

**UPPER AMERICAN RIVER PROJECT
FERC Project No. 2101**

**CHILI BAR HYDROELECTRIC PROJECT
FERC Project No. 2155**

**Relicensing Settlement Agreement
for the
Upper American River Project
and
Chili Bar Hydroelectric Project**

January 2007

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Appendix 2 Proposed License Articles for the Chili Bar Hydroelectric Project, FERC No. 2155

Appendix 3 Draft U.S. Forest Service “Standard” Section 4(e) Conditions for the Upper American River Project, FERC No. 2101

Appendix 4 Draft Bureau of Land Management “Standard” Section 4(e) Conditions for the UARP Project, FERC No. 2101, and the Chili Bar Project, FERC No. 2155

Appendix 5 Authorized Representatives of the Parties

Appendix 6 Recreation Payment Agreement with Bureau of Land Management

Appendix 7 Cooperation Agreement Between Sacramento Municipal Utility District and Pacific Gas and Electric Company Regarding Upper American River Project and Chili Bar Project

Appendix 8 Draft Form of Recreation Payment Agreement with California Department of Parks and Recreation

**Upper American River Project
FERC Project No. 2101**

**Chili Bar Hydroelectric Project
FERC Project No. 2155**

**Relicensing Settlement Agreement for the
Upper American River Project and
Chili Bar Hydroelectric Project**

This RELICENSING SETTLEMENT AGREEMENT FOR THE UPPER AMERICAN RIVER PROJECT AND CHILI BAR HYDROELECTRIC PROJECT (“Settlement”) is made and entered into pursuant to Federal Energy Regulatory Commission (“FERC”) Rule 602, 18 C.F.R. § 385.602, by and among:

Sacramento Municipal Utility District (“SMUD”);
Pacific Gas and Electric Company (“PG&E”);
United States Department of Agriculture Forest Service (“FS”);
United States Department of the Interior Fish and Wildlife Service (“FWS”);
United States Department of the Interior Bureau of Land Management (“BLM”);
United States Department of the Interior National Park Service (“NPS”);
California Department of Fish and Game (“CDFG”);
California Department of Parks and Recreation (“CDPR”);
American Whitewater (“AW”);
Friends of the River (“FOR”);
California Sportfishing Protection Alliance (“CSPA”);
American River Recreation Association and Camp Lotus (“ARRACL”);
Foothill Conservancy (“FC”);
California Outdoors (“CO”); and
Certain individuals as identified on the signature page of this Settlement;

each referred to individually as a “Party” and collectively as “Parties.”

RECITALS

WHEREAS,

A. SMUD is the FERC licensee for the Upper American River Project, FERC Project No. 2101 (“UARP”), located in El Dorado and Sacramento Counties, California. The UARP is operated and maintained pursuant to and in accordance with a license originally issued by FERC’s predecessor agency, the Federal Power Commission (“FPC”), by order dated August 28, 1957. The current license for the UARP expires on July 31, 2007;

B. In seeking a new license for the UARP, SMUD, after consulting with state and federal resource agencies, Native American tribes, local governments, nongovernmental organizations,

and members of the public, filed a formal request with FERC on July 11, 2001, to follow the procedures of the Alternative Licensing Process (“ALP”), as specified in FERC regulations, 18 C.F.R. § 4.34(i), for relicensing of the UARP. FERC noticed SMUD’s request in the Federal Register on July 19, 2001, and approved the request on August 29, 2001;

C. PG&E is the FERC licensee for the Chili Bar Hydroelectric Project, FERC Project No. 2155 (“Chili Bar”), located on the South Fork American River directly downstream of the UARP in El Dorado County, California. Chili Bar is operated and maintained pursuant to and in accordance with a license originally issued by the FPC by order dated August 28, 1962. The current license for Chili Bar expires on July 31, 2007;

D. In seeking a new license for Chili Bar, PG&E prepared its application for a new license for Chili Bar by utilizing a modified Traditional Licensing Process that made extensive use of public collaboration processes;

E. SMUD and PG&E, beginning in 2001, developed goals, identified issues, designed and conducted scientific studies, and issued technical reports in the relicensing of their respective Projects, with the active participation of state and federal resource agencies, local governments, nongovernmental organizations, and members of the public;

F. In accordance with the requirements of Section 15(b)(1) of the Federal Power Act (“FPA”) and attendant FERC regulations, SMUD and PG&E each filed a Notice of Intent (“NOI”) to file an application for new license. PG&E filed its NOI for Chili Bar on July 12, 2002, and SMUD filed its NOI for the UARP on July 18, 2002;

G. Because the UARP and Chili Bar (collectively, “Projects”) have concurrent license expiration dates and certain common relicensing issues related to streamflows, operational coordination, and other subjects, many of such studies and technical reports developed in the relicensing of the Projects were scoped and coordinated with PG&E’s cooperation and participation in the ALP for the UARP;

H. As an outgrowth of these collaborative efforts and preparation of studies and technical reports, SMUD, PG&E, FS, FWS, BLM, NPS, CDFG, CDPR, FOR, El Dorado County and related entities, and other parties, together with the California State Water Resources Control Board (“SWRCB”), began seeking agreement on protection, mitigation and enhancement (“PM&E”) measures to resolve all issues among them in support of the relicensing of the UARP and Chili Bar, including issues common to both Projects, and to propose as conditions of the New Project Licenses, including mandatory conditions submitted under Section 4(e) of the FPA, and for consideration by SWRCB in issuance of Certifications pursuant to Section 401 of the Clean Water Act (“401 Certification”). This settlement negotiation group conducted numerous public meetings, as well as confidential settlement negotiations, reviewed data, commissioned and evaluated additional studies, and prepared and relied on a record for its actions;

I. Despite the efforts of all participants, the settlement negotiation group did not reach settlement prior to the statutory deadline for SMUD and PG&E to file their relicensing applications with FERC. Thus, on July, 15, 2005, SMUD filed its Application for New License

for the UARP with FERC, which included its formal request to construct and operate the Iowa Hill Pumped Storage Development, which it originally proposed in May 2003. On the same date, PG&E filed its Application for New License for Chili Bar with FERC. Following such filings, the settlement negotiation group continued confidential settlement negotiations;

J. On November 1, 2005, CDFG, SWRCB, CDPR, FS, BLM, FWS, NPS, ARRACL, CO, FOR, AW, and certain individuals filed the Comprehensive Resource Agency/NGO Alternative (“Agency Alternative”) with FERC, which set forth proposed PM&E measures for the new licenses for the Projects;

K. SMUD, on August 18, 2006, filed a Supplemental Preliminary Draft Environmental Assessment (“SPDEA”) with FERC, which analyzes the PM&E measures set forth in the Agency Alternative;

L. During September and October 2006, after FERC had accepted SMUD’s and PG&E’s Applications for New License and solicited recommendations, prescriptions, terms and conditions under Sections 4(e), 10(a), 10(j) and 18 of the FPA, federal and state resource agencies, nongovernmental organizations, and members of the public filed for intervention in the FERC relicensing proceedings for the Projects, and submitted preliminary proposed terms and conditions, most of which were consistent with the Agency Alternative, which had been revised in several material respects to address issues including those raised by SMUD and others in the SPDEA and elsewhere. FS submitted preliminary FPA Section 4(e) mandatory conditions in the UARP proceeding, and BLM filed preliminary FPA Section 4(e) mandatory conditions in the proceedings for both Projects;

M. Following the filing of recommendations, prescriptions, terms and conditions with FERC, the Parties, assisted by FERC’s Dispute Resolution Service, reconvened the settlement negotiation group, which had met periodically since the Applications for New License had been filed with FERC, to explore the possibility of reaching comprehensive settlement in the relicensing of the Projects. Such settlement negotiations led to an Agreement in Principle, which was filed with FERC on November 16, 2006;

N. To afford the Parties time to finalize this Settlement and revise their preliminary terms and conditions, FERC, on November 16, 2006, extended until February 1, 2007, the deadline for the filing of preliminary terms, conditions and recommendations; and

O. This Settlement is the end product of the settlement negotiation group’s work and is filed in accordance with FERC’s deadline extension of February 1, 2007.

TERMS OF AGREEMENT

NOW THEREFORE, in consideration of the mutual covenants set forth herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1 General Provisions

1.1 Effective Date of Settlement

This Settlement shall become effective upon the later of: (1) the execution by all Parties of this Settlement; (2) the execution of the RPA-BLM by BLM, SMUD and PG&E; and (3) the execution of the Cooperation Agreement by SMUD and PG&E (“Effective Date”).

1.2 Effective Date of Licensees’ Obligations

The contractual obligations of the Licensees under Appendices 1 through 4 of this Settlement shall become effective only upon each Licensee’s acceptance of its Final New Project License, unless: (a) this Settlement specifically provides for early implementation; or (b) a Licensee, prior to its acceptance of its Final New Project License, provides Notice that it intends to withdraw from this Settlement pursuant to Section 6 herein. While acknowledging FERC’s current policy that the Licensees’ regulatory obligations become effective upon issuance of a New Project License, the Parties intend that the contractual obligations shall become effective only upon each Licensee’s acceptance of its Final New Project License. Within forty-five (45) days of its New Project License becoming Final, each Licensee shall provide Notice to all Parties whether it affirmatively accepts its New Project License and its obligations under this Settlement. If a Licensee does not timely provide such Notice, such Licensee shall be deemed to have affirmatively accepted its New Project License, and its obligations under this Settlement to the extent those obligations are not modified by its New Project License.

1.3 Effective Date of Parties’ Obligations

Except as provided in Section 1.2 herein, the Parties’ obligations under this Settlement, including the obligation to support this Settlement in the licensing and related regulatory proceedings, take effect on the Effective Date.

1.4 Term of Settlement

Unless terminated as provided herein, the term of this Settlement shall commence on the Effective Date and shall continue, with respect to each Project, through the term of the New Project License including any annual license(s) that may be issued after the New Project License expires, or until the date of any FERC order approving surrender of the New Project License, whichever is earlier.

1.5 Definitions

401 Certification shall mean SWRCB's issuance of a water quality certification pursuant to Section 401 of the CWA, 33 U.S.C. § 1341.

ADR shall mean the alternative dispute resolution procedure set forth in Section 5 of this Settlement.

CEQA shall mean the California Environmental Quality Act.

Chili Bar shall mean the Chili Bar Hydroelectric Project, licensed to PG&E as FERC Project No. 2155.

Cooperation Agreement shall mean the Cooperation Agreement Between Sacramento Municipal Utility District and Pacific Gas and Electric Company Regarding Upper American River Project and Chili Bar Project, which is set forth in Appendix 7 of this Settlement.

CWA shall mean the Clean Water Act, 33 U.S.C. §§ 1251 *et seq.*

Disputing Party or **Disputing Parties** shall mean the Party providing Notice of the objection or dispute, the Party alleged to have not performed the obligation, and any other Party that provides Notice of its intent to participate in the dispute resolution.

Effective Date shall mean the date set forth in Section 1.1 of this Settlement.

ESA shall mean the Endangered Species Act, 16 U.S.C. §§ 1531 *et seq.*

FERC shall mean the Federal Energy Regulatory Commission.

Final, with respect to a New Project License under this Settlement, shall mean the Licensee's acceptance of such license after exhaustion of administrative and judicial remedies for any challenge which any Party or other person brings against the New Project License or any other permit or approval associated with issuance of the New Project License for that Project.

FPA shall mean the Federal Power Act, 16 U.S.C. §§ 791a *et seq.*

Good Faith shall mean honesty of purpose, free from intention to defraud, and faithful to one's duty or obligation.

Iowa Hill shall mean the Iowa Hill Pumped Storage Development, as proposed in SMUD's Application for New License for the UARP.

Inconsistent with the Settlement shall mean: (i) any Material Modification of the Proposed License Articles proposed by FERC, any Regulatory Party, or the SWRCB; or (ii) any expansion of the FERC Project boundary for the UARP or Chili Bar not provided for under the Proposed License Articles or the RPA-BLM; or (iii) the submission by BLM of any conditions under Section 4(e) of the FPA for inclusion in the UARP New Project License, other than Proposed UARP Article 1-36, conditions contained in the RPA-BLM, and the “standard” BLM Section 4(e) conditions set forth in Appendix 4; or (iv) the submission by BLM of any conditions under Section 4(e) of the FPA for inclusion in the Chili Bar New Project License, other than Proposed Chili Bar Articles 2-13 and 2-20, conditions contained in the RPA-BLM, and the “standard” BLM Section 4(e) conditions set forth in Appendix 4.

Inconsistent with the Settlement shall not mean: (i) the inclusion of standard articles from FERC’s L-Forms (as defined by 18 C.F.R. § 2.9) in any New Project License; or (ii) FERC’s insertion of its approval or its reservation of its authority to require changes to implementation schedules or plans set forth in any Proposed License Article; or (iii) the inclusion in any 401 Certification of the issuing agency’s reservation of authority to reopen its conditions, *provided*, that such reservation of authority is consistent with this Settlement; or (iv) BLM’s exercise of any reservation of FPA Section 4(e) authority as provided under Proposed UARP Article 1-36 and/or Proposed Chili Bar Article 2-20; or (v) a Material Modification of the Proposed License Articles in any ESA Section 7 Biological Opinion issued for either or both of the Projects; or (vi) the inclusion in any New Project License or in any Mandatory Term and Condition or 401 Certification, of such reasonable reporting requirements as FERC or the issuing agency, respectively, determines are necessary to ensure a Licensee’s compliance; or (vii) FERC’s removal of language in any Proposed License Article that sets forth the rationale for the obligation in the article, as opposed to the obligation of the article itself; or (viii) FS’s submittal to FERC of final Section 4(e) “standard” conditions for the UARP that are in all material respects consistent with the draft Section 4(e) conditions attached to this Settlement as Appendix 3; or (ix) BLM’s submittal to FERC of final Section 4(e) “standard” conditions for Chili Bar or UARP that are in all material respects consistent with the draft Section 4(e) conditions attached to this Settlement as Appendix 4.

Licensee or Licensees shall mean PG&E and/or SMUD.

Mandatory Terms and Conditions shall mean conditions submitted to FERC under Sections 4(e) and 18 of the FPA.

Material Modification shall mean any deviation from the Proposed License Articles as proposed in this Settlement, including but not limited to the modification of, variation from, addition to, or subtraction from, one or more Proposed License Article(s) or the inclusion of any license term and condition in a New Project License not set forth in the Proposed License Articles; *provided*, that such deviation(s), individually or collectively, substantially affect the Parties’ bargained-for benefits under this Settlement, including but not limited to costs; power generation; regulatory responsibilities; environmental PM&E; and recreational PM&E.

Material New Information shall mean significant and relevant new information which: (i) for the purpose of the Parties' obligations before a New Project License is issued, is not in the administrative record for the relicensing of that Project as of the Effective Date; or (ii) for the purpose of the Parties' obligations after a New Project License is issued but prior to the New Project License becoming Final, is not in the administrative record for that Project as of the date the New Project License is issued; or (iii) for the purpose of the Parties' obligations after a New Project License is Final, is not in the administrative record for that Project as of the date the New Project License becomes Final; or (iv) for any purpose, was not actually known to the Party who seeks to use the Material New Information, as of the applicable date.

