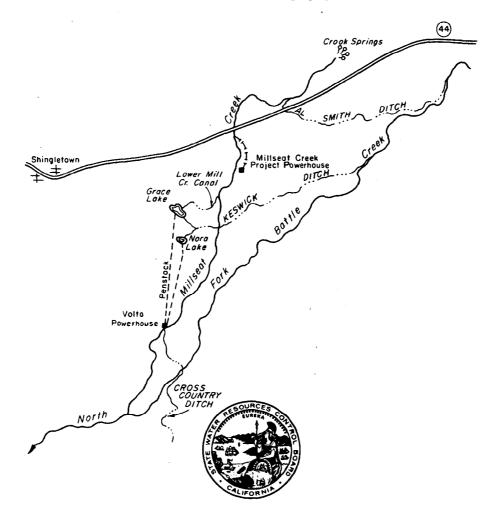


MILLSEAT CREEK HYDROELECTRIC PROJECT IN SHASTA COUNTY

APPLICATIONS 27504 AND 27671

Decision 1597



February 1984

STATE WATER RESOURCES CONTROL BOARD



STATE OF CALIFORNIA George Deukmejian, Governor

STATE WATER RESOURCES CONTROL BOARD
Carole A. Onorato, Chairwoman
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TABLE OF CONTENTS

SECTION	SUBJECT	PAGE
1.0	BY THE BOARD (Introductory Recitals)	1.0
2.0	SUBSTANCE OF APPLICATIONS	1.0
3.0	PROJECT DESCRIPTION	2.0
4.0	PROTESTS	2.0
4.1	Pacific Gas and Electric Company	3.0
4.2	Department of Fish and Game; Northern California Council of Fly Fishing Clubs	4.0
4.3	Other Protestants and Interested Parties; Ray and Joanne Record	4.0
5.0	AVAILABILITY OF UNAPPROPRIATED WATER	5.0
6.0	FINANCIAL FEASIBILITY	6.0
6.1	Project Revenues	6.0
6.2	Construction Costs	7.0
6.3	Financing Costs	7.0
6.3.1	Tax Credits	7.0
6.3.2	Interest Rates and Loan Payback Periods	8.0
6.4	Operation and Maintenance Costs	8.0
6.5	Conclusions	8.0
7.0	ENVIRONMENTAL AND PUBLIC INTEREST ISSUES	10.0
7.1.	Fishery Concerns	11.0
7.2	Aesthetics and Noise	12.0
7.3	Other Project Impacts	13.0
8.0	CONCLUSIONS	13.0
0.0	OPNED	14.0

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STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of Applications 27504 and 27671) DECISION	1597
FRED M. SUTTER, JR.,		Millseat Creek, Tributary to North
Applicant,		Fork Battle Creek
RAY and JOANNE RECORD, ET AL.,	COUNTY:	Shasta
Protestants.	}	

DECISION APPROVING APPLICATIONS 27504 AND 27671

1.0 BY BOARD MEMBER DR. ALJIBURY

Fred N. Sutter, Jr., having filed Applications 27504 and 27671 for permits to appropriate unappropriated water from Millseat Creek, protests having been received, a hearing having been held on August 30, 1983, the Board having considered all evidence in the record, the Board finds as follows:

2.0 SUBSTANCE OF APPLICATIONS

Applications 27504 and 27671 differ only in the quantity of water sought for appropriation and in priority dates. Application 27504 is for 25 cubic feet per second (cfs) and Application 27671 is for 12 cfs. Both applications are for the direct diversion of water for the purpose of producing hydroelectric power via year round diversion from Millseat Creek in Shasta County. Water will be diverted within the SW1/4 of NE1/4 of Section 34, T31N, R1E, and returned to the stream within the NW1/4 of SE1/4 of Section 34, T31N, R1E, MDB&M.

