

# UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE

Southwest Region 777 Sonoma Ave., Room 325 Santa Rosa, CA 95404-4731

February 27, 2009

In response refer to: 150304SWR03SR8616

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

Re: Comments on the Commission's Draft Environmental Assessment and its Section 10(j)
Preliminary Determinations of Inconsistency, DeSabla-Centerville Hydroelectric Project
No. P-803

#### Dear Secretary Bose:

Enclosed for filing in the above referenced proceeding are the comments of the National Oceanic and Atmospheric Administration, National Marine Fisheries Service regarding the Commission's Environmental Assessment, and responses to its January 14, 2009, letter informing us that certain of our recommendations for license conditions have been preliminarily determined to be inconsistent with the Federal Power Act §10(j).

We consider the salmon and steelhead populations in Butte Creek important to the conservation and management of these species. In particular, we consider the continued viability of the Central Valley spring-run Chinook salmon population in Butte Creek necessary for recovery of this species.

Therefore, we request a meeting with Commission Staff to resolve differences between our respective recommendations for new license conditions. If you have any questions regarding this matter, please contact Mr. Larry Thompson at 916-930-3613, or at larry.thompson@noaa.gov.

Steve Edmondson

Northern California Habitat Supervisor

Enclosures

cc: Maria Rea, NMFS, Sacramento

Service List



# UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Pacific Gas and Electric Company	)	Project No. P-803
DeSabla-Centerville Hydroelectric Project	)	•
	)	
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NATIONAL MARINE FISHERIES SERVICE'S COMMENTS ON THE ENVIRONMENTAL ASSESSMENT AND RESPONSES TO PRELIMINARY DETERMINATIONS OF INCONSISTENCY FOR RECOMMENDED TERMS AND CONDITIONS

#### 1. INTRODUCTION

The U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NMFS) hereby responds to the Environmental Assessment (EA) issued December 29, 2008, by the Federal Energy Regulatory Commission (Commission) for the relicensing of the DeSabla-Centerville Hydroelectric Project (P-803) (Project), and the Commission's Section 10(j) Preliminary Determination of Inconsistency by letter to NMFS dated January 14, 2009. NMFS timely filed its Motion to Intervene, Comments, Recommended Terms and Conditions, Preliminary Prescription, and Index to Administrative Record for the Project on June 30, 2008. The Project is located on the West Branch of the Feather River and Butte Creek in California's Central Valley. Pacific Gas and Electric Company (Licensee) owns and operates the Project and filed an application for a new license for the Project.

NMFS has statutory responsibility for the protection and enhancement of living marine resources, including anadromous fish and their supporting habitats, under the Endangered Species Act (ESA), 16 U.S.C. §§ 1531 et seq., Magnuson-Stevens Fishery Conservation and Management Act (MSA), 16 U.S.C. §§ 1801 et seq., Fish and Wildlife Coordination Act (FWCA), 16 U.S.C. §§ 661 et seq., and Reorganization Plan No. 4 of 1970, 84 Stat. 2090. Butte

Creek supports a number of anadromous fish species under NMFS' jurisdiction. These species include the Central Valley spring-run Chinook salmon (*Oncorhynchus tshawytscha*)

Evolutionarily Significant Unit (ESU), which includes the Feather River Hatchery artificial propagation program (70 Fed. Reg. 37160, June 28, 2005); the California Central Valley steelhead (*O. mykiss*) Distinct Population Segment (71 Fed. Reg. 834, January 5, 2006); and the North American green sturgeon (*Acipenser medirostris*) Southern Distinct Population Segment (71 Fed. Reg. 17757, April 7, 2006); which are listed under the ESA as threatened. In addition, NMFS has designated critical habitat on Butte Creek for Central Valley spring-run Chinook and California Central Valley steelhead (70 Fed. Reg. 52488, September 2, 2005).

NMFS finds that impacts from hydropower development contributed substantially to the decline of Central Valley spring-run Chinook salmon and California Central Valley steelhead (63 Fed. Reg. 11482, March 9, 1998; 63 Fed. Reg. 13347, March 19, 1998; 64 Fed. Reg. 50394, September 16, 1999; 69 Fed. Reg. 33102, June 14, 2004; 70 Fed. Reg. 37160, June 28, 2005; and 71 Fed. Reg. 834, January 5, 2006). Dams also contributed to the decline of the Central Valley fall and the late-fall Chinook salmon, which is listed as a species of concern (71 Fed. Reg. 61022, October 17, 2006).

