

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

ORDER WQ 2013-0018

In the Matter of Petition for Reconsideration of Water Quality Certification for the
PACIFIC GAS AND ELECTRIC COMPANY
CHILI BAR HYDROELECTRIC PROJECT
FEDERAL ENERGY REGULATORY COMMISSION PROJECT NO. 2155

SOURCE: South Fork American River
COUNTY: El Dorado County

1. INTRODUCTION

Pacific Gas and Electric Company (PG&E or Licensee) petitioned the State Water Resources Control Board (State Water Board or Board) for reconsideration of the Executive Director's certification for a new Federal Energy Regulatory Commission (FERC or Commission) license for PG&E's existing Chili Bar Hydroelectric Project, FERC Project No. 2155 (Project) as complying with the requirements of section 401 of the Clean Water Act (33 U.S.C. § 1341). The State Water Board finds that portions of the petition for reconsideration have merit, and thus modifies the certification as described below, and approves the certification as modified. (Cal. Code Regs., tit. 23, § 3869.)

2. FACTUAL BACKGROUND

PG&E filed an application with FERC for a new license for the Project on July 15, 2005. The Project is located on the South Fork American River in El Dorado County and is capable of generating seven megawatts of hydroelectric power.

The Executive Director of the State Water Board issued a water quality certification for the Project on November 8, 2012. On December 7, 2012, PG&E filed a petition for reconsideration pursuant to California Code of Regulations, title 23, section 3867. PG&E requests several changes to the certification, focused primarily on deletion or modification of the conditions reserving to the State Water Board the authority to amend the conditions of the certification under certain circumstances. PG&E also requests deletion or clarification of the condition making certification contingent on compliance with all applicable requirements of the Central Valley Regional Water Quality Control

The Clean Water Act recognizes and maintains states as the primary authority over water quality within their boundaries. (33 U.S.C. § 1251 (b).) Section 401 of the Clean Water Act anticipates that water quality certifications will not only set limits on operations, but will also monitor operations on an ongoing basis. (33 U.S.C. § 1341 (d).) It would be counter to the Clean Water Act to read into it a limitation that states are prohibited from acting to ensure that a facility continues to comply with water quality standards.

Conditions of certification must be reviewed by the state court system. (See *American Rivers Inc. v. FERC* (2nd Cir. 1997) 129 F.3d 99 [overruling FERC's refusal to incorporate conditions of water quality certification, including reservations of authority].) Although the State Water Board has routinely included reservations of authority in the water quality certifications it issues, the authority to do so has not previously been challenged in a petition for reconsideration and the issue has not reached the California appellate courts, so there is no California precedent specifically addressing the issue. There are precedents in other states, however. The high courts of Maine and New York have upheld conditions allowing the reopening or amendment of water quality certification. (*S.D. Warren Co. v. Bd. of Environmental Protection* (Me. 2005) 868 A.2d 210, 218-220 *aff'd* on other grounds (2006) 547 U.S. 370; *de Rahm v. Diamond* (1973) 295 N.E.2d 763.) Similarly, federal agencies with mandatory conditioning authority over FERC licenses may adopt conditions that reserve authority to require additional approvals under specified conditions. (See, e.g. *Southern California Edison Co. v. FERC* (D.C. Cir. 1997) 116 F.3d 507, 519.)

To support its contention that the Board's reservations of authority "appear to contravene the express terms of the Federal Power Act," PG&E quotes, in part, language from section 6 of the Federal Power Act. (16 U.S.C. § 799.) Section 6, in addition to the language quoted by PG&E regarding alteration of licenses, makes it clear that every license "shall be conditioned upon acceptance by the licensee of all of the terms and conditions of this chapter and such further conditions, if any, as the Commission shall prescribe in conformity with this chapter, which said terms and conditions and the acceptance thereof shall be expressed in said license." (*Id.*) PG&E also points the Board to section 401 of the Clean Water Act. According to the plain language of section 401, "Any certification provided under this section ... shall become a condition on any Federal license or permit subject to the provisions of this section." (33 U.S.C. § 1341 (d).) Read together, conditions of a water quality certification issued pursuant to section 401 of the Clean Water Act are conditions of a licensee's acceptance of the Federal Power Act license. As such, exercise of those conditions does not constitute *unilateral* alteration of the license such that section 6 requires "mutual agreement" between the licensee and the Commission.

Furthermore, the courts have already addressed reservations of authority in the context of section 6 of the Federal Power Act. In *State of California v. Federal Power Commission* (1965) 345 F.2d 917, the 9th Circuit Court of Appeal addressed, in part, the contention that the Federal Power Commission's reservation of authority to modify stream flows at some time in the future violated section 6. In that case, Turlock and Modesto Irrigation Districts asserted that the Federal Power Commission violated section 6 "by ordering the issuance of a license which did not state all of its terms and conditions." (*Id.*, at p. 924.) The court, in upholding the license condition reserving the Federal Power Commission's authority to modify the license under certain circumstances in the future, concluded:

The section 6 requirement that the terms and conditions of a license be expressed in the license must not be given a construction which is impracticable of application. When the Commission reasonably foresees the possibility that a need may develop years in the future requiring, in the public interest, the imposition of a burden upon the licensee at that time, but either the dimensions of the need or the way of meeting it is not presently ascertainable, the license terms cannot possibly speak with definiteness and precision concerning the matter. Under these circumstances, it is sufficient, under section 6, to include in the license a condition reserving the problem, including the licensees' rights to test the validity of any future action taken.

The principle applicable here is analogous to that which obtains in determining whether the Commission order must contain specific findings of fact as to future conditions. We dealt with that problem in *Portland General Electric Co. v. F.P.C.*, 9 Cir., 328 F.2d 165, 175. We there held that it is not arbitrary, unreasonable, or a deprivation of due process to refrain from making findings as to what conditions may be in the future, at least where no present burden is imposed.

(*Id.*, at pp. 924-25. See also *Wisconsin Public Service Corp. v. FERC* (7th Cir. 1994) 32 F.3d 1165, 1168-69 [upholding reopener clauses requiring construction and operation of fishways as may be prescribed in the future by the United States Fish and Wildlife Service.]) PG&E cites to no legal authority supporting a different conclusion.

The alternative would be that the Board conditions its water quality certifications in such a way that ensures the construction and operation of a project under a 30- to 50-year FERC license would be protective of water quality for the duration of that license, taking into account potential changes to the baseline assumptions and current conditions. The conditions of such a certification would likely be prohibitively burdensome and be tantamount to a denial of water quality certification in many cases.

4.2 It Is Appropriate and Not Inconsistent With the Clean Water Act that the Certification Is Subject to Modification Or Revocation Upon Administrative or Judicial Review

PG&E disagrees in part with Condition 33 of the certification, namely with the fact that the certification is subject to “modification *or revocation* upon administrative or judicial review....” To support this contention, PG&E cites section 401 of the Clean Water Act, though without further explanation or direct citation.

Condition 33 of the certification reflects one of the State Water Board’s standard conditions listed in California Code of Regulations, title, 23, section 3860, specifically subdivision (a). Inclusion of these terms in water quality certifications is not discretionary. (Cal. Code Regs., tit. 23, § 3860 [“The following *shall* be included as conditions of all water quality certification actions....”].) It is not clear why “or revocation” was removed from the water quality certifications referenced by PG&E, however PG&E does not present a compelling reason why the Board should not follow its regulations here.