3.0 PROJECT DESCRIPTION

The project will divert water from Millseat Creek about 1000 feet south of Highway 44. Diversion of water will be accomplished by a 4-foot high and 30-foot long dam extending from the west bank to the stream center. Water will be carried in a 30-inch steel pipe about 2000 feet downstream to the powerhouse situated near the creek. After passing through the powerhouse, water will be returned to the creek via a concrete tailrace with energy dissipators. The powerhouse will include a 100 kilowatt generator that may produce between 613,000 to 681,000 KWh per year. The project will be located on land owned by the applicant. (See Millseat Creek Hydroelectric Project, Staff Analysis of Record (Staff Analysis) Sections 5.0, 5.1, and 6.0 for the more detailed project description.)

4.0 PROTESTS

The applications were protested by the Pacific Gas and Electric Company (PG&E), the California Department of Fish and Game (F&G), the Northern California Council of Fly and Fishing Clubs (Club), Evelyne Michael, and Ray and Joanne Record. Counselor David F. Schmidt, appearing on behalf of protestants Michael and the Records, indicated he was also representing interested parties Herb and Beth Pope and Robert and Marie Rice (T, 5, 25-6,4; see Staff Analysis Section 1.0, for explanation of how the record is cited).

The following information will aid in understanding the reason for the protests:

(a) The creek is used by PG&E to transport water for the operation of the Battle Creek Hydroelectric Project and the proposed project will utilize water placed in the creek by PG&E for the Battle Creek Hydroelectric Project.

(b) The proposed project will partially dewater about 2000 feet of Millseat Creek including a water fall. Reduced instream flows may reduce the resident population of trout in the creek and affect the esthetic values associated with the creek and the falls.

4.1 Pacific Gas and Electric Company

The protest by PG&E was based on the desire to protect its prior water rights and the operational integrity of its downstream power project. An agreement has been reached between PG&E and the applicant wherein the applicant recognizes PG&E's prior rights and agrees (among other things) to the inclusion of certain conditions, to protect PG&E's interests, in any permits issued by this Board. The Board has been requested to make compliance with the entire agreement a condition of any permits issued.

The agreement, however, includes many provisions not sufficiently related to the Board's jurisdiction to warrant inclusion among permit conditions. If included as a permit condition, the Board could become an arbitor of private contractual disputes having little relation to the Boards duties. Accordingly, the permits issued pursuant to our decision shall include only the following conditions derived from the agreement between the Company and its applicant.

- (a) Permittee shall operate his project in such a manner as not to cause injury to PG&E's prior water rights or flow requirements. Should operation cause injury to PG&E, permittee shall immediately modify his operation so that no such injury will continue.
- (b) Permittee shall keep an operations log. The log shall record events which change the amount of water diverted from Millseat Creek. The log shall contain entries and details sufficient for understanding the routing of water through the project. Permittee shall make these records available to PG&E upon request. These records will be used to verify whether the operation of the project adversely affects PG&E prior rights and operations.

(c) Permittee, upon advance notice, shall allow PG&E or its designated representative reasonable access to his project for the purpose of obtaining information and other data as required by the terms and conditions of this permit.

Finally, because the proposed project will rely upon water imported by PG&E, the following condition should be included in the permits issued pursuant to this decision:

"To the extent that water available for use under this permit is imported water this permit shall not be construed as giving any assurance that such supply will continue."

4.2 Department of Fish and Game Protest; Northern California Council of Fly Fishing Clubs

Both F&G and the Club filed protests because of the proposed project's potential effect on the fishery resources of Millseat Creek. An agreement was also reached between F&G and the applicant, and thereafter the Club withdrew its protest. The applicant has agreed that the following measures may appear as conditions in any permits issued by the Board:

- (a) Bypass of 15 cfs or the flow in the stream, whichever is less;
- (b) Installation of devices to measure and record required bypass flows;
- (c) Requirement that a stream alteration agreement be made with F&G;
- (d) Installation of a fish screen; and
- (e) The right to use water be subject to continuing Board authority to require additional bypass flows.

4.3 Other Protestants and Interested Parties; Ray and Joanne Record

The remaining protestants and interested parties reside along the portion of the stream that will be dewatered by the project, including the waterfall, and on the stream bank opposite the location proposed for the conduit and powerhouse.

