March 17, 2009

Hon. Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

Re: Potter Valley Hydroelectric Project No. 77-212:

Comments on Draft Environmental Assessment for Application of Amendment of License for Diversion of Water at Lake Pillsbury (Potter Valley Project)

Dear Secretary Bose:

Friends of the Eel River ("FOER") submit the following comments concerning the Draft Environmental Assessment ("EA") prepared by the Federal Energy Regulatory Commission ("FERC") regarding a proposal (the "Project") by Pacific Gas & Electric Company ("PG&E") to divert additional water from the Eel River for frost protection and late fall irrigation activities carried out by the Potter Valley Irrigation District ("PVID").

As shown below, the EA fails to meet the minimum legal requirements of the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§4321 et seq. The EA's conclusion that the Project will have no significant effect on the human environment is demonstrably erroneous. This conclusion relies on the assumption that the Project will not increase diversions from the Eel River, even though the EA itself acknowledges that such an increase is the primary purpose and chief effect of the Project. Furthermore, the EA uses an incorrect and unsubstantiated "baseline" for analysis of the Project's environmental impacts. The EA also fails to adequately analyze the Project's impacts on fisheries, including impacts to threatened and endangered salmonids, and further fails to disclose that the total amount of water proposed for diversion under the Project exceeds both PG&E's and PVID's water rights. Finally, the EA fails to analyze cumulative impacts and neglects to consider a

range of alternatives. NEPA requires much more.

The Project also threatens to violate the Endangered Species Act ("ESA"), 16 U.S.C. §§ 1531 et seq. The EA's conclusion that this Project will not affect listed salmon and steelhead, again, is predicated on erroneous assumptions. Indeed, the sole purpose of this Project is to modify restrictions imposed under the ESA in order to avoid jeopardy to threatened and endangered salmon and steelhead in the Eel River. Accordingly, FERC must reinitiate consultation with the National Marine Fisheries Service.

I. **The EA Fails to Satisfy the Requirements of NEPA.**

FERC has violated NEPA by failing to prepare a full Environmental Impact Statement ("EIS") that adequately analyzes the Project's environmental impacts, as well as a reasonable range of alternatives to, and mitigation for, those impacts. The EA, as well as the information provided in this letter and the exhibits hereto, demonstrate that despite FERC's conclusory statements, substantial questions exist as to whether this Project will have a significant impact on the environment, particularly with respect to water resources, fisheries, threatened and endangered salmon and steelhead, and recreational resources. Because such questions exist, an EIS for this Project is required under NEPA. See Ocean Advocates v. U.S. Army Corps of Engineers, 402 F.3d 846, 864-65 (9th Cir. 2004); Idaho Sporting Congress v. Thomas, 137 F.3d 1146, 1149-50 (9th Cir. 1998); Foundation for North American Wild Sheep v. USDA, 681 F.2d 1172, 1178 (9th Cir. 1982). In addition, the EA fails to provide meaningful analysis of the Project's impacts and a convincing statement of reasons why those impacts are not significant, see The Steamboaters v. F.E.R.C., 759 F.2d 1382, 1393 (9th Cir. 1985), and fails to analyze an adequate range of alternatives. See 40 C.F.R. § 1508.9(b); Bob Marshall Alliance v. Hodel, 852 F.2d 1223, 1229 (9th Cir. 1988).

A. **The EA Employs an Arbitrary and Contradictory "Baseline" for Analysis of Environmental Impacts.**

The EA assumes that the Project's impacts will be insignificant provided that PG&E ensures that water deliveries do not exceed PVID's purported entitlement to 19,000

acre-feet per year ("afy") under a 1936 contract between the two entities. The assumption is wrong for at least two reasons. First, PVID does not currently divert anywhere near 19,000 afy under its contract with PG&E. Accordingly, the EA cannot rely on this figure as a "baseline" against which to measure the Project's environmental impacts. Second, it does not appear that PVID's claimed entitlement to 19,000 afy under its contract with PG&E is supported by actual water rights. Indeed, under the two permits that form the basis of the contract, PG&E has the right to store and deliver less than half that amount. The EA thus fails to account for the ways in which this Project changes the status quo, in violation of NEPA.

