STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

In the Matter of Applications 31595 and 31596

of

Sacramento Municipal Utility District and

Pacific Gas and Electric Company

ORDER APPROVING ISSUANCE OF PERMITS

SOURCES: Rubicon River, Little Rubicon River, Gerle Creek, South Fork Rubicon River, Silver Creek, Brush Creek and South Fork American River

COUNTY: El Dorado

WHEREAS:

1. Water right Applications 31595 and 31596 of Sacramento Municipal Utility District (SMUD) were filed with the State Water Resources Control Board (State Water Board), Division of Water Rights (Division) on May 24, 2005. The applications were filed to appropriate additional water for hydropower generation at SMUD's existing Upper American River Hydroelectric Project (UARP) which diverts from multiple water sources in the Rubicon River and South Fork American River watersheds in El Dorado County.

2. Under Application 31595, SMUD requests a right to directly divert 1,910 cubic feet per second and collect 3,610 acre-feet per annum (afa) to storage from the Rubicon River watershed. Under Application 31596, SMUD requests a right to collect 27,200 afa to storage from the South Fork American River watershed. Diversion of water for hydropower generation is considered a beneficial use of water under California Code of Regulations, title 23, division 3, section 662.

3. On April 30, 1957, the State Water Board issued water right Permit 10704 (Application 12624) for the UARP's diversions that required completion of construction by December 1, 1967, and complete use of water by December 1, 1975. The completed Rubicon diversions have no mechanism to limit inflow, and their location in the Desolation Wilderness area would make it very difficult to build or operate such a mechanism. In December 1980, the Division issued SMUD water right License 11074 pursuant to Application 12624, based on diversion and storage data from 1969—then the maximum runoff year on record. Since 1980, higher peak runoff events have resulted in SMUD's diverting water in excess of limitations in License 11074 in several years. A temporary permit provided a basis of right for SMUD's diversion in excess of the License 11074 limits in 2006.

4. The UARP is subject to federal regulation by the Federal Energy Regulatory Commission (FERC) and is required to operate in accordance with the requirements of its federal power license. The Federal Power Act preempts state authority over federally licensed hydropower projects, subject to certain exceptions. (*California v. Federal Energy Regulatory Commission* (1990) 495 U.S. 490; *Sayles Hydro Assocs. v. Maughan* (9th Cir. 1993) 985 F. 2d at p. 451.) The State Water Board's review of the applications was limited to the impacts on proprietary uses. (see Sayles Hydro Assoc., supra, 985 F. 2d at p. 456.)

5. Although these permits do not contain terms which address environmental and public trust issues, the diversions will remain subject to minimum stream bypass requirements and other environmental protection conditions in any new FERC license. The FERC relicensing process is currently ongoing, and the water quality certification application for the UARP is pending. The State Water Board may impose mandatory water quality and beneficial use protections through the water quality certification process. (S.D. Warren Co. v. Maine Bd. of Environmental Protection, (2006) 126 S. Ct. 1843.)

6. The applications were noticed on October 12, 2006. Anglers Committee (AC), Placer County Water Agency (PCWA), Friends of the River (FOR), California Sportfishing Protection Alliance (CSPA), and the Department of Fish and Game (DFG) filed protests. The protest filed by PCWA based on potential injury to prior rights was accepted. On December 20, 2006, the Division notified AC that its protest based on environmental issues was not accepted due to the Federal Power Act preemption over the State Water Board regarding environmental impacts of the project. On May 21, 2007, the Division notified CSPA and FOR that the environmental elements of their protests were subject to cancellation, but the State Water Board or its designee would address the policy issue of whether the State Water Board should use 14-day flow averaging for direct diversion limitations on hydropower projects. On May 21, 2007, the Division notified DFG that its protest was subject to cancellation, except insofar as it raises the policy issue whether the State Water Board should refuse to accept and process applications from illegal diverters. This order addresses CSPA, FOR and DFG's policy concerns.

7. The PCWA protest was resolved by execution of a settlement agreement with SMUD. Protest settlement resulted in the inclusion of a permit term to compensate PCWA if SMUD diverts water that PCWA would otherwise have been able to use. (See Permit 21261, condition 10; Permit 21262, condition 10.)

8. Georgetown Divide Public Utility District (GDPUD) did not protest the applications, but as downstream diverters requested the inclusion of a permit term that will protect its downstream rights. Both permits contain such a term (See Permit 21261, condition 14; Permit 21262, condition 14.)