Nothing in section 401 of the Clean Water Act supports a different conclusion. To the contrary, the condition is consistent with the principles of federalism embodied in Section 401 the Clean Water Act. Review of state water quality certification orders is in state court. (See *American Rivers Inc. v. FERC*, 129 F.3d at p. 108.) A reviewing court with authority to review the validity of an administrative order may require the agency to set aside that order. (See Code Civ. Proc., § 1094.5, subd. (f).) Denying a reviewing court that power, under circumstances where the court determines that revocation is the appropriate remedy under state law, would be inconsistent with respect for state law, state procedures and state institutions.

4.3 Condition 21 (Climate Change) Is Appropriate and Related to the Project

PG&E contends that Condition 21 inappropriately requires PG&E to mitigate for a harm to which the Project is not contributing, namely, climate change in general, suggesting that, because “the Project is not a cause of climate change” there is no nexus between the Project and the condition. PG&E misses the point of this condition.

Future changes in climate projected to occur during the license term may significantly alter the baseline assumptions used to develop the conditions of this certification. The State Water Board reserves authority to modify or add conditions in this certification to require additional monitoring and/or other measures, as needed, to verify that Project operations meet water quality objectives and protect the beneficial uses assigned to Project-affected stream reaches.

(Certification, p. 26.) This condition does not hold PG&E responsible for causing climate change through its Project operations; this condition, like the other reservations of authority discussed above, reflects the fact that the baseline assumptions upon which the conditions of the certification are based are likely to change over the duration of the license term. As such, and in order to verify that the Project will continue to meet water quality objectives and protect the beneficial uses assigned to Project-affected stream reaches *for the duration of the license term*, the Board needs to reserve its authority to modify or add conditions to the certification as environmental conditions beyond the control of PG&E change. Thus, Condition 21 has not been included to require PG&E to mitigate for the impacts of climate change, but to mitigate the impacts of its Project on the environment under a changed-climate scenario. Because the Board cannot determine with any reasonable degree of specificity at this time what modifications may be necessary in the future, it has left that question to be answered when and if relevant information becomes available. State Water Board [Resolution 2008-0030](#) “Directs Water Boards’ staff to require sustainable water resources management such as LID [low impact development] and climate change considerations, in all future policies, guidelines, and regulatory actions.” Condition 21 adheres to the State Water Board’s direction by including climate change considerations and the associated need for adaptive management in the certification.

As with the other reservations of authority, it is entirely possible that there will be no need during the term of the FERC license, and any subsequently issued annual licenses, for the Board to exercise this reserved authority. However, by reserving the authority in case it is needed, the Board is able to certify that the Project will meet water quality objectives and protect the beneficial uses for the duration of the license.

4.4 Condition 32 - Due Process

PG&E requests that Condition 32, which states “The State Water Board may provide notice and an opportunity to be heard in exercising its authority to add or modify any of the conditions of this certification,” be modified to replace “may” with “shall.” The Board agrees that this condition was issued in error and will revise Condition 32 to read “The State Water Board shall provide notice and an opportunity to be heard in exercising its authority to add or modify any of the conditions of this certification.”

4.5 Condition 22 – Basin Plan Compliance

As issued, Condition 22 of the certification reads, in part, “This certification is contingent on compliance with all applicable requirements of the Basin Plan.” PG&E objects to this condition as unduly vague. In making this contention, PG&E suggests that it cannot determine “which of the

literally hundreds of requirements contained in that Basin Plan are in fact applicable” and that it would “have to guess as to what the ‘applicable requirements’ were at any given time.” (Petition, p. 5.) Compliance with the applicable terms of the relevant Basin Plan is a common condition of certification and it is not unreasonable for the Board to require the owners and operators of projects subject to certification to determine which conditions of the relevant Basin Plan are applicable to their project.

PG&E also suggests it is “unfair for a compliance determination to hinge on the opinion of future regulators as to what may or may not have been intended as an ‘applicable requirement’ of such a lengthy document, particularly one that is routinely changed from time to time.” (Petition, p. 5.) All requirements of a certification depend to some degree upon the opinion of future regulators as to what may or may not have been intended when the original requirements were imposed. This is no different. Furthermore, PG&E has the same opportunity to comment on any changes to the Basin Plan that could implicate its Project as any other member of the regulated community. Amendments to Basin Plans are quasi-legislative activities and as such are afforded significant process before action is taken. If PG&E believes that a requirement of the Basin Plan may be applicable to its Project and thus compliance with that requirement is a condition of this certification, it can comment prior to adoption of any such requirement or change to a requirement.

Upon further review of this condition, the State Water Board does, however, find it appropriate to require that the certification *require* compliance with all applicable requirements of the Basin Plan, rather than making the certification *contingent on compliance*. This is consistent with the other conditions of the certification in that violations of the conditions are subject to appropriate enforcement and penalties, but noncompliance does not negate the Board’s certification. Condition 25 notes that any violation or threatened violation of the conditions of the certification is subject to any remedies, penalties, process or sanctions as provided for under state or federal law, and that the applicability of such remedies, penalties, process or sanctions is a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated in the certification. As such, Condition 22 should be modified to read:

This certification *requires* compliance with all applicable requirements of the Basin Plan. The Licensee must notify the Deputy Director and Central Valley Water Board’s Executive Officer (Executive Officer) within 24 hours of any unauthorized discharge to surface waters.

4.6 Condition 12 – Reintroduction of Anadromous Fish

Another condition that PG&E specifically objects to is Condition 12, by which the Board reserves the authority to modify or add conditions and requires PG&E to consult with other agencies regarding restoration of fish passage at Nimbus and/or Folsom Dams. As noted in that condition, “it is possible that anadromous fish passage will be restored at Nimbus and/or Folsom Dams on the American River downstream of the Project during the course of the Commission license term.” (Certification, Condition 12, p. 24.) PG&E objects to Condition 12 on the grounds that the NMFS Biological Opinion (B.O.) requiring fish passage has been remanded to NMFS for further action, and that the condition is unduly vague.

As discussed above, conditions in the certification reserving the Board’s authority to modify or add to the certification are based on the long duration of the FERC license and the real possibility that the baseline assumptions used to develop the conditions of the certification may change. In regards to the reintroduction of anadromous fish into the American River above Nimbus and Folsom dams, this is more than just a speculative possibility; although the NMFS B.O. was remanded to NMFS, in doing so, the court ordered NMFS to submit a revised B.O. by February 1, 2016. (In re *Salmonid Consolidated Cases* (E.D.Cal. Dec. 12, 2012, 1:09-CV-01053 LJO DLB, Doc. 655.) And as noted by NMFS in its comment letter on the petition for reconsideration, while parts of the B.O. were remanded to NMFS, the court did not vacate the B.O.’s Reasonable and Prudent Alternative (RPA) that includes development of a Fish Passage Program, which “would aid in the recovery of [California Central Valley (CCV)] steelhead by reintroducing CCV steelhead past Nimbus and Folsom dams and into the upper American River.” (NMFS comment letter, p. 1, citation omitted.)