NEPA shall mean the National Environmental Policy Act, 42 U.S.C. §§ 4321 *et seq.*

New Project License shall mean the new license issued by FERC pursuant to Section 15 of the FPA for each Project, as follows:

- (i) For the UARP, the New Project License shall mean the new license issued by FERC to SMUD in response to SMUD's Application for New License filed July 15, 2005.
- (ii) For Chili Bar, the New Project License shall mean the new license issued by FERC to PG&E in response to PG&E's Application for New License filed July 15, 2005.

Notice shall mean a written communication that meets the requirements of Section 7.14 of this Settlement and any other requirements for notice specifically provided in any other applicable section of this Settlement.

Overlapping Issues shall mean those issues in common to both Projects and addressed in this Settlement under Proposed Chili Bar Articles 2-1, 2-2, 2-3, 2-4, 2-5, 2-6, 2-14, and 2-15, and Proposed UARP Article 1-4.

Party or **Parties** shall mean the signatories to this Settlement.

PM&E shall mean protection, mitigation and enhancement.

Project or **Projects** shall mean the UARP and/or Chili Bar Project.

Proposed License Article or **Proposed License Articles** shall mean the Proposed Chili Bar Articles and/or Proposed UARP Articles.

Proposed Chili Bar Articles shall mean the terms and conditions set forth in Appendices 2 and 4 of this Settlement that the Parties respectfully request that FERC include, without Material Modification, in the New Project License issued to PG&E for the continued operation of Chili Bar.

Proposed UARP Articles shall mean the terms and conditions set forth in Appendices 1, 3 and 4 of this Settlement that the Parties respectfully request that FERC include, without Material Modification, in the New Project License issued to SMUD for the continued operation of the UARP, including the construction and operation of Iowa Hill.

Public Agency shall mean SMUD, FS, FWS, BLM, NPS, CDFG, and/or CDPR.

Regulatory Party or Regulatory Parties shall mean FS, FWS, BLM, NPS, CDFG, and/or CDPR.

RPA-BLM shall mean the Recreation Payment Agreement among SMUD, PG&E and BLM, which is set forth in Appendix 6 of this Settlement.

RPA-CDPR shall mean the California Parks Payment Agreement among SMUD, PG&E and CDPR, which shall be in substantial conformance with the draft form of agreement set forth in Appendix 8 of this Settlement.

Settlement shall mean the entirety of this Settlement and Appendices 1 through 5. Appendices 6, 7 and 8 are not part of this Settlement and are attached hereto for informational purposes and convenience of the Parties.

SWRCB shall mean California State Water Resources Control Board.

UARP shall mean the Upper American River Project, licensed to SMUD as FERC Project No. 2101.

Uncontrollable Force shall include, but is not limited to, natural events, labor or civil disruption, action or non-action of a governmental agency (other than SMUD), or breakdown, malfunction or failure of Project works.

2 Purpose of Settlement

2.1 Purpose

The Parties have entered into this Settlement for the purpose of resolving among the Parties all issues, except as otherwise expressly provided herein, that have or could have been raised by the Parties in connection with FERC's orders issuing New Project Licenses for the UARP and Chili Bar. While recognizing that several regulatory and statutory processes are not yet completed as of the Effective Date of this Settlement, it is the Parties' intention that, except as otherwise expressly provided herein, this Settlement also resolves all issues that may arise in the issuance of all permits and approvals associated with the issuance of the New Project Licenses, including but not limited to: 401 Certifications under the CWA; NEPA; and CEQA. This Settlement also enhances the mutual benefits of the Projects for the Licensees, beneficiaries of the Projects, local communities, and other Parties. Pursuant to the Parties' various rights, authorities, and responsibilities under Sections 4(e), 10(a), 10(j), and 18 of the FPA, as well as other

statutory and regulatory authorities and implied powers, this Settlement establishes the Licensees' obligations for the PM&E of resources affected by the Projects under the New Project Licenses. It also specifies procedures to be used among the Parties to ensure that implementation of the New Project Licenses is not Inconsistent with the Settlement, and with other legal and regulatory mandates. For these purposes, the Parties agree that this Settlement is fair and reasonable and in the public interest, consistent with the standards under the FPA. Except as to Material New Information or as otherwise specifically provided in Sections 3.1.3 and 4.3 herein, each Regulatory Party represents that, by entering into this Settlement, it believes that all its authorities and obligations in connection with FERC's orders issuing New Project Licenses for the UARP and Chili Bar have been, are, or can be met by the terms of this Settlement and that the Licensees' performances of their obligations under this Settlement will be consistent with and are intended to fulfill the Licensees' existing statutory and regulatory obligations as to each Federal and State Regulatory Party relating to the relicensing of the Projects. The Parties further represent that this Settlement provides sufficient PM&Es for FERC to find a balance of beneficial uses as required under Section 10 of the FPA.

2.2 No Precedent for Other Proceedings

This Settlement is made upon the express understanding that it constitutes a negotiated resolution among the Parties. Accordingly, nothing in the Settlement is intended or shall be construed as a precedent with regard to any other proceeding: (i) concerning the Project(s) but addressing issues not the subject of this Settlement, including but not limited to any water rights proceeding before the SWRCB; or (ii) proceedings concerning other hydroelectric projects. *Provided further*, that this Settlement shall not be construed as a limitation upon the Parties to participate in any such other proceeding. Further, this Settlement shall not be offered against a Party as argument, admission or precedent in any mediation, arbitration, litigation, or other administrative or legal proceeding that does not involve or relate to the New Project Licenses or the operation of the Projects. Further, no Party shall be deemed to have approved, admitted, accepted, or otherwise consented to any operation, management, valuation, or other principle underlying any of the matters covered by this Settlement, except as expressly provided herein. With respect to any mediation, arbitration, litigation or other administrative or legal proceeding involving or relating to the New Project Licenses, the Parties' rights and responsibilities shall be as set forth in this Settlement. This Section shall survive any termination of this Settlement.

3 Compliance with Legal Responsibilities and Reservation of Rights

3.1 Public Agency Parties

3.1.1 Satisfaction of Legal Responsibilities

3.1.1.1 UARP Relicensing

Except as to Material New Information or as otherwise provided in this Settlement, by entering into this Settlement, each Party that is a Public Agency represents that it believes and expects that: (A) the Proposed UARP Articles satisfy its statutory, regulatory, or other legal responsibilities for the PM&E of natural resources, water quality, recreation, and cultural and historic resources affected by the UARP under its New Project License; and (B) the Public Agency's statutory, regulatory, or other legal responsibilities are, or can be, met through approval without Material Modification of this Settlement and subsequent implementation of the New Project License for the UARP. This representation applies only to those responsibilities that the Public Agency administers.

3.1.1.2 Chili Bar Relicensing

Except as to Material New Information or as otherwise provided in this Settlement, by entering into this Settlement, each Party that is a Public Agency represents that it believes and expects that: (A) the Proposed Chili Bar Articles satisfy its statutory, regulatory, or other legal responsibilities for the PM&E of natural resources, water quality, recreation, and cultural and historic resources affected by Chili Bar under its New Project License; and (B) the Public Agency's statutory, regulatory, or other legal responsibilities are, or can be, met through approval without Material Modification of this Settlement and subsequent implementation of the New Project License for Chili Bar. This representation applies only to those responsibilities that the Public Agency administers.

3.1.2 No Irrevocable Commitment of Resources or Pre-Decisional Determination

Nothing in this Settlement is intended or shall be construed to be an irrevocable commitment of resources or a pre-decisional determination by a Public Agency. After the Effective Date of this Settlement, but prior to FERC's issuance of the New Project Licenses, each Public Agency shall participate in the Projects' relicensing proceedings, including environmental review and consideration of public comments, as required by applicable law. Further, FWS shall consult with FERC and the Licensees under the ESA, as appropriate. Each Public Agency

may give due consideration to any New Material Information arising in the relicensing proceedings or ESA consultations, as required by applicable law. Nothing in this Settlement should be read to predetermine or limit the outcome or lawful discretion of FS, BLM or FWS in issuing final Mandatory Terms and Conditions inconsistent with those recommended herein.

3.1.3 Reservation of Rights

Nothing in this Settlement is intended to, or shall be construed to, affect or limit the authority or obligation of any Party to fulfill its constitutional, statutory, and regulatory responsibilities under applicable law or to comply with any judicial decision or order. Among other things, as provided in Section 1.5 (definition of “Inconsistent with the Settlement”), this reservation permits a reservation of authority in a 401 Certification; *provided*, that each other Party reserves its right to contest the exercise of such reservation as set forth in Section 4.13.1 herein. Notwithstanding this Section 3.1.3, no Regulatory Party shall submit to FERC any reservation of authority pursuant to Sections 4(e) or 18 of the FPA that modifies, adds to, or deletes from such reservations set forth in the Proposed License Articles, including without limitation Proposed UARP Articles 1-35 and 1-36 and Proposed Chili Bar Articles 2-19 and 2-20.

3.2 Future Relicensings

Nothing in this Settlement is intended or shall be construed to affect or restrict any Party’s participation in or comments about the provisions of any future relicensing of the Projects subsequent to the current relicensings, or any other hydroelectric project licensed to SMUD or PG&E under the FPA.

4. Settlement Commitments and Implementation

4.1 Parties Bound by Settlement

The Parties shall be bound by this Settlement for the term stated in Section 1.4 herein, *provided* the New Project Licenses are not Inconsistent with the Settlement, and except as otherwise provided in Section 6 of this Settlement.

4.2 Mandatory Terms and Conditions and Section 10(a) and 10(j) Recommendations

4.2.1 Submittal of Terms, Conditions and Recommendations

4.2.1.1 Proposed License Articles to be Included in Terms, Conditions and Recommendations

Except as to Material New Information and as provided in Section 3.1.2 herein:

- (a) Mandatory Terms and Conditions and recommendations submitted by the Parties under Sections 10(a) and 10(j) of the FPA shall not be Inconsistent with the Settlement;
- (b) Any information, comments, or responses to comments filed in the context of the relicensing of the Projects by the Parties shall not be Inconsistent with the Settlement;
- (c) The Parties shall use reasonable efforts to obtain a timely FERC order approving this Settlement and issuing New Project Licenses for the UARP and Chili Bar that are not Inconsistent with the Settlement; and
- (d) The Parties shall support, in all relevant regulatory proceedings in which they participate, regulatory actions not Inconsistent with the Settlement.

4.2.1.2 Limitation on Parties to Revisit Settlement Provisions

No Party shall use any Material New Information generated in the environmental review, public comments, or otherwise in the relicensing process for the Projects to revisit the compromises inherent in this Settlement for the purpose of improving its bargained-for benefits. Instead, a Party may use such information to submit Mandatory Terms and Conditions or Section 10(a) and 10(j) recommendations or comments Inconsistent with the Settlement, but only if it believes in Good Faith that such information significantly undermines this Settlement, taken as a whole for the affected Party, and significantly affects the adequacy of the Proposed License Articles for use under Sections 4(e), 10(a), 10(j) and 18 of the FPA or other applicable law.

4.2.2 Terms, Conditions or Recommendations Inconsistent with the Settlement

4.2.2.1 Effect of Inconsistent Final Mandatory Terms and Conditions

If any of the Final Mandatory Terms and Conditions is Inconsistent with the Settlement, this Settlement shall be deemed modified to conform to the inconsistency unless a Party provides Notice to the other Parties that it objects to the inconsistency and initiates ADR within thirty (30) days after the date the inconsistent term or condition is filed with FERC.

4.2.2.2 Dispute Resolution and Administrative/Judicial Review

A Disputing Party may, in addition, and to the extent provided by applicable law, seek administrative and/or judicial review of any action by a Regulatory Party that is Inconsistent with the Settlement, including but

not limited to, submission of preliminary or final Mandatory Terms and Conditions, or recommendations under Sections 10(a) and 10(j) of the FPA. The Parties shall follow the ADR process set forth in Section 5 of this Settlement to the extent reasonably practicable while any such appeal of an inconsistent action is pursued. If a Party has filed for administrative rehearing or judicial review and the Disputing Parties subsequently agree to modify this Settlement to conform to the Regulatory Party's action, the filing Party or Parties shall withdraw the petition or dismiss the judicial action, or recommend such withdrawal or dismissal, as appropriate.

4.2.2.3 Effect of Inconsistent Final Mandatory Terms and Conditions Following Administrative/Judicial Review

Except as provided in Section 4.5.5.4 for omissions based on jurisdiction or if this Settlement is terminated pursuant to Section 6 herein, if any of the final Mandatory Terms and Conditions is Inconsistent with the Settlement after a final and non-appealable administrative or judicial decision, this Settlement shall be deemed modified to conform to that decision.

4.2.3 Proceedings under the Energy Policy Act of 2005

Regarding any Mandatory Term and Condition filed with FERC pursuant to this Section 4.2 that is not Inconsistent with the Settlement, including Appendices 3 or 4, each Party waives any right it may have to request an agency trial-type hearing on issues of material fact under Sections 4(e) and 18 of the FPA and to propose alternatives under Section 33 of the FPA. The Parties shall not support any trial-type hearing requested by any non-Party and will make reasonable efforts to support FWS, BLM, and FS, as appropriate, if a trial-type hearing is requested by any non-Party. If a non-Party requests a trial-type hearing, the Parties may intervene in the hearing to support this Settlement, and BLM, FWS, and/or FS shall use Good Faith efforts to defend in the trial-type hearing any challenged Mandatory Term and Condition adopting this Settlement or any portion thereof. Notwithstanding the above, each Party reserves any rights it may have under FPA Sections 4(e), 18 and 33 for any Mandatory Term and Condition filed with FERC that is Inconsistent with the Settlement.

4.2.4 Standard Section 4(e) Conditions Submitted by FS for Inclusion in New Project License for the UARP

Notwithstanding any other provision in Section 4.2 of this Settlement, if SMUD and FS agree to Material Modifications to the draft Proposed UARP Articles set forth in Appendix 3 to this Settlement, which FS expects to submit to FERC as "standard" conditions for inclusion in the New Project License for the UARP under Section 4(e) of the FPA, Appendix 3 shall be deemed modified to conform

to such Material Modifications, and no Party shall assert that such modifications are Inconsistent with the Settlement.

4.2.5 Standard Section 4(e) Conditions Submitted by BLM for Inclusion in New Project Licenses for UARP and Chili Bar

Notwithstanding any other provision in Section 4.2 of this Settlement, if SMUD, PG&E and BLM agree to Material Modifications to the draft Proposed License Articles set forth in Appendix 4 to this Settlement, which BLM expects to submit to FERC as “standard” conditions for inclusion in the New Project License for the UARP and Chili Bar under Section 4(e) of the FPA, Appendix 4 shall be deemed modified to conform to such Material Modifications, and no Party shall assert that such modifications are Inconsistent with the Settlement.

4.3 Reservation of Rights Under ESA

Nothing in this Settlement is intended to or shall be construed to restrict or affect the continuing responsibilities of FERC or any Party under the ESA or the California ESA, including the implementing regulation at 50 C.F.R. § 402.16. ESA issues related to the new licensing and/or operation of the UARP and Chili Bar are not resolved by this Settlement.