1. **The EA Contains Contradictory Assumptions Concerning the Project's Impacts.**

The EA contains contradictory statements and assumptions regarding whether the Project will alter the status quo. On one hand, the EA suggests that PVID need not "pay back" additional water diverted for frost protection and late fall irrigation purposes, as has been required under previous temporary license amendments, so long as it does not divert more than the 19,000 afy allowed under its contract with PG&E. See EA at 8, 30. The EA also states that NMFS has expressed concurrence with the Project based on an assumption that "since the annual amount of water diverted for PVID will not change under PG&E's long-term plan, overall annual storage in Lake Pillsbury is not anticipated to be affected." EA at 15-16; see also R. McInnis, NMFS, letter to K. Bose, FERC (Feb. 3, 2009) at 2. The EA thus leaves the reader with the impression that PVID's diversion of 19,000 afy reflects the status quo, and that the Project effects no change in diversions or in storage at Lake Pillsbury.

This impression is false and misleading. As PG&E's own filings in this proceeding demonstrate, PVID does not currently divert anywhere near 19,000 afy under its contract. See R. Doble, PG&E, letter to K. Bose, FERC (Jan. 2, 2009) at 2 (showing "Total Annual Diversions" between 5,785 and 13,667 afy for 2004-2007 calendar years). Moreover, the purpose and effect of the Project is to increase diversions, specifically of water stored in Lake Pillsbury, by 4,195 afy. EA at 18, 20.

The Project thus effects a substantial change in the status quo, the significant impacts of which must be analyzed in an EIS. See, e.g., Pit River Tribe v. U.S. Forest Serv., 469 F.3d 768, 784 (9th Cir. 2006) (extension of lease with development rights a change in the status quo); Confederated Tribes and Bands of Yakima Indian Nation v. F.E.R.C., 746 F.2d 466, 476 (9th Cir. 1984) (relicensing of hydropower project, even

under same terms and conditions, is “more akin to an irreversible and irretrievable commitment of a public resource than a mere continuation of the status quo”). Under this Project, an additional 4,195 afy of water will be released from Scott Dam, diverted into Powerhouse Canal, and thereby irretrievably and irreversibly committed to use outside the Eel River watershed.

As shown in greater detail below, the impacts of this increased diversion on water resources, fisheries, and recreation are significant. Limiting PVID’s diversion to its purported contractual entitlement of 19,000 afy will do nothing to ameliorate these impacts. FERC must prepare an EIS for this Project.

2. **PVID’s Purported Contractual Entitlement to 19,000 afy Has No Basis in Current Water Rights.**

The EA’s reliance on the 19,000 afy contractual limitation is legally erroneous for a separate reason: the contractual limitation does not accurately reflect the water rights that allow PG&E to deliver water under its contract with PVID.

The EA’s discussion of this purported contractual entitlement is derived from representations made by PVID in a comment letter filed in 2007. See EA at 5 n.6 (citing Potter Valley Irrigation District, 2007. Comments, Recommendations for Terms and Conditions and Motion to Intervene for Project 77-162 (April 3, 2007)). However, PVID’s account of its contract with PG&E is not supported by either the contract itself or the underlying water rights, as the historical record demonstrates.

PG&E and PVID entered into a contract on March 30, 1936, under which PG&E agreed to provide an aggregate of 19,000 afy to PVID. See March 30, 1936 Agreement (Exhibit A) at 1, 2. The contract stated that this water would be provided “under and by virtue of Permits numbered 2954 and 3635” granted to PG&E by the California Division of Water Resources.[1] Id. at 1. These two permits, therefore, define the scope of the contract between PG&E and PVID.

At the time that the March 30, 1936 Agreement was executed, Permit 2954 (Application 5661) had been perfected as License 1199. See Exhibit C. License 1199 allowed storage in Lake Pillsbury of 4,500 afy to be rediverted and used within PVID’s service boundaries. Id.

Permit 3635 (Application 6594), as originally issued on December 11, 1930, allowed storage and rediversion of an additional 14,500 afy, also for irrigation purposes. See Exhibit D. In 1936, therefore, these two permits supported PG&E’s promise to deliver 19,000 afy.