9. Inclusion of conditions 10 and 14 in the permits ensures that the water will be diverted and used without injury to any lawful user of water.

10. Protestants CSPA and FOR raised the policy concern that use of 14-day flow averaging for direct diversion limitations of hydropower projects is inappropriate as a practice. Permits and licenses that contain a rotation clause allow diversion of water at a greater rate than the amount identified in the permit or license, provided that the running average diversion rate over the specified number of days does not exceed the face value diversion rate of the water right. Rotation clauses are routinely used for municipal, domestic, irrigation and hydropower projects, although the number of days used for averaging varies. With hydropower, rotation clauses allow a utility to beneficially use flow variations for power production.

SMUD's UARP involves the two pending applications and six existing water right licenses, which were licensed using 14-day flow averages to calculate the maximum diversions. As a practical matter, all of the water diverted for this project should be measured using one measurement system. In its April 23, 2007 response to the PCWA protest, SMUD informed PCWA that it was seeking the rotation clause in any permits issued, and provided a March 15, 2007 technical response to the PCWA protest that evaluated whether there would be any impacts to PCWA as a consequence of using the 14-day rolling average in any permits issued to SMUD. The settlement agreement between SMUD and PCWA is based upon both parties acknowledging the use of a 14-day flow average in any permits issued pursuant to Applications 31595 and 31596. Similarly, the term protecting other downstream uses protects GDPUD even with 14-day averaging. The State Water Board declines to find that 14-day averaging is per-se inappropriate.

11. DFG has raised the policy issue of whether illegal diverters should be able to file applications to appropriate water to establish a basis of right for the unauthorized diversion. Such a refusal would support state interests in discouraging unauthorized diversions. However, the fact that a diversion has been made without authorization does not indicate that the application will not have merit. A refusal to consider such applications would be contrary to state policy encouraging beneficial use of water. (Water Code § 100.) The State Water Board has enforcement discretion and may issue a cease and desist order or administrative civil liability under Water Code section 1052 for unauthorized diversions. The State Water Board enforcement authority provides an appropriate incentive to avoid illegal diversions and appropriately balances policy concerns.

12. SMUD documented the availability of unappropriated water to serve Applications 31595 and 31596 in a May 23, 2005 water availability analysis (WAA). The WAA documents the existing flows, evaluates the changes in runoff pattern that have occurred over the last 80 years and projects future water availability based on ongoing changes in runoff pattern. The SMUD WAA correlates with the following American River analyses: (a) the National Research Council's 1999 study of flow trends, and (b) a Department of Water Resources July 2006 report evaluating the 100-year three-day peak flows, comparing the pre-1955 period to the post-1955 period. Although there has been no net change in annual runoff, the streamflow pattern has shifted and the SMUD facility is uniquely situated to take advantage of any future peak flow events.

13. SMUD requested a permit development period of 50 years based on the assumption that its pending FERC license will be for a period of 50 years. The particular conditions surrounding each case govern the period of time to be allowed to apply water to full beneficial use. (Cal Code Regs., tit. 23, § 841.) FERC licenses may be issued for between 30 and 50 years. (See 18 CFR § 5.18(b).) There is no certainty that FERC will issue a 50-year license, but it is certain that the FERC license will be for a minimum of 30 years. Fifty years is a much longer development period that the State Water Board normally grants. Additionally, SMUD's applications are based on projected flow increases rather than historic data. Given the uncertainties inherent in such predictions, and the likelihood that better estimation will be possible before 50 years, the State Water Board declines to grant the full 50-year development period requested. The Division has determined that allowing a development period of 30 years is appropriate. This balances concerns regarding peak flow uncertainty with the practicality of timing water right licensure in coordination with the FERC relicensing process.

A shorter development period is generally appropriate if facilities have been fully constructed. In this case, however, the 30-year period is appropriate due to documented, ongoing changes in the streamflow pattern which have resulted in larger peak flow events which can be used to generate hydropower. The State Water Board recognizes that a longer than normal development period for a fully-constructed facility is appropriate here given the WAA and its correlation with other studies.

As hydropower generation is a non-consumptive use, the longer development period will not affect downstream water users except in the Rubicon system, where protest settlement terms will serve to protect PCWA and GDPUD, the downstream users on that system.

14. A 30-year development period will not create uncertainty for downstream applicants, in large part because SMUD's diversions are non-consumptive in nature and the water is returned to the stream system for use by downstream diverters. The permits issued pursuant to SMUD's applications will be conditioned such that no diversion or use of water can be made under the permits that will in any way interfere with diversion or use of water for irrigation, stockwatering, or domestic purposes, whether such higher uses are made under either prior or subsequent rights.