The California Advisory Committee on Salmon and Steelhead Trout was created in 1983 to develop a strategy for the conservation and restoration of salmon and Central Valley steelhead resources in California. The Salmon, Steelhead Trout, and Anadromous Fisheries Program Act of 1988 was signed by the Governor of California to implement the advisory committee's recommendations, which included doubling the natural production of salmon and Central Valley steelhead as of 1988. The Steelhead Restoration and Management Plan for California (CDFG 1996) summarized this Act as follows:

Proper salmon and steelhead resource management requires maintaining adequate levels of natural, as compared to hatchery, spawning and rearing. Reliance upon hatchery production of salmon and steelhead is at or near the maximum percentage that it should occupy in the mix of natural and artificial hatchery production in the State. If both hatchery production and natural production are feasible alternatives for increasing salmon and steelhead numbers in specific situations, preference shall be given to natural production.

Meyer Resources Inc. (1988) conducted an analysis of the economic benefits that would result from doubling California's salmon and steelhead stocks. The Steelhead Restoration and Management Plan for California (CDFG 1996) estimates that the net annual economic benefit for the Sacramento and San Joaquin rivers would be \$101.4 million (in 1988 dollars).

The Steelhead Restoration and Management Plan for California (CDFG 1996) states that restoring access to historical habitat should receive the highest priority for funding. NMFS concurs with the findings of the California Advisory Committee on Salmon and Steelhead Trout, the Salmon, Steelhead Trout, and Anadromous Fisheries Program Act, and the Steelhead Restoration and Management Plan for California, that natural production should be given preference over hatchery production.

These anadromous fishes are now limited to relatively few miles of valley mainstem rivers, though they were historically dispersed over many miles of upper mainstems and tributaries (Yoshiyama, et al. 2001). Temperatures on the valley floor are also significantly warmer in the late fall and winter, so that fishes likely hatch and rear earlier than in their natural habitats (CDWR 2005). Valley floor habitats contain fewer features that anadromous fish require, e.g., overhanging vegetation, woody debris, and hydraulic complexity. Juvenile rearing habitat is more open and interconnected, so that available forage is competed for by many conspecifics, as well as the greater numbers of Central Valley fall-run Chinook salmon juveniles.

Due to competition for forage, juveniles may migrate downstream at a smaller size, potentially increasing the risk of predation (CDWR 2005).

The Project affects these species and critical habitat by altering flows and temperatures, in spawning, rearing and holding habitats. However, the Project provides benefits to one of the largest populations of Central Valley spring-run Chinook salmon in the ESU, therefore, NMFS considers that the continuity of certain Project operations benefits recovery. NMFS submits its comments pursuant to sections 10(a), 10(j) and 18 of the Federal Power Act (FPA), 16 U.S.C. §§ 791 et seq., and pursuant to its statutory responsibility for the protection and conservation of the anadromous fish species listed above.

#### 2. REVIEW PROCEDURES

NMFS has reserved its fishway prescription authority under FPA section 18. In accordance with NMFS' resource agency procedures for conditions and prescriptions in hydropower licenses, 50 CFR Part 221, the hearing and alternatives processes provided under the Energy Policy Act of 2005 will be available if and when NMFS exercises its reserved authority by prescribing fishways. Consistent with its authorities under Federal Power Act, Magnuson-Stevens Fishery Conservation and Management Act and the Endangered Species Act as described above, NMFS reserves the right to submit further comments, recommended terms and conditions, or prescriptions in the future as necessary and appropriate.

## 3. NMFS' RESOURCE MANAGEMENT GOALS AND OBJECTIVES

These goals apply with respect to species listed under the ESA and MSA, as well as those that are not currently listed but are affected by continuing project operations or may require listing in the future. In addition, NMFS' recommended terms and conditions are intended to

serve the public interest and meet our environmental trust responsibilities following our statutory obligations under the resource laws that we administer.

NMFS further intends that our recommended terms and conditions will achieve the related planning goals and objectives established by state, federal, and local watershed plans. For example, the California State Water Resources Control Board administers section 401 of the Federal Clean Water Act, and has established criteria to protect and improve water quality. Specific criteria pertaining to Butte Creek include water temperature, turbidity, dissolved oxygen, pH, and total dissolved gas. These plans contain provisions which pertain to the protection, mitigation, and enhancement of fish resources in Butte Creek and the Project area.