Protestants Ray and Joanne Record may be particularly affected by the proposed project. The Records both reside and operate a recreational vehicle mobile home park adjacent to the stream. The scenic value of the falls and the stream's fishery are assets to the operation of the mobile home park. Finally, the proposed powerhouse would be located on the stream bank opposite from the Records' home. The Records are concerned that the operation of the powerhouse will result in noise disturbing the use and enjoyment of their home and the mobile home park by patrons.

All protestants and interested parties seek, at a minimum, an additional 5 cfs (20 cfs) of instream flows below the diversion works for instream beneficial uses including maintenance of the fishery, riparian vegetation and the appearance of the falls.

The protestants request for additional instream flows requires consideration of two related subjects. First, how much water is available in the stream for use by the applicant and for instream uses; and, second, will the project be financially feasible if the applicant is required to bypass either 15 cfs or 20 cfs for instream flows. These subjects will be addressed in the following paragraphs.

5.0 AVAILABILITY OF UNAPPROPRIATED WATER

Millseat Creek is tributary to North Fork Battle Creek thence Sacramento River. While the watershed above the proposed project is small, natural flows in the creek are augmented by water imported by PG&E. Water stored at McCumber and North Battle Creek reservoirs is diverted to Millseat Creek via the Al Smith Ditch. Downstream from the proposed project, where the imported water and natural flow of Millseat Creek is diverted, PG&E maintains a flume for measuring diverted flows.

Records maintained by PG&E for the flume provide the following information regarding natural and imported flows in Millseat Creek. Average monthly flows in Millseat Creek from 1976 into 1983 were about 51.4 cfs. During wet years mean monthly flows were about 59.0 cfs and in drier years about 43.0 cfs. Clearly, these flows are sufficient to supply the applicant's request under Applications 27504 and 27671 for 37 cfs of water. It is equally clear, however, that a minimum bypass of 15 cfs or 20 cfs for instream uses will reduce the quantity of water available to operate the proposed project. (See <u>Staff Analysis</u>, Sections 8.0 through 8.4 for the more detailed analysis.) Because bypass flows will reduce the water available for the production of power revenues, we will examine the project's financial feasibility.

6.0 FINANCIAL FEASIBILITY

6.1 Project Revenues

This project is a small hydroelectric project within the meaning of the Public Utility Regulatory Policies Act (PURPA, P.L. 93-617, 92 Stat. 3144). Section 210 of PURPA requires PG&E to offer to purchase energy from small hydroelectric projects at its "full avoided cost" (16 USC $\S824$ and 18 CFR $\S292.304(b)(2-4)$). Accordingly, the applicant has a guaranteed buyer for its power at PG&E°s cost.

In California, the Public Utilities Commission (PUC) sets the "avoided cost" offers for each utility. Using (1) PG&E's standard offer No. 2 as approved by the PUC and (2) the 1976-83 flows in Millseat Creek, the applicant estimates annual project revenues as follows with 15 cfs and 20 cfs bypass requirements:

Bypass Flows	Revenue	
15 cfs	\$44,500	
20 cfs	\$39,300	

It must be noted that the offering price in Standard Contract No. 2 is subject to change every 90 days as PG&E's operating costs change.

Operating costs are influenced, for instance, by changes in the price of oil. (See Staff Analysis, Section 7.4, for additional analysis.)

6.2 Project Construction Costs

The applicant estimates the cost of the project as \$253,000 for equipment plus construction. Protestants offered information indicating such costs could fall within a range of \$225,000 to \$350,000. This information was based on the experience of protestant's consultant with small hydro projects. The variation in the estimated project cost appears to be caused by the use of different assumptions regarding the sizing of project components used in such projects. (See Staff Analysis, Section 7.1 for the more detailed analysis.)

6.3 Project Costs

The applicant examined four factors in evaluating the cost of financing his project; i.e., interest rates, loan pay back periods, federal investment tax credits and federal energy tax credits.