15. By letter dated December 1, 2010, SMUD notified the Division that a discrete portion of Applications 31595 and 31596 had been transferred to Pacific Gas and Electric Company (PG&E). The interest under the applications transferred to PG&E is limited solely to the right to redivert authorized flows at Chili Bar Reservoir and put the water to beneficial use at Chili Bar Powerhouse.

NOW, THEREFORE, IT IS ORDERED THAT permits are issued for Applications 31595 and 31596, subject to the conditions contained in the attached permits.

STATE WATER RESOURCES CONTROL BOARD

James W. Kassel

for *Barbara Evoy, Deputy Director*
Division of Water Rights

Dated: FEB 09 2011

Attachments

STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

PERMIT FOR DIVERSION AND USE OF WATER

PERMIT 21262

Application **31596** of

Sacramento Municipal Utility District and
Pacific Gas and Electric Company
P.O. Box 15830
Sacramento, CA 95852-1830

filed on **May 24, 2005**, has been approved by the State Water Resources Control Board (State Water Board) SUBJECT TO PRIOR RIGHTS and to the limitations and conditions of this permit.

Permittee is hereby authorized to divert and use water as follows:

1. Source of water

Source:	Tributary to:
(1) Rubicon River	**Middle Fork American River thence American River**
(2) Little Rubicon River	**Rubicon River thence Middle Fork American River**
(3), (4) Gerle Creek	**South Fork Rubicon River thence Rubicon River**
(5) South Fork Rubicon River	**Rubicon River thence Middle Fork American River**
(6), (7), (8) Silver Creek	**South Fork American River thence American River**
(9) Brush Creek	**South Fork American River thence American River**
(10) South Fork American River	**American River**

within the County of **El Dorado**

2. Location of points of diversion

By California Coordinate System of 1983 in Zone 2	40-acre subdivision of public land survey or projection thereof	Section (Projected)*	Township	Range	Base and Meridian
Diversion: **(1) <u>Rubicon Reservoir</u>** **North 2,126,887 feet and East 7,067,563 feet**	**NW¼ of SW¼**	**9**	**13N**	**16E**	**MD**
Diversion and Rediversion: **(2) <u>Buck Island Reservoir</u>** **North 2,132,587 feet and East 7,057,063 feet**	**SW¼ of NW¼**	**6**	**13N**	**16E**	**MD**

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Diversion and Rediversion: **(3) Loon Lake Reservoir** **North 2,131,387 feet and East 7,041,663 feet**	**SE¼ of NE¼**	**5**	**13N**	**15E**	**MD**
Diversion and Rediversion: **(4) Gerle Creek Reservoir** **North 2,117,680 feet and East 7,018,270 feet**	**SE¼ of SW¼**	**15**	**13N**	**14E**	**MD**
Diversion and Rediversion: **(5) Robbs Peak Reservoir** **North 2,110,835 feet and East 7,019,912 feet**	**SW¼ of NE¼**	**27**	**13N**	**14E**	**MD**
Diversion and Rediversion: **(6) Union Valley Reservoir** **North 2,081,086 feet and East 7,005,362 feet**	**SW¼ of SW¼**	**20**	**12N**	**14E**	**MD**
Diversion and Rediversion: **(7) Junction Reservoir** **North 2,075,950 feet and East 7,000,911 feet**	**SW¼ of SW¼**	**30**	**12N**	**14E**	**MD**
Diversion and Rediversion: **(8) Camino Reservoir** **North 2,066,788 feet and East 6,978,522 feet**	**SW¼ of NW¼**	**4**	**11N**	**13E**	**MD**
Diversion and Rediversion: **(9) Brush Creek Reservoir** **North 2,060,363 feet and 6,954,288 feet**	**NW¼ of SE¼**	**10**	**11N**	**12E**	**MD**
Diversion and Rediversion: **(10) Slab Creek Reservoir** **North 2,046,185 feet and East 6,932,660 feet**	**SE¼ of NW¼**	**25**	**11N**	**11E**	**MD**
Rediversion: **(11) Chili Bar Reservoir** **North 2,044,985 feet and East 6,899,860 feet**	**NE¼ of SW¼**	**25**	**11N**	**10E**	**MD**