#### Resource Goals

- 1. Protect, conserve, enhance, and recover native anadromous salmonids and their habitats by providing access to suitable habitats and by restoring fully functioning habitat conditions.
- Identify and implement measures to protect, mitigate or minimize direct, indirect, and cumulative impacts to, and enhance native anadromous salmonid resources, including related spawning, rearing, and migration habitats and adjoining riparian habitats.

# Resource Objectives

1. Flows - Implement scheduled flows in Butte Creek and regulated tributaries to the benefit of native anadromous salmonids and their habitats. This includes providing a range or schedule of flows necessary to: a) optimize suitable habitat, including the distribution of holding and spawning habitat; b) stabilize flows during spawning and incubation of in-gravel forms; c) maintain flows necessary to facilitate the efficient migration of spawning adults; and the safe and timely emigration of smolts and kelts, and movement of rearing juveniles between feeding and sheltering areas; d) maintain flows necessary to ensure redd placement in viable areas; and e)

maintain flows necessary for channel forming processes, riparian habitat protection, and maintenance movement of forage communities. This also includes impacts of flood control, irrigation or other project structures or operations that act to displace individuals or their forage or destabilizes, scours, or degrades physical, chemical, or biological quality of habitat.

- 2. Water Quality Modify project structures or operations necessary to mitigate direct, indirect, or cumulative water temperature and quality impacts associated with project structures and operations or enhance water temperature and quality conditions in salmonid habitat. This includes water temperature management necessary to ensure the optimal survival and distribution of all life stages of Central Valley spring-run Chinook salmon and Central Valley steelhead.
- 3. Water Availability Coordinate operations with other projects, programs, or initiatives and/or use water transfers, water exchanges, water purchases, or other forms of agreements to maximize potential benefits to anadromous salmonids from limited water supplies.
- 4. Fish Passage Passage to suitable spawning, rearing, and migration habitats within or near the project as necessary to complete their life cycles and utilize seasonal habitats necessary to contribute to the recovery of Central Valley spring-run Chinook salmon, California Central Valley steelhead, and other species of concern. Access into the Project may include passive or active structures or devices which provide upstream and/or downstream passage. Passage within or near the Project boundary may include modifications to project facilities and operations necessary to ensure the safe, timely, and efficient passage of upstream migrating adults, downstream passage of emigrating juveniles, and passage necessary for juveniles to access habitat necessary for the seasonal movement of rearing juveniles to feeding and shelter habitats.

- 5. Channel Maintenance Implement flow regimes and non-flow related measures necessary to mitigate and minimize direct, indirect, and cumulative impacts of project facilities and operations on sediment movement and deposition, river geometry, and channel characteristics. This includes impacts on stream competence, capacity, flood plain conductivity, bank stability and extent, duration, and repetition of high flow events. In addition, this includes impacts to habitat diversity and complexity such as pool riffle sequencing and instream cover.
- 6. Hatchery Operations Minimize and mitigate the impact of hatchery facilities and/or operations on native, wild anadromous salmonids. This includes the direct, indirect, and cumulative impacts of hatchery product on anadromous salmonids and the direct, indirect, and cumulative impacts of hatchery facilities and operations on salmonids and their habitats.
- 7. Predation Minimize and mitigate the impact of Project structures or operations that either have in the past or continue to introduce predators, create suitable habitat for predators, harbor predators, or are conducive to the predation of native anadromous salmonids.
- 8. Riparian Habitat Protect, mitigate or minimize direct, indirect, and cumulative impacts to, and enhance riparian habitat and habitat functions necessary to mitigate and minimize direct, indirect, and cumulative impacts of project facilities and operations.
- 9. Flow Ramping Modify project structures or operations necessary to minimize impacts of flow fluctuations associated with increases or decreases in project discharges.
- 10. Coordination In developing alternatives for relicensing, include a full range of alternatives for modifying project and non-project structures and operations to the benefit of anadromous salmonids and their habitats, while minimizing conflicts with operational requirements and other beneficial uses. This includes developing alternatives for greater coordination with other stakeholders and water development projects to ensure that, at a minimum, project structures and

operations are consistent with and can potentially enhance on-going and future restoration efforts.