4.4 CWA Section 401 Certification

4.4.1 Proposed License Articles Recommended to be Included in 401 Certifications

4.4.1.1 401 Certification for the UARP

As to SMUD’s application for a 401 Certification for the relicensing of the UARP, the Parties respectfully request that SWRCB accept and incorporate, without Material Modifications, as conditions to the Section 401 Certification issued to SMUD, all Proposed UARP Articles that are within the SWRCB’s jurisdiction pursuant to Section 401 of the CWA. The Parties further request that SWRCB not include as conditions to the 401 Certification for the UARP conditions that constitute a Material Modification of the Proposed UARP Articles, or that are otherwise Inconsistent with the Settlement.

4.4.1.2 401 Certification for Chili Bar

As to PG&E’s application for a 401 Certification for the relicensing of Chili Bar, the Parties respectfully request that SWRCB accept and incorporate, without Material Modifications, as conditions to the Section 401 Certification issued to PG&E, all Proposed Chili Bar Articles that are within the SWRCB’s jurisdiction pursuant to Section 401 of the CWA.

The Parties further request that SWRCB not include as conditions to the 401 Certification for Chili Bar conditions that constitute a Material Modification of the Proposed Chili Bar Articles, or that are otherwise Inconsistent with the Settlement.

4.4.2 401 Certification Inconsistent with Settlement

4.4.2.1 Effect of Inconsistent 401 Certification

If SWRCB denies a Licensee's application for 401 Certification for the Project, the Parties agree such a denial shall be considered Inconsistent with the Settlement with respect to such Licensee's Project. If SWRCB issues the 401 Certification and any provision of the 401 Certification is Inconsistent with the Settlement, this Settlement shall be deemed modified to conform to the provisions of the 401 Certification, unless a Party provides Notice to the other Parties that it objects to the inconsistency and initiates ADR within thirty (30) days after the issuance of the 401 Certification.

4.4.2.2 Dispute Resolution and Administrative/Judicial Review

The Disputing Party may, in addition, file a petition for reconsideration under California Code of Regulations, title 23, sections 3867-3869, and/or judicial review, of any provision of the 401 Certification that is Inconsistent with the Settlement; such petition must be filed within thirty (30) days of the issuance of the 401 Certification. The Parties shall follow the ADR process, if appropriate, to the extent reasonably practicable while such petition or judicial review is pursued. If a Party has filed for administrative rehearing or judicial review of any provision of the 401 Certification that is Inconsistent with the Settlement and the Disputing Parties subsequently agree to modify this Settlement to conform to the inconsistent provision, the filing Party or Parties shall withdraw the petition or dismiss the judicial action, or recommend such withdrawal or dismissal, as appropriate.

4.4.2.3 Effect of Inconsistent 401 Certification Following Administrative/Judicial Review

Except as provided in Section 4.5.5.4 for omission based on jurisdiction or if this Settlement is terminated pursuant to Section 6 herein, if any provision of any 401 Certification is Inconsistent with the Settlement after a final and non-appealable decision on the petition or judicial action, this Settlement shall be deemed modified to conform to the final decision.

4.5 New Project Licenses

4.5.1 Support for Issuance of New Project Licenses

To the extent permitted by applicable law, all Parties shall support and advocate through appropriate written communications to FERC, FS, FWS, BLM, the National Marine Fisheries Service, and SWRCB this Settlement and the Proposed License Articles. Subject to Sections 4.2.1, 4.3, and 4.4.1 of this Settlement, the Parties agree not to propose, support, or advocate proposed PM&E measures, or license conditions Inconsistent with the Settlement.

4.5.2 Term of New Project Licenses

This Settlement is expressly not contingent upon any particular term for the New Project Licenses issued by FERC, nor does this Settlement advocate or otherwise recommend that FERC establish a particular term for the New Project Licenses. Accordingly, FERC's establishment of New License Terms of anywhere from 30 to 50 years, as required under the FPA, shall be deemed consistent with this Settlement. Notwithstanding, SMUD and PG&E may advocate for, and request, terms of 50 years for the New Project Licenses, and non-Licensee Parties shall remain silent on this issue and let FERC determine the length of the terms of the New Project Licenses.

4.5.3 Comments on the NEPA Document

The Parties respectfully request that FERC Staff include in the draft or final NEPA document, Staff's recommended license articles in their customary form. The Parties shall comment on any Staff-recommended license article which, if approved in either of the New Project Licenses, would be Inconsistent with the Settlement, in an effort to resolve such potential inconsistency before the issuance of the New Project Licenses.

4.5.4 Proposed License Articles Recommended to be Included in New Project Licenses

Subject to Sections 4.2.1, 4.3, and 4.4.1 of this Settlement, the Parties respectfully request that FERC accept and incorporate, without Material Modification: (1) all of the Proposed UARP Articles as license articles in the New Project License for the UARP; and (2) all of the Proposed Chili Bar Articles as license articles in the New Project License for Chili Bar. Subject to the same limitation, the Parties further request that FERC: (1) not include in the New Project License for the UARP any article, term, condition, recommendation or requirement that constitutes a Material Modification of the Proposed UARP Articles or that is otherwise Inconsistent with the Settlement; and (2) not include in the New Project License for Chili Bar any article, term, condition, recommendation or requirement

that constitutes a Material Modification of the Proposed Chili Bar Articles or that is otherwise Inconsistent with the Settlement.

4.5.5 New Project Licenses Inconsistent with the Settlement

4.5.5.1 Consistency of Final Licenses with Settlement

If any New Project License issued by FERC, either initially or following conclusion of any rehearing or judicial review, is Inconsistent with the Settlement, this Settlement shall be deemed modified to conform to the inconsistency, unless a Party provides Notice to the other Parties that it objects to the inconsistency within thirty (30) days after the date of the FERC licensing order or other agency action giving rise to the inconsistency, and that Party initiates the ADR procedures set forth in Section 5 of this Settlement. The Disputing Party(s) may, in addition, initiate the rehearing procedure described in Section 4.5.5.2 herein.

4.5.5.2 Disputing Inconsistencies

The Disputing Party(s) may, in addition, if they have intervened in the FERC relicensing proceeding for the Project in which FERC issued the order containing the Inconsistency with the Settlement, petition FERC for rehearing or seek judicial review of any New Project License article, or omission of any Proposed License Article that is Inconsistent with the Settlement. If any Party or non-Party seeks rehearing or judicial review of a New Project License, the Licensee for that Project may seek a stay or an extension of time of the New Project License or other order. The Parties shall follow the ADR process set forth in Section 5 of this Settlement while any such rehearing, appeal or request for stay or extension is pursued. Any Disputing Party(s) may ask FERC or the court to defer action on the merits of any rehearing request while ADR is pursued. If a Party has filed for administrative rehearing or judicial review and the Disputing Parties subsequently agree to modify this Settlement to conform to the inconsistent action, the filing Party(s) shall withdraw the appeal, or recommend such withdrawal, as appropriate.

4.5.5.3 Modification of Settlement if Inconsistency

Except as provided in Section 4.5.5.4 herein for omissions based on jurisdiction, or if this Settlement is terminated pursuant to Section 6 herein, if any article in any Final New Project License is Inconsistent with the Settlement, this Settlement shall be deemed modified to conform to the final decision.

4.5.5.4 Omission Based on Jurisdiction

(a) UARP Relicensing

If the Final New Project License for the UARP does not contain any Proposed UARP Article solely because FERC expressly determines that it does not have jurisdiction to adopt or enforce the omitted Proposed UARP Article, this Settlement shall not be deemed modified to conform to such omission, and such omission shall not be used as the basis for dispute among the Parties. SMUD shall be bound in contract to undertake any Proposed UARP Article that FERC excludes from the New Project License for the UARP based on a lack of jurisdiction, *provided* such action is not inconsistent with the terms of the New Project License or other applicable statutes or regulations.

(b) Chili Bar Relicensing

If the Final New Project License for Chili Bar does not contain any Proposed Chili Bar Article solely because FERC expressly determines that it does not have jurisdiction to adopt or enforce the omitted Proposed Chili Bar Article, this Settlement shall not be deemed modified to conform to such omission, and such omission shall not be used as the basis for dispute among the Parties. PG&E shall be bound in contract to undertake any Proposed Chili Bar Article that FERC excludes from the New Project License for Chili Bar based on a lack of jurisdiction, *provided* such action is not inconsistent with the terms of the New Project License or other applicable statutes or regulations.

4.5.6 Requests for Stay or Extension of Implementation

The Parties support this Settlement and acknowledge that the operations of the Projects as provided for in this Settlement are important to the Licensees' abilities to fund the implementation of the Proposed License Articles and ensure the resource benefits provided for in this Settlement. The Parties recognize there may be challenges to the New Project Licenses. As a result of such a challenge, each Licensee may at its discretion request from FERC or a court a stay or extension of implementation of any measure, action, or activity in the Proposed License Articles for so long as the New Project License for which the extension or stay is sought is subject to administrative or judicial review. The other Parties will endeavor to support the Licensee's request to FERC for a stay or extension. If a Party cannot support the request for a stay or extension, that Party may oppose the request for a stay or extension only if:

- (a) The challenge, if successful, would not add material requirements to the New Project License for which an extension or stay is sought; or
- (b) The scope of the request for stay or extension is not reasonably justified by the nature of the challenge. The scope of the request would be deemed reasonably justified if the magnitude of the request for stay or extension were comparable to the magnitude of risk posed by the challenge, and either: (i) the stay or extension relates to the challenge or to measures physically or biologically linked to the challenge; or (ii) the requested stay or extension of time relates to measures that would result in material capital cost to the Licensee requesting the stay or that would materially affect Project generation, operations, or economics; or
- (c) The stay or extension is inconsistent with that Party's responsibility under law or regulation; or
- (d) A Licensee challenges a New Project License and the opposing Party reasonably disagrees with the Licensee's determination that the New Project License being challenged is Inconsistent with the Settlement.

If a Licensee intends to seek a stay or extension, the Licensee shall contact the other Parties and make reasonable efforts to meet with the other Parties to explain and discuss the scope and extent of any such request for stay or extension. If any Party opposes a request for stay or extension, that Party shall contact the other Parties and make reasonable efforts to meet with the other Parties to explain and discuss the scope and extent of any opposition.

4.6 Cooperation Among Parties

The Parties shall cooperate in the implementation of this Settlement and the New Project Licenses. No Party shall exercise discretion in a manner that results in an action or requirement that is Inconsistent with the Settlement unless necessary to comply with statutory, regulatory or other legal responsibility; in which event, the Party shall provide timely Notice to other Parties of this obligation in order to permit ADR as provided in Section 5 of this Settlement.

4.7 Support for Implementation

Upon the request of either Licensee for the need therefore, the Parties shall provide written communications (or orally, in the event written communication is impossible to obtain due to reasons outside a Party's control) of support in any administrative approval process that may be required for implementation of this Settlement or related articles of the New Project Licenses, subject to available agency resources and agency authority.

The preceding sentence shall not apply to the Public Agency exercising the authority or to a Public Agency not participating in the subject proceeding. All Parties are encouraged to intervene in the relicensing proceedings before FERC and support this Settlement.

4.8 Defense Against Conditions Inconsistent with the Settlement or Amendment

If a Party files a pleading or other document before FERC or another regulatory agency advocating a condition Inconsistent with the Settlement or a proposed amendment to a New Project License which is not based on Material New Information as provided under Section 4 of this Settlement, any other Party may defend by: (a) stating its opposition to the condition Inconsistent with the Settlement or proposed amendment; (b) requesting that FERC or other regulatory agency disapprove the condition Inconsistent with the Settlement or proposed amendment; and (c) explaining what other reasonable conditions should be included in and/or excluded from the New Project License if the condition Inconsistent with the Settlement or proposed amendment is approved. Since the Parties recognize that a dispute that results in the defense described in (c) may threaten the viability of this Settlement or may result in an action for specific performance pursuant to Section 5.3.2, the Parties affirm their commitment to make best efforts to resolve any such dispute regarding advocacy of a condition Inconsistent with the Settlement or proposed amendment in a timely manner to avoid such results. The Parties recognize that advocacy of conditions Inconsistent with the Settlement or proposed amendments based on Material New Information is permissible as described in Section 4.

4.9 Responsibility for Funding

Each Licensee shall ensure that funding needed for it to implement its obligations under this Settlement and the New Project Licenses is provided. No Licensee shall be excused from its duty to provide such funds due to a failure by any other Party, entity or person to provide funding or carry out a duty, obligation, or responsibility it may have with respect to the Licensee's Project pursuant to other laws or agreements. Notwithstanding the foregoing, this Settlement does not alter or abrogate any duty, obligation or responsibility that any other Party or person may have to provide such funding pursuant to other laws or agreements, nor does this Settlement prevent the Licensees or any other Party from seeking to enforce such duty, obligation or responsibility. Further, the Licensees shall have no obligation to reimburse or otherwise pay any other Party for its assistance, participation, or cooperation in any activities pursuant to this Settlement or the New Project Licenses unless expressly agreed to by the Licensees or as required by law. In the event of administrative rehearing or judicial review, Parties shall bear their own costs and attorneys' fees, unless otherwise provided by applicable law.

4.10 Licensees Responsible for Compliance with the New Project Licenses

Upon acceptance of its New Project License, each Licensee is ultimately responsible for compliance with its New Project License. By entering into this Settlement, except as expressly provided herein, none of the Parties are accepting any new or additional legal

liability or responsibility for compliance with the obligations under the New Project Licenses. Neither Licensee shall be excused from its duty to comply with its obligations under its New Project License due to a failure by any other Party, entity or person to provide funding or carry out a duty, obligation or responsibility it may have with respect to its Project pursuant to other laws or agreements. Notwithstanding the foregoing, this Settlement does not alter or abrogate any duty, obligation or responsibility that any other Party or person may have with respect to either Project pursuant to other laws or agreements, nor does this Settlement prevent a Licensee or any other Party from seeking to enforce such duty, obligation or responsibility.

4.11 Availability of Funds

Implementation of this Settlement by any Party other than the Licensees is subject to the availability of funds. In addition, implementation of this Settlement by any Party that is a federal agency is subject to the requirements of the Anti-Deficiency Act, 31 U.S.C. §§ 1341 *et seq.* Further, implementation of this Settlement Agreement by any State agency is subject to Article 16, Section 7 of the California Constitution.

4.12 Implementation

4.12.1 Consultation Group

The Licensees shall utilize a Consultation Group for the purpose of keeping the Parties informed and getting input from the Parties with regard to subjects of identified interest to the Parties. This would include development of implementation plans and adaptive management concerning such subjects. All Parties to this Settlement shall be invited to participate in the Consultation Group; *provided, however,* that unless specifically provided otherwise under a New Project License, the information and advice provided by the members of the Consultation Group are advisory only. The Licensees may individually or jointly utilize the Consultation Group; *provided, however,* it is anticipated that the Licensees will jointly utilize the Consultation Group with regard to Overlapping Issues. The Licensees shall invite the SWRCB, the Regional Water Quality Control Board, and El Dorado County to participate in all meetings of the Consultation Group.

