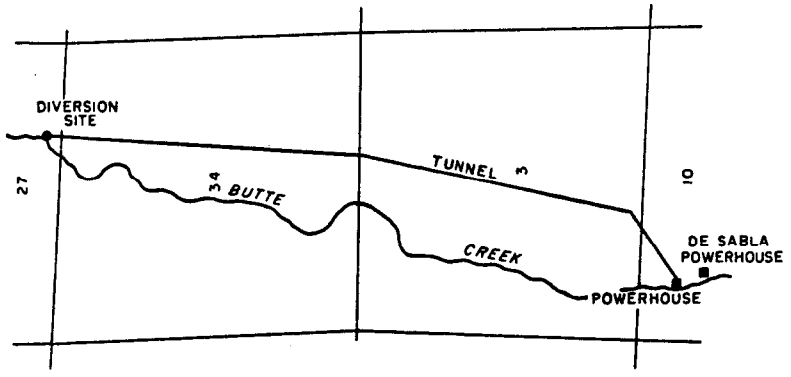
FORKS OF BUTTE HYDROELECTRIC PROJECT IN BUTTE COUNTY

APPLICATION 27815

DECISION 1617



FEBRUARY 1988

STATE WATER RESOURCES CONTROL BOARD

STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

In the Matter of Application 27815 ENERGY GROWTH GROUP and BUTTE CREEK IMPROVEMENT CO., Applicants, PACIFIC GAS & ELECTRIC COMPANY, et al., Protestants.	)	DECISION 1617 SOURCE: Butte Creek, a tributary to the Sacramento River COUNTY: Butte

DECISION APPROVING APPLICATION 27815 SUBJECT TO RESERVATION OF JURISDICTION TO SUBORDINATE PRIORITY OF APPLICATION 27815 TO APPLICATION 28535

BY THE BOARD:

1.0 INTRODUCTION

Energy Growth Group and Butte Creek Improvement Company (EGG) having filed Application 27815; protests having been filed; two days of public hearing having been held on March 17 and 18, 1986; applicant's representatives, protestants and interested parties having appeared and presented evidence; the evidence in the record having been duly considered; the Board finds as follows:

2.0 SUBSTANCE OF APPLICATION

EGG filed Application 27815 on July 28, 1983. EGG requests a permit to divert 250 cubic feet per second (cfs) from Butte Creek on a year-round basis to generate hydroelectric power. Project facilities will be located on federal land under the jurisdiction of the U.S.

Department of Interior, Bureau of Land Management (BLM), and on private land leased from Pacific Gas & Electric Company (PG&E).

3.0 APPLICABLE LAW

In order to issue a permit, the Board must find that unappropriated water is available (Water Code Section 1375). The use of water for preservation of fish and wildlife resources is a beneficial use of water. When determining the amount of water available for appropriation, the Board must take into account the water required for preservation of fish and wildlife (Water Code Section 1243). The Board must include conditions to develop, conserve and utilize water in the public interest when approving an application to appropriate water (Water Code Section 1253). Jurisdiction may be reserved to impose additional conditions when additional studies are necessary (Water Code Section 1394).

Section 106.7 of the Water Code addresses the use of water for hydroelectric power generation. Subdivision (a) of that section declares that it is "the established policy of this state to support and encourage the development of environmentally compatible small hydroelectric projects as a renewable energy source, provided that the projects do not result in surface disturbances within [designated] sensitive areas...". Water Code Section 106.7(d) declares the desirability of developing small hydroelectric power generating projects on "existing dams, diversions, and canals with a sufficient drop so that power may be efficiently generated without significant environmental effects." When considering the economic feasibility of

proposed small hydroelectric projects of 100 kilowatts or more, the Board must find that project revenues will exceed project costs, including the costs of measures necessary to mitigate environmental impacts, over the life of the project (Water Code Section 106.7(e)).