# 4. NMFS' RESPONSES TO THE COMMISSION'S PRELIMINARY DETERMINATIONS OF INCONSISTTENCY REGARDING NMFS' FPA §10(j) RECOMMENDATIONS

Our responses below are ordered as in the Commission's January 14, 2009 letter (FERC 2009) to NMFS, containing its preliminary determinations of inconsistency.

#### 1. Fish screening of Lower Centerville diversion dam

FERC Staff does not adopt our proposed (§10(j) Recommendation #1, Fish Passage Plan, that includes the planning, permitting, design, scheduling, costs, construction implementation, and monitoring of screening facilities for the Project's Lower Centerville Canal entrance (at or near the Lower Centerville Dam) on Butte Creek. Staff agrees it is likely screening the Lower Centerville Canal entrance would prevent fish entrainment into the canal and powerhouse intakes. However Staff does not provide quantitative data in the EA indicating the degree of entrainment and mortality of fishes. The Commission denied requests from NMFS and other resource agencies for additional fish population and entrainment studies that could have provided these data. Absent this information, Staff concludes in the EA that screening would reduce the Project's effects on the trout populations in Butte Creek.

The degree that the screening would reduce population-level effects is not evaluated in the EA because Staff concludes the trout populations are viable and generally healthy above and below the Project's Lower Centerville Canal entrance. This conclusion is not consistent with census data showing the mean linear abundance of trout has exhibited a downward trend over the

current license term in Butte Creek downstream of the Butte Dam and above the Lower Centerville Dam, falling from 148 trout per 100 meters in 1986 to 66 trout per 100 meters in 2006 (CDFG 2008).

Fish screening to protect the *O. mykiss* that FERC Staff describes as resident fish (in absence of the studies that NMFS requested) may be important for recovery of the Central Valley steelhead DPS. Resident trout and anadromous steelhead are the same species (*O.mykiss*) and have been shown to exhibit both fresh water and marine life histories. Therefore, a percentage of steelhead (smolts and perhaps kelts) from the *O. mykiss* population passing downstream of the Lower Centerville Diversion Dam are being entrained into the Lower Centerville Cana, and fish from that population could exhibit a marine life history. Although some juveniles may be returned to Butte Creek during canal rescues, we consider that most are seeking habitats downstream of the Lower Centerville Canal and are susceptible to penstock entrainment (where a high proportion would be killed).

We think it important to protect the *O. mykiss* that are assumed resident (in absence of the studies that NMFS requested), and become entrained in the Lower Centerville Canal. These *O. mykiss* may be important for the recovery of the Central Valley steelhead DPS. Therefore, NMFS is recommending a screen at the Lower Centerville Canal under FPA § 10(j), and reserving its authority under FPA § 18 to prescribe downstream passage for Central Valley steelhead.

FERC Staff found the environmental benefits of screening do not warrant the annualized cost (estimated at 3 million dollars). Staff provides an alternative recommendation for Licensee to conduct fish rescues from Lower Centerville Canal, and states the benefits to the fish populations warrant the reduced cost (estimated at \$42,900). Absent additional information

about the degree of fish entrainment and mortality, and Staff analysis of population-level effects of the entrainment/mortality and effects on recovery of the Central Valley steelhead DPS, this alternative recommendation is not acceptable to NMFS. Our views expressed here are intended to ensure the protection and enhancement of fish and wildlife resources, because additional entrainment studies were denied by the Commission; thus, the Commission has not provided sufficient information to justify a different approach.

#### 2. Resident fish monitoring

FERC Staff does not recommend adopting our proposed FPA §10(j) Recommendation 5(B), Butte Creek Non-listed Fish Monitoring Plan. We recommended the Applicant develop the plan within one year of license issuance. Our plan envisioned monitoring would be conducted for two consecutive years during each 5-year period through the term of the license. Staff recommends monitoring that should commence 5 years following any changes in operations. Staff also recommends monitoring of resident fish populations be discontinued following the next monitoring cycle, 5 years following the last change in minimum instream flows. However, while Staff considers operations changes affecting minimum instream flows (MIFs), we note that other operations changes will also occur in the Project area under the new license. Most notably, a facility to reduce warming in DeSabla Forebay could affect resident and anadromous fish populations, but this change may not occur for 3+ years and will not necessarily occur concurrently with MIF changes. If the Staff recommendation to initiate monitoring 5 years following any changes in MIFs becomes a license condition, we are concerned that a significant time lapse could occur between other changes in facilities or operations under the new license that could affect resident and anadromous fish populations and the initiation of monitoring. We

anticipate more discussion with Staff on this topic during our FPA §10(j) meeting to resolve differences in our recommendations for new license conditions.