6.3.1 Tax Credits

Tax credits lower the total amount of the project which needs to be financed and, in effect, raise additional cash from the U. S. Treasury at no interest cost to the taxpayer claiming the credits. Two tax credits are available to the applicant, (1) the one time 10 percent federal tax credit on equipment costs and (2) The federal 15 percent energy tax

credit. The combined effect of filing both credits was estimated by the applicant as a 21 percent credit and reduced total financing requirements to \$178,000 (79% of \$225,000) or to \$276,000 (79% of \$350,000) (see <u>Staff Analysis</u>, Section 7.2 for the more detailed analysis).

Whether either or both tax credits can be fully utilized depends on whether the applicant has or can organize a group of investors who have a tax liability in excess of the credits being claimed. In the case of the 21 percent credit, the amount of tax liability involved is \$47,000 to \$74,000. No information was presented by the applicant to indicate whether the full tax credits could in fact be utilized. For this analysis, full utilization will be assumed.

6.3.2 Interest Rates and Loan Payback Periods

The applicant provided analysis examining project financing with interest rates of 12 and 15 percent and with loan repayment periods of 10, 15, and 20 years.

These interest rates and repayment periods reasonably reflect current conditions. For the purpose of this decision, however, we will give consideration to only the 12 percent, and the 15 and 20-year loan periods, the case most favorable to seeing the proposed project come to fruition.

6.4 Operation and Maintenance Costs

The applicant estimated total operation and maintenance costs for the project as a flat \$10,000 per year, including hiring a part-time operator and all taxes and insurance.

6.5 Conclusion

Based on our analysis, the applicant's project is feasible only if the more favorable assumptions are used. For instance, the project will yield

a net operating profit of only \$5,000 when: (1) no more than \$178,000 is borrowed; (2) the interest rate is 12 percent; (3) the loan payback period is 15 years; (4) the 21 percent tax credit is fully utilized; and (5) the bypass flows are 15 cfs. Using the same assumptions, the project is not feasible if bypass flows are increased to 20 cfs (see <u>Staff Analysis</u>, Section 7.7, CASE II).

In general the conditions necessary for the project to be profitable are that the total amount financed be less than about \$250,000, the interest rate be around 12 percent and and the loan term be for 15 or 20 years. In the alternative, if the PG&E offering price for electricity were to increase, the project would be profitable under less strict conditions. So long as the applicant can meet project costs in the near-term, the project will become profitable over the long-term. In all cases the increase in bypass flows from 15 cfs to 20 cfs will reduce the project profit.

In order for this project to be economically feasible in the near-term, the applicant must keep construction costs down, use the tax credits and find a low-cost, long-term loan. These conditions are possible, but will be difficult, to achieve. Although the project is only marginally feasible, the applicant has an opportunity through his own efforts by undertaking construction to make the project feasible. We conclude, therefore, that the applications should not be denied merely because the project is financially marginal.

Because the project is marginal, however, any permits issued pursuant to this decision should:

(a) Prohibit construction in Millseat Creek until the applicant submits a signed power purchase contract and plan of finance which, taken together, indicate the project is financially feasible; and

(b) Require that project construction be commenced within two years in order to assure due diligence in proceeding with the project.

7.0 ENVIRONMENTAL AND PUBLIC INTEREST ISSUES

Environmental and public interest issues are sometimes closely related. Shasta County has adopted Final Environmental Impact Report No. 6-82, Sutter Hydroelectric Project (EIR). The County has also adopted Use Permit No. 20-82 mitigating or avoiding project effects. Several of the impacts of the proposed project addressed in the EIR and mitigated or avoided in the Use Permit were reiterated as issues in the water right hearing.

The EIR identifies the following as significant project effects:

- (a) Reduced stream flow
 - o Fishery effects
 - o Aesthetics effects
 - -- Diversion work (visual)
 - -- Powerhouse (visual)
 - -- Flow reduction (visual)
- (b) Water quality effects
 - o Construction impacts
- (c) Noise
 - o Construction
 - o Powerhouse operations
 - o Water returning to creek
- (d) Diversion work
 - o Fishery impact
- (e) Construction impacts
 - o Water quality
 - o Noise
 - o Riparian habitat

(EIR, pages 11-38.)

The Use Permit included 33 permit conditions to mitigate or avoid all of the impacts identified (FNS, 6).