When acting as a responsible agency under the California Environmental Quality Act, the Board is required to mitigate or avoid, when feasible, significant project impacts over which it has jurisdiction (Public Resources Code Section 21002.1). An environmental impact report should give consideration to the cumulative impacts of the proposed project and reasonably anticipated future projects producing related or cumulative impacts (14 Calif.Admin.Code §15130). A supplemental environmental impact report may be prepared if new information of substantial importance that was not known at the time the environmental impact report was certified as complete becomes available (Public Resources Code Section 21166, 14 Calif.Admin. Code §15162).

4.0 PROJECT DESCRIPTION

4.1 Location

EGG's Forks of Butte project is approximately 15 miles northeast of Chico. The point of diversion will be on BLM land approximately 2350 feet downstream from the Ponderosa Way Bridge within the SW1/4 of the SE1/4 of Section 27, T24N, R3E, MDB&M. The powerhouse will be nearly two miles farther downstream, adjacent to PG&E's existing DeSabla powerhouse within the NW1/4 of the NW1/4 of Section 10, T23N, R3E, MDB&M, on land leased from PG&E.

4.2 Diversion Facilities

The diversion structure will consist of a reinforced concrete dam across Butte Creek. The dam will be 10 feet high and 40 feet wide, and will be covered with irregular rocks and boulders to give it a more natural appearance. A reinforced concrete intake structure incorporating a fish screening system approved by the Department of Fish and Game will be located on the west side of Butte Creek.

Diverted water will be taken underground from the intake portal to the powerhouse, first through a horizontal tunnel to a 450-foot vertical shaft, then through 11,000 feet of tunnel passing under Butte Creek to the east side.

4.3 Powerhouse, Switchyard and Transmission Line

The powerhouse will consist of a reinforced concrete building about 34 feet by 90 feet. The powerhouse will contain two impulse turbine generators which will produce a combined 10.8 megawatts (MW) at the design flow of 250 cfs. The minimum flow at which the powerhouse will operate is approximately 12.5 cfs. The turbines will discharge into concrete pits below the floor that lead directly to the tailrace channel. The tailrace is a concrete channel, with energy dissipators. It discharges into Butte Creek. The powerhouse structure and all equipment will be located above the 100-year flood line. The switchyard will be located next to the powerhouse and will include a step-up transformer and dead-end structure with breakers and protective relays. The transformer will increase the generator voltage to 60,000 volts (60 KV). Approximately 500 feet of new 60 KV

transmission line will be constructed from the switchyard to the intertie with the DeSabla-Oroville 60 KV transmission line.

5.0 PROTESTS

Protests against approval of Application 27815 were filed by the following:

Protestant	Basis of Protest
Department of Fish and Game	Environmental Impacts and Public Interest Grounds
California Save Our Streams Council	Environmental Impacts
County of Butte	Environmental Impacts and Public Interest Grounds
Dennis Johnson	Environmental Impacts and Public Interest Grounds
David Frey	Environmental Impacts and Public Interest Grounds
Matthew Callan	Environmental Impacts and Public Interest Grounds
J. Kapp	Environmental Impacts and Public Interest Grounds
Pacific Gas and Electric Co.	Prior Rights

The applicant and Department of Fish and Game (Department) reached an agreement that resolved the Department's protest. The remaining seven protests were unresolved at the time of the hearing.

5.1 Resolved Protest

The Department's protest alleged that this appropriation would not best conserve the public interest and would have an adverse environmental impact. Specifically, the Department expressed concern regarding the riparian vegetation zone which provides valuable habitat

for numerous species of wildlife and the impact the project could have on the rainbow and brown trout population in Butte Creek. The Department wanted adequate flows released by the project to protect these resources.

On October 8, 1985, the Department submitted 19 specific conditions for dismissal of its protest. One of the purposes of the terms proposed by the Department is to maintain the pre-project fishery. The applicant agreed to all the proposed terms and the protest of Application 27815 by the Department was dismissed on October 29, 1985.

The Draft Environmental Impact Report (DEIR) raised a question regarding appropriate temperature controls. As a result, EGG proposed a modification to lower the control temperature from the 20 degrees celsius (68 degrees Fahrenheit) requested by the Department to 18 degrees celsius (64 degrees Fahrenheit). The Department concurred in this modification.

