder was reopened, and an additional 7 steelhead passed up the ladder. The ladder was closed again on February 24 as the upper Eel River crested to more than 30,000 cfs.

Our understanding is that the present closure, which began on February 24, will not be addressed before March 18. While we understand that it is unsafe to clean the hotel at river flows above roughly 2000 cfs, the challenge here appears to be PG&E’s unwillingness to prioritize the work at Cape Horn above other operations which also require dive teams. (We would respectfully suggest PG&E hire additional divers as necessary to clear the fish ladder as quickly as possible.)

As well, during the winter of 2017, high flows in January (of approximately 29,000 cfs) and February (26,000 cfs) each forced the closure of the fish ladder. Previous to those closures, we understand that a high water event in 2005 caused the worst obstruction of the fish ladder and hotel in recent memory. This history tells us that these problems are not merely incidental, and that suitable measures have yet to be taken to “minimize the likelihood”
these failures to provide fish passage will recur in future high water events, as the FERC Compliance Handbook states.

In addition to the problems posed by sediment and debris, we note that the ‘fish hotel’ does not appear to function at all in higher flows, even when it is not impaired by sediment and debris. Per CDFW’s Scott Harris, fish are unable to locate the fish ladder when flows in the upper Eel River are above approximately 2,000 cfs due to high water velocities at the base of the hotel structure. Thus, Harris reports that he routinely closes the fish ladder when flows reach 3,000 cfs or above.

We query whether this level of performance meets requirements of Articles 15, 46, and 52 of the PVP license. Article 15 requires the licensee to “construct, maintain, and operate protective devices in the interest of fish and wildlife resources, as ordered by FERC or as recommended by other Federal or State agency...” Article 46 requires ongoing consultation and cooperation “with appropriate Federal, state, and other natural resource agencies for the protection and development of the environmental resources of the Project area.” Article 52 requires compliance with the Reasonable and Prudent Alternative of the 2002 NMFS BiOp for the Project. As well, Article 35 requires the licensee to “maintain and operate the Project in good faith and comply with terms of the license.”

We also question whether the fish passage provided by the facilities at Cape Horn Dam is adequate to meet the National Marine Fisheries Service’s standards for volitional fish passage at federally licensed hydropower facilities.

As far as we can tell, licensee PG&E has no current plans to provide either short-term fish passage when the Cape Horn fish ladder is offline, or to retrofit and/or redesign the fish passage facility so that fish can pass upstream in higher flows, so that the facility is not rendered inoperable by higher flows.

Absent decisive and effective action to restore fish passage, we believe PG&E may be in violation of not only its license, but also the Endangered Species Act. The license conditions reflect the requirements of the Reasonable and Prudent Alternative developed by NMFS, which in turn reflect NMFS’ determination in the 2002 Biological Opinion that operation of the PVP under the 1984 FERC license would be likely to jeopardize the survival of listed chinook and steelhead in the Eel River.

As NMFS wrote in the Incidental Take Statement incorporated in that 2002 Biological Opinion,

“Take” is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harm is further defined to include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including breeding, spawning, rearing, migrating, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful
activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the ESA provided that such taking is in compliance with the terms and conditions of this incidental take statement. (p. 104)

Thus, under the ESA § 7, actions which “significantly (impair) essential behavioral patterns, including breeding, spawning, rearing, migrating” can constitute a “take” of listed species unless expressly permitted.

While the Reasonable and Prudent Alternative, in the passage above, provides incidental take coverage for operations consistent with its requirements, the blockages we are reporting do not appear to be consistent with the RPA or with the PVP license. As the district court explained in Grand Canyon Trust v. U.S. Bureau of Reclamation, 623 F. Supp. 2d 1015, 1020 (D. Ariz. 2009), "(a) biological opinion’s “Incidental Take Statement constitutes a permit authorizing the action agency to ‘take’ the endangered or threatened species so long as it respects the [FWS] terms and conditions”’ (quoting Bennett v. Spear, 520 U.S. 154, 170 (1997)). Thus, we are concerned that these repeated failures to provide fish passage may constitute violations of both §7 and §9 of the ESA.