In making this decision the Board has considered the EIR and will in the public interest, adopt conditions to mitigate or avoid significant project effects within our jurisdiction.

7.1 Fishery Concerns

Several protestants are concerned that the bypass flows be adequate to protect the trout fishery. Mr. David Hoopaugh, a Fishery Biologist with 15 years of experience, appeared on behalf of the F&G. He testified in support of the previously identified proposal to bypass 15 cfs for the fishery (Section 4.2, supra). He contended that reduced instream flows may improve fishery conditions, in part of the stream by reducing stream velocity. Mr. Hoopaugh was a very creditable witness in supporting and defending the 15 cfs bypass proposal on the basis of four observations of Millseat Creek and personal experience. Nevertheless, we note that F&G's current policy is that instream flow studies should be conducted prior to setting instream flows. Mr. Hoopaugh was the only technically qualified witness to address this issue during the hearing.

In view of Mr. Hoopaugh's testimony in support of the 15 cfs bypass requirement, the applicant's commitment to operate the project with a 15 cfs requirement and the absence of creditable evidence to suggest a different bypass requirement, we conclude that the permit issued pursuant to this decision should include the 15 cfs bypass proposal. However, in the absence of an instream flow study, the Board should reserve jurisdiction to require additional bypass flows if it becomes apparent that project operations are damaging the fishery. Of course the other measures proposed by F&G to protect fishery resources and agreed to by the applicant should be included as permit conditions.

7.2 Aesthetics and Noise

As previously stated the project will partially dewater about 2,000 feet of Millseat Creek. The reduction in flow in the creek and over the falls will be readily noticeable even with a 15 cfs bypass requirement. Resulting stream flows will be somewhat shallower and narrower than under existing circumstances; however, the stream and falls will not be reduced much below, if any, their natural condition before PG&E commenced importing water to Millseat Creek. These impacts are unavoidable if this type of power project is to be constructed. Mitigation is possible and the County Use Permit requires the applicant to bypass 15 cfs of water at the diversion works. More mitigation is possible only by requiring additional bypass flows at the expense of project revenues.

The waterfall will be somewhat diminished in the volume of its sound, an attribute prized by the Records. Conversely, the powerhouse may increase the noise level in its vicinity. The Use Permit requires the applicant to "[d]esign and build the powerhouse to attenuate the exterior noise level increase to less than 3dB(A) at the property line." This measure will mitigate or avoid the noise resulting from the operations of the powerhouse. The protestants provided no competent evidence to show that bypasses at 20 cfs or 25 cfs would provide meaningful additional mitigation for the impact of reduced sound from the falls or the visual effect of reduced flow in the stream and over the falls.

Burying the penstock, minimizing impacts to riparian vegetation, constructing the diversion works out of natural materials, and surrounding the powerhouse with native vegetation will reduce other aesthetic impacts of the project. The county Use Permit includes such conditions.

7.3 Other Project Impacts

Water quality impacts are a special area of concern to this Board. The EIR indicates that water quality impacts may result from construction of the project and the Use Permit includes conditions recommended by the California Regional Water Quality Control Board, Central Valley Region to mitigate or avoid such impacts. Mrs. Record expressed additional concern that water quality problems could occur as a result of the construction and operation of the powerhouse tailrace. After reviewing the Use Permit and considering Mr. Record's testimony, we conclude the permits issued by this Board should require the following:

- (a) Permittee shall construct baffles at the tailrace outfall to dissipate energy and prevent erosion.
- (b) Permittee shall reseed all areas denuded by project construction with plant species of value to wildlife. Denuded slopes shall be covered with a protective mulch or other protective reseeding technique as soon as practicable following active work at the specific site. Slope protection shall be repeated as necessary to ensure erosion prevention."