5.2 Unresolved Protests

5.2.1. Environmental and Public Interest Issues

The area along Butte Creek between the point of diversion and the place of use is heavily used for recreation and observation of native vegetation and wildlife. Access to the area is by the Butte Creek Trail. Many of the protestants expressed similar environmental and public interest concerns regarding the potential for impacts to the area as a result of construction on this project.

Though the applicant proposed many mitigation measures, the original project design would have created significant unavoidable long-term

adverse impacts to vegetation and recreation along the Butte Creek Trail. In response to the environmental objections of many parties, including the Butte Creek Trail Council, EGG developed an alternative method for transporting water entirely underground from the point of diversion to the powerhouse. The Board appreciates and commends EGG's willingness to develop a radically different diversion and water transport system in response to these environmental concerns. The revised design described in this decision greatly reduces the potential for environmental impacts affecting the Butte Creek Trail corridor. Temporary closures of the trail would still be necessary during construction, but surface construction activities impacting vegetation would be limited to the diversion dam and powerhouse areas, as compared to surface construction activities affecting about one mile of the trail under the previous design.

New environmental impacts associated with the modified project design have been identified through comments on the supplemental EIR. Conditions necessary to mitigate these impacts should be included in the permit. EGG's tunneling, and disposal of cuttings from the tunnel, could have an adverse impact on water quality in Butte Creek downstream of EGG's powerhouse. Construction of EGG's powerhouse adjacent to PG&E's DeSabla powerhouse could destablilize slide areas underlying PG&E parstock.

Any discharge of wastes or pollutants that could affect water quality would be subject to regulation by the California Regional Water

Quality Control Board, Central Valley Region (Regional Board) under Division 7 of the Water Code (Section 13000, et seq.). The Regional Board could adopt effluent limitations, or a requirement that wastes be isolated from waters of the State and contained within a classified waste management unit. One of the Board's standard permit conditions addresses the applicant's obligation to apply for and comply with waste discharge requirements from the appropriate Regional Board.

Construction in geologically unstable areas requires additional care in planning and execution to avoid environmental disruption. EGG should be required to confer with PG&E regarding geologic hazards that could cause environmental impacts.

5.2.2. Prior Rights of PG&E

PG&E protested that approval of Application 27815 would cause injury to PG&E's vested rights, and asked EGG to sign an agreement acknowledging PG&E's prior rights. PG&E is currently diverting 95 cfs from Butte Creek under claim of a pre-1914 appropriative right dating back to 1857. PG&E uses the water for hydroelectric power generation at the DeSabla powerhouse (a component of the DeSabla-Centerville system).

On August 9, 1985, (two years after EGG's Application 27815 was filed) PG&E filed Application 28535 to divert 20 cfs year-round in addition to the amount of water PG&E is currently diverting for their existing DeSabla-Centerville system. In Application 28535 PG&E requests permits to divert additional water for improvements to both PG&E's DeSabla and PG&E's Centerville projects; however, only the

DeSabla component of Application 28535 is in conflict with EGG's Application 27815. PG&E proposes to divert this additional 20 cfs upstream from EGG's proposed point of diversion under Application 27815 and to return the water nearly at the same point as EGG. PG&E urges that its Application 28535 be given priority over EGG's Application 27815 for two reasons. First, PG&E contends that its project would better serve the public interest by generating more electric power per volume of water diverted than EGG's project. Second, PG&E contends that the improvements necessary to put the additional water to beneficial use in the DeSabla upgrade would not involve any new significant adverse environmental impact. PG&E presented evidence to show that diverting 20 cfs through its existing DeSabla system would produce approximately 1200 KWh per acre-foot of water as opposed to 520 KWh per acre-foot of water under the project proposed by EGG, or approximately 150 percent more energy for this increment of water. This advantage reflects the fact that PG&E's project provides 1,540 feet of head as compared to the 720 feet available for EGG's project. A full assessment of the attributes of PG&E's DeSabla upgrade will be undertaken in the proceeding on PG&E's Application 28535.