Under §9, PG&E may be liable for the unpermitted take of listed chinook and steelhead. In its order entering final judgment and permanent injunction in Wishtoyo Foundation v. United Water Conservation District, the federal district court for the Central District of California explicitly held that “operation and maintenance of the fish ladder” at the Vern Freeman Dam “has caused unauthorized ‘take’ of the Distinct Population Segment of Southern California Steelhead in violation of section 9 of the Endangered Species Act (ESA), 16 U.S.C. § 1538.” (Case No. 2:16-cv-03869-DOC-PLA.)

Previously in the same case, the court had held that “(t)he inclusion of the incidental take statement in the ... Biological Opinion constitutes a formal NMFS finding that (defendants’ actions subject to consultation) are taking Steelhead.” (see Decision of 9/23/2018, page 115, CV 16-3869-DOC (PLAx)). We conclude from NMFS’ inclusion of the incidental take statement cited above that operations of the Potter Valley Project not in compliance with the Biological Opinion, including failure to provide adequate fish passage at Cape Horn Dam, may be causing take of steelhead in violation of the Endangered Species Act.

Section 7(a)(2) of the ESA imposes substantive obligations on federal agencies, including FERC and NMFS, to ensure that an activity does not jeopardize a listed species. See Pyramid Lake Paiute Tribe of Indians v. U.S. Dep’t of the Navy, 898 F.2d 1410, 1415 (9th Cir. 1990); see also Res. Ltd. v. Robinson, 35 F.3d 1300, 1304 (9th Cir. 1994) (“Consulting with the FWS alone does not satisfy an agencies’ duty under the Endangered Species Act.”); City of Tacoma, Wash. v. FERC, 460 F.3d 53, 75-76 (D.C. Cir. 2006) (“[T]he ultimate responsibility for compliance [with Section 7] ... falls on the action agency.”)

In addition, while we are cognizant that FERC’s jurisdiction does not extend to the enforcement of state law, Article 15 of the Potter Valley Project license does require the
licensee to “construct, maintain, and operate protective devices in the interest of fish and wildlife resources, as ordered by FERC or as recommended by other Federal or State agency...” California Fish and Game Code § 5937 requires that “(t)he owner of any dam shall allow sufficient water at all times to pass through a fishway...” We would contend that the failure to promptly remedy the blockage of the fish ladder and fish hotel makes it impossible for “sufficient water to pass through” the Cape Horn fishway.

For the foregoing reasons, we respectfully request FERC promptly initiate an investigation, pursuant to its Compliance Handbook, of these apparent violations of the Potter Valley Project (P-77) license conditions. If violations are found, we urge FERC to require PG&E to take immediate steps to provide alternative fish passage, if any feasible means can be found to provide passage in the short term. As well, we implore FERC to require PG&E to begin preparing a plan to redesign and/or reconstruct the fish passage facilities at Cape Horn Dam to to minimize the likelihood such violations will recur.

Thank you for your prompt attention to this matter. Please feel free to contact us at your convenience if we may be of any further assistance.

Sincerely yours,

Scott Greacen
Conservation Director
Friends of the Eel River

Enclosures: photographs

cc: Office of Rep. Jared Huffman
Cape Horn Dam with the Eel River flowing at approximately 16,400 cfs.

Photo Scott Harris CDFW
Cape Horn Dam with the Eel River flowing at approximately 16,400 cfs. The ‘fish hotel’ structure is entirely underwater in the center-left portion of the photo.

Photo Scott Harris CDFW
Woody debris in the upper portion of the fish hotel structure.

Photo Scott Harris CDFW
Gravel entirely obstructing the fishways in the lower portion of the ‘fish hotel’ structure. Fish cannot reach the fish ladder until the gravel is cleared.

Photo Scott Harris CDFW
Gravel. Photo Scott Harris CDFW
Lots and lots of gravel. Photo Scott Harris CDFW
Gravel in the fish ladder itself. Photo Scott Harris CDFW