3. Purpose of use	4. Place of use	Location	Section	Township	Range	Base and Meridian
Camino Reservoir **Hydroelectric Power Generation, Recreation**	**Jaybird Powerhouse**	**NE¼ of NW¼**	**4**	**11N**	**13E**	**MD**
Junction Reservoir **Hydroelectric Power Generation, Recreation**	**Camino Powerhouse**	**SW¼ of SE¼**	**15**	**11N**	**12E**	**MD**
Brush Creek Reservoir **Hydroelectric Power Generation, Recreation**	**Slab Creek Powerhouse**	**SE¼ of NW¼**	**25**	**11N**	**11E**	**MD**
Slab Creek Reservoir **Hydroelectric Power Generation, Recreation**	**White Rock Powerhouse**	**NW¼ of NE¼**	**31**	**11N**	**11E**	**MD**
	Chili Bar Powerhouse	**NE¼ of SW¼**	**25**	**11N**	**10E**	**MD**

The place of use is shown on map filed with the State Water Board.

5. The water appropriated under this permit shall be limited to the quantity which can be beneficially used and shall not exceed **27,200 acre-feet per annum** by storage, to be collected from all sources from October 1 of each year to September 30 of the succeeding year. The maximum amount of water to be collected to storage in any one year in each of the permittee's reservoirs is:

   (1) Camino Reservoir - **1,400 acre-feet**
   (2) Junction Reservoir - **6,300 acre feet**
   (3) Brush Creek Reservoir - **2,500 acre feet**
   (4) Slab Creek Reservoir - **17,000 acre feet**

   The total amount of water to be taken from all sources shall not exceed 27,200 acre feet per annum.

   (0000005D)

6. The total amount of water to be collected to storage from all sources under this permit and water right Licenses 11073 and 11074, issued pursuant to Applications 12323 and 12624, respectively, shall not exceed 465,800 afa.

   (0000005L)

7. Water diverted under this permit is for nonconsumptive use and is to be returned to the South Fork American River at Chili Bar Powerhouse within the NE ¼ of the SE ¼ of Section 25, T11N, R10E, MDB&M.

   (0000111)

8. Complete application of the water to the authorized use shall be prosecuted with reasonable diligence and completed by December 31, 2040.

(0000009)

9. This permit shall not be construed as conferring upon the permittee right of access to the point of diversion.

(0000022)

10. To address any interference that diversions under this permit may have with the exercise of Placer County Water Agency's (PCWA's) water rights under Permits 13855, 13856, 13857, 13858, and 20754 (Applications 18084, 18085, 18086, 18087, and 29721) and License 12644 (Application 26637), permittee and PCWA executed a Settlement Agreement dated September 6, 2007, a copy of which was submitted to the State Water Resources Control Board, providing for financial compensation for any defined interference with PCWA's prior rights. In accordance with the Settlement Agreement, permittee shall, upon receipt of a written request by PCWA that includes a daily record of PCWA's downstream storage and direct diversions, provide a calculation of the amount, if any, of interference with PCWA's water rights caused by diversion under this permit. Permittee shall maintain records of its daily direct diversion of water from the Rubicon River, Little Rubicon River, Gerle Creek and South Fork Rubicon River and of its daily diversion to storage from these streams.

(0110800)

11. The equivalent of the authorized continuous flow allowance for any 14-day period may be diverted in a shorter time, provided there is no interference with other rights and instream beneficial uses, and provided further that all terms and conditions protecting instream beneficial uses are observed.

(0000027)

12. If it is determined after permit issuance that the as-built conditions of the project are not correctly represented by the map(s) prepared to accompany the application, permittee shall, at his expense have the subject map(s) updated or replaced with equivalent as-built map(s). Said revision(s) or new map(s) shall be prepared by a civil engineer or land surveyor registered or licensed in the State of California and shall meet the requirements prescribed in section 715 and sections 717 through 723 of the California Code of Regulations, Title 23. Said revision(s) or map(s) shall be furnished upon request of the Deputy Director, Division of Water Rights.

(0000030)

13. 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 under this permit 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.

(000000I)

14. No diversion or use of water shall be made under this permit which will in any way interfere with diversion or use of water for irrigation or domestic purposes, whether such higher uses are made under either prior or subsequent rights.

(0460800)

15. 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.

(000000Jm)

16. Permittee shall forward to the State Water Board all pertinent Federal Energy Regulatory Commission filings that may impact the diversion and use of water associated with this project.

(000000J)

17. The interest of Pacific Gas and Electric Company in this permit is limited to the operation of Chili Bar Powerhouse.

THIS PERMIT IS ALSO SUBJECT TO THE FOLLOWING TERMS AND CONDITIONS:

A. The amount authorized for appropriation may be reduced in the license if investigation warrants.

(0000006)

B. Progress reports shall be submitted promptly by permittee when requested by the State Water Board until a license is issued.