5.2.3. Allocation of Priorities

It is fundamental that the priority of appropriative rights depends on seniority. Priority of right is initiated by application and is based on the date of filing the application. However, priority is not perfected until the State Board issues a permit. Permit issuance requires consideration of public interest factors as well as the

availability of water for appropriation. In this context the Board can compare competing applications, and can adjust priorities between competing projects to ensure that the water resources of the State are "put to beneficial use to the fullest extent of which they are capable" in order to best serve the public's interest in efficient utilization of water resources. See Section 100 of the Water Code. There is evidence that maximum beneficial use of the waters of Butte Creek under these competing applications could be achieved by first allocating 20 cfs to PG&E under Application 28535, and allocating any remaining water available for appropriation to EGG under Application 27815.

If PG&E's contentions regarding the comparative efficiency and environmental impact of the DeSabla upgrade (Application 28535) and EGG's project (Application 27815) are borne out in the Board's evaluation of PG&E's Application 28535, the Board could adjust the respective priorities of Application 27815 and Application 28535 for the following reasons of public interest:

- The DeSabla project consists of upgrading an existing facility which will require a minimum of new construction, in accordance with the policy implicit in Section 106.7(d) of the Water Code;

- The DeSabla upgrade would use diverted water more efficiently than EGG's project: the benefit per acre-foot of water anticipated by

the DeSabla upgrade project is more than twice that anticipated by the Forks of Butte Project (1200 KWh to 520 KWh).

- o Allocating 20 cfs to PG&E would not preclude EGG from proceeding with the Forks of Butte project.

Accordingly, the Board should reserve jurisdiction with respect to 20 cfs of water until PG&E's Application 28535 can be evaluated fully.

5.3 Public Interest Concerns Regarding Hydroelectric Projects

Several protestants contend that small run-of-the-river hydro projects are not in the public interest in light of publication of the recent Energy Commission Electricity Report and the suspension by the California Public Utilities Commission (PUC) of Standard Offer #4 as a power purchase contract. Protestants contend that these events call into question the need for additional electricity and the potential cost impact on the consumer.

Although the PUC no longer authorizes Standard Offer #4, it has taken no action to negate contracts that have already been signed under Standard Offer #4. The PUC also has classified EGG's Forks of Butte Project as a Qualifying Facility under FERC rules. The evidence in the record shows that EGG has a guaranteed market for 10.8 MW of hydroelectric power. Finally, Section 106.7 of the Water Code contains a legislative declaration of the public interest in favor of small hydroelectric generating projects.

6.0 AVAILABILITY OF UNAPPROPRIATED WATER

6.1 Watershed Description

Butte Creek is tributary to the Sacramento River and flows in a southwesterly direction from the foothills of the Sierra Nevada. The watershed above the point of diversion contains an area of approximately 97.7 square miles with the elevation ranging from 2,000 to 6,300 feet above sea level. Normal annual precipitation within the watershed varies from 65 to 75 inches. Approximately two-thirds of the watershed receives snowmelt from areas above 4,800 feet. The flow available for this project consists of water that flows by PG&E's Butte Creek diversion, all runoff from the area west of the Butte Creek Canal (including the West Branch of Butte Creek), and all water from the area east of the Butte Creek Canal that is not diverted by the canal and carried to PG&E's De Sabla forebay.

The hydrologic character of Butte Creek was analyzed through use of streamflow and precipitation data collected from and around the Butte Creek watershed, and by statistical comparison to data from USGS gaging stations on Big Chico Creek and Oregon Creek.

Two sources of streamflow data available on Butte Creek can be used to analyze the runoff from the watershed. The USGS gaging station near Butte Meadows was in service from 1961 to 1974, a period of 14 years. Also, PG&E has monitored both the Butte Creek diversion to the Butte Creek Canal and the flow over the diversion dam since the early 1900s.