While NMFS notes that the RPA for the Fish Passage Program was not remanded and is currently being implemented in its entirety, that degree of certainty is not necessary for the Board to include a condition in its certification reserving authority to address the issue should it come up. Even were the Fish Passage Program not being currently implemented, the fact that it is reasonably foreseeable that fish passage could be required during the term of the license is sufficient for the Board to include a condition in its water quality certification reserving the authority to address that scenario when it comes up. The South Fork American River is designated for cold freshwater habitat and cold freshwater spawning, reproduction and/or early development. (See Basin Plan, II-6.00.) Condition 12 is a proper condition of the Board’s certification because it allows the Board to ensure protection of listed designated uses during the term of a new FERC license.

In regards to PG&E's concern that the condition, as issued, is unduly vague, PG&E contends that it will be unable to determine when to consult with the listed resource agencies "prior to the restoration of fish passage." (Petition, p. 7, quoting Certification, Condition 12, p. 24.) It proposes instead that, if the condition remains, PG&E consult with the resource agencies and the State Water Board "within 120 days after physical completion and initiation of operation of fish passage facilities at Nimbus and/or Folsom Dams." (Petition, p. 7.) While this proposal is indeed less vague, it is also less likely to ensure protection of the Basin Plan beneficial uses discussed above. In order to provide "a comprehensible standard" as requested by PG&E while still providing appropriate protection for the beneficial uses, Condition 12 shall be modified, as follows:

Condition 12 - It is possible that anadromous fish passage will be restored at Nimbus and/or Folsom Dams on the American River downstream of the Project during the course of the Commission license term. Per the LF [Long-Term Fish Passage Action] 2 of the NMFS B.O., "[Bureau of] Reclamation and partner agencies shall submit a plan to NMFS on or before December 31, 2016, which shall describe planned long-term upstream and downstream fish passage facilities and operations, based on the best available information at that time."

Within 90-days of submittal of the plan referenced in LF 2 or an equivalent plan to restore anadromous fish passage to the waters above Folsom Dam, the Licensee shall consult with CDFW [California Department of Fish and Wildlife¹], USFWS [United States Fish and Wildlife Service], NMFS and State Water Board staff to determine whether changes are needed in the certification conditions to protect beneficial uses associated with anadromous fish. The State Water Board recognizes that the timelines associated with the NMFS B.O. and the NMFS B.O. provisions may change over the term of the license. The State Water Board reserves authority to modify or add conditions to this certification based on the outcome of the consultation process or to clarify the trigger for consultation based on new or updated biological opinions or determinations by state or federal agencies which would have a bearing on anadromous fish reintroduction.

As proposed, consultation would be tied to a more readily-identifiable event, after which fish passage would be reasonably certain, and the Board's exercise of its reserved authority would follow such consultation.

5. CONCLUSION

For the reasons discussed above, the petition for reconsideration is granted in part. The certification will be amended as described in this order. As amended by this order, the certification is appropriate and proper.

¹ The California Department of Fish and Game (CDFG) is not the California Department of Fish and Wildlife (CDFW). To reflect the current name and be consistent, all references to CDFG in the certification shall be changed to CDFW.

6. ORDER

IT IS HEREBY ORDERED that the certification of PG&E's new license for FERC Project No. 2155 for purposes of compliance with section 401 of the Clean Water Act is amended as attached to this order.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on May 7, 2013.

AYE: Chair Felicia Marcus
Vice Chair Frances Spivy-Weber
Board Member Tam M. Doduc
Board Member Steven Moore
Board Member Dorene D'Adamo

NAY: None

ABSENT: None

ABSTAIN: None



Jeanine Townsend
Clerk to the Board

Attachment

ACCORDINGLY, BASED ON ITS INDEPENDENT REVIEW OF THE RECORD, THE STATE WATER RESOURCES CONTROL BOARD CERTIFIES THAT OPERATION OF THE CHILI BAR HYDROELECTRIC PROJECT BY PACIFIC GAS AND ELECTRIC COMPANY will comply with sections 301, 302, 303, 306, and 307 of the Clean Water Act, and with applicable provisions of State law, if the Licensee complies with the following terms and conditions during the Project activities certified herein.

CONDITION 1. Minimum Instream Flows to Protect Aquatic Life Beneficial Uses

Within three months of license issuance, the Licensee, in consultation with the UARP Licensee (SMUD), shall maintain streamflows in the SF American River below Chili Bar Dam as set forth in the schedule in Table 2, provided that inflows to Chili Bar Reservoir and Chili Bar Reservoir elevations are sufficient to maintain these streamflows³. The compliance point for the measurement of the required minimum streamflows shall be United States Geological Survey (USGS) gage 11444500 (PG&E gage A49). All specified streamflows are in cfs. The schedule specifies minimum streamflows by month and six water year types denoted as: Wet, Above Normal (AN), Below Normal (BN), Dry, Critically Dry (CD), and Super Dry (SD). Water year types are described further in the next section.

Month	Minimum Streamflow by Water Year Type (cfs)*					
	SD	CD	DRY	BN	AN	WET
October	150	185	200	250	250	250
November	150	185	200	200	200	250
December	150	185	200	200	200	250
January	150	185	200	200	200	250
February	150	185	200	200	200	250
March	150	185	200	200	200	250
April	150	200	250	250	300	350
May	150	200	250	250	350	500
June	200	200	250	250	350	500
July	150	185	200	250	300	350
August	150	185	200	250	300	300
September	150	185	200	250	250	250

*As measured at USGS gage 11444500 (PG&E gauge A49)

The minimum streamflows specified in the schedule may be temporarily modified if required by equipment malfunction, operating emergencies or public safety emergencies, which are reasonably beyond the control of the Licensee. If the streamflow is so modified, the Licensee shall provide Notice to the Commission, BLM, CDFW, USFWS, and the State Water Board's Deputy Director of the Division of Water Rights (Deputy Director) as soon as possible, but no later than 10 days after such an incident. The minimum streamflows specified may also be temporarily modified for short periods in non-emergency situations five days after Notice to the Commission, and upon approval by the Deputy Director.

³ To comply with the flow requirements of the water quality certification (i.e., minimum instream flows, ramping rates, recreational flows), the Project generally must receive adequate inflows of water in a timely manner from SMUD's UARP. As noted in Condition 4 of this certification (Coordination with UARP Licensee), the Licensee shall develop a plan and coordinate Project operations with the UARP Licensee (SMUD) to enable compliance with Conditions 1-3 of this certification.

- A. Minimum recreational streamflows scheduled for three hours shall meet or exceed the specified minimum from 9:00 am until at least noon.
- B. Minimum recreational streamflows scheduled for four hours shall meet or exceed the specified minimum from 8:00 am until at least noon.
- C. Minimum recreational streamflows scheduled for five hours shall meet or exceed the specified minimum from 7:00 am until at least noon on Saturdays and 8:00 am until at least 1:00 pm on Sundays.
- D. Minimum recreational streamflows scheduled for six hours shall meet or exceed the specified minimum from 7:00 am until at least 1:00 pm.

If, as a result of consultation with CDPR and BLM, the Deputy Director determines that changes are needed in the timing of the recreational streamflow releases shown above, the Deputy Director will direct the Licensee to implement a new schedule. The Licensee shall adjust the timing of the recreational streamflow releases to meet the new schedule provided that inflows to Chili Bar Reservoir and Chili Bar Reservoir elevations are sufficient to maintain these flows.