4.12.1.1 Consultation on Draft Implementation Plans and Draft Adaptive Management Plans

When consulting with the Consultation Group with regard to an implementation plan or adaptive management plan required under a New Project License, the Licensee of such Project, prior to filing the plan with FERC and/or a Regulatory Party for approval, shall distribute a draft plan to all Consultation Group members that have indicated an interest in the subject of the plan for review and comment. Unless another consultation time period is specified for such plan under the New Project License, the

Licensee shall allow Consultation Group members a minimum of thirty (30) days to review and provide written comments on the draft plan. If the Licensee does not adopt a recommendation submitted by a member of the Consultation Group, the Licensee, concurrent with the filing of its draft plan with FERC and/or a Regulatory Party for approval, shall provide a response and explanation to such commenting member of the Consultation Group, based on Project-specific information.

When providing its written comments on a draft plan, a Consultation Group member may request that the Licensee(s) convene a meeting of the Consultation Group to allow an opportunity for responsive Parties to explain and discuss the draft plan, which request shall not be unreasonably denied. *Provided, however,* that the Licensee(s) may reasonably decline a request to convene a meeting if it determines, based upon the deadline for filing the draft plan for approval by FERC and/or a Regulatory Party and the number of comments on the draft plan requiring a response, that such a meeting would adversely affect its ability to timely file the draft plan with FERC and/or the approving Regulatory Party.

Any advice provided to the Licensees by any member of the Consultation Group shall be for the use of the Licensees, and shall not constitute advice for any Regulatory Party required by a New Project License to approve the subject plan.

4.12.1.2 Participation in Annual Review Meetings Between Licensee(s) and Regulatory Parties

All members of the Consultation Group shall be invited to attend the annual meeting between a Licensee and specified Regulatory Parties to review ecological conditions, as provided in Proposed UARP Article 1-14 and Proposed Chili Bar Article 2-11. At least forty-five (45) days prior to the annual meeting with the Regulatory Parties, the Licensee shall Notify all Consultation Group members of the date, time, and location of the meeting. At least two (2) weeks prior to such meeting, the Licensee shall make available to all Consultation Group members a summary report that lists and describes: (1) all implementation activities on recreation and ecological PM&E measures under its New Project License performed during the previous calendar year; (2) all implementation activities on such PM&E measures currently underway as of the date of the summary report; and (3) all implementation activities on recreation and ecological PM&E measures under its New Project License planned to be undertaken during the current calendar year.

The Licensees may convene such other meetings of the Consultation Group as they deem appropriate, with Notice to all Parties, to consult,

review, and discuss with responsive Parties other matters arising from recreation or ecological PM&E measures in their New Project Licenses.

It is anticipated that both Licensees will be present at meetings of the Consultation Group that concern Overlapping Issues.

4.12.1.3 Parties' Participation in Consultation Group

Failure of a Party to participate in one or more meetings of the Consultation Group, or to submit comments on a draft implementation or adaptive management plan, shall not be grounds for removal of that Party from the Consultation Group. A Party may elect to be removed from the Consultation Group, or may elect not to participate in the Consultation Group on specified PM&E measures under the New Project Licenses, by providing Notice to all other Parties. The Licensees' obligations under this Section 4.12.1 extend only to those Consultation Group members that: (1) submit comments on a draft implementation or adaptive management plan under Section 4.12.1.1; or (2) are in attendance at any meeting of the Consultation Group under Section 4.12.1.2.

4.12.1.4 Public Participation

Consultation Group meetings shall be open to the public.

4.12.2 Permits

Upon acceptance of its New Project License and FERC approval of the applicable plans, each Licensee shall apply for and use active and diligent efforts to obtain in a timely manner and in final form all applicable federal, state, regional, and local permits, licenses, authorizations, certifications, determinations, and other governmental approvals for purposes of implementing this Settlement and its New Project License (Permits). The applications for such Permits shall be consistent with the terms of this Settlement. Each Party, upon the Licensee's request, shall actively support the Licensee's applications for Permits, and shall not file comments or recommend Permit conditions to another Public Agency that are Inconsistent with the Settlement. However, the duty to affirmatively support the Licensees' applications for Permits, such as filing letters in support, shall not apply to a Public Agency not participating in the Permit application proceeding. The Licensee shall pay all fees required by law related to such Permits. The Parties shall work together and cooperate as appropriate during the permitting, environmental review, and implementation of this Settlement. Except as expressly provided in this Settlement, the Licensees shall not be required by this Settlement to implement an action required under this Settlement or the New Project Licenses if a Permit has been denied, contains conditions that are unreasonable or Inconsistent with the Settlement, or until all applicable Permits required for that action are obtained. If a proceeding challenging any Permit

required for the action has been commenced, the Licensee applying for the Permit shall be under no obligation under this Settlement to implement the action or any related action until any such proceeding is terminated. In the event any Permit has been denied, Licensee determines that the Permit contains conditions that are unreasonable or Inconsistent with the Settlement, or any Permit is not obtained in a timely manner, the Parties shall confer to evaluate the effect of such event on implementation of this Settlement and seek to develop actions to respond to that event. If the Parties do not agree on actions to respond to that event and nonperformance or prolonged delay in performance of one or more Proposed License Articles due to the event materially reduces the benefit of this Settlement, a Party may initiate ADR, except that ADR regarding denial of a Permit shall be restricted to the issue of actions to respond to that event. In addition, if the event results in nonperformance or prevents performance of one or more Proposed License Articles for a prolonged period, the Parties recognize that re-initiation of consultation under the ESA may be required. Nothing contained in this Section shall be construed to limit a Licensee's right to apply for a Permit before issuance of the New Project Licenses, provided that any such applications shall not be Inconsistent with the Settlement.

4.13 Reopener or Amendment of New Project Licenses

4.13.1 Reopener by a Party Other Than the Licensees

A Party to this Settlement, other than a Licensee, may seek to modify or otherwise reopen the Proposed License Articles included in the New Project Licenses, including without limitation exercising any authority reserved in the New Project Licenses under Sections 4(e) or 18 of the FPA, only if the Party, relying on Material New Information, reasonably demonstrates in the reopener proceeding that such proposed modification or other cause of reopener is required to fulfill statutory, regulatory, or court-ordered responsibilities or is otherwise in furtherance of the public interest under the FPA or other applicable law. With regard to any such reopener proceeding of a Proposed License Article included in a New Project License, each Party reserves its right to contest the exercise of such reserved authority at such time as the agency may exercise the reserved authority. *Provided further*, that with regard to any reservation of authority included in a New Project License as a final Mandatory Term or Condition, each Party additionally reserves its rights to request a trial-type hearing under FPA Sections 4(e) and 18 or propose alternatives under Section 33 of the FPA in response to any exercise of such reserved authority. *Provided, however*, that this Section 4.13.1 shall not apply to the exercise of any reservation of FPA Section 4(e) authority under Proposed UARP Article 1-36 or Proposed Chili Bar Article 2-20 that is consistent with the conditions contained in the RPA-BLM.

4.13.1.1 Notice

Prior to seeking modification or reopener, a Party shall provide the Licensees and the other Parties at least ninety (90) days' Notice to consider the Material New Information and that Party's position. A Party shall not be required to comply with this ninety (90) day Notice provision if it reasonably believes an emergency situation exists. In such an emergency situation, the Party shall give Notice to all other Parties within five (5) days of recognition of the need for such modification or reopener. If a Party proposes in the Notice a modification or reopener that another Party believes would be Inconsistent with the Settlement and objects, then the ADR provisions of Section 5 of this Settlement apply, and the objecting Party must invoke ADR during the ninety (90) day Notice period or waive its objection.

4.13.2 Amendment of New Project Licenses

Nothing in this Settlement is intended or shall be construed to affect or limit the right of SMUD or PG&E to seek amendments of their New Project Licenses that are not Inconsistent with the Settlement. A Licensee may seek a license amendment for the Project(s) that would be Inconsistent with the Settlement to comply with any FERC directive pertaining to dam safety, flood control, or Project security. Additionally, a Licensee may seek a license amendment that would be Inconsistent with the Settlement if the Licensee reasonably demonstrates that such proposed amendment is required to fulfill statutory or regulatory responsibilities or is otherwise in furtherance of the public interest under the FPA or other applicable law; *provided*, that such amendment is supported by: (i) Material New Information; or (ii) another Party's proposal to modify or reopen under Section 4.13.1 herein; or (iii) a non-Party's proposal to modify or reopen any New Project License; or (iv) a Biological Opinion issued for a New Project License after such New Project License becomes Final (or challenge to such Biological Opinion) that would result in an Inconsistency with the Settlement. The provisions of this Settlement shall remain in effect as unmodified by any amendment sought by the Licensee until the effective date such amendment is approved by FERC.

4.13.2.1 Notice

Prior to filing a proposed license amendment that relates to the subject of this Settlement, a Licensee shall provide the Parties at least ninety (90) days Notice of its intention to do so, and promptly following the giving of such Notice, shall consult with Parties responding within thirty (30) days of such Notice regarding the need for and the purpose of the amendment. If a Party believes the proposed amendment is Inconsistent with the Settlement and objects, then the ADR provisions in Section 5 of this Settlement shall apply, and the objecting Party must invoke ADR within

this ninety (90) day Notice period or waive its objection. The Licensee proposing the amendment shall not be required to comply with this ninety (90) day Notice provision if it reasonably believes an emergency situation exists or if required to meet its responsibilities under applicable law or an order of an agency with jurisdiction over the Licensee, and *provided further*, that the Licensee proposing the amendment shall comply with any statutory or regulatory requirements for such notice or consultation. In such an emergency or compliance situation, the Licensee proposing the amendment shall give Notice to all other Parties within five (5) days of recognition of the need for such amendment.

4.13.2.2 Consultation on Amendments

Except as otherwise provided in a New Project License or in the case of an emergency, the Licensee proposing the amendment shall allow a minimum of thirty (30) days for any Party to comment and to make recommendations before filing any study, operating or implementing plan, report, or facility design with FERC for any application for a Project license amendment that relates to a subject of this Settlement and where consultation with Regulatory Parties or other Parties is required. In any application for a Project license amendment, the Licensee proposing the amendment shall include with its application documentation of its consultation with the responsive Parties, summarize the positions and recommendation of the responsive Parties and provide its response to those positions and recommendations. If the Licensee proposing the amendment does not adopt a recommendation or comment of a Party, it shall include in any filing with FERC copies of the comments/recommendations and an explanation as to why the comment/recommendation was not adopted.

4.13.2.3 Parties' Option to Intervene in Amendment Proceeding

The Licensee proposing the amendment shall not oppose, based on the issue of standing, an intervention request by any Party that satisfies FERC's procedural requirements in a proceeding for a Project license amendment that any Party has concluded would be Inconsistent with the Settlement. The Parties acknowledge that intervention in the relicensing proceeding docket at FERC does not make the Party an intervenor in any post-licensing proceeding for that Project, such as an amendment proceeding.

4.13.3 Amendment of New Project License for the UARP Upon Non-Construction of Iowa Hill

In the event FERC approves SMUD's proposal to construct and operate Iowa Hill, and subsequent to such approval SMUD reasonably determines in its sole

discretion not to construct Iowa Hill, SMUD shall Notify the Parties of such decision, and all Parties shall support SMUD's application to amend the UARP New Project License to remove all requirements related to Iowa Hill, including but not limited to Proposed UARP Articles 1-38 through 1-50, inclusive. Notwithstanding any other provision in this Settlement, such amendment application filed by SMUD shall not be deemed Inconsistent with the Settlement and shall not give rise to the ADR and withdrawal provisions of this Settlement.

4.14 Amendment of Settlement

In addition to amendments to conform with certain actions of federal and state agencies, as set forth in Sections 4.2.2, 4.2.4, 4.2.5, 4.4.2, and 4.5.5 herein, this Settlement may be amended at any time beginning upon the Effective Date and through the term of the New Project Licenses plus the term(s) of any annual license(s) that may be issued after the New Project Licenses have expired, after Notice by the Party seeking the amendment, with the unanimous agreement of all Parties still in existence, including any successor thereto. If a Licensee seeks to amend this Settlement, such Licensee shall give each Party at least sixty (60) days prior written Notice. Such Notice shall state that failure of any Party still in existence (excepting all such federal, state or local governmental agency Parties) to respond in writing or by electronic mail to the Licensee's Notice within the applicable sixty (60) day period shall be deemed to be an approval of such amendment proposed by the Licensee. Any amendment of this Settlement shall be in writing and executed by the responding Parties.

4.15 Project Boundary

Except as to any expansion of the FERC Project boundary for the UARP or Chili Bar provided for under the Proposed License Articles or RPA-BLM, no Party shall request, support or advocate that FERC expand the boundary of the UARP or Chili Bar. Except as provided in the RPA-BLM, the Parties shall cooperate with Licensees' opposition to any efforts by FERC or a non-Party to expand a Project's boundary in a manner Inconsistent with the Settlement.

4.16 Monetary Payments

Notwithstanding any inclusion in the New Project Licenses of FERC's reservation of rights to require either of the Licensees to undertake such measures as may be appropriate and reasonable to implement approved plans and other requirements in the New Project Licenses in excess of any agreed-upon monetary payment amounts set forth in the Proposed License Articles, the Parties agree to be bound by the monetary payment amounts in this Settlement, subject to any conditions or exceptions expressly provided in this Settlement. The Parties agree not to seek a Licensee's expenditure of additional funds in excess of the agreed-upon monetary payment amounts if the Licensee is in compliance with the relevant license article in its New Project License. Monetary payment amounts required under this Settlement may be adjusted only as set forth in

Section 7.2 of this Settlement. For the purposes of this Section 4.16, “monetary payment amounts” do not include those items identified as cost estimates.

5 Dispute Resolution

5.1 General Applicability

All disputes among the Parties regarding any Party’s performance or compliance with this Settlement, including, without limitation, resolution of any objections or disputes related to any provision of the New Project Licenses, Mandatory Terms and Conditions, 401 Certifications, Permits related to the New Project Licenses, or other mandatory license condition that is Inconsistent with the Settlement, shall be the subject of the ADR process provided in this Section 5, unless otherwise specifically provided in this Settlement or precluded by statute or agency regulation. All disputes under this Section 5 shall be brought in a prompt and timely manner and as follows:

- (a) The Disputing Parties shall cooperate in Good Faith to promptly schedule, attend and participate in the ADR.
- (b) The Disputing Parties agree to devote such time, resources and attention to the ADR as is needed to attempt to resolve the dispute at the earliest time possible.
- (c) Unless otherwise agreed among the Disputing Parties, each Disputing Party shall bear its own costs for its participation in this or any administrative ADR resolution process related to this Settlement.
- (d) Each Disputing Party shall implement promptly all final agreements reached, consistent with its applicable statutory and regulatory responsibilities.
- (e) The ADR process in this Section 5 does not preclude any Party from timely filing and pursuing an action for administrative or judicial relief of any FERC order, compliance matter, or other regulatory action related to the New Project Licenses; *provided* that any such Party shall pursue ADR pursuant to this Section 5 as soon as practicable thereafter or concurrently therewith.
- (f) The Party initiating a dispute under this Section 5 shall notify FERC when ADR proceedings are initiated relevant to an issue related to the Proposed License Articles or New Project Licenses. The Parties acknowledge that the initiation of ADR proceedings shall have no effect upon filing deadlines or applicable statutes of limitation before FERC.