From the results of the hydrologic analysis of the watershed, the applicant developed Monthly Flow Duration Curves that represent the

water available at the proposed Forks of Butte diversion. These estimated flows take into account PG&E's Butte Creek diversion. The mean monthly flow estimates are as follows:

TABLE I

MEAN MONTHLY FLOWS AVAILABLE AT EGG DIVERSION

MONTH	FLOWS (cfs)
October	22
November	60
December	170
January	335
February	335
March	405
April	385
May	350
June	130
July	18
August	18
September	18

6.2 Flow Availability Conclusions and Recommendations

There are no diversions between the proposed point of diversion for this project and the point of return to Butte Creek, and there are no other existing water rights on Butte Creek that could be affected by this project.

Under the bypass conditions agreed to between EGG and the Department (47 cfs), and with the 12.5 cfs needed to run EGG's turbines, EGG's powerplant will be operational whenever flows at EGG's point of diversion exceed approximately 60 cfs.

Water is available for EGG's Forks of Butte project during 7 months of the year at the mean flow levels.

7.0 PROJECT ECONOMICS

An applicant for a permit to appropriate water must be able to demonstrate the economic feasibility of the project with the amount of water available in order to satisfy the Board that waters of the state will be put to reasonable and beneficial use with due diligence. Further, it is in the public interest to ensure adequate bypass flows for the maintenance and enhancement of fish and wildlife. The State Board must be satisfied that the applicant will not require additional flows at some future time in order to salvage the economic viability of an inadequately engineered project. Economic feasibility depends on the relation between project revenues and costs. The project costs include construction costs, financing costs, and the cost of operations, maintenance, taxes, insurance and labor. Revenues are directly related to the price a utility will pay for the electric power produced by a hydroelectric project. Unless the PUC invalidates existing contracts executed under Standard Offer #4, revenue estimates based on such contracts have been accepted as valid.

7.1 Costs

Total capital costs for EGG's project, as modified to avoid environmental impacts on the Butte Creek Trail corridor, will amount to $25 million of which $17.5 million will be financed for 20 years at 11.5%. This includes direct and indirect costs such as construction, engineering, environmental studies, mitigation measures and initial financing fees. Annual costs, including the cost of capital (repayment of principal plus interest) and operations and maintenance will vary from $2 million to $3.1 million per year as shown in

Tables IIa and IIb (anticipated operation and maintenance costs will be slightly less if the Board subordinates the rights sought in Application 27815 to the rights sought by PG&E in Application 28535).

7.2 Revenue

EGG can generate 35.4 million KWh per year with a 10.8 MW powerplant based on the mean flows available in Butte Creek after the bypasses necessary for maintenance of instream beneficial uses. EGG has a contract with PG&E under Standard Offer #4 for 10.8 MW at guaranteed rates of 7.34 to 13.14 cents per KWh from 1989 to 1998. (In 1999 and thereafter the rate used to calculate project revenues is based on PG&E's 1998 firm price with a five percent annual escalation rate: 8.72 cents per KWh in 1999 to 14.2 cents per KWh in 2009.) Based on this contract EGG anticipates revenues of $1.6 million to $5.4 million per year during project's 20 year "economic life" a shown in Table III.

If the State Board subordinates the priority of the water rights granted pursuant to EGG's Application 27815 to rights granted under PG&E's Application 28535, the flows available for EGG's power plant would be reduced by 20 cfs. Under those circumstances EGG could expect to generate 33.1 KWh per year. Annual revenues would range from $1.5 million to $5.1 million as shown in Tables IIIa and IVb.

7.3 Economic Feasibility

In all but the first year of operation the projected revenue from EGG's 10.8 MW powerplant under a Standard Offer #4 contract with PG&E

will exceed the projected costs of installing, operating and maintaining the proposed hydroelectric power generating project, including costs incurred to mitigate environmental impacts, over the 20-year "economic life" of the project. This would be the case even if the Board subordinates EGG's right to the right sought by PG&E under Application 28535. A summary of anticipated project economics is shown in Tables IVa and IVb.

8.0 COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The State is lead agency for the project with respect to CEQA. A Draft EIR for the project was circulated for public and agency review on November 20, 1985. The Board received 38 leters of comment in response to the EIR. Most commenters expressed concern that the Draft EIR did not adequately address the project's impact on the Butte Creek Trail or the measures necessary to mitigate such impacts.