The minimum recreational streamflows specified in the schedules may be temporarily modified upon the occurrence of the following events:

- A state or federal electrical emergency is declared by an appropriate authority where specific orders are issued or specific actions are mandated by said authority that require the Licensee to produce electricity outside normal planned operations;
- System events cause the Operating Reserves to drop below the Western Energy Coordinating Council Minimum Operating Reliability Criteria; or
- Equipment malfunction, public safety emergency, or law enforcement activity.

Additionally, recreational streamflows specified at 1,750 cfs may be reduced to 1,500 cfs during scheduled unit outages. However, the Licensee shall make a good faith effort to avoid scheduling unit outages when recreational streamflows of 1,750 cfs are required. If the recreational streamflow is so modified, the Licensee shall provide Notice to the Commission, BLM, CDPR, and the Deputy Director as soon as possible, but no later than 10 days after such incident.

Where facility modification is required to maintain the specified minimum recreational streamflows, the Licensee shall complete such modifications as soon as reasonably practicable and no later than three years after license issuance. Prior to such required facility modifications, the Licensee shall make every reasonable effort to provide the specified minimum recreational streamflows within the capabilities of the existing facilities.

CONDITION 4. Coordination with UARP Licensee (SMUD)

The Licensee shall coordinate operation of the Project with the Licensee of the UARP (SMUD) to enable the Licensee to comply with Condition 1 (Minimum Instream Flows), Condition 2 (Ramping Rates), and Condition 3 (Recreational Streamflows) in this water quality certification. Each Licensee's responsibilities for achieving coordinated operations of the two projects are described in the *Cooperation Agreement Between Sacramento Municipal Utility District and Pacific Gas and Electric Company Regarding Upper American River Project and Chili Bar Project* (Cooperation Agreement)⁴.

⁴ As stated in the Coordination Agreement, "SMUD agrees to provide to Company [PG&E] Operational Guidance and sufficient water inflows into Chili Bar Reservoir to enable Company to comply with the conditions of the Chili Bar license, and Company agrees to follow such Operational Guidance in a manner that will comply with the flow-related Chili Bar license conditions."

As specified in the SA, the Licensees of the UARP (SMUD) and the Project (PG&E) must jointly prepare and file with the Commission within 120 days after license issuance, a plan for coordinated operations of the two projects as described in the Cooperation Agreement. To provide the opportunity for review and approval of the Plan by the Deputy Director prior to submittal to the Commission, PG&E shall submit the Plan to the Deputy Director within 90 days after issuance of the UARP and Project licenses, or if the licenses are issued separately, the latter of the two. The Deputy Director may require modifications as part of the approval. The Licensee shall file the Deputy Director's approval, together with any required Plan modifications, with the Commission. If Deputy Director approval is not received 14 calendar days prior to an applicable Commission deadline, the Licensee may file the Plan with the Commission; however, Deputy Director approval is required prior to Plan implementation. The Licensee must amend its filing with the Commission if modifications are made as part of the Deputy Director's subsequent approval. The Licensee shall implement the Plan upon receiving all necessary approvals. Amendments or modifications to the approved Plan shall be approved by the Deputy Director prior to implementation.

In addition to the coordination described above related to compliance with streamflow conditions, the Licensee shall consult and coordinate with the Licensee of the UARP in implementation of Condition 5 (Adaptive Management Program), Condition 6 (Monitoring Program), Condition 7 (Sediment Management Plan), and Condition 11 (Streamflow and Reservoir Level Public Information Services) of this water quality certification.

CONDITION 5. Adaptive Management Program

The Licensee shall, beginning as early as reasonably practicable and within three months after license issuance, in consultation and coordination with the UARP Licensee (SMUD), implement an adaptive management program as described below. The program shall generally consist of: (a) implementation of a monitoring program; (b) analysis of data for trends to identify and address Project-related impacts or effects on beneficial uses and/or water quality; and (c) specific adaptive management measures that shall be implemented if the monitoring program and other information indicate that the applicable resource objectives identified in the Rationale Report⁵ will likely not be met without adjustment of the initial conditions. Monitoring shall be conducted to determine if the applicable resource objectives are achievable and being met.

Analysis of the monitoring results shall be used to determine the need for adaptive management measures. Adaptive management decisions shall be made in conjunction with the USFS, BLM, CDFW, and State Water Board staff as part of the Annual Review of Ecological Conditions (Condition 10) based on monitoring results and other scientific information and a determination that the applicable ecological resource objectives identified in the Rationale Report are not being met and will likely not be met without application of the adaptive management measures. For purposes of the adaptive management program, each year is defined on a calendar year basis (i.e., January through December). Year 1 is defined as the first year during which all initial streamflows required by the license are implemented by May 1.

⁵ *Rationale Report for Relicensing Settlement Agreement* submitted by CDFW to the Commission on January 29, 2007.

A. Coordinated Operations

Coordinated operations, described above in Condition 4 (Coordination with UARP Licensee), shall be reviewed annually to determine if the operations are effective in achieving the ecological and recreational streamflows in the SF American River downstream of Chili Bar Reservoir Dam, as defined previously in Condition 1 (Minimum Instream Flows), Condition 2 (Ramping Rates), and Condition 3 (Recreational Streamflows) of this certification. As outlined in Condition 4, any amendments or modifications to the approved coordination of operations plan shall be approved by the Deputy Director prior to implementation.

B. Invasive Algae

If the monitoring required in Condition 6.H. (Algae) indicates that invasive algae are present and are creating nuisance conditions, the Licensee shall develop adaptive measures to reduce or eliminate the problem, submit them to the Deputy Director for approval, and implement the measures upon approval. The Deputy Director may require modifications as part of the approval.

CONDITION 6. Monitoring Program

The Licensee, in consultation and coordination with the UARP Licensee (SMUD), shall implement the following Monitoring Program after license issuance and throughout the term of the new license and any annual licenses, in coordination with BLM, CDFW, USFWS, and State Water Board staff.

The Licensee shall ensure that the final monitoring plan for each element of the Monitoring Program is provided for review to BLM, CDFW, USFWS, and the Deputy Director. Each element of the final monitoring plan must be approved by the Deputy Director prior to implementation. The Deputy Director may require modifications as part of the approval. Each monitoring element is described below.

BLM, CDFW, USFWS, and the Deputy Director may alter the monitoring program methodologies and frequencies of data collection if it is determined that: (a) there is a more appropriate or preferable methodology or site to use than that described in the individual elements of the monitoring program; or (b) monitoring may be reduced or terminated because the relevant ecological resource objectives have been met or no change in resource response is expected. Within the scope of the specified monitoring program, BLM, CDFW, USFWS, and the Deputy Director may select an equal number of alternative years to ensure that surveys occur during a range of water year types. Modifications made to the monitoring plans must be approved by the Deputy Director prior to implementing the modified monitoring plan.

The Licensee shall prepare an annual report that fully describes the monitoring efforts of the previous calendar year, which includes the data collected and associated analysis. BLM, CDFW, USFWS, and State Water Board staff shall have at least 30 days to review and comment on a draft report prior to the filing of the final report with the Commission. The Licensee shall provide copies of the final annual report to BLM, CDFW, USFWS, and the Deputy Director.