5.2 ADR Procedures

5.2.1 Dispute Initiation Notice

A Party claiming a dispute shall give Notice of the dispute. If the dispute includes a claim that one or both of the New Project Licenses, Mandatory Terms and Conditions, or 401 Certifications related to the New Project Licenses is Inconsistent with the Settlement, the Notice shall be issued within the applicable time periods specified in Section 4 of this Settlement. Any Notice under this Section 5 shall describe: (a) the matter(s) in dispute; (b) the identity of any other Party alleged to have not performed an obligation provided by this Settlement; and (c) the specific relief sought.

5.2.2 Informal Meetings

The Disputing Parties shall hold at least two informal meetings to resolve the dispute, commencing within thirty (30) days after the Dispute Initiation Notice. Any Disputing Party may request that a FERC employee facilitate these informal meetings to assist in resolving the dispute.

5.2.3 Mediation

If the informal meetings fail to resolve the dispute, the Disputing Parties shall decide whether to use a neutral mediator, such as FERC's Office of Dispute Resolution Services. The decision whether to pursue mediation shall be made within twenty (20) days after conclusion of the informal meeting in Section 5.2.2 herein. The Disputing Parties shall agree on an appropriate allocation of any costs of the mediator employed under this Section. Mediation shall not occur if the Disputing Parties cannot agree on the allocation of costs. The Disputing Parties shall select a mediator within thirty (30) days of the decision to pursue mediation, including the agreement of allocation of costs. The mediation process shall be concluded not later than sixty (60) days after the mediator is selected. The above time periods may be shortened or lengthened upon mutual agreement of the Disputing Parties.

5.2.4 Dispute Resolution Notice

The Disputing Parties shall provide Notice of any resolution of the dispute achieved under Section 5.2 of this Settlement. The Notice shall: (a) restate the disputed matter, as initially described in the Dispute Initiation Notice; (b) describe the alternatives which the Disputing Parties considered for resolution; and (c) state whether resolution was achieved, in whole or part, and state the specific relief agreed to as part of the resolution.

5.3 Enforcement of Settlement After Dispute Resolution

5.3.1 Enforcement Regarding New Project Licenses

A Disputing Party may seek administrative or judicial relief for an unresolved dispute regarding a Licensee's performance of its obligations under its New Project License only after exhaustion of the ADR process under this Section 5. Any such relief shall be sought and obtained from FERC or other appropriate regulatory or judicial forum. No Party to this Settlement may seek damages for breach of the Proposed License Articles, whether before or after acceptance of the New Project Licenses.

5.3.2 Enforcement Regarding Contractual Obligations

With regard to any contractual obligations of the Parties, including those set forth in Section 4.5.5.4 herein, a Disputing Party may seek administrative or judicial relief for breach of a contractual obligation established by this Settlement only after exhaustion of the ADR process under this Section 5. Venue for such action shall lie in a court with jurisdiction located in Sacramento, California. In such action, a Disputing Party may only seek specific performance of the contractual obligation or other equitable relief. No Party shall be liable for damages for such breach of contractual obligations. By executing this Settlement, no Party waives any equitable or legal defenses that may be available.

6 Withdrawal From Settlement

6.1 Withdrawal of a Party from Settlement

A Party may withdraw from this Settlement only if: (a) such Party objects to an order issuing a New Project License that is Inconsistent with the Settlement or to a final Mandatory Term and Condition issued before such New Project License becomes Final that is Inconsistent with the Settlement, or to a 401 Certification that is Inconsistent with the Settlement; and (b) such Party has complied with the ADR procedures set forth in Section 5 of this Settlement to attempt to resolve the dispute; and (c) such Party does not file for appeal. If the Party seeking to withdraw files an appeal to resolve the inconsistency, that Party may not withdraw until its appeal is exhausted or withdrawn. Notwithstanding the preceding sentence, a Party who had objected to a preliminary Mandatory Term and Condition on the basis that it is Inconsistent with the Settlement, and who attempted to resolve that objection through ADR procedures, may withdraw following issuance of a final Mandatory Term and Condition which contains the same Inconsistency, regardless of whether it may thereafter file an appeal of the New Project License. In this circumstance, the objecting Party is not required to undertake such ADR procedures again to object to the same Inconsistency in the final Mandatory Term and Condition. In addition, either Licensee may withdraw as provided in Section 6.2 of this Settlement. A Party that withdraws shall provide Notice of withdrawal, including its basis for withdrawal.

6.2 Withdrawal of SMUD or PG&E from Settlement

In addition to the provisions of Section 6.1 of this Settlement, prior to accepting its New Project License, SMUD or PG&E may withdraw from this Settlement without first complying with the ADR procedures set forth in Section 5 if a Party withdraws from this Settlement, and SMUD or PG&E reasonably determines at its sole discretion, after providing the other Parties Notice and a reasonable opportunity to meet and discuss with the Parties, that the withdrawal: (a) may adversely affect the likelihood of FS and/or BLM issuing final Mandatory Terms and Conditions not Inconsistent with the Settlement; (b) may adversely affect the likelihood of FERC's issuance of a New Project License not Inconsistent with the Settlement; or (c) substantially diminishes the value of this Settlement to SMUD or PG&E. Any Licensee withdrawing under this Section 6.2 shall give Notice identifying the reason for withdrawal within thirty (30) days of its actual knowledge of the event creating the right to withdraw. If a Licensee withdraws from this Settlement, such Licensee shall support any Regulatory Party's request of FERC for a stay of the licensing process to allow the Regulatory Party to comply with FERC's regulatory processes.

6.3 Limited Right of Withdrawal Following ESA Section 7 Consultation

Notwithstanding any other provision of this Settlement, if the FWS issues a Biological Opinion following ESA Section 7 consultation with FERC concerning the proposed new licensing action for one or both Projects, which Biological Opinion(s) contain terms and conditions that would constitute a Material Modification of the Proposed License Articles in this Settlement, a Party may withdraw from this Settlement after providing the other Parties Notice within thirty (30) days of its actual knowledge of the Biological Opinion and following an additional thirty (30) day period for the discussion of the proposed withdrawal. If a Licensee withdraws under this Section 6.3 prior to issuance of a New Project License, it shall support any Regulatory Party's request to FERC for a stay of the licensing process to allow the Regulatory Party to comply with FERC's regulatory process. The inclusion in any Biological Opinion issued by FWS for one or both of the Projects of its criteria for reinitiation of Section 7 consultation pursuant to 50 C.F.R. 402.16 or of reasonable reporting requirements to ensure a Licensee's compliance shall not constitute a Material Modification of this Settlement. Disputes concerning ESA consultation shall not be subject to the ADR procedures set forth in Section 5 of this Settlement.

6.4 Effective Date of Withdrawal

Withdrawal by a Party shall become effective ten (10) calendar days after Notice is given by the withdrawing Party.

6.5 Continuity After Withdrawal

Except as provided in Section 6.6 of this Settlement, the withdrawal of a Party does not terminate this Settlement for the remaining Parties. If a Party withdraws from this Settlement, the withdrawing Party shall not be bound by any term contained in this Settlement, except Sections 2.2 and 7.1.

6.6 Termination of Settlement

6.6.1 Withdrawal by One Licensee

In the event of withdrawal by one, but not both, Licensees, such withdrawal does not terminate this Settlement for the remaining Parties. *Provided, however,* that the remaining Licensee shall have the option of: (1) continuing to be bound by this Settlement as a Party; or (2) attempting to reach an amendment of this Settlement, as provided under Section 4.14 herein, with the remaining Parties in a manner that would allow this Settlement to remain intact, but only with respect to issues pertaining to the remaining Licensee's Project and New Project License; or (3) unilaterally withdrawing from this Settlement without first complying with the ADR procedures set forth in Section 5. The remaining Licensee shall exercise its option under this Section 6.6.1 by providing Notice within thirty (30) days of the other Licensee's withdrawal.

6.6.2 Withdrawal by Both Licensees

In the event of withdrawal by both Licensees, including but not limited to withdrawal under Section 6.6.1 of this Settlement, this Settlement shall terminate as to all Parties and have no further force or effect, except that all Parties shall continue to be bound by Sections 2.2 and 7.1, which Sections shall survive termination.

6.6.3 Expiration of New Project Licenses

Upon expiration of the New Project Licenses and any annual license(s) issued after expiration thereof, this Settlement shall terminate as to all Parties and have no force or effect, except that all Parties shall continue to be bound by Sections 2.2 and 7.1, which Sections shall survive termination.

7 Miscellaneous

7.1 Settlement Negotiations Privileged and Confidential

The Parties have entered into the negotiations and discussions leading to this Settlement with the understanding that all discussions, communications, drafts, work papers, and notes relating to this Settlement are privileged and confidential. This material shall not prejudice the position of any Party or participant taking part in such discussions and

negotiations, and shall not be used by any entity in any manner, including but not limited to admission into evidence, admission, or argument in any forum or proceeding for any purpose, to the fullest extent allowed by law, including but not limited to 18 C.F.R. § 385.606. This provision does not apply to any information that was in the public domain prior to the development of this Settlement or that became part of the public domain at some later time through no unauthorized act or omission by any Party. This provision does not apply to: (a) any information held by a federal agency that is not protected from disclosure pursuant to the Freedom of Information Act or other applicable law; or (b) any information held by a state or local agency that is not protected from disclosure pursuant to the California Public Records Act or other applicable state or federal law. A withdrawing Party shall continue to maintain the confidentiality of all settlement communications to the extent permitted by applicable law. Nothing in this Section 7.1 is intended to or shall be construed as prohibiting the filing of appropriate material in support of this Settlement with FERC or other regulatory agency. This Section shall survive any termination of this Settlement.

7.2 Escalation of Costs

Costs specified in any Proposed License Article as a year 2007 cost basis shall be escalated based on the U.S. Gross Domestic Product - Implicit Price Deflator (GDP-IPD). Costs not specified as a year 2007 cost basis are constant dollars not subject to escalation.

7.3 Entire Agreement

Except as provided in Sections 7.3.1, 7.3.2, and 7.3.4 of this Settlement, this Settlement contains the complete and exclusive agreement among all of the Parties with respect to the subject matter thereof, and supersedes all discussions, negotiations, representations, warranties, commitments, offers, contracts, agreements in principle, and other writings prior to the Effective Date of this Settlement, with respect to its subject matter.

7.3.1 No Effect on Other Agreements

Nothing in this Settlement is intended to, or shall be construed to, modify in any manner the RPA-BLM, RPA-CDPR, Cooperation Agreement, or any other agreement in the relicensing of the Projects that has been executed by one or both of the Licensees and filed with FERC.

7.3.2 Relationship to Other Agreements

The Parties recognize that some of the Parties to this Settlement are also parties to the RPA-BLM, RPA-CDPR and/or Cooperation Agreement and that several Proposed License Articles included in this Settlement partially satisfy certain provisions of these other agreements. The Parties' obligations under this Settlement shall be interpreted independent of the RPA-BLM, RPA-CDPR and Cooperation Agreement. Nothing in this Settlement is intended to, or shall be construed to, bind any Party to this Settlement as a party to the RPA-BLM, RPA-

CDPR or Cooperation Agreement. Although these three agreements are attached as appendices to this Settlement, such attachment is for informational purposes and the convenience of the Parties and does not render them part of this Settlement.

7.3.3 Execution of Final RPA-CDPR

Within sixty (60) days after the Effective Date of this Settlement, SMUD, PG&E and CDPR shall finalize and execute the RPA-CDPR, which shall be in substantial conformance with the draft form of agreement set forth in Appendix 8 of this Settlement.

7.3.4 Relationship with the RPA-BLM

The parties to the RPA-BLM acknowledge that the creation of the RPA-BLM was intended to foster a comprehensive settlement for the UARP and Chili Bar Projects; however, due to its independent nature and inclusive terms, the RPA-BLM is intended to operate on its own. Therefore, nothing in this Settlement (including Appendices 1 through 5) is intended to, or shall be construed to, modify in any manner provisions in the RPA. Likewise the Parties' obligations under Sections 1 through 8 of this Settlement shall be interpreted without reference to, and independent of the RPA except as may be provided herein.

7.4 Non-Severable Terms of Settlement

The terms of this Settlement are not severable one from the other. This Settlement is made on the understanding that each term is in consideration and support of every other term, and each term is a necessary part of the entire Settlement. If a court of competent jurisdiction rules that any provision in this Settlement is invalid, this Settlement is deemed modified to conform to such ruling, unless a Party objects. If a Party objects, the other Parties agree to meet and confer regarding the continued viability of this Settlement.

7.5 No Third Party Beneficiaries

Without limiting the applicability of rights granted to the public pursuant to applicable law, this Settlement shall not create any right or interest in the public, or any member thereof, as a third party beneficiary hereof, and shall not authorize any non-Party to maintain a suit at law or equity pursuant to this Settlement. The duties, obligations and responsibilities of the Parties with respect to third parties shall remain as imposed under applicable law.

7.6 Successors and Assigns

This Settlement shall apply to, and be binding on, and inure to the benefit of the Parties and their successors and assigns, unless otherwise specified in this Settlement.

7.6.1 Assignment

Any voluntary assignment by a Party shall not be effective unless approved by the Licensees, which approval shall not be unreasonably withheld. A partial assignment is not permitted. After the Licensees' approval of the assignment, the assignee shall sign this Settlement and become a Party.

7.6.2 Succession

In the event of succession between Public Agencies, whether by statute, executive order, or operation of law, the successor agency shall become a Party to and be bound by the terms of this Settlement, to the extent permitted by law.

7.6.3 Continuation of Certain Obligations

Upon completion of a succession or assignment, the initial Party shall no longer be a Party to this Settlement. It shall continue to be bound by Sections 2.2, 7.1, 7.5, and 7.6. Except as provided in Sections 3 and 4 of this Settlement, the initial Party shall not take any action adverse to this Settlement or the portions of the New Project Licenses that incorporate this Settlement.

No change in ownership of the Projects or transfer of the existing or New Project Licenses by SMUD or PG&E shall in any way modify or otherwise affect any other Party's interests, rights, responsibilities or obligations under this Settlement. Unless prohibited by applicable law, a Licensee shall provide in any transaction for a change in ownership of its Project or transfer of its existing or New Project License, that such new owner shall be bound by, and shall assume the rights and obligations of the Licensee under this Settlement upon completion of the change of ownership and approval by FERC of the license transfer.

7.6.4 Notice

A Licensee transferring pursuant to Section 7.6.3 or an assigning Party shall provide Notice to the other Parties at least thirty (30) days prior to the proposed effective date of such transfer or assignment.

7.7 Extension of Time; Inability to Perform

7.7.1 Obligations under New Project Licenses

7.7.1.1 Extension of Time

If a Licensee has good cause, consistent with FERC's standard in 18 C.F.R. § 385.2008, to seek an extension of time to fulfill an obligation under its New Project License arising from this Settlement, the Licensee

may file with FERC such a request. The Parties acknowledge that FERC's standard for any such request shall apply. If any Party provides Notice that it disputes the good cause for extension, the Licensee and the Disputing Party shall follow the ADR process in Section 5 of this Settlement. If the dispute cannot be timely resolved by such process, the Licensee may proceed with its request, if it has not done so already, and any Disputing Party may oppose the request.