On October 9, 1987 the Board circulated the Supplement to the Draft Environmental Impact Report (Supplement) for the revised project. The revised project avoids the significant recreational impact to the Butte Trail that was inherent in the previous design proposal. The Board received four letters of comment on the Supplement. Staff has prepared a revised Final Environmental Impact Report which includes responses to comments received on the Draft EIR and on the Supplement. To complete compliance with CEQA, the Board will:

- o Review and consider the Final EIR;
- o Certify that the Final EIR complies with CEQA, and that the Board reviewed and considered the Final EIR prior to project approval (14 Calif. Code of Regulations 15090);

- Develop and impose conditions on the permit that will ensure mitigation of any unavoidable adverse environmental impacts identified by the Final EIR;

- Following project approval, the Division of Water Rights will file a Notice of Determination with the State Clearinghouse (14 Calif. Code of Regulations 15094).

9.0 CONCLUSIONS

From the evidence presented regarding Application 27815, the Board concludes that: (1) Unappropriated water is available to satisfy the needs of this project; (2) Revenues from this project will exceed costs, including costs incurred to mitigate environmental impacts; (3) The applicant has modified the project design to mitigate significant adverse environmental impact on the Butte Creek Trail corridor, and has agreed to provide sufficient bypass flows to protect fish and wildlife.

The Board further concludes that unresolved public interest issues raised by PG&E based on Application 28535 are such that the Board should reserve jurisdiction to consider reversal of priority of rights initiated by EGG's Application 27815 and PG&E's Application 28535 following a full assessment of Application 28535, to the end that flows be allocated in the manner that will serve the public interest in the fullest beneficial use of waters of the state.

ORDER

IT IS HEREBY ORDERED that Application 27815 is approved subject to the following conditions to conserve the public interest in the water sought for appropriation; and subject to the Board's reserved jurisdiction to reverse the dates of priority between Application 27815 and Application 28535, or to reallocate the flows available for appropriation under Application 27815 and Application 28535.

Conditions

The following conditions shall be included in any permit issued pursuant to Application 27815:

1. Standard permit terms 6, 7, 8, 9, 10, 11, 12 and 13 (copy attached).

2. The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 250 cubic feet per second to be diverted from January 1 through December 31 of each year.

3. For the protection of fish, wildlife, and riparian habitat, permittee shall bypass at all times a minimum of 47 cubic feet per second or the natural stream flow, whichever is less.

4. When the water temperature in Butte Creek as measured by a recording thermograph located 100 feet upstream from the powerhouse exceeds 18 degrees Celsius, permittee shall release additional water, up to the entire inflow to the diversion, as is necessary to prevent the water temperature from exceeding 18 degrees Celsius 100 feet upstream from the powerhouse, provided that if the water temperature at the diversion point

exceeds 18 degrees Celsius, permittee shall only be required to release sufficient water, up to the entire streamflow, as may be necessary to maintain a two degree or less difference between the water temperature in degrees Celsius at the diversion point and at the point 100 feet upstream from the powerhouse.

5. All streamflow releases and temperature requirements shall be monitored by a continuous recording stream gage and recording thermographs at two sites approved by Department of Fish and Game and the State Water Resources Control Board. The recording gage and thermographs shall be properly operated and maintained by permittee. The daily record of maximum and minimum flows, maximum water temperatures, and daily power generation records shall be provided to Department of Fish and Game and the State Water Resources Control Board annually by December 31 of each year for the preceding October 1 through September 30 water year. These records shall also be made available during the year to the Department of Fish and Game and the State Water Resources Control Board upon reasonable request.

6. To prevent fish stranding, increases in the rate of diversion shall be gradual and at a rate not to exceed 30 percent of the total streamflow.

7. A fish screen acceptable to Department of Fish and Game shall be installed on the intake structure. The fish screen shall be properly maintained and operated by permittee.