The following guidelines shall be used in implementing the monitoring program: (a) monitoring and studies shall be relevant to the Project; (b) monitoring and studies shall be conducted such that they provide useful information for management decisions or for establishing compliance with license conditions; and (c) monitoring and studies shall be as cost-effective as possible.

For purposes of the adaptive management program required in Condition 5, each year is defined on a calendar year basis (i.e., January through December). This monitoring program covers monitoring to be conducted during all years until a subsequent license is issued. Where years are specified, Year 1 is the first year during which all initial minimum instream flows required by the license are implemented by May 1.

6.A. Fish Populations

The Licensee shall develop a fish population monitoring plan in consultation with BLM, CDFW, USFWS, and the State Water Board. After agency consultation and within two years of license issuance, the Licensee shall submit the Plan to the Deputy Director for review and approval. The Licensee shall provide the Deputy Director with any comments provided by the agencies during the consultation process. The Deputy Director shall be provided with a 90-day review and approval period. The Deputy Director may require modifications as part of the approval. The Licensee shall implement the Plan upon receiving all necessary approvals.

Method: Electrofishing and/or snorkeling, as conducted by the Licensee in 2003-2004. Electrofishing shall be conducted along the stream margins at the snorkel survey sites as needed to verify species identifications made during snorkel surveys, to obtain length-weight relationships, and to capture species that are difficult to observe while snorkeling. Any hardhead that are detected shall be noted.

Locations⁶: SF American River below Chili Bar Reservoir Dam at upper and lower sample section of the following two snorkel sites: CB-F1 (approximately 1.7 miles downstream at the "Old Flume" memorial); and CB-F4 (near the confluence with Weber Creek).

Frequency: Years 5, 6, 10, 11, 15, 16, and thereafter for two consecutive years every 10 years for the term of the license and any annual extensions.

6.B. Aquatic Macroinvertebrates

The Licensee shall develop an aquatic macroinvertebrate monitoring plan in consultation with BLM, CDFW, USFWS, and State Water Board staff. After agency consultation and within two years of license issuance, the Licensee shall submit the Plan to the Deputy Director for review and approval. The Licensee shall provide the Deputy Director with any comments provided by the agencies during the consultation process. The Deputy Director shall be provided with a 90-day review and approval period. The Deputy Director may require modifications as part of the approval. The Licensee shall implement the Plan upon receiving all necessary approvals.

Method: A method accepted by BLM, CDFW, USFWS, and State Water Board staff. The results shall be compared to an aquatic health index specified in the Plan approved by the Deputy Director.

⁶ Sample site designations are the same as those used in the technical reports that were completed and filed with the Commission during the relicensing proceeding.

Locations⁶: SF American River below Chili Bar Reservoir Dam at CB-11 (downstream of Georgetown Road Bridge) and CBI4 (near Camp Lotus).

Frequency: Years 5, 6, 10, 11, 15, 16, and thereafter for two consecutive years every 10 years for the term of the license and any annual extensions.

6.C. Amphibians and Reptiles

The Licensee shall develop an amphibian and reptile habitat evaluation and species presence monitoring plan in consultation with BLM, CDFW, USFWS, and State Water Board staff. After agency consultation and within one year of license issuance, the Licensee shall submit the Plan to the Deputy Director for review and approval. The Licensee shall provide the Deputy Director with any comments provided by the agencies during the consultation process. The Deputy Director shall be provided with a 90-day review and approval period. The Deputy Director may require modifications as part of the approval. The Licensee shall implement the plan upon receiving all necessary approvals.

Method: Conduct protocol surveys for FYL frogs (special status, sensitive species); and California Red-Legged Frogs (CRL frogs, a federal Endangered Species Act (ESA)-listed amphibian species) using the procedures of the USFWS⁷ and the Licensee⁸, or the most current survey protocol approved by the Deputy Director. The surveys shall be conducted in a sub-sample of appropriate habitat types to document species presence and distribution. The Licensee shall also survey for Western Pond Turtle during FYL frog surveys.

The Licensee shall identify amphibian breeding and larval periods in the SF American River downstream of the Project by surveying locations where amphibians are known to occur during spring/summer. The first iteration of surveys shall be used to determine the timing and success of the following life stages of any existing known FYL frog populations: egg laying; tadpole rearing; metamorphosis; and size/condition of metamorphs in late September to estimate the probability of overwintering success. Based on review of the first year's data, for subsequent years the Deputy Director, after consultation with BLM, USFWS, and CDFW, may approve a subset of survey sites or a less intensive program. In the future, BLM, USFWS, CDFW, or the Deputy Director may request additional breeding site habitat data to assess the cause of unexpected or chronic reproductive failures that may be related to Project operations.

Locations⁶: SF American River below Chili Bar Reservoir Dam along the entire reach from CB-A15 (near Scott Road) downstream to Ponderosa Campground (near Highway 49 Bridge) on the right and left banks.

Frequency: Years 2, 3, 5, 6, 10, 11, 15, 16, and thereafter for two consecutive years every five years for the term of the license and any annual extensions.

⁷ USFWS. 1997. Guidance on site assessment and field surveys for California red-legged frogs (*Rana aurora draytonii*).

⁸ Seldenrich, C. P. and A. C. Pool. 2002. A standardized approach for habitat assessments and visual encounter surveys for the foothill yellow-legged frog (*Rana boylei*). PG&E.

6.D. Riparian Vegetation Species Composition

The Licensee shall develop a riparian vegetation monitoring plan in consultation with BLM, CDFW, USFWS, and State Water Board staff. After agency consultation and within two years of license issuance, the Licensee shall submit the Plan to the Deputy Director for review and approval. The Licensee shall provide the Deputy Director with any comments provided by the agencies during the consultation process. The Deputy Director shall be provided with a 90-day review and approval period. The Deputy Director may require modifications as part of the approval. The Licensee shall implement the Plan upon receiving all necessary approvals.

Method: Aerial photo flights and greenline method.⁹ The data collected at each site will include transects to document species composition, percent cover, and quantification of length and width of riparian community.

Locations: The five Intensive Field Study Sites (riparian) that were surveyed in the Riparian Report filed with the Commission as part of the Licensee's application for new license on July 15, 2005.

Frequency: Years 5, 10 and 15 after license issuance. Thereafter every 10 years (e.g., Years 25, 35, 45, etc.) for the term of the license and any annual extensions.

6.E. Water Temperature

Within three months of license issuance, the Licensee shall consult with State Water Board staff, BLM, USFWS, and CDFW on the development of a Water Temperature Monitoring Plan consistent with the method and frequencies described below. After agency consultation and within one year of license issuance, the Licensee shall submit the Plan to the Deputy Director for review and approval. The Licensee shall provide the Deputy Director with any comments provided by the agencies during the consultation process. The Deputy Director shall be provided with a 90-day review and approval period. The Deputy Director may require modifications as part of the approval. The Licensee shall file the Deputy Director's approval, together with any required Plan modifications, with the Commission. If Deputy Director approval is not received 14 calendar days prior to an applicable Commission deadline, the Licensee may file the Plan with the Commission; however, Deputy Director approval is required prior to Plan implementation. The Licensee must amend its filing with the Commission if modifications are made as part of the Deputy Director's subsequent approval. The Licensee shall implement the Plan upon receiving all necessary approvals.