8.0 CONCLUSIONS

We find the proposed use of water is for a beneficial purpose and that sufficient water is available for the requested appropriations. Water Code §1243 authorizes the Board, in determining the amount of water available for appropriation, to consider the amounts of water required for preservation and enhancement of fish and wildlife resources. We find that the applicant should be required to bypass flows available for appropriation to preserve the fishery of Millseat Creek and that the Board should retain jurisdiction for the duration of the permit to determine whether additional flows are necessary to preserve or enhance the

fishery. Further, Water Code §1253 authorizes the Board to allow the appropriation of water under conditions that will best utilize, in the public interest, the water sought to be appropriated. We find that the applicant should be required to bypass 15 cfs (the same 15 cfs) to preserve the esthetic values of Millseat Creek and that the Board should retain jurisdiction for the duration of the permit to determine whether additional flows are necessary for this purpose.

In proceeding with this project, the applicant should take notice that the 15 cfs bypass requirement may be increased upon a showing that additional water is necessary for instream uses and that the public interest in such uses may outweigh the public and private interest in the use of water to generate power. Recognizing the already tenuous financial feasibility of this project, additional bypass flows should not be increased above an additional 5 cfs (a total of 20 cfs) during any loan payout period used to finance the project. Although we are indicating that additional bypasses, above 20 cfs, would not be required during the period of project financing, the applicant should finance his project as if the 20 cfs bypass requirement were in effect. The applicant should also take notice that in the event of cost overruns or revenue shortfall, the Board will not look upon additional applications to appropriate the remaining bypass flows in Millseat Creek with favor.

ORDER

IT IS HEREBY ORDERED:

1. Application 27504 is approved for power purposes and a permit shall be issued to Fred N. Sutter, Jr., subject to prior rights. The permit shall contain standard permit terms 6, 10, 11, 12 and 13 (the Board maintains a

list of standard permit terms, copies of which may be obtained upon request) and the common terms contained herein in addition to the following special condition:

"The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 25 cubic feet per second to be diverted from January 1 to December 31 of each year."

"The equivalent of the continuous flow allowance for any 14-day period may be diverted in a shorter time, provided there be no interference with other rights."

2. Application 27671 is approved for power purposes and a permit shall be issued to Fred N. Sutter, Jr., subject to prior rights. The permit shall contain standard permit terms 6, 10, 11, 12 and 13 and the common terms contained herein in addition to the following special condition:

"The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 12 cubic feet per second to be diverted from January 1 to December 31 of each year."

"The equivalent of the continuous flow allowance for any 14-day period may be diverted in a shorter time, provided there be no interference with other rights."

IT IS FURTHER ORDERED that both permits contain the following common terms:

3. Construction work shall begin within two years of the date of this permit and shall thereafter be prosecuted with diligence, and if not so commenced and prosecuted, this permit may be revoked.

- 4. Construction work shall be completed by December 1, 1987.
- 5. Complete application of the water to the authorized use shall be made by December 1, 1990.
- 6. Permittee shall within 24 months from the date of the permit submit to the Board a plan of finance and a signed purchase contract which, taken together, indicate the project is financially feasible. Permittee shall not proceed with any construction of the project within the stream corridor until the Chief of the Division of Water Rights concurs in writing, that the project is financially feasible.
- 7. To the extent that water available for use under this permit is imported water, this permit shall not be construed as giving any assurance that such supply will continue.
- 8. Permittee shall comply with the following provisions derived from the agreement between permittee and PG&E executed on September 17, 1982, amended on August 1, 1983 and filed with the State Water Resources Control Board:
 - (a) Permittee shall operate his project in such a manner as not to cause injury to PG&E's prior water rights or operations. Should operation cause injury to PG&E, permittee shall immediately modify his operation so that no such injury will continue.
 - (b) Permittee shall keep an operations log. The log shall record events which change the amount of water diverted from Millseat Creek. The log shall contain entries and details sufficient for understanding the routing of water through the

project. Permittee shall make these records available to PG&E upon request. These records will be used to verify whether the operation of the project adversely affects PG&E°s prior rights and operations.

(c) Permittee, upon advance notice, shall allow PG&E or its designated representative reasonable access to his project for the purpose of obtaining information and other data as required by the terms and conditions of this permit.

Inclusion in this permit of certain provisions of this agreement shall not be construed as disapproval of other provisions of the agreement or as affecting the enforceability, as between the parties, of such other provisions insofar as they are not inconsistent with the terms of this permit.