7.7.1.2 Inability of Licensee to Perform

If a Licensee is unable to perform an obligation under its New Project License, which is also a Proposed License Article in Appendix 1 or 2 of the Settlement, due to an event or circumstances beyond its reasonable control, the Licensee may file with FERC an appropriate request for relief. The Parties acknowledge that FERC's standard for any such request shall apply. In addition, the Licensee shall consider, in consultation with the Consultation Group, if there are reasonable and feasible alternative measures that can be implemented to address the same Project objectives. If any Party provides Notice that it disputes the non-performance, the Licensee and the Disputing Party, along with other interested Parties from the Consultation Group, shall follow the ADR process in Section 5 of this Settlement. The ADR process shall attempt to reach agreement among the parties to the ADR on a reasonable and feasible alternative measure(s) that can be implemented with FERC's approval and consistent with the New Project License to address the same Project objectives. If the dispute is not timely resolved by such process, the Licensee may proceed with its request to FERC, if it has not done so already, and any party to the ADR may oppose the Licensee's request.

7.7.2 Contractual Obligations

No Party shall be in breach of this Settlement as a result of a failure to perform or for delay in performance of any contractual obligation under this Settlement, including those set forth in Section 4.5.5.4 of this Settlement, if it is unable to perform or delays performance due to any Uncontrollable Force reasonably beyond its control, unless otherwise provided in this Settlement.

7.7.3 Notice of Delay or Inability to Perform

The Party whose performance of an obligation under this Settlement is affected by any delay or inability to perform under Section 7.7 of this Settlement shall provide Notice as soon as reasonably practicable. This Notice shall include: (1) a description of the event causing the delay or anticipated delay; (2) an estimate of the anticipated length of the delay; (3) a description of the measures taken or to be taken to avoid or minimize the delay; and (4) a proposed timetable for the implementation of the measures or performance of the obligation. The affected

Party shall make all reasonable efforts to promptly resume performance of the obligation. It shall provide Notice when it resumes performance of the obligation.

7.8 Waiver

The failure of any Party to insist, on any occasion, upon strict performance of any provision of this Settlement shall not be considered a waiver of any obligation, right or duty of, or imposed upon, such Party.

7.9 Governing Law

The New Project Licenses and any other terms of this Settlement over which a federal agency has statutory or regulatory jurisdiction shall be governed, construed, and enforced in accordance with the statutory and regulatory authorities of such agency. This Settlement shall otherwise be governed and construed under the laws of the State of California. By executing this Settlement, no federal agency is consenting to the jurisdiction of a state court unless such jurisdiction otherwise exists. All activities undertaken pursuant to this Settlement shall be in compliance with all applicable law.

7.10 Elected Officials Not to Benefit

No elected officials shall be entitled to any share or part of this Settlement or to any benefit that may arise from it.

7.11 Relationship of the Parties

Except as otherwise expressly set forth herein, nothing contained in this Settlement is intended or shall be construed to create an association, trust, partnership or joint venture, or impose any trust or partnership duty, obligation or liability on any Party, or create an agency relationship between or among the Parties or between any Party and any employee of any other Party.

7.12 No Changes to Existing Contracts and Agreements

This Settlement is entirely separate from and independent of other contracts and agreements among the Parties. This Agreement does not and will not be deemed to change any rights or obligations under previously executed contracts or agreements between or among the Parties except as may be provided in this Agreement.

7.13 Reference to Regulations

Any reference in this Settlement to any federal or state regulation shall be deemed to be a reference to such regulation, or successor regulation, in existence as of the date of the action at the time in question.

7.14 Notice

Except as otherwise provided in this Section, any Notice required by this Settlement shall be written. Notice shall be sent to all Parties still in existence by first-class mail or comparable method of distribution, and as applicable shall be filed with FERC. If practicable, Notice also shall be provided by e-mail or facsimile; *provided, however*, that for any proposed license amendment under Section 4.13.2 herein, the Licensee(s) shall provide Notice by e-mail and first-class mail. For the purposes of this Settlement, and unless otherwise specified, a Notice, including Notice via e-mail or facsimile, shall be effective upon receipt, but if provided by U.S. Mail, seven (7) days after the date on which it is mailed. When this Settlement requires Notice in fewer than seven (7) days, Notice shall be provided by telephone, facsimile or e-mail and shall be effective when provided. For the purpose of Notice, the list of authorized representatives of the Parties as of the Effective Date is attached as Appendix 5. The Parties shall provide Notice of any change in the authorized representatives designated in Appendix 5, and the Licensees shall maintain the current distribution list of such representatives. The Parties acknowledge their responsibility to keep the Licensees informed of their current address, telephone, facsimile and e-mail information, and that failure to provide the Licensees with current contact information will result in a waiver of that Party's right to Notice under this Settlement. Notice obligations under this Section 7.14 are in addition to any notice provisions required by applicable law.

7.15 Section Titles for Convenience Only

The titles for the Sections of this Settlement are used only for convenience of reference and organization, and shall not be used to modify, explain, or interpret any of the provisions of this Settlement or the intentions of the Parties. This Settlement has been jointly drafted by the Parties and therefore shall be construed according to its plain meaning and not for or against any Party.

8 Execution of Settlement

8.1 Signatory Authority

Each signatory to this Settlement certifies that he or she is authorized to execute this Settlement and to legally bind the Party he or she represents, and that such Party shall be fully bound by the terms hereof upon such signature without any further act, approval, or authorization by such Party.

8.2 Signing in Counterparts

This Settlement may be executed in any number of counterparts, and each executed counterpart shall have the same force and effect as an original instrument as if all the signatory Parties to all of the counterparts had signed the same instrument. Any signature page of this Settlement may be detached from any counterpart of this Settlement without impairing the legal effect of any signatures thereon, and may be attached to another

counterpart of this Settlement identical in form hereto but having attached to it one or more signature pages.

IN WITNESS THEREOF,

the Parties, through their duly authorized representatives, have caused this Settlement to be executed as of the date set forth in this Settlement.

Sacramento Municipal Utility District

Susan Patterson Date: 1/29/07
Susan Patterson, President, Board of Directors

Jan Schori Date: 1/29/07
Jan Schori, General Manager

Approved as to form:

Julie Annunzio

Pacific Gas and Electric Company

John S. Keenan Date: 1/29/07
John S. Keenan, Sr. VP Generation and Chief Nuclear Officer

United States Department of the Interior Fish and Wildlife Service

Ken McDermott Date: 1/29/07
by Ken McDermott, Deputy manager, CWO
(Print) (Title)

United States Department of the Interior National Park Service

_____ Date: _____
by _____
(Print) (Title)

United States Department of the Interior Bureau of Land Management

Mike Pool Date: 1/29/07
by Mike Pool, State Director
(Print) (Title)

IN WITNESS THEREOF,

the Parties, through their duly authorized representatives, have caused this Settlement to be executed as of the date set forth in this Settlement.

Sacramento Municipal Utility District

by _____
(Print) (Title)

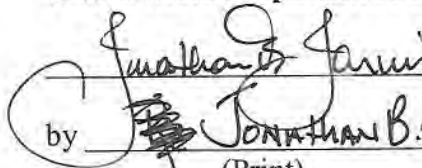

Pacific Gas and Electric Company

by _____
(Print) (Title)

United States Department of the Interior Fish and Wildlife Service

by _____
(Print) (Title)

United States Department of the Interior National Park Service


by  Jonathan B. Jarvis Regional Director, PWR
(Print) (Title)

United States Department of the Interior Bureau of Land Management

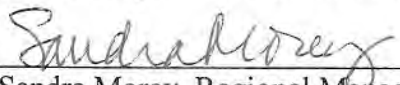
by _____
(Print) (Title)

United States Department of Agriculture Forest Service


For Bernard Weingardt, Regional Forester

Date: 01/29/07

California Department of Fish and Game


Sandra Morey, Regional Manager, North Central Region

Date: 01/29/07

California Department of Parks and Recreation

by _____
(Print) (Title)

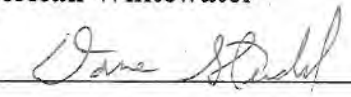
Date: _____

Friends of the River


by Ronald Stark Senior Policy Advocate
(Print) (Title)


Date: 01/29/07

American Whitewater


by Dave Steindorf California Stewardship Director
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Date: 1-29-07

California Sportfishing Protection Alliance


by Chris Shutes FERC Projects Director
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Date: January 29, 2007

United States Department of Agriculture Forest Service

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California Department of Fish and Game

by _____
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California Department of Parks and Recreation

Paul D. Romero
by *Paul D. Romero* *Chief Deputy Director*
(Print) (Title)

Friends of the River

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California Sportfishing Protection Alliance

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American River Recreation Association and Camp Lotus

Bill Center Date: 1/29/2007
by Bill Center, President ARRA
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Foothill Conservancy

R. Winston Bell Date: 01/29/07
R. Winston Bell

California Outdoors

Nathan Rangel Date: 1-29-07
by Nathan Rangel PA
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INDIVIDUAL SIGNATORIES TO THIS SETTLEMENT

Hilde Schweitzer, Private Boater

Hilde Schweitzer Date: 1-27-07

Theresa Simsiman, Private Boater

Theresa Simsiman Date: 1-29-07

Richard C. Platt, Private Citizen

Richard C. Platt Date: 1/29/07

APPENDIX 1

**PROPOSED LICENSE ARTICLES
FOR THE UPPER AMERICAN RIVER PROJECT, FERC NO. 2101**

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I. PROPOSED LICENSE ARTICLES TO ADDRESS THE EXISTING UARP

Article 1-1. Minimum Streamflows

The licensee shall, beginning as early as reasonably practicable within 3 months after license issuance, maintain minimum streamflows in Rubicon River below Rubicon Reservoir Dam, Little Rubicon River below Buck Island Reservoir Dam, Gerle Creek below Loon Lake Reservoir Dam, Gerle Creek below Gerle Creek Reservoir Dam, South Fork Rubicon River below Robbs Peak Reservoir Dam, South Fork Silver Creek below Ice House Reservoir Dam, Silver Creek below Junction Reservoir Dam, Silver Creek below Camino Reservoir Dam, Brush Creek below Brush Creek Reservoir Dam, and South Fork American River (SFAR) below Slab Creek Reservoir Dam. For compliance purposes, the point of measurement for each required minimum streamflow is described in the introduction to the minimum streamflow schedule for that particular stream reach. All specified streamflows are in cubic feet per second (cfs). The schedules specify minimum streamflows, by month and water year type, for each of the specified stream reaches.

The minimum streamflows specified in the schedules may be temporarily modified if required by equipment malfunction or operating emergencies reasonably beyond the control of the licensee. If the streamflow is so modified, the licensee shall provide Notice to FERC, FS, CDFG, FWS, and the SWRCB as soon as possible, but no later than 10 days after such incident. The minimum streamflows specified may also be temporarily modified for short periods in non-emergency situations 5 days after Notice to FERC, and upon approval of FS, CDFG, FWS, and SWRCB.

Where facility modification is required to maintain the specified minimum streamflows, the licensee shall complete such modifications as soon as reasonably practicable and no later than 3 years after license issuance. Prior to such required facility modifications, the licensee shall make a good-faith effort to provide the specified minimum streamflows within the capabilities of the existing facilities. In order for the licensee to adjust operations to meet the required minimum streamflows, the licensee shall have a 3-year period after the license is issued or 3 years after completion of necessary facility modifications, whichever is later, in which daily mean streamflows may vary up to 10 percent below the amounts specified in the minimum streamflow

schedules, provided that the average monthly streamflow in any given month equals or exceeds the required minimum streamflow for the month. After the applicable period, the licensee shall meet the minimum streamflow requirements specified in the minimum streamflow schedules.

Water Year Types. The minimum streamflow schedules have been separated into five water year types: Wet, Above Normal (AN), Below Normal (BN), Dry, and Critically Dry (CD). The licensee shall determine the water year type based on the water year forecast of unimpaired runoff in the American River below Folsom Lake published, near beginning of each month from February through May, in the California Department of Water Resources (DWR) Bulletin 120 "Report of Water Conditions in California." Specifically, the "American River Below Folsom Lake" forecast is currently shown in the "Water Year Forecast" column of the "Water Year Unimpaired Runoff" table in Bulletin 120. The water year types are defined as follows:

<u>Year Type</u>	<u>American River Water Year Forecast</u>
Wet	greater than or equal to 3.5 MAF
AN	greater than or equal to 2.6 MAF but less than 3.5 MAF
BN	greater than 1.7 MAF or equal to but less than 2.6 MAF
Dry	greater than 0.9 MAF or equal to but less than 1.7 MAF
CD	less than 0.9 MAF

Each February through May the licensee shall determine the water year type based on the DWR Bulletin 120 forecast and shall operate for that month based on that forecast beginning 3 days after issuance of the forecast and continuing until 2 days after issuance of a subsequent monthly forecast. The May forecast shall be used to establish the final water year type for the remaining months of the water year and the month of October. The water year type for the months of November through January shall be based on the Department of Water Resources' Full Natural Flow record for the American River at Folsom (California Data Exchange Center site AMF sensor 65) for the preceding water year, and the licensee shall operate based on that record beginning November 1. The licensee shall provide Notice to FS, FERC, CDFG, FWS, and SWRCB of the final water year type determination within 30 days of the May forecast.

Rubicon River below Rubicon Reservoir Dam

The licensee shall maintain the minimum streamflow specified in the following schedule based on month and water year type. During the months of March, April, and May, required modifications to minimum streamflows may occur within a 14-calendar day window beginning 7 calendar days prior to the first day of the month, if inclement weather conditions prevent access to the minimum streamflow release valve. However, the May minimum streamflow shall be no less than 30 days in duration. Minimum streamflows shall be measured at either USGS gage 11427960, located at the outlet structure on the Rubicon Reservoir Dam, or a new gaging station that is approved through the Streamflow and Reservoir Elevation Gaging Plan (Article 1-10).

Rubicon River Below Rubicon Reservoir Dam						
Month	Minimum Streamflow by Water Year (cfs)					
	CD	DRY	BN	AN	WET	
OCT	6 or NF*	6 or NF*	6 or NF*	6 or NF*	6 or NF*	
NOV	6 or NF*	6 or NF*	6 or NF*	6 or NF*	6 or NF*	
DEC	6 or NF*	6 or NF*	6 or NF*	6 or NF*	6 or NF*	
JAN	6 or NF*	6 or NF*	6 or NF*	6 or NF*	6 or NF*	
FEB	6 or NF*	6 or NF*	6 or NF*	6 or NF*	6 or NF*	
MAR	6 or NF*	8	15	15	15	
APR	8	12	20	20	20	
MAY	10	15	35	35	35	
JUNE	6 or NF*	8	15	15	15	
JULY	6 or NF*	6 or NF*	6 or NF*	6 or NF*	6 or NF*	
AUG	6 or NF*	6 or NF*	6 or NF*	6 or NF*	6 or NF*	
SEPT	6 or NF*	6 or NF*	6 or NF*	6 or NF*	6 or NF*	

*If Natural Flow (NF) measured in the Rubicon River above Rubicon Reservoir is below 1 cfs, the minimum streamflow shall be 1 cfs. In CD water year types, if the useable storage in Rubicon Reservoir is less than 60 acre-feet and the licensee cannot maintain 1 cfs due to lack of NF into and storage in Rubicon Reservoir, the licensee shall notify FS, CDFG, FWS, and SWRCB at least 30 days prior to not meeting the streamflow. After notification of FS, CDFG, FWS, and SWRCB, the licensee may reduce minimum flows below 1 cfs, but at no time shall the minimum streamflow be less than the NF into Rubicon Reservoir, until sufficient water is available to resume prescribed minimum streamflow releases.