Method: Continuous temperature recording devices shall be installed and maintained at a minimum of four stream temperature stations as designated below. Reservoir temperature profiles may be added if BLM, CDFW, USFWS, and State Water Board staff determine that Chili Bar Reservoir temperatures are a controllable factor in the SF American River downstream of the Project or if water chemistry monitoring in the reservoir indicates a need for additional temperature information.

⁹ The *Riparian Vegetation and Wetlands Technical Report* (Riparian Report) defines the greenline as "...the first perennial vegetation that forms a lineal grouping of community types on or near the water's edge..." As presented in the Riparian Report, each greenline is described by the cumulative distance in feet occupied by each community type.

Locations: Initial monitoring sites shall be determined in consultation with BLM, CDFW, USFWS, and State Water Board staff. Up to two additional stream sites may be added if temperature problems are identified through review of monitoring data and annual consultation with USFS, CDFW, USFWS, and State Water Board staff (Condition 10). The final monitoring sites and any subsequent modifications shall be approved by the Deputy Director. At a minimum, the water temperature plan shall provide for monitoring at the following locations:

- A. SF American River immediately below Chili Bar Dam;
- B. SF American River upstream of Dutch Creek confluence;
- C. SF American River immediately upstream of Camp Lotus; and
- D. SF American River immediately upstream of Greenwood Creek.

Frequency: For the preceding monitoring sites (A – D above), the Licensee shall conduct continuous monitoring from March 15 through October 15 in all years after license issuance until a subsequent license is issued or until it can be demonstrated by the Licensee that operation of the Project reasonably protects the "cold freshwater" beneficial use as determined by BLM, the Deputy Director, USFWS, and CDFW.

If a determination is made that Chili Bar Reservoir temperature profiles are required, seasonal temperature profiles shall be collected at locations specified by the agencies during multiple water year types to develop data necessary for decision-making. Some temperature stations may be deleted if the Deputy Director, in consultation with BLM, USFWS, and CDFW, finds that sufficient temperature data have been collected and that no significant issues related to temperature are evident for the relevant area.

6.F. Water Quality

Within three months of license issuance, the Licensee shall consult with BLM, CDFW, State Water Board staff, USFWS, and the Central Valley Water Board on the development of a Water Quality Monitoring Program Plan (WQ Monitoring Plan). The WQ Monitoring Plan shall include the water quality monitoring elements listed below, and must: (1) provide detail on field sampling locations, sampling frequency, handling methods and quality assurance/quality control; and (2) define the laboratory analyses and associated method detection limits for all constituents and parameters to be monitored in the various elements of the monitoring program.

Following consultation and within six months of license issuance, the Licensee shall submit the WQ Monitoring Plan to the Deputy Director for review and approval. The Licensee shall provide the Deputy Director with any comments provided by the agencies during the consultation process. The Deputy Director shall be provided with a 90-day review and approval period. The Deputy Director may require modifications as part of the approval. The Licensee shall file the Deputy Director's approval, together with any required Plan modifications, with the Commission. If Deputy Director approval is not received 14 calendar days prior to an applicable Commission deadline, the Licensee may file the Plan with the Commission; however, Deputy Director approval is required prior to Plan implementation. The Licensee must amend its filing with the Commission if modifications are made as part of the Deputy Director's subsequent approval. The Licensee shall implement the Plan upon receiving all necessary approvals.

The approved WQ Monitoring Plan shall be implemented by the Licensee as described, throughout the term of the license and any annual extensions. The WQ Monitoring Plan may be modified pursuant to adaptive management program needs as recommended by State Water Board staff, BLM, CDFW, USFWS, and the Central Valley Water Board, and after approval by the Deputy Director.

Water Chemistry

The Licensee shall conduct a water chemistry sampling program designed to demonstrate seasonal conditions at Chili Bar Reservoir and stream locations affected by operation of the Project, as described in the relicensing Water Quality Study Plan (Plenary approval, January 8, 2003). Laboratory analyses shall be conducted using USEPA analytical methods or other methods that are sensitive enough for determination of compliance with recognized state and federal water quality criteria.

a. Annual In Situ Monitoring

Method: Monitoring for physical parameters (pH, water temperature, dissolved oxygen, specific conductance, and turbidity) using USEPA analytical methods or other methods sensitive enough to determine compliance with recognized state and federal water quality criteria.

Locations: SF American River downstream of Chili Bar Reservoir at representative locations as defined in the final WQ Monitoring Plan. In situ physical parameters shall be monitored in Chili Bar Reservoir as vertical profiles collected at one-meter intervals from surface to bottom.

Frequency: For stream reaches, once seasonally in spring (April-May), summer (August), fall (November) and winter (January-February) each year after license issuance for the term of the license and any annual extensions. For Chili Bar Reservoir, spring (April-May) and fall (November) each year after license issuance for the term of the license and any annual extensions. When possible, in situ water quality monitoring should be completed coincident with amphibian, fisheries, and macroinvertebrate monitoring.

b. General Chemistry Monitoring

Method: Measurement of in situ parameters and water sampling for the analysis of minerals, nutrients, metals (total and dissolved fractions), measured hardness, and petroleum products shall be conducted.

Locations: General chemistry samples shall be collected from Chili Bar Reservoir and at a minimum of three representative sites along the SF American River between Chili Bar Dam and the confluence of Greenwood Creek. Reservoir samples shall be collected at the surface and near the bottom at multiple, representative locations, as defined in the final WQ Monitoring Plan.

Frequency: Beginning in Year 3 after license issuance, and every five years thereafter for the term of the license and any annual extensions. Sampling shall be conducted in the spring, summer, fall, and immediately following either the second or third measurable rain event of the fall-winter period. After a minimum of three data

sets are collected, if it is demonstrated that constituents of concern do not exceed regulatory criteria at specific locations, the Licensee may request that the Deputy Director approve modifications to the sampling frequency. The Deputy Director may make modifications as part of the approval.

Bacteria

- Method:** The Licensee shall conduct bacterial monitoring for fecal coliform and/or *E.coli* consistent with Basin Plan objectives for protection of the REC-1 beneficial use. Five near-shore samples shall be collected at each of the eight sampling locations during the 30-day period that spans either the Independence Day Holiday (June-July) or the Labor Day Holiday (August-September), using the five samples in 30-day methodology or other protocol as amended in the Basin Plan.
- Locations:** Samples shall be collected at a minimum of eight shoreline recreational locations in the SF American River downstream of Chili Bar. Sampling locations shall be selected based on criteria that include: (1) swimming and other water contact recreation activities that are known to occur in the area; and (2) sources for potential introduction of pathogens to the water column in the immediate vicinity. Candidate sites for annual REC-1 pathogen monitoring will include developed recreation sites and frequently used white water boating take-out sites along the SF American River downstream of Chili Bar Reservoir Dam. The bacterial monitoring program shall include sampling at a minimum of four swim beach sites, including the Coloma and Camp Lotus areas, along with four other selected stations. The Licensee, in consultation with BLM, CDFW, State Water Board staff, USFWS, and the Central Valley Water Board shall determine sampling locations for each upcoming field season. The Licensee shall consult with State Water Board staff and other listed parties for final determination of the locations to be sampled no later than May 31 of each designated sampling year and shall submit the list of sampling locations to the Deputy Director for approval. The Deputy Director may make modifications as part of the approval.
- Frequency:** Bacterial monitoring shall be conducted annually for the first five years after license issuance. Upon approval by the Deputy Director, bacterial monitoring may be decreased in frequency to every other year if data demonstrates compliance with the Basin Plan bacteria objective for protection of REC-1 designated waters during Years 1 through 5. Monitoring shall continue through the term of the license and any annual extensions.