- 9. Permittee shall release past the diversion structure a continuous flow of 15 cubic feet per second or the total streamflow, whichever is less.
- 10. Permittee shall not make changes in the amount of water being diverted at a rate exceeding 30 percent of the total streamflow per hour.
- 11. No water shall be diverted under this permit until permittee has installed devices, satisfactory to the State Water Resources Control Board, which are capable of continuously measuring and recording the flows diverted and required by the conditions of this permit. One of the devices shall be installed at a point between the diversion point and the first downstream point of accretion to Millseat Creek. That measuring device shall be capable of continuously recording the bypass flow required by permit conditions 9 and shall include a calibrated staff gage visible from the west side of Millseat Creek. Said measuring devices shall be properly maintained.

- 12. Permittee shall by December 31 of each year provide the State Water Resources Control Board and the California Department of Fish and Game a record of the daily diversions and a record of the daily minimum and maximum bypass flows for the preceding October 1 to September 30 water year as measured and recorded by the measuring devices of permit condition 11.
- 13. No water shall be diverted under this permit until permittee has installed a screen, satisfactory to the California Department of Fish and Game, which is capable of preventing fish from entering the project penstock.
- 14. In accordance with Section 1601, 1603 and/or Section 6100 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 and/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 permittee.
- 15. During the term of this permit, the State Water Resources Control Board reserves jurisdiction to change conditions for the protection of instream beneficial uses, including fish and wildlife. No change will be made until after notice to parties and opportunity for hearing. Bypass flows will not be increased above 20 cfs during the payout period of any loan obtained to finance the project.
- 16. Permittee shall construct baffles at the tailrace outfall to dissipate the energy of water and prevent erosion of the streambed and of the streambanks.

- 17. Permittee shall reseed all areas denuded by project construction with plant species of value to wildlife. Denuded slopes shall be covered with a protective mulch or other protective reseeding technique as soon as practicable following active work at the specific site. Slope protection shall be repeated as necessary to ensure erosion prevention.
- 18. Permittee shall provide automatic shutoff gates or valves in the penstock or turbine capable of automatically adjusting or even discontinuing the diversion of water to assure bypass requirements of permit conditions 9 are continuously observed.
- 19. Permittee shall bury the project conduit and penstock. During construction, permittee shall minimize damage to and clearing of riparian vegetation.
- 20. Permittee shall incorporate native rock material into the exterior design of the project diversion structure.
- 21. Permittee shall landscape the project powerhouse and appurtenances with native vegetation so as to screen them from view from adjacent properties.
- 22. 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 stockwatering uses within the watershed. Such rights and privileges may also be subject to future upstream appropriations for uses within the watershed other than domestic and stockwatering 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.

23. 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.

Date: FEB 1 6 1984

CAROLE A. ONORATO, Chairwoman

WARREN D. NOTEWARE, Vice Chairman

F. K. ALJIBURY Member

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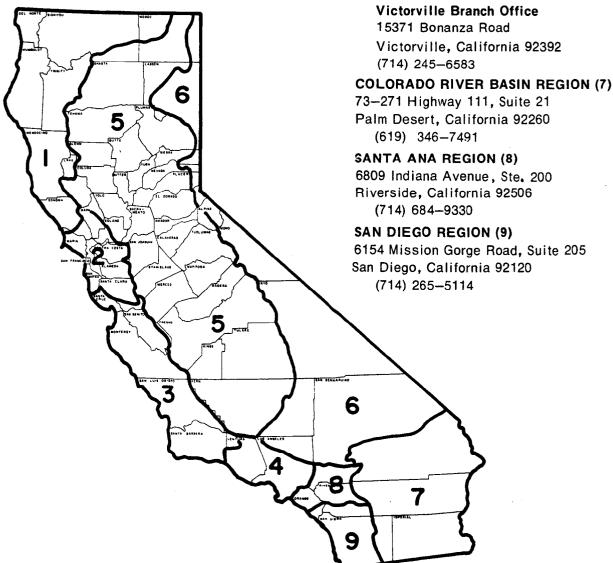
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A RESERVE AND A SERVER