The licensee shall maintain an over-wintering minimum pool of 6,527 feet in elevation in Rubicon Reservoir once the reservoir begins to freeze for the protection of aquatic species. Below an elevation of 6,527 feet, streamflow releases from Rubicon Reservoir shall equal the lesser of the applicable flow listed in the table or the NF into Rubicon Reservoir.

Little Rubicon River Below Buck Island Reservoir Dam

The licensee shall maintain the minimum streamflow specified in the following schedule based on month and water year type. During the months of March, April, and May, required modifications to minimum streamflows may occur within a 14-calendar day window beginning 7 calendar days prior to the first day of the month, if inclement weather conditions prevent access to the minimum streamflow release valve. However, the May minimum streamflow shall be no less than 30 days in duration. Minimum streamflows shall be measured at USGS gage 11428400, located at the outlet structure on Buck Island Reservoir Dam.

Little Rubicon River Below Buck Island Reservoir Dam						
Month	Minimum Streamflow by Water Year (cfs)					
	CD	DRY	BN	AN	WET	
OCT	1*	1*	1*	1*	1*	
NOV	1*	1*	1*	1*	1*	
DEC	1*	1*	1*	1*	1*	
JAN	1*	1*	1*	1*	1*	
FEB	1*	1*	1*	1*	1*	
MAR	1*	2	3	3	3	
APR	2	3	5	5	5	
MAY	2	3	8	8	8	
JUNE	1*	2	3	3	3	
JULY	1*	1*	1*	1*	1*	
AUG	1*	1*	1*	1*	1*	
SEPT	1*	1*	1*	1*	1*	

*If Natural Flow (NF) measured in Highland/Rockbound Creek above Buck Island Reservoir is below 1 cfs, the minimum flow shall be 1 cfs. In CD water year types, if the useable storage in Buck Island Reservoir is less than 60 acre-feet and the licensee cannot maintain 1 cfs due to lack of NF into and storage in Buck Island Reservoir, the licensee shall notify FS, CDFG, FWS, and SWRCB at least 30 days prior to not meeting the streamflow. After notification of FS, CDFG, FWS, and SWRCB, the licensee may reduce minimum flows below 1 cfs, but at no time shall the minimum streamflow be less than the NF into the Buck Island Reservoir, until sufficient water is available to resume prescribed minimum streamflow releases.

Gerle Creek Below Loon Lake Reservoir Dam

The licensee shall maintain the minimum streamflow specified in the following schedule based on month and water year type. Minimum streamflow shall be measured at USGS gage 11429500, located approximately 0.3 mile downstream from Loon Lake Reservoir Dam.

Gerle Creek Below Loon Lake Reservoir Dam						
Month	Minimum Streamflow by Water Year (cfs)					
	CD	DRY	BN	AN	WET	
OCT	7	11	16	20	23	
NOV	7	11	16	20	23	
DEC	8	13	18	22	26	
JAN	12	15	19	23	28	
FEB	14	18	22	27	32	
MAR	19	24	30	37	44	
APR	23	32	40	49	58	
MAY	25	32	40	49	58	
JUNE	10	16	22	27	32	
JULY	5	14	22	27	32	
AUG	5	10	14	17	20	
SEPT	5	10	14	17	20	

Gerle Creek Below Gerle Creek Reservoir Dam

The licensee shall maintain the minimum streamflow specified in the following schedule based on month and water year type. Minimum streamflow shall be measured at a new gaging device located immediately downstream of Gerle Creek Reservoir Dam.

Gerle Creek Below Gerle Reservoir Dam						
Month	Minimum Streamflow by Water Year (cfs)					
	CD	DRY	BN	AN	WET	
OCT	5	9	10	10	10	
NOV	4	4	6	6	6	
DEC	4	5	6	6	6	
JAN	5	6	6	6	6	
FEB	5	6	6	6	6	
MAR	7	10	12	9	9	
APR	9	12	15	9	9	
MAY	9	12	15	15	15	
JUNE	9	12	15	15	15	
JULY	7	10	13	15	15	
AUG	5	9	12	12	12	
SEPT	5	9	10	10	10	

South Fork Rubicon River Below Robbs Peak Reservoir Dam

The licensee shall maintain the minimum streamflow specified in the following schedule based on month and water year type. Minimum streamflow shall be measured at a new gaging device located immediately downstream of Robbs Peak Reservoir Dam.

South Fork Rubicon River Below Robbs Peak Reservoir Dam						
Month	Minimum Streamflow by Water Year (cfs)					
	CD	DRY	BN	AN	WET	
OCT	3	3	3	3	3	
NOV	1	2	3	3	3	
DEC	1	3	4	4	4	
JAN	2	5	7	7	7	
FEB	2	5	8	8	8	
MAR	3	7	11	9	9	
APR	4	9	13	10	10	
MAY	4	9	13	13	13	
JUNE	4	9	13	13	13	
JULY	3	5	6	13	13	
AUG	3	5	6	11	11	
SEPT	3	5	6	6	6	

South Fork Silver Creek Below Ice House Reservoir Dam

The licensee shall maintain the minimum streamflow specified in the following schedule based on month and water year type. Minimum streamflow shall be measured at USGS gage 11441500, located approximately 0.4 mile downstream from Ice House Reservoir Dam.

South Fork Silver Creek Below Ice House Reservoir Dam						
Month	Minimum Streamflow by Water Year (cfs)					
	CD	DRY	BN	AN	WET	
OCT	5	10	15	15	15	
NOV	5	7	8	8	8	
DEC	5	8	11	11	11	
JAN	6	12	18	18	18	
FEB	6	12	18	18	18	
MAR	8	16	24	24	24	
APR	15	28	41	41	41	
MAY	30	46	68	68	68	
JUNE	25	31	46	46	46	
JULY	21	21	30	30	30	
AUG	14	14	15	15	15	
SEPT	10	10	15	15	15	

Silver Creek Below Junction Reservoir Dam

The licensee shall maintain the minimum streamflow specified in the following schedule based on month and water year type. Minimum streamflow shall be measured at USGS gage 11441800, located at the outlet structure on Junction Reservoir Dam.

Silver Creek Below Junction Reservoir Dam						
Month	Minimum Streamflow by Water Year (cfs)					
	CD	DRY	BN	AN	WET	
OCT	5	10	15	15	15	
NOV	5	7	20	20	20	
DEC	5	8	20	20	20	
JAN	6	12	20	20	20	
FEB	6	12	20	20	20	
MAR	8	16	25	25	25	
APR	15	28	42	42	42	
MAY	30	46	68	68	68	
JUNE	25	31	50	59	59	
JULY	21	21	30	35	35*	
AUG	14	14	15	18	18*	
SEPT	10	10	15	18	18*	

*The licensee shall be required to release additional water into Silver Creek below Junction Reservoir Dam annually in the months of July, August, and/or September in Wet water year

types for temperature control upon approval of the SWRCB, CDFG, FWS, and FS. A block of water shall not exceed the acre-feet of water described in the table below. Within 1 year of license issuance, the licensee shall, in consultation with SWRCB, CDFG, FWS, and FS, develop a plan for the block of water that addresses, at a minimum: notification protocols for temperature exceedances, emergency temperature operation contingencies, and ecological monitoring needs associated with use of the block of water. The plan shall be approved by SWRCB, CDFG, FWS, and FS.

The licensee shall release the block of water as directed by SWRCB, CDFG, FWS, and FS to maintain mean daily water temperatures of 20°C or below in this reach. The Block of Water shall become available if water temperature in Silver Creek below Junction Reservoir Dam exceeds a mean daily water temperature of 20°C, as measured at Silver Creek immediately upstream of Camino Reservoir. The licensee shall install and maintain a temperature gage on Silver Creek immediately upstream of Camino Reservoir to measure water temperature in Silver Creek below Junction Reservoir Dam. The licensee shall, promptly but not later than within 24 hours, notify the SWRCB, CDFG, FWS, and FS if the water temperatures in Silver Creek below Junction Reservoir Dam exceed the water temperature criteria above.

If the water temperature criterion is exceeded, the licensee may be required to monitor for presence of foothill yellow-legged frog life prior to and after the release of the Block of Water.

The Block of Water specified shall be the total amount of additional water available for release in the specified time periods. The Block of Water shall be made available concurrent with implementation of the initial minimum streamflows and through the remainder of the license term.

Adaptive Management Block of Water for Water Temperature Moderation Silver Creek Below Junction Reservoir Dam		
	Month	
	JULY	1044*
	AUG	491*
	SEPT	475*

*All values referenced above are in acre-feet.

Silver Creek Below Camino Reservoir Dam

The licensee shall maintain the minimum streamflow specified in the following schedule based on month and water year type. Minimum streamflow shall be measured at USGS gage 11441900, located approximately 0.4 mile downstream from Camino Reservoir Dam. Facilities improvements to provide these flows may include new release valves and/or installation of a new minimum flow turbine.

Silver Creek Below Camino Reservoir Dam						
Month	Minimum Streamflow by Water Year (cfs)					
	CD	DRY	BN	AN	WET	
OCT	5	10	15	15	15	
NOV	5	7	20	20	20	
DEC	5	8	20	20	20	
JAN	6	12	20	20	20	
FEB	6	12	20	20	20	
MAR	8	16	25	25	25	
APR	15	28	42	42	42	
MAY	30	46	68	68	68	
JUNE	25	31	50	59	59	
JULY	21	21	30	35	35*	
AUG	14	14	15	18	18*	
SEPT	10	10	15	18	18*	

*The licensee shall be required to release additional water into Silver Creek below Camino Reservoir Dam annually in the months of July, August, and/or September in Wet water year types for temperature control upon approval of the SWRCB, CDFG, FWS, and FS. A block of water shall not exceed the acre-feet of water described in the table below. Within 1 year of license issuance, the licensee shall, in consultation with SWRCB, CDFG, FWS, and FS, develop a plan for the block of water that addresses, at a minimum: notification protocols for temperature exceedances, emergency temperature operation contingencies, and ecological monitoring needs associated with use of the block of water. The plan shall be approved by SWRCB, CDFG, FWS, and FS.

The licensee shall release the block of water as directed by SWRCB, CDFG, FWS, and FS to maintain mean daily water temperatures of 20°C or below in this reach. The Block of Water shall become available if water temperature in Silver Creek below Camino Reservoir Dam exceeds a mean daily water temperature of 20°C, as measured at Silver Creek immediately upstream of SFAR (at or near discontinued USGS gage 11442000, licensee station SC1). The licensee shall install and maintain a temperature gage on Silver Creek upstream of SFAR at or near the site of discontinued USGS gage 11442000 (licensee station SC1). Within 2 years of license issuance, the licensee shall develop and install a telemetry system that provides daily access to hourly temperature monitoring data. The licensee shall, promptly but not later than within 24 hours, notify the SWRCB, CDFG, FWS, and FS if the water temperatures in Silver Creek below Camino Reservoir Dam exceed the water temperature criteria above.

If the water temperature criterion is exceeded, the licensee may be required to monitor for presence of foothill yellow-legged frog life prior to and after the release of the Block of Water.

The Block of Water specified shall be the total amount of additional water available for release in the specified time periods. The Block of Water shall be made available concurrent with implementation of the initial minimum streamflows and through the remainder of the license term.

Adaptive Management Block of Water for Water Temperature Moderation		
Silver Creek Below Camino		
Reservoir Dam		
	Month	
	JULY	1044*
	AUG	491*
	SEPT	475*

*All values referenced above are in acre-feet.

Facilities improvements to provide these flows may include new release valves and/or installation of a new minimum flow turbine.

Brush Creek Below Brush Creek Reservoir Dam

The licensee shall maintain the minimum streamflow specified in the following schedule based on month and water year type. Minimum streamflow shall be measured at USGS gage 11442700, located at the outlet structure on Brush Creek Reservoir Dam.

Brush Creek Below Brush Creek Reservoir Dam						
	Month	Minimum Streamflow by Water Year (cfs)				
		CD	DRY	BN	AN	WET
	OCT	4 or NF*	4 or NF*	4 or NF*	4 or NF*	4 or NF*
	NOV	6 or NF*	7 or NF*	8 or NF*	9 or NF*	9 or NF*
	DEC	6 or NF*	7 or NF*	8 or NF*	9 or NF*	10 or NF*
	JAN	6 or NF*	7 or NF*	8 or NF*	9 or NF*	10 or NF*
	FEB	6 or NF*	7 or NF*	8 or NF*	9 or NF*	10 or NF*
	MAR	6 or NF*	7 or NF*	8 or NF*	9 or NF*	10 or NF*
	APR	6 or NF*	7 or NF*	8 or NF*	9 or NF*	10 or NF*
	MAY	6 or NF*	7 or NF*	8 or NF*	9 or NF*	10 or NF*
	JUNE	6 or NF*	7 or NF*	8 or NF*	9 or NF*	9 or NF*
	JULY	5 or NF*	5 or NF*	5 or NF*	5 or NF*	5 or NF*
	AUG	4 or NF*	4 or NF*	4 or NF*	4 or NF*	4 or NF*
	SEPT	3 or NF*	3 or NF*	3 or NF*	3 or NF*	3 or NF*

*If Natural Flow (NF) measured in Brush Creek above Brush Creek Reservoir is below 1 cfs, the minimum flow shall be 1 cfs.

South Fork American River Below Slab Creek Reservoir Dam

The licensee shall maintain the minimum streamflow specified in the following schedule based on month and water year type for years 1 through 3 of the new license in order to allow facility modifications to be completed at this location. In months with more than one minimum streamflow, the licensee shall maintain each minimum streamflow listed for 1 week prior to reducing to the next minimum streamflow for the month. Minimum streamflow shall be measured at USGS gage 11443500, located approximately 500 feet upstream from Iowa Canyon Creek.

South Fork American River Below Slab Creek Reservoir Dam						
Years 1-3						
Month	Minimum Streamflow by Water Year (cfs)					
	CD	DRY	BN	AN	WET	
OCT	63	63	70	80	90	
NOV	63	63	70	80	90	
DEC	63	63	70	80	90	
JAN	63	63	70	80	90	
FEB	63	63	70	80	90	
MAR	63	101	110-130-150-180	110-130-150-180	110-130-150-180	
APR	100	101-132-156-183	188-197-213-222	188-197-213-222	188-197-213-222	
MAY	109	164-145-126-107	229-236-247-263*	229-236-247-263*	229-236-247-263*	
JUNE	90	90	228-193-158-123	228-193-158-123	228-193-158-123	
JULY	77	90	90	90	90	
AUG	63	70	70	70	70	
SEPT	63	63	70	70	70	

*Or maximum capacity of the existing valve, whichever is less.