## 3. Benthic macroinvertebrate monitoring

FERC Staff does not recommend adopting our proposed FPA §10(j) Recommendation 6, Benthic Macroinvertebrate Monitoring Plan. We recommended monitoring in years 1 through 4, and in years 8, 12, 16, 20, 24, and every five years thereafter for the remainder of the license term. Staff recommends sampling benthic macroinvertebrates in the same years as fish population monitoring. Again, we note that Staff appears to recommend monitoring initiation and frequency based on coordination with MIF changes, but not other operations changes such as those that affect stream temperatures. We anticipate more discussion with Staff on this topic during our FPA §10(j) meeting to resolve differences in our recommendations for new license conditions.

#### 4. Remote operating capability/reservoir gages

FERC Staff does not recommend adopting our proposal for the Licensee to install remote operating equipment at the Round Valley and Philbrook reservoirs, a recommendation within our FPA § 10(j) Recommendation 8, to develop and implement a Long Term Project Operations Plan for the Project. Staff finds that remote operations capability for the reservoirs would allow quicker operations changes, but there is little evidence to support the need (FERC 2009).

FERC Staff recommends real-time water temperature and reservoir level gage installations in Philbrook reservoir, and maintenance of stream flow gages in other important Project bypass reaches. These measures will inform Project operations responses to changes in environmental conditions. In the past, prompt response to changing meteorological conditions has been needed to adjust Project flows for the benefit of Central Valley spring-run Chinook

salmon and Central Valley steelhead. We anticipate more discussion with Staff during our FPA §10(j) resolution meeting to discuss these issues, annual operations and maintenance planning, and long term operations planning.

#### 5. Implement a revised drought plan

FERC Staff recommends adopting our proposed FPA §10(j) Recommendation 2(F), Contingency for Multiple Dry Water Years. However, Staff does not agree that a revised operational plan ("drought" plan) is accepted when filed with the Commission. Rather, Staff recommends the plan be implemented only after approval by the Commission. We agree with Staff on this point.

#### 6. Minimum instream flows

FERC Staff does not recommend adopting our proposed FPA §10(j) Recommendation 2.1, Minimum Instream Flow (MIF) proposal for Butte Creek downstream of Lower Centerville Dam on Butte Creek. Staff instead recommends the MIFs proposed by the Licensee, a schedule of lower flows in this reach than we recommend. Staff concludes its alternative best provides a balance between creating additional habitat and maintaining, or reducing, stream water temperatures (FERC 2009).

Our higher MIFs would increase fish habitat, especially during the spawning season for Central Valley spring-run Chinook salmon. The U.S. Fish and Wildlife Service (FWS 2003) conducted site-specific studies in Butte Creek to determine flow versus spawning habitat relationships for this species. Based on their model results, we proposed a normal-year MIF in the Middle Butte subreach of 100 cubic feet per second (cfs), representing 78% of the optimal

weighted-usable-area (WUA). Complete model-based optimization of fish habitat area is not possible through the spawning season due to Butte Creek flow limitations (even if augmented by West Branch Feather River flows), as 100% WUA requires > 400 cfs. However, the relationship between flow and spawning habitat developed by the UFSWS (2003) indicates an appreciable rate of increase in WUA as flows increase from 50 to 75 cfs, and again from 75 to 100 cfs (EA, Figure 3-38, p. 170). For that reason, our normal-year 100 cfs MIF proposal during spawning provides more habitat area than Staff's MIF of 75 cfs (78% versus 68% maximum WUA). In dry years, our MIF of 75 cfs would yield more habitat in this subreach than Staff's 60 cfs (68% versus 62% of maximum WUA). Our proposal adds thousands of square feet of additional habitat during spawning, and is intended to reduce the crowding and high degree of redd superimposition observed by the USFWS (2003) during their field collections of data for model development. These direct observations by trained biologists should be considered strong additional evidence that existing spawning flows are limiting, and should be increased substantially in the new license.

Staff maintains their recommendation strikes a balance between more flows for habitat and reduced stream temperatures (FERC 2009), as if these outcomes are inversely related.