8. Permittee shall remove sand and sediment from the pool immediately upstream from the diversion structure on Butte Creek to a site acceptable to the California Regional Water Quality Control Board, Central Valley Region and the Department of Fish and Game. All accumulated materials

greater than or equal to one-half inch in greatest dimension shall be returned in an approved manner to Butte Creek downstream from the diversion structure.

9. To prevent erosion and sedimentation of Butte Creek, construction of roads, diversion structures, and other facilities shall be performed in accordance with an erosion control plan approved by the Central Valley Regional Water Quality Control Board and Department of Fish and Game.

10. Transmission lines shall be designed and constructed in such a way that they are not a hazard to raptors.

11. All areas denuded during project construction shall be reseeded with native plant species valuable to wildlife. Denuded slopes shall be covered with a protective mulch or other protective reseeding as soon as practicable. Slope protection shall be repeated a often as necessary to control erosion.

12. At least 90 days prior to start of construction, permittee shall submit engineering drawings of the diversion structure, the fish screen, and the powerhouse tailrace to Department of Fish and Game and the State Water Resources Control Board for review and approval. These drawings shall be designed by a civil engineer licensed in the State of California. The diversion structure shall be designed to pass the 100-year flood flow and the outlet of the fish flow release shall be constructed in such a manner that silt and debris do not obstruct the outlet and the release is made continuously and automatically. The powerhouse tailrace shall be designed to prevent streambank erosion.

13. In accordance with Section 1603 of the Fish and Game Code, no work shall be started on the diversion works and no water shall be diverted until permittee has entered into a stream or lake alteration agreement with the Department of Fish and Game or the Department has determined that measures to protect fishlife have been incorporated into the plans for construction of such diversion works. Construction, operation, and maintenance costs of any required facility are the responsibility of the permittee.

14. To ensure proper incorporation and operation of fish and wildlife protective measures, permittee shall permit access to the project by representatives of the Department of Fish and Game without prior notification.

15. Permittee shall implement any remedial action found necessary by the State Water Resources Control Board to protect, maintain, or restore fish and wildlife resources adversely impacted as a result of failure to comply in whole or in part with any of the terms and conditions of this permit.

16. Permittee shall construct the project using an all-tunnel alignment substantially as specified in the Supplement to the Draft Environmental Impact Report dated October 1987 for Application 27815.

17. Permittee shall comply with all measures required by the U.S. Bureau of Land Management for mitigation of impacts to vegetation, recreation, and visual qualities.

18. The State Water Resources Control Board reserves jurisdiction over this permit until after the proceeding on Application 28535 of Pacific Gas and Electric Company for the purpose of evaluating the public interest issues

to determine whether the public interest requires a reversal of the priorities of rights initiated by Applications 27815 and 28535.