If data demonstrate that bacterial concentrations present risks to human health at specific stream sites, the Licensee shall notify the Central Valley Water Board and shall continue annual monitoring at those sites until such time that the Licensee consults with State Water Board staff (and any other interested parties) and agreement is reached that the monitoring frequency can be reduced and the Deputy Director has approved the change in monitoring frequency.

6.G. Metals Bioaccumulation

- Method:** The Licensee shall monitor for potential uptake of mercury, copper, lead, and silver through the aquatic food chain resident in Chili Bar Reservoir. Target fish species, numbers of individuals to be analyzed, sampling strategy, and analytical

methods used shall be consistent with the State Water Board's Surface Water Ambient Monitoring Program (or other water quality monitoring program approved by the Deputy Director). The metals bioaccumulation monitoring plan shall be submitted to the Deputy Director for review and approval prior to each sampling event after Licensee consultation with BLM, CDFW, State Water Board staff, Central Valley Water Board, USFWS, and the state Office of Environmental Health Hazard Assessment. The Licensee shall provide the Deputy Director with any comments provided by the agencies during the consultation process. The Deputy Director shall be provided with a 90-day review and approval period. The Deputy Director may require modifications as part of the approval.

Locations: Resident fish species shall be collected from Chili Bar Reservoir.

Frequency: Once every five years beginning in Year 2 following license issuance. Monitoring shall continue through the term of the license and any annual extensions.

6.H. Algae

Method: Monitoring for the presence of *Didymosphenia geminata* (invasive diatomaceous algae that is also known as rock snot) through visual observation.

Locations: At representative sites in the SF American River downstream of Chili Bar Reservoir Dam, in conjunction with the Annual In Situ Monitoring described in the Water Chemistry monitoring portion of Section 6.F. (Water Quality).

Frequency: The Licensee shall monitor for *Didymosphenia geminata* in stream reaches seasonally in conjunction with Annual In Situ Monitoring as described in the Water Chemistry monitoring portion of this certification (Section 6.F. Water Quality).

CONDITION 7. Sediment Management Plan

Within one year of license issuance, the Licensee shall, in consultation and coordination with the UARP Licensee (SMUD), plan and implement a geomorphology monitoring program to be performed once every five years for the duration of the license term and any annual extensions. The following data will be collected in the SF American River downstream of Chili Bar Reservoir Dam at three sites identified in the *2005 Channel Morphology Technical Report* as: CB-G1 (Upper Canyon Site); CB-G2 (Upper Coloma Site); and CB-G3 (Lower Coloma Site):

- A. Bed profile measurements at three cross-sectional transects.
- B. Longitudinal profile extending through the vicinity of the three cross-sectional transects.
- C. Bed characterization using pebble count to determine substrate composition at the three cross-sectional transects.
- D. Channel stability and bank characterization using Pfankuch characteristics.
- E. Large woody debris characterization within the site.

If the Licensee, in consultation with the UARP Licensee (SMUD), elects to dredge Chili Bar Reservoir, the Licensee will consult with the resource agencies (i.e., BLM, CDFW, USFWS and State Water Board staff) in the development of a Sediment Management Plan including consideration of depositing the material in the SF American River downstream of Chili Bar

Reservoir Dam. The Licensee shall submit the plan to the Deputy Director for review and approval, after consultation with the resource agencies. The Licensee shall provide the Deputy Director with any comments provided by the agencies during the consultation process. The Deputy Director shall be provided with a 90-day review and approval period. The Deputy Director may require modifications as part of the approval.

The Sediment Management Plan shall be implemented upon and after approval by the Deputy Director. Prior to initiating dredging, the Licensee shall consult with the United States Army Corps of Engineers to determine if a Clean Water Act Section 404 permit is required for the dredging activities, and if so, shall obtain said permit and a Clean Water Act Section 401 Water Quality Certification from the Central Valley Water Board.

CONDITION 8. Large Woody Debris for Protection of Aquatic Life Beneficial Uses

The Licensee shall ensure that mobile instream large woody debris in Chili Bar Reservoir continues downstream beyond Chili Bar Reservoir Dam. The mobilization of large woody debris shall be performed under circumstances that permit safe access and working conditions using reasonable means, which includes short-term spill flows at the dam. At a minimum, all large woody debris with dimensions greater than both 20 centimeters in width and 12 meters in length shall be allowed to continue downstream beyond the dam. Smaller sizes are also allowed but are not required to be moved beyond the dam. To assure compliance with this measure, the Licensee shall include in the annual monitoring report required in Condition 6 (Monitoring Program) a summary of the efforts made during the year to assure that large woody debris continues downstream beyond Chili Bar Reservoir Dam.

CONDITION 9. Streamflow and Reservoir Elevation Gaging

The Licensee shall, within one year of license issuance, develop and file for Commission approval a Streamflow and Reservoir Elevation Gaging Plan (Gaging Plan) that meets USGS standards. The Licensee shall develop the initial draft version of the Gaging Plan in consultation with the USGS. The Licensee shall provide copies of the draft Gaging Plan and USGS review results to BLM, CDFW, USFWS, the Commission, and State Water Board staff for review and comment. Following agency consultation, the Gaging Plan and any comments received from the agencies shall be submitted to the Deputy Director for review and approval prior to filing the plan with the Commission. The Deputy Director shall be provided with a 90-day review and approval period. The Deputy Director may require modifications as part of the approval. The Licensee shall file the Deputy Director's approval, together with any required Plan modifications, with the Commission. If Deputy Director approval is not received 14 calendar days prior to an applicable Commission deadline, the Licensee may file the Gaging Plan with the Commission; however, Deputy Director approval is required prior to Gaging Plan implementation. The Licensee must amend its filing with the Commission if modifications are made as part of the Deputy Director's subsequent approval. The Licensee shall implement the Gaging Plan upon receiving all necessary approvals.

At a minimum, the Gaging Plan shall address compliance gaging at the following locations:

- A. Streamflow Gaging at SF American River below Chili Bar Reservoir Dam (existing USGS gage number 11444500 or its successor).
- B. Reservoir Elevation Gaging at Chili Bar Reservoir.

CONDITION 10. Annual Review of Ecological Conditions

Each calendar year, by April 1, the Licensee shall schedule and facilitate a meeting with the CDFW, BLM, USFWS, and State Water Board staff to review and discuss the results of implementing the conditions in this certification. The meeting shall also include discussion of other issues related to restoring and protecting ecological values affected by the Project, including implementation of Condition 5 (Adaptive Management Program).