However, if a flow vs. temperature tradeoff existed downstream of Lower Centerville Dam, it would be more important during the warmer months during adult holding. Also, such a tradeoff is not supported by the temperature model simulation results contained in the EA (pp. 431-437). All simulations that assumed higher flow releases to the reach below Lower Centerville Dam and a DeSabla Forebay temperature improvement (simulations 8-11 and 24-27) predict reductions in mean temperatures below Lower Centerville Dam. Mean temperature reductions are also predicted below Centerville Powerhouse in 7 of the 8 cases (simulation 10 predicts no change).

While the EA lacks analysis supporting a tradeoff of Butte Creek flows versus temperature, USFWS (2003) provides information supporting the benefits of increased anadromous fish spawning habitat due to increased flows.

Our flow recommendations will likely require shutting down the one or more of Centerville Powerhouse generators during September through October or November, and operating it at reduced capacity in November or December through mid-March. Staff estimates implementing our MIF recommendations in lower Butte Creek would reduce the average annual Project generation by 2,256 MWh compared to the staff alternative. However, in consideration of the valuable salmon population that spawns in the Project area and downstream, we assert the benefits of increasing spawning habitat area outweigh the costs of reducing power generation.

## 7. DeSabla Forebay water temperature improvement

FERC Staff does not recommend adopting our proposed FPA §10(j) Recommendation 4, for a plan to design and construct a water temperature reduction facility within the DeSabla Forebay that would reduce the thermal loading in DeSabla Forebay by  $\geq$  80% (equivalent to limiting the warming within the forebay to  $\leq$  0.2 °C). The preliminary Biological Opinion issued by NMFS requested study of the feasibility and effectiveness of reducing the thermal loading in DeSabla Forebay, during the months of July and August, with a goal of reducing thermal loading by 50%. However, based largely on additional temperature modeling performed during this relicensing, we now recommend a reduction in thermal loading within DeSabla Forebay of  $\geq$  80%. Reducing water temperature heating in DeSabla Forebay would help reduce summer mortality of spring-run Chinook salmon holding below Lower Centerville Dam and Centerville Powerhouse, by enhancing and increasing the suitable thermal habitat.

Licensee proposes to maximize the Project's cool water benefits to support holding, spawning, and rearing of Chinook salmon and steelhead in downstream project reaches (EA, p. 26). In contrast, Staff concludes reducing the thermal loading within DeSabla forebay by at least 50% is acceptable. It is unclear how Staff determined a 50% reduction target is acceptable while providing little temperature control device information. Without device details, Staff estimates a facility that would reduce thermal loading by 80% would have an annualized cost of approximately \$201,100 more than a facility which reduces thermal loading by 50%. It is unclear how these cost estimates were derived.

We wish to emphasize the importance of the Licensee proposal to maximize the temperature benefits of a facility within the DeSabla Forebay. The potential benefits are reinforced by the temperature modeling results contained in the EA (pp. 431-437). Of the 18 model simulations that assumed a DeSabla Forebay temperature improvement (numbers 8-15 and 22-31), all predict reductions in mean temperatures in the reach from the Lower Centerville Dam to the Centerville Powerhouse. Reductions in mean temperatures are also predicted below Centerville Powerhouse in all but a single simulation (#10 predicts no change). In contrast, of the 6 simulations where the model did not assume a DeSabla Forebay temperature improvement (#16-21), all predict increases in mean temperatures below the Centerville Powerhouse, and 3 also predict increases in mean temperatures in the reach from the Lower Centerville Dam to the Centerville Powerhouse. The potential benefit of a DeSabla Forebay temperature improvement is clear, and it should be maximized.

We anticipate more discussion with Staff on this topic during our FPA §10(j) meeting to resolve differences in our recommendations for new license conditions. We wish to understand

more from Staff regarding their determination of a 50% temperature reduction goal and how cost comparisons between alternatives were derived.

## 5. NMFS' COMMENTS ON THE COMMISSION'S EA

# Magnuson-Stevens Fishery Conservation and Management Act (MSA) consultation

Essential Fish Habitat (EFH) has been established in Butte Creek between Parrott-Phelan diversion dam and Lower Centerville diversion dam for spring-run Chinook salmon, fall-run Chinook salmon, and late fall-run Chinook salmon. In the EA, FERC Staff determines that licensing the Project, as proposed by Licensee and with Staff's alternative measures, would not adversely affect essential fish habitat (EFH) (p. 11). Staff requests NMFS' concurrence with their conclusion, but if the Commission determines that the action would not adversely affect EFH, then it has no statutory obligation to consult pursuant to the MSA EFH consultation requirements, and we are not required to provide the requested concurrence.