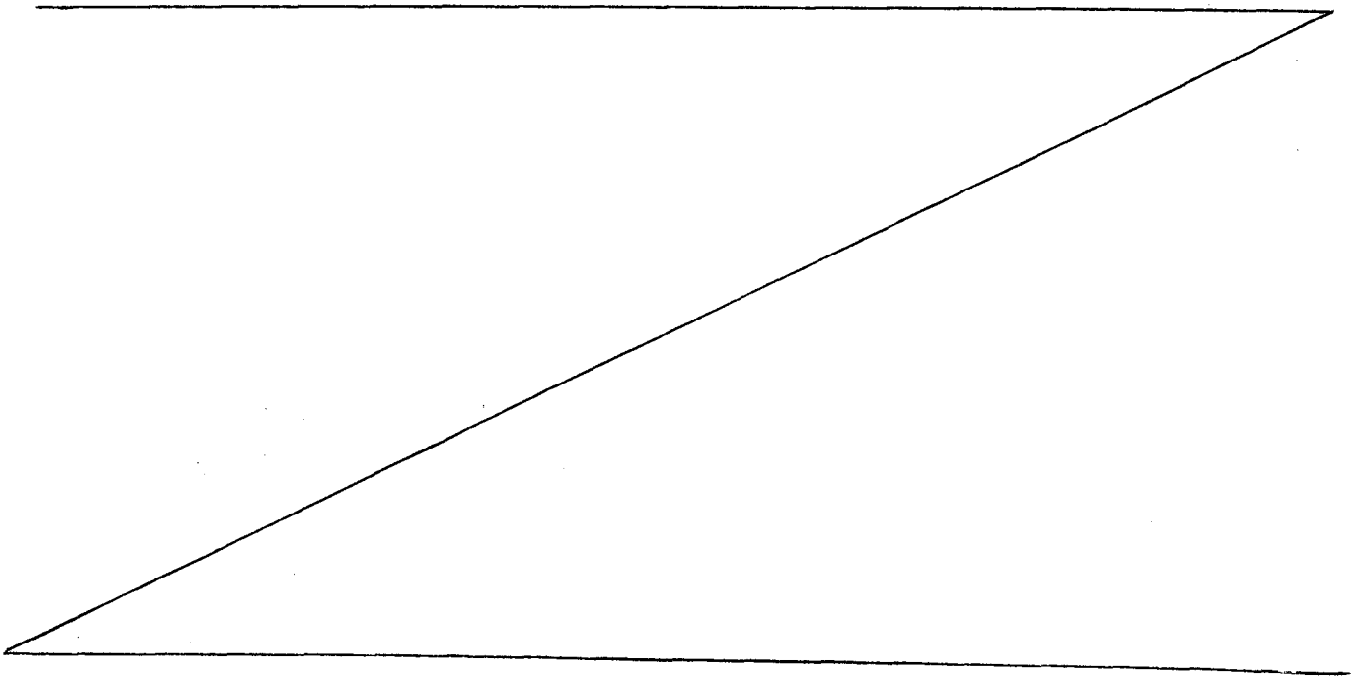
19. All rights and privileges to appropriate water for power purposes under this permit and any subsequently issued license are subject to depletions resulting from future upstream appropriation for domestic and stock watering uses within the watershed. Such rights and privileges under this permit may also be subject to future upstream appropriations for uses within the watershed other than domestic and stock watering if and to the extent that the Board determines, pursuant to Water Code Sections 100 and 275, that the continued exercise of the appropriation for power purposes is unreasonable in light of such proposed uses. Any such determination shall be made only after notice to permittee or licensee of an application for any such future upstream appropriation and the opportunity to be heard; provided, that a hearing, if requested, may be consolidated with the hearing on such applications.

20. No construction shall be commenced and no water shall be used under this permit until all necessary federal, state and local approvals have been obtained, including compliance with any applicable Federal Energy Regulatory Commission requirements.

21. If construction activities reveal the presence of any cultural resources either above or below the ground surface that were not observed during the archaeological survey, work in that immediate area shall cease until a professional archaeologist is consulted to evaluate the significance of the discovery and make recommendations for mitigation of impacts.

22. Prior to any construction in the vicinity of PG&E's DeSabla powerhouse permittee shall consult with PG&E regarding geologic hazards that could be affected by construction; and shall undertake engineering and construction precautions to avoid disturbance of geologic hazards that could damage PG&E facilities; and shall provide the Board with evidence satisfactory to the Board that permittee has obtained the necessary right of access to the proposed site for permittees powerhouse.

23. In order to prevent degradation of the quality of water during and after construction of the project, prior to commencement of construction permittee shall file a report pursuant to Water Code Section 13260 and shall comply with any waste discharge requirements imposed by the California Regional Water Quality Control Board, Central Valley Region, or by the State Water Resources Control Board.



24. The report of waste discharge to be filed pursuant to Term 23 shall include description of a program to sample and monitor tunnel rock as excavations proceed.

CERTIFICATION

The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a decision duly and regularly adopted at a meeting of the State Water Resources Control Board held on February 18, 1988

AYE: W. Don Maughan, Chairman
Darlene E. Ruiz, Vice Chairwoman
Edwin H. Finster, Member
Eliseo M. Samaniego, Member
Danny Walsh, Member

NO: None

ABSENT: None

ABSTAIN: None

Maureen Marche'
Administrative Assistant to the Board