PVID, however, was never able to put the full 14,500 afy authorized under Permit 3635 to beneficial use, despite having been allowed nearly 30 years to do so. See Exhibit E (correspondence between PVID and DWR). When Permit 3635 was finally perfected as License 5545 in December 1958, it authorized only 4,908 afy of total storage and diversion, at a maximum of 40 cubic feet per second ("cfs"). See Exhibit F.

Therefore, under the permits referenced in the March 30, 1936 Agreement—the contract that is still in effect, and that is at issue here—PG&E has the right to store in Lake Pillsbury and to deliver for irrigation purposes 9,408 afy, not 19,000 afy. A letter from PVID's attorney to the State Water Board dating from 1963 confirms that PVID has known this for many years. See Exhibit G. Accordingly, the 19,000 afy contract amount discussed in PVID's 2007 comment letter, and relied upon throughout the EA, is in large part a relic of water rights that were never perfected and no longer exist.

Indeed, PG&E's Licenses 1199 (Application 5661) and 5545 (Application 6594), allowing a combined diversion of 9,408 afy, are the only water rights held by PG&E that could support a contractual delivery of water from Lake Pillsbury to PVID. PG&E's other water rights pertaining to the Potter Valley Project do not support any additional diversion of water stored in Lake Pillsbury. License 1424 (Application 1719), as amended in 1985, allows storage and diversion only for hydroelectric power generation and incidental fisheries protection purposes. See Exhibit J. PG&E's 1905 appropriation, originally obtained by the Snow Mountain Power Company, allows only direct diversion of the flood flows of the Eel River at Van Arsdale, and does not allow any diversion for storage at, or rediversion from, Lake Pillsbury (which did not exist in 1905). See Exhibit K.

Accordingly, the EA's reliance on the 19,000 afy contractual term not only fails to reflect present conditions, but also has no basis in current and valid water rights. Indeed, as shown below, FERC's approval of the Project could result in diversions of water in excess of both PVID's and PG&E's rights. This in itself is a significant impact that must be addressed in an EIS. See 40 C.F.R. §§ 1506.2(d), 1508.27(b)(10).

B. **The EA Improperly Defers Analysis of the Project's Significant Environmental Impacts.**

Under NEPA, "[b]efore one brings about a potentially significant and irreversible change to the environment, an EIS must be prepared that sufficiently explores the

intensity of the environmental effects it acknowledges." National Parks & Conservation Ass'n v. Babbitt, 241 F.3d 722, 733 (9th Cir. 2001). Accordingly, an agency may not "propose[] to increase the risk of harm to the environment and then perform . . . studies" necessary to determine whether that risk is significant. Id.; see also Blue Mtns. Biodiversity Project v. Blackwood, 161 F.3d 1208, 1213 (9th Cir. 1998) (holding "general statements" about "possible effects" in EA insufficient to meet NEPA's requirement that an agency take a "hard look" at environmental consequences); Sierra Club v. U.S. Forest Service, 843 F.2d 1190, 1195 (9th Cir. 1988) (agency's failure to account for factors necessary to determine whether significant impacts would occur violated NEPA).

The EA violates these principles in at least three major ways. First and foremost, in discussing the Project's impacts on water resources, the EA states that the Project does not provide certainty as to [its] effectiveness during critical or exceptionally low inflow periods that may occur in the project area. During these periods it may be necessary to consider alternate flow releases needed for the protection of the various resources analyzed in the EA. PVID's diversions may need to be reduced to less than the flows requested in this amendment proposal. Experience gained during these critical or exceptionally low inflow periods during the 13 years between now and the expiration of the project license (1922) [sic] may necessitate changes to the flow diversions proposed here. Therefore, we recommend that the Commission reserves its right to allow changes in these flow proposals after consultations with all applicable entities involved with this proceeding.

EA at 19, see also id. at 21, 24, 27. Like the EA invalidated in National Parks, this EA "has the process exactly backwards." 241 F.3d at 733. The Project's "effectiveness" in protecting water resources and listed species during periods of low flow must be analyzed now, before FERC and PG&E take actions that increase the risk to the environment. Id. FERC cannot defer analysis of this risk pending "experience gained" sometime during the next 13 years. Indeed, the EA's acknowledgment of these "uncertainties" itself raises substantial questions concerning the Project's environmental impacts—questions that demand preparation of an EIS. See, e.g., Ocean Advocates, 402 F.3d at 864-65.