We have several concerns with Staff's conclusions regarding EFH. One concern is the EA is unclear that the action reviewed by Staff includes all proposed license requirements (including mandatory conditions) that could affect EFH. The EA describes the action as the Licensee's proposal plus Staff's alternative measures, with no mention of the inclusion of preliminary or final mandatory conditions (p. 11). The Commission, as the Federal action agency, must make the initial determination of whether the action may adversely affect EFH, and then proceed with consultation if, in the Commission's view, the Project may adversely affect EFH. Therefore, the evaluation of effects on EFH should be conducted by Staff after the proposed action is clearly established.

Another concern relates to the lack of analysis to support Staff's conclusion that licensing the Project, as proposed by Licensee and with Staff's alternative measures, would not adversely affect essential fish habitat. Staff essentially provide one sentence to support this conclusion, "With this EA, we recommend a number of measures, for the betterment of Chinook salmon." However, Staff does not provide an analysis of the potential adverse effects of the action on EFH and managed species, which is required under 50 CFR § 600.920(e)(3)(ii). Although measures included in the proposed action to avoid or minimize adverse effects should be considered in determining whether the action may adversely affect EFH, the determination should not be based on an analysis of only positive effects or even net effects, but it should also be based on an analysis of potential adverse effects. Based upon the regulations, an action either does or does not adversely effect EFH. There is no category for intermediate effects. Under its conclusions regarding the Endangered Species Act, Staff concluded that, even with the benefits the project provides to Chinook salmon and its habitat, and with Staff's recommended measures, "the project may still result in the incidental take of [individuals of the] species or adversely [affect] their habitat. . ." (p. 10). Thus, it is unclear how Staff could make a substantially different conclusion regarding adverse effects to EFH of Chinook salmon.

#### **Long Term Project Operations Plan**

We recommended a FPA § 10(j) condition for the Licensee to develop and implement a Long Term Project Operations Plan (LTOP) within one year of license issuance, in consultation with the FWS, NMFS, California Department of Fish and Game, and the California State Water Resources Control Board. We erred in failing to include the U.S. Forest Service as a consultation partner, and recommend Commission Staff add this agency.

Our LTOP recommendation states a primary goal of seeking to provide cold water for holding, spawning, and rearing of Chinook salmon and steelhead in Butte Creek upstream and downstream from the Centerville Powerhouse. We envision the LTOP will inform the annual planning that occurs under the current license to coordinate operations of the facilities of the Project, in both the Butte Creek and West Branch Feather River watersheds. This planning includes monitoring hydrologic and summer weather conditions to anticipate and respond to "heat storms" each summer during adult salmon holding and the onset of spawning in Butte Creek. Other annual task planning under a new license could include: installation of a DeSabla Forebay temperature reduction facility, powerhouse maintenance, canal maintenance, spillway maintenance/repair, MIFs, installation of fish screens, erosion controls, resident and anadromous fish monitoring, water temperature monitoring, installation of flow gages, turbidity monitoring, anadromous and resident fish monitoring, amphibian monitoring, benthic invertebrate monitoring, etc.

Coordination of Project operations now occurs through development and implementation of an Annual Operations and Maintenance Plan each year. During our FPA §10(j) resolution meeting, we wish to understand more about how annual planning will occur during the transition to a new license, and before all information is gathered to inform development of a longer-term plan.

#### 6. LITERATURE CITED

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# UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Pacific Gas and Electric Company	)	Project No. P-803
DeSabla-Centerville Hydroelectric Project	)	•
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	)	

#### CERTIFICATE OF SERVICE

I hereby certify that I have this day served, by first class or electronic mail, the National Marine Fisheries Service's cover letter and Comments on the Commission's Draft Environmental Assessment and its Section 10(j) Preliminary Determinations of Inconsistency, DeSabla-Centerville Hydroelectric Project No. P-803, to Secretary Bose of the Federal Energy Regulatory Commission, 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 27<sup>th</sup> day of February, 2009

Richard Wantuck