The Licensee shall provide CDFW, BLM, USFWS, and State Water Board staff with an operations and maintenance plan for the coming year at least two weeks prior to the meeting. The Licensee shall also make every effort to provide the agencies with the annual monitoring report (required per Condition 6) at least 10 days prior to the meeting. If the annual monitoring report is not available, the Licensee shall provide available information and data to the agencies at least 10 days prior to the meeting.

CONDITION 11. Streamflow and Reservoir Level Public Information Services

The Licensee shall, in consultation and coordination with the UARP Licensee (SMUD), BLM, State Water Board staff, and the Consultation Group¹⁰, prepare a plan to provide public information on streamflow and reservoir level. The Licensee shall file the plan with the Commission within six months of license issuance. The plan shall be submitted to the Deputy Director for review and approval prior to filing with the Commission. The Licensee shall provide the Deputy Director with any comments received during the consultation process. The Deputy Director shall be provided with a 60-day review and approval period. The Licensee shall file the Deputy Director's approval, together with any required Plan modifications, with the Commission. If Deputy Director approval is not received 14 calendar days prior to an applicable Commission deadline, the Licensee may file the Plan with the Commission; however, Deputy Director approval is required prior to Plan implementation. The Licensee must amend its filing with the Commission if modifications are made as part of the Deputy Director's subsequent approval. The Licensee shall implement the Plan upon receiving all necessary approvals.

The plan shall include at a minimum, the following components:

- A. Real-time lake stage height and storage information for Chili Bar Reservoir.
- B. Installation of up to two simple staff gages for use by the public.
- C. Real-time streamflow and reservoir level information that is available to the public year-round via a toll-free telephone number or other appropriate technology approved by BLM.
- D. Streamflow information on a website, which is collected consistent with standard USGS gaging practices for the existing stream gage facilities downstream of Chili Bar Reservoir Dam (USGS gage 11444500 or its successor) that includes 15-minute increments and stream flows releases from the past seven days.

Following approval of the plan by the Deputy Director, the minimum streamflow and recreational streamflow schedules from Conditions 1 and 3 (Minimum Instream Flows and Recreational Streamflows), as well as the current water year type designation, shall be published via the website.

¹⁰ The SA defines the Consultation Group as including all parties to the SA with the addition of the State Water Board, the Central Valley Water Board, and El Dorado County.

CONDITION 16. The State Water Board's approval authority includes the authority to withhold approval or to require modification of a proposal or plan prior to approval. The State Water Board may take enforcement action if the Licensee fails to provide or implement a required plan in a timely manner.

CONDITION 17. The State Water Board reserves the authority to modify the conditions of this water quality certification to incorporate load allocations developed in a total maximum daily load developed by the State Water Board or a Regional Water Quality Control Board (Regional Water Board).

CONDITION 18. The State Water Board may add to or modify the conditions of this certification, as appropriate, to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act.

CONDITION 19. The State Water Board may add to or modify the conditions of this certification as appropriate to coordinate the operations of the Project and other hydrologically connected water development projects, where coordination of operations is reasonably necessary to achieve water quality objectives or protect beneficial uses of water.

CONDITION 20. The State Water Board reserves authority to modify this certification if monitoring results indicate that continued operation of the Project could violate water quality objectives or impair the beneficial uses of the SF American River or its tributaries.

CONDITION 21. Future changes in climate projected to occur during the license term may significantly alter the baseline assumptions used to develop the conditions in this certification. The State Water Board reserves authority to modify or add conditions in this certification to require additional monitoring and/or other measures, as needed, to verify that Project operations meet water quality objectives and protect the beneficial uses assigned to Project-affected stream reaches.

CONDITION 22. This certification requires compliance with all applicable requirements of the Basin Plan. The Licensee must notify the Deputy Director and Central Valley Water Board's Executive Officer (Executive Officer) within 24 hours of any unauthorized discharge to surface waters.

CONDITION 23. Notwithstanding any more specific conditions in this certification, the Project shall be operated in a manner consistent with all water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the Clean Water Act. The Licensee must take all reasonable measures to protect the beneficial uses of waters of the SF American River and tributaries.

CONDITION 24. This certification does not authorize any act which results in the taking of a threatened, endangered or candidate species or any act, which is now prohibited, or becomes prohibited in the future, under either the California ESA (Fish & Game Code §§ 2050-2097) or the federal ESA (16 U.S.C. §§ 1531 - 1544). If a "take" will result from any act authorized under this certification or water rights held by the Licensee, the Licensee must obtain authorization for the take prior to any construction or operation of the portion of the Project that may result in a take. The Licensee is responsible for meeting all requirements of the applicable ESAs for the Project authorized under this certification.

CONDITION 25. In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation is subject to any remedies, penalties, process or sanctions as provided for under applicable state or federal law. For the purposes of section 401(d) of the Clean Water Act, the applicability of any state law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this certification.

CONDITION 26. In response to a suspected violation of any condition of this certification, the State Water Board may require the holder of any federal permit or license subject to this certification to furnish, under penalty of perjury, any technical or monitoring reports the State Water Board deems appropriate, provided that the burden, including costs, of the reports shall bear a reasonable relationship to the need for the reports and the benefits to be obtained from the reports (California Water Code, §§ 1051, 13165, 13267 and 13383). The State Water Board may add to or modify the conditions of this certification as appropriate to ensure compliance.

CONDITION 27. No construction shall commence until all necessary federal, state, and local approvals have been obtained.

CONDITION 28. Any requirement in this water quality certification that refers to an agency whose authorities and responsibilities are transferred to or subsumed by another state or federal agency, will apply equally to the successor agency.

CONDITION 29. The Licensee must submit any change to the Project, including Project operation, which would have a significant or material effect on the findings, conclusions, or conditions of this certification, to the State Water Board for prior review and written approval. If such a change would also require submission to the Commission, the change must first be submitted and approved by the State Water Board, unless otherwise noted in this certification.

CONDITION 30. When Commission approval is required for a plan, if Deputy Director approval is not received 14 calendar days prior to an applicable Commission deadline, the Licensee may file the plan with the Commission; however, Deputy Director approval is required prior to plan implementation. The Licensee must amend its filing with the Commission if modifications are made as part of the Deputy Director's subsequent approval.

CONDITION 31. The Licensee must provide State Water Board staff access to Project sites to document compliance with this certification.

CONDITION 32. The State Water Board shall provide notice and an opportunity to be heard in exercising its authority to add or modify any of the conditions of this certification.

CONDITION 33. This certification is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to California Water Code Section 13330 and California Code of Regulations, Title 23, Division 3, Chapter 28, Article 6 (commencing with Section 3867).

CONDITION 34. Certification is not intended and shall not be construed to apply to any activity involving a hydroelectric facility and requiring a Commission license or an amendment to a Commission license unless the pertinent certification application was filed pursuant to Subsection 3855(b) of Article 4, Title 23 of the California Code of Regulations and that application specifically identified that a Commission license or amendment to a Commission license for a hydroelectric facility was being sought.

CONDITION 35. Certification is conditioned upon total payment of any fee required under Article 4, Title 23 of the California Code of Regulations.

CONDITION 36. Activities associated with operation or maintenance of the Project that threaten or potentially threaten water quality shall be subject to further review by the Deputy Director and the Executive Officer.

Attachment A: Location Map