Second, the EA reveals that springtime releases from Scott Dam for frost protection purposes could interfere with releases of block water from Lake Pillsbury required under the RPA to assist the migration of salmon and steelhead. See EA at 24-25, 27. Again, however, the EA fails to analyze the significance of this interference. Instead, the EA recommends that PG&E simply report on any such interference, once per

year, in conjunction with its annual report regarding water deliveries to PVID. See EA at 6-7, 19, 25. This after-the-fact monitoring of the Project's impacts is no substitute for what NEPA requires: a "hard look" at environmental consequences before a decision is made.

Finally, the EA fails to discuss any mitigation measures whatsoever. Rather, the EA just recommends that FERC require post-approval reporting on the Project's actual impacts, wait to see what problems might arise, and "reserve" discretion to take unspecified actions in response to those problems. To the extent that the EA's "recommendations" are intended as mitigation measures, they are entirely inadequate under NEPA. See National Parks, 241 F.3d at 734-35 (mitigation measures based on future study inadequate to support finding of no significant impact). An EIS must be prepared, with full analysis of the Project's environmental impacts, and full discussion of mitigation measures necessary to reduce those impacts.

C. **The EA Fails to Adequately Analyze the Project's Significant Impacts on Water Resources.**

The EA concludes that the Project's water resources impacts are insignificant, at least in normal water years. As discussed above, this conclusion only begs the question as to whether the Project will have significant impacts in years with less-than-normal flow. Even in normal years, moreover, the Project could result in diversions exceeding both PG&E's and PVID's state water rights. This is a significant impact that must be analyzed in an EIS. See 40 C.F.R. §§ 1506.2(d), 1508.27(b)(10).

The EA fails to include a clear statement of the total amount of water that could be diverted if the Project is implemented. This is, however, a matter of simple mathematics. Under the current RPA, PG&E's deliveries to PVID are limited to 5 cfs between October 16 and April 14, and 50 cfs between April 15 and October 15. Using the conversion figure employed in the EA (1 cfs = 1.9835 acre-feet per day), this results in a maximum yearly diversion of 21,471.4 afy.[2] By adding an additional 31 days per year during which water could be diverted at 50 cfs rather than 5 cfs, the Project would increase that maximum amount by 4,195 afy. EA at 18, 20. Therefore, the total maximum water diversion under the Project is 25,666.4 afy.

As previously discussed, PG&E has the right to store and divert only 9,408 afy for irrigation purposes. PG&E's other water right allowing diversion for storage in Lake Pillsbury, License 1424, cannot be used for irrigation purposes, and PG&E's 1905

appropriation does not contemplate diversion or rediversion of water stored at Lake Pillsbury. PG&E's total right to deliver water from Lake Pillsbury to PVID, therefore, is limited to 9,408 afy. The amounts released from Scott Dam under this Project could vastly exceed this limitation—and the proposed contractual limitation of 19,000 afy would do nothing to avoid this outcome.

Under the Project, moreover, PVID can cause more water to be released from Scott Dam than it is entitled to divert from Powerhouse Canal (a total of 22,670 afy, including the contract amount).[3] Even under the existing RPA, PVID's maximum diversion of 21,471.4 afy is very close to this limit. Based on PVID's past practices, the EA assumes that PVID will request that PG&E release and divert the maximum amount of water allowable under the Project at all times—whether PVID actually rediverts the water or not—just to ensure that the water will be at the tailrace if needed. See EA at 17. The Project, however, contemplates that the 19,000 afy limitation will apply only to water actually diverted into PVID's canals at the tailrace. EA at 6-7. The Project would effectively regularize this wasteful practice in a manner that conflicts with state law. Specifically, PVID could request, and PG&E could divert, up to 25,666.4 afy—a diversion far in excess of the 19,000 afy limitation supposedly imposed by the EA, and in excess of PVID's own water rights.