The licensee shall maintain the minimum streamflow specified in the following schedule based on month and water year type for years 4 through the new license term. Facilities improvements may include new release valves and/or higher capacity minimum flow turbine upgrade to current facilities.

South Fork American River Below Slab Creek Reservoir Dam						
Years 4 through License Term						
Month	Minimum Streamflow by Water Year (cfs)					
	CD	DRY	BN	AN	WET	
OCT	63	63	70	80	90	
NOV	63	63	70	80	90	
DEC	63	63	70	80	90	
JAN	63	63	70	80	90	
FEB	63	63	70	80	90	
MAR	63	101	110-130-150-180	110-130-150-180	110-130-150-180	
APR	100	110-130-150-183	222-236-247-263	222-236-247-263	222-236-247-263	
MAY	109	164-145-126-107	272-286-297-303	272-316-367-395*	272-337-287-415*	
JUNE	90	90	255-210-165-120	324-256-188-120	352-274-197-120	
JULY	77	90	90	90	90	
AUG	63	70	70	70	70	
SEPT	63	63	70	70	70	

*Or maximum capacity of the new retrofit valve, whichever is less.

Article 1-2. Pulse Flows

General

The licensee shall, beginning as early as reasonably practicable within 3 months after license issuance, but not prior to the implementation of the new minimum streamflows, provide annual pulse flow events in Rubicon River below Rubicon River Reservoir Dam, Gerle Creek below Loon Lake Reservoir Dam, and South Fork Silver Creek below Ice House Reservoir Dam as specified in the following pulse flow schedule by

water year type.

For compliance purposes, the point of measurement for each required pulse flow is included. All specified pulse flows are in cubic feet per second (cfs). Pulse flows do not need to be implemented in water years where natural spill events provide flows of equivalent magnitude and duration during either (1) spring snowmelt runoff or (2) a natural storm event that occurs in the months of January through May in the specific watershed in which a pulse flow is required.

The pulse flows specified in the following schedule may be temporarily modified if required by equipment malfunction or operating emergencies reasonably beyond the control of the licensee. If a pulse flow is so modified, the licensee shall provide Notice to FS, FERC, CDFG, FWS, and SWRCB as soon as possible but no later than 10 days after such incident. The pulse flows specified may also be temporarily modified for short periods in non-emergency situations upon approval of FS, FERC, CDFG, FWS, and SWRCB.

Where facility modification is required to provide the specified pulse flows, the licensee shall make such modifications as soon as reasonably practicable and no later than 3 years after license issuance. Prior to such required facility modifications, the licensee shall make a good-faith effort to provide the specified pulse flows within the capabilities of the existing facilities.

Rubicon River Below Rubicon Reservoir Dam

The licensee shall provide a pulse flow in Rubicon River below Rubicon Reservoir Dam in BN, AN, and Wet water years to coincide with winter storm events or spring snowmelt runoff in the Rubicon River watershed. The objective is to provide at least 600 cfs of flow for 3 days during this time period. A natural spill of 3,600 acre-feet or more within 3 consecutive days that coincides with a winter storm event or spring snowmelt runoff satisfies the pulse flow requirement for the water year.

If a pulse flow does not occur naturally, the pulse flow shall be provided by using the existing flashboards at the Rubicon Tunnel headworks. Prior to pulse flow events, the licensee shall meet with FS, CDFG, SWRCB, FWS, and the Consultation Group provided under Section 4.12.1 of the Relicensing Settlement Agreement to evaluate snowpack conditions in the Rubicon River watershed and determine the appropriate gate elevation (at or above 6,539 feet) and/or timing for tunnel gate installation. Upon agreement of the parties and approval of the FS, the licensee shall install and lower the tunnel gates as agreed to in the meeting.

The tunnel gates may be removed after one of the following events occurs: (1) the April or May DWR Bulletin 120 indicates a Dry or CD water year type, (2) the flashboards have been installed for a minimum of 60 days, (3) a pulse flow event of 3,600 acre-feet occurs within 3 consecutive days, or (4) at least 3,600 acre-feet of water has spilled over the main and auxiliary dams over a 10-day period.

Subsequent to removal of the tunnel gates, the licensee shall meet with the FS, CDFG, SWRCB, FWS, and the Consultation Group to evaluate whether or not the pulse flow objective was met and how tunnel gate operations might be changed to meet the pulse flow objective in future

years. The quantity and/or duration threshold in item 4, above, may also be re-evaluated during this meeting.

The pre- and/or post- pulse flow meetings described above may be discontinued if the licensee, CDFG, SWRCB, FWS, and the Consultation Group agree upon a tunnel gate operation plan that is approved by the FS that governs future tunnel gate operations for pulse flow events.

The pulse flows shall be measured at either USGS gage 11427960, located at the outlet structure on Rubicon Reservoir Dam, or at a new gaging station located downstream of the confluence of the spillway on the main dam and the spillway on the auxiliary dam.

Gerle Creek Below Loon Lake Reservoir Dam

The licensee shall provide pulse flows timed to coincide with spring snowmelt runoff as specified in the following schedule based on month and water year type. The pulse flows shall be measured at USGS gage 11429500, located approximately 0.3 mile downstream from Loon Lake Reservoir Dam.

Gerle Creek Below Loon Lake Reservoir Dam Pulse Flows			
	BN	AN	Wet
Day 1	125	200	600
Day 2	125	200	600
Day 3	180	250	740*
Day 4	125	200	600
Day 5	125	200	600

*Or maximum capacity of outlet works, whichever is less.

Prior to implementing the pulse flows in Gerle Creek below Loon Lake Reservoir Dam and within 2 years of license issuance, the licensee shall complete the following:

1. A sensitive site investigation that includes additional permanent cross-sections that characterize the upper and middle Rosgen Level 3 analysis reaches. Areas of unstable banks and downed logs that are obstructing streamflow shall be mapped. A professional riparian ecologist shall participate in the investigation.
2. Test pulse releases shall be made from the outlet works at different levels up to the prescribed 740 cfs or the maximum capacity of the outlet works, whichever is less, to determine the appropriate pulse flows for the desired channel conditions.
3. Analysis of the effects of the pulse flows on downstream features including bridges, campgrounds, and day-use areas for potential impacts from the pulse flows.

Once these items are completed, FS may adjust the prescribed pulse flows, if necessary, based on the results of the investigation and objectives of restoring the stream channel to a proper functioning condition. The final pulse flows shall not exceed those described in the pulse flow schedule.

South Fork Silver Creek Below Ice House Reservoir Dam

The licensee shall provide pulse flows as specified in the following schedule based on month and water year type.

Pulse flows may be timed to coincide with winter storm events in the period between December 15 and April 10. Pulse flow events timed with winter storm events prior to April 10 shall be based on the prior water year type and shall be deemed complete regardless of water year type revisions after the pulse flow event has taken place. The licensee shall notify FS, CDFG, FWS, and SWRCB prior to or immediately after the pulse flow event.

Pulse flows after April 10 shall be timed to coincide with spring snowmelt runoff. The specific timing of such pulse flow events shall be approved by FS, CDFG, FWS, and SWRCB.

The pulse flows shall be measured at USGS gage 11441500, located approximately 0.4 mile downstream from Ice House Reservoir Dam.

South Fork Silver Below Ice House Reservoir Dam Pulse Flows			
	BN	AN	Wet
Day 1	450	550	600
Day 2	450	550	600
Day 3	550	650	780*
Day 4	450	550	600
Day 5	450	550	600

*Or maximum capacity of outlet works, whichever is less.

Article 1-3. Ramping Rates

The licensee shall, beginning as early as reasonably practicable within 3 months after license issuance, use a ramping rate of 1 foot per hour when making the following licensee-controlled releases:

1. Pulse flow releases in Gerle Creek below Loon Lake Reservoir Dam and South Fork Silver Creek below Ice House Reservoir Dam.
2. Minimum streamflow releases in Silver Creek below Junction Reservoir Dam, Silver Creek below Camino Reservoir Dam, and SFAR below Slab Creek Reservoir Dam.
3. Recreational streamflow releases in South Fork Silver Creek below Ice House Reservoir Dam and SFAR below Slab Creek Reservoir Dam.

The ramping rate shall be measured at the streamflow gaging stations located immediately downstream of each of the release points. Where facility modification is required to provide the specified ramping rates, the licensee shall complete such modifications as soon as reasonably practicable and no later than 3 years after license issuance. Prior to such required facility

modifications, the licensee shall make a good-faith effort to provide the specified ramping rates within the capabilities of the existing facilities.

The licensee shall make available to FS, CDFG, FWS, and SWRCB the streamflow records related to ramping rates upon request. The licensee shall be excused from complying with the ramping rate requirements in the event of law enforcement or search and rescue activities, Division of Safety of Dams compliance requirements, equipment malfunction or failure that is directly related to providing the specified ramping rates, or a large storm event that is beyond its ability to control. The licensee shall provide notice to FS, CDFG, FWS, and SWRCB within 10 days after such an event occurs and shall provide a report documenting the reason that ramping rates were not followed within 1 month after such an event occurs.

Article 1-4. Coordination with Chili Bar Licensee

Coordination of Operations

The licensee shall coordinate operation of the Project with the licensee of the Chili Bar Project, FERC No. 2155 (Chili Bar) in order to enable the Chili Bar licensee to comply with the following articles in the Chili Bar license: Article 2-1 (minimum streamflows), Article 2-2 (ramping rates), and Article 2-15 (recreational streamflows). The licensee's responsibilities for achieving coordinated operations of the two projects are described in Exhibit 1 of the January 29, 2007 *Cooperation Agreement Between Sacramento Municipal Utility District and Pacific Gas and Electric Company Regarding Upper American River Project and Chili Bar Project*. Within 120 days after license issuance, the licensee shall, jointly with the Chili Bar licensee, prepare and file with FERC for approval a plan for coordinated operations of the two projects as described in Exhibit 1. Upon FERC approval, the Licensee shall implement the plan, including any changes required by FERC.

Coordination in Implementing Certain License Conditions

The licensee shall consult and coordinate with the licensee of the Chili Bar Project, FERC No. 2155 (Chili Bar), as described in Exhibit 2 of the *[date] Cooperation Agreement Between Sacramento Municipal Utility District and Pacific Gas and Electric Company Regarding Upper American River Project and Chili Bar Project* in implementation of the following articles in the Chili Bar license: Article 2-1 (minimum streamflows), Article 2-2 (ramping rates), Article 2-4 (monitoring program), Article 2-5 (adaptive management program), Article 2-6 (sediment management plan), Article 2-14 (public information services), and Article 2-15 (recreational streamflows).

Article 1-5. Monitoring Program

The licensee shall implement the following Monitoring Program after license issuance and through the term of the new license and any annual licenses, in coordination with FS, CDFG, FWS, and SWRCB.

The licensee shall ensure that the final monitoring plan for each element of the Monitoring Program is reviewed and approved by FS, CDFG, FWS, and SWRCB prior to implementation of the monitoring element, as described under each monitoring element.

FS, CDFG, FWS, and SWRCB have the flexibility to 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 objective has been met or no change in resource response is expected. Within the scope of the specified monitoring program, FS, CDFG, FWS, and SWRCB may select an equal number of alternative years to ensure that surveys occur during a range of water year types.

The licensee shall file with FERC by June 30 of each year an annual report fully describing the monitoring efforts of the previous calendar year. FS, CDFG, FWS, and SWRCB shall have at least 30 days to review and comment on the draft report prior to filing with FERC. The licensee shall provide copies of the annual report to FS, CDFG, FWS, and SWRCB.

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 establishing compliance with license conditions, and (c) monitoring and studies shall be as cost-effective as possible.

For purposes of the ecological resources adaptive management program, 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 new license is issued. Where years are specified, Year 1 is the first year during which all initial minimum streamflows required by the license are implemented by May 1.

1. Fish Populations

Within 2 years of license issuance, the licensee shall develop a fish population monitoring plan in consultation with FS, CDFG, FWS, and SWRCB. The licensee shall provide FS, CDFG, FWS, and SWRCB a 90-day review and approval period for the monitoring plan prior to implementation. The licensee shall implement the plan upon approval.

Method: Electrofishing and/or snorkeling (as conducted in 2002-2003 by the licensee) during late summer/fall for rainbow trout at all stations listed below, brown trout in the Gerle Creek below Loon Lake Reservoir Dam Reach only, and hardhead sampling in SFAR below Slab Creek Reservoir Dam Reach only:

- a. Rubicon River below Rubicon Reservoir Dam (upper and lower sample section of sites RRD-F1 and RRD-F2).

- b. Little Rubicon River below Buck Island Reservoir Dam (upper sample section of site BID-F1).
- c. Gerle Creek below Loon Lake Reservoir Dam (upper and lower sample section of sites LLD-F1 and LLD-F2).
- d. Gerle Creek below Gerle Creek Reservoir Dam (upper and lower sample section of site GCD-F1).
- e. South Fork Rubicon River below Robbs Peak Reservoir Dam (upper and lower sample section of site RPD-F1).
- f. South Fork Silver Creek below Ice House Reservoir Dam (upper and lower sample section of sites IHD-F1 and IHD-F2).
- g. Silver Creek below Junction Reservoir Dam (upper and lower sample section of site JD-F1).
- h. Silver Creek below Camino Reservoir Dam (upper and lower sample section of site CD-F1).
- i. Brush Creek below Brush Creek Reservoir Dam (site BCD-F1). This site shall be surveyed once every 10 years after license issuance.
- j. SFAR below Slab Creek Reservoir Dam (electrofishing at upper and lower sample section of site SCD-F2). Hardhead snorkeling shall be conducted from immediately downstream of Mosquito Road Bridge to and including site SCD-F2.

Frequency: Rainbow trout and brown trout: Years 5, 6, 10, 11, 15, 16, and thereafter for 2 consecutive years during every 10 years for the term of the license. Hardhead: Years 2, 3, 5, 6, 10, 11, 15, 16 and thereafter for 2 consecutive years during every 10 years for the term of the license.

Rationale: Sampling for 2 years in the beginning of each 5-year period provides a mean of 2 years for comparison to the ecological resource biomass objectives and reduces electroshocking effects to individuals, with sufficient response time to the new streamflow regimes. Hardhead sampling in years 2 and 3 will provide evaluation of initial response to the new flow regime.

2. Aquatic Macroinvertebrates

Within 2 years of license issuance, the licensee shall develop an aquatic macroinvertebrate monitoring plan in consultation with FS, CDFG, FWS, and SWRCB. The licensee shall provide FS, CDFG, FWS, and SWRCB a 90-day review and approval period for the monitoring plan prior to implementation. The licensee shall implement the plan upon approval.

Method: A method accepted by FS, CDFG, FWS, and SWRCB. The results shall be compared to an aquatic health index approved by FS, CDFG, FWS, and SWRCB. The following sites shall be included:

- a. Rubicon River below Rubicon Reservoir Dam (RR-I3).
- b. Gerle Creek below