(0000010)

C. Permittee shall allow representatives of the State Water Board and other parties, as may be authorized from time to time by said State Water Board, reasonable access to project works to determine compliance with the terms of this permit.

(0000011)

D. Pursuant to California Water Code sections 100 and 275, and the common law public trust doctrine, except to the extent (if any) such authority is preempted by federal law, all rights and privileges under this permit and under any license issued pursuant thereto, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of State Water Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of said water.

Except to the extent (if any) that such action would be preempted by federal law, the continuing authority of the State Water Board may be exercised by imposing specific requirements over and above those contained in this permit with a view to eliminating waste of water and to meeting the reasonable water requirements of permittee without unreasonable draft on the source. Permittee may be required to implement a water conservation plan, features of which may include but not necessarily be limited to (1) suppressing evaporation losses from water surfaces; (2) controlling phreatophytic growth; and (3) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this permit and to determine accurately water use as against reasonable water requirements for the authorized project. No action will be taken pursuant to this paragraph unless the State Water Board determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

Except to the extent (if any) that such action would be preempted by federal law, the continuing authority of the State Water Board also may be exercised by imposing further limitations on the diversion and use of water by the permittee in order to protect public trust uses. No action will be taken pursuant to this paragraph unless the State Water Board determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution Article X, Section 2; is consistent with the public interest; and is necessary to preserve or restore the uses protected by the public trust.

(0000012m)

E. Except to the extent (if any) that such action would be preempted by federal law, the quantity of water diverted under this permit and under any license issued pursuant thereto is subject to modification by the State Water Board if, after notice to the permittee and an opportunity for hearing, the State Water Board finds that such modification is necessary to meet water quality objectives in water quality control plans which have been or hereafter may be established or modified pursuant to Division 7 of the Water Code. No action will be taken pursuant to this paragraph unless the State Water Board finds that (1) adequate waste discharge requirements have been prescribed and are in effect with respect to all waste discharges which have any substantial effect upon water quality in the area involved, and (2) the water quality objectives cannot be achieved solely through the control of waste discharges.

(0000013m)

F. This permit does not authorize any act which results in the taking of a threatened, endangered, or candidate species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish & G. Code, §§ 2050 - 2097) except to the extent (if any) that the Act is preempted by federal law, or the federal Endangered Species Act (16 U.S.C.A. §§ 1531 - 1544). If a "take" will result from any act authorized under this water right, the permittee shall obtain authorization for an incidental take prior to construction or operation of the project. Permittee shall be responsible for meeting all requirements of the applicable Endangered Species Act for the project authorized under this permit.

(0000014m)

G. Permittee shall maintain records of the amount of water diverted and used to enable the State Water Board to determine the amount of water that has been applied to beneficial use pursuant to Water Code Section 1605.

(0000015)

H. Except to the extent (if any) that such permitting would be preempted by federal law, no work shall commence and no water shall be diverted, stored or used under this permit until a copy of a stream or lake alteration agreement between the State Department of Fish and Game and the permittee is filed with the Division of Water Rights. Compliance with the terms and conditions of the agreement is the responsibility of the permittee. If a stream or lake agreement is not necessary for this permitted project, the permittee shall provide the Division of Water Rights a copy of a waiver signed by the State Department of Fish and Game.

(0000063m)

This permit is issued and permittee takes it subject to the following provisions of the Water Code:

Section 1390. A permit shall be effective for such time as the water actually appropriated under it is used for a useful and beneficial purpose in conformity with this division [of the Water Code], but no longer.

Section 1391. Every permit shall include the enumeration of conditions therein which in substance shall include all of the provisions of this article and the statement that any appropriator of water to whom a permit is issued takes it subject to the conditions therein expressed.

Section 1392. Every permittee, if he accepts a permit, does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefore shall at any time be assigned to or claimed for any permit granted or issued under the provisions of this division [of the Water Code], or for any rights granted or acquired under the provisions of this division [of the Water Code], in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any permittee or by the holder of any rights granted or acquired under the provisions of this division [of the Water Code] or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State, of the rights and property of any permittee, or the possessor of any rights granted, issued, or acquired under the provisions of this division [of the Water Code].

STATE WATER RESOURCES CONTROL BOARD

James W. Kassel
for *Barbara Evoy, Deputy Director*
Division of Water Rights

Dated: FEB 09 2011