The EA calls this a mere "data discrepancy," EA at 20, but it is much more than that. Rather, it is a major flaw in the Project that could lead to diversions in excess of the rights held by both PG&E and PVID. This is a significant impact that must be analyzed in an EIS.

PVID's practice of requesting diversion of water it does not need, moreover, may violate fundamental requirements of state law requiring that appropriations be put only to reasonable and beneficial use. See Cal. Const., art. X, § 2. Buried in the EA's discussion of recreational impacts is a disclosure that in 2004, PVID diverted 735 acre-feet for frost protection purposes, but this amount "does not include excess diversions made from the Eel River by PG&E for the benefit of PVID that was [sic] subsequently not rediverted at the tailrace." EA at 30. Indeed, PVID's own 2007 comments reveal that in 2006, PVID had only one night of frost protection. PVID 2007 at 3. The EA, however, reveals that PVID's past practice has been to request the maximum amount of water available, whether it is needed or not. See EA at 17, 30. Diverting 50 cfs for 31 days in order to supply frost protection water for one day is the very definition of waste.[4]

The California Constitution's reasonable and beneficial use requirements apply to all water rights in the state—even the pre-1914 rights held by PG&E. See Imperial

Irrigation Dist. v. State Water Res. Control Bd., 186 Cal. App. 3d 1160 (Cal. App. 4th Dist. 1986). The Project threatens to institutionalize practices that may violate these basic requirements. Again, these potentially significant conflicts with California law must be thoroughly analyzed in an EIS.

D. **The EA Fails to Adequately Analyze the Project's Significant Impacts on Fisheries, Including Threatened and Endangered Salmon and Steelhead.**

The EA's analysis of the Project's impacts to fisheries, including threatened and endangered salmon and steelhead, is fatally flawed. As discussed above, the EA recognizes two potentially significant effects. First, the Project may affect listed species during periods of low flow. See EA at 19, 27. Second, additional releases of spring frost protection water from Lake Pillsbury could interfere with block water releases required under the RPA. EA at 24-25, 27. The EA fails to analyze these impacts, and instead unlawfully defers both analysis and development of remedial measures until after Project approval.

Furthermore, the EA's conclusion that the Project will have no impact on threatened and endangered species rests exclusively on a letter from NMFS stating that effects to listed salmonids are not anticipated. EA at 27. NMFS reached this conclusion based on the following assumption:

Since the annual amount of water diverted for PVID will not change under the long-term plan, overall annual storage in Lake Pillsbury is not anticipated to be affected. Therefore, NMFS does not anticipate that effects to ESA-listed salmonids or to their designated critical habitat would result from the proposed license amendment.

R. McInnis, NMFS, letter to K. Bose, FERC (Feb. 3, 2009) at 2. In a previous letter, NMFS similarly concluded that implementation of the 19,000 afy contract limitation would prevent impacts to salmonids. See R. McInnis, NMFS, letter to K. Bose, FERC (Oct. 24, 2008).

As shown above, however, the assumptions contained in NMFS' letters are erroneous. First, due to the "data discrepancies" identified in the EA, more water could be released from Lake Pillsbury at PVID's request than PVID eventually diverts from the tailrace. See EA at 20, 30. As a result, the 19,000 afy limitation—even if it were appropriate or legally supported—does not guard against excessive releases from Lake Pillsbury. Second, the EA itself expressly recognizes that the Project will, in fact, affect "overall annual storage" in Lake Pillsbury. See EA at 30-31 (discussing

recreational impacts of reduced storage). Accordingly, both FERC and NMFS must analyze the impacts of this reduction.

The EA also completely fails to address the Project's potential effects on coho salmon in the Eel River. Apparently, FERC believes that no analysis is necessary because coho are more prevalent in the South Fork Eel River than in the mainstem. See EA at 26. This belief is unsupportable. NMFS' 2002 Biological Opinion for the Potter Valley Project discusses the many ways in which coho do, in fact, use the Eel River. See NMFS, Biological Opinion for the Proposed License Amendment for the Potter Valley Project, FERC Project No. 77-110 (Nov. 26, 2002) ("NMFS 2002") at 13, 15, 29. The EA's failure to analyze the Project's effects on coho is especially puzzling in light of the Biological Opinion's conclusion that flow regimes proposed for the Potter Valley Project would jeopardize Southern Oregon/Northern California Coast coho and modify their critical habitat. Id. at 81. The RPA that PG&E now seeks to modify was developed in order to avoid jeopardy not only to chinook and steelhead, but also to coho. Accordingly, the EA for this Project must analyze potential impacts to coho salmon in the Eel River.

E. **The EA Fails to Address the Project's Cumulative Impacts.**

NEPA requires that FERC analyze the cumulative impacts of the Project in conjunction with all past, present, and reasonably foreseeable future actions. See Kern v. U.S. Bureau of Land Management, 284 F.3d 1062, 1075-76 (9th Cir. 2002); Idaho Sporting Congress v. Rittenhouse, 305 F.3d 957, 973 (9th Cir. 2002); 40 C.F.R. §§ 1508.7, 1508.27(a)(7). Because this EA wholly fails to discuss or analyze the cumulative impacts of this Project and other actions affecting water resources, fisheries, and threatened and endangered species, the document is legally deficient under NEPA.

Specifically, the EA fails to analyze the cumulative impacts of the storage and flow changes contemplated by the Project in connection with past, present, and reasonably foreseeable future diversions by other water users in both the Eel River and East Fork Russian River basins. A listing of water rights granted or claimed in these basins, downloaded from the State Water Resources Control Board's e-WRIMS database on March 17, 2009, is attached as Exhibit L.

In addition, the EA fails to analyze the Project in the context of other proposed frost protection withdrawals in the Russian River and its tributaries. NMFS recently wrote

to the State Water Resources Control Board in order to express its concern that frost protection activities could harm salmon and steelhead. See S. Edmondson, NMFS, letter to V. Whitney (Feb. 19, 2009), attached as Exhibit M. FERC must analyze whether other water users, particularly in the East Fork Russian River watershed, are also proposing to withdraw water for frost protection, and must analyze the impacts of this Project in conjunction with any such withdrawals.

F. **The EA Fails to Analyze an Adequate Range of Alternatives.**

NEPA requires that an EA consider a reasonable range of alternatives to the proposed project that would achieve the project's purpose. See 42 U.S.C. § 4332(2)(E); 40 C.F.R. § 1508.9(b); Bob Marshall Alliance, 852 F.2d at 1229; Native Ecosystem Council v. U.S. Forest Service, 428 F.3d 1233, 1245-46 (9th Cir. 2005). This EA fails to comply with NEPA because, although other reasonable alternatives exist, the EA considers only the proposed Project and the no-action alternative.

On behalf of Friends of the Eel River, we request that FERC analyze alternatives that will not only avoid significant impacts to water resources and fisheries but also comply with state water law. Specifically, FERC should analyze alternatives that limit PG&E's releases from Scott Dam for irrigation purposes to 9,408 afy, consistent with Licenses 1199 and 5545. In addition, FERC should analyze alternative delivery mechanisms that will not induce PVID to request that PG&E release more water from Scott Dam than is legitimately necessary for frost protection purposes.

II. FERC Must Reinitiate Consultation Under the Endangered Species Act.

FERC appears to have bypassed the ESA by failing to reinitiate formal consultation with NMFS. Section 7 of the ESA requires consultation with NMFS to determine whether the Project is likely to jeopardize federally listed species or result in the destruction or adverse modification of their critical habitat. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.01(b). This Project modifies terms of PG&E's license that were adopted, pursuant to an RPA set forth in a final Biological Opinion, specifically to avoid jeopardy to salmon and steelhead. The EA acknowledges that the Project could affect threatened and endangered species during periods of low flow, and also could interfere with springtime block water releases required under the RPA to aid migration of listed salmonids. See EA at 27. Because the Project has impacts that were not considered in the Biological Opinion, and because it deviates from and could interfere with implementation of the RPA, reinitiation of formal consultation with NMFS is required. See 50 C.F.R. § 402.16; NMFS 2002 at 112.

For the foregoing reasons, FOER requests that FERC prepare an EIS for this Project and reinitiate consultation with NMFS regarding its effects on threatened and endangered salmon and steelhead.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Kevin P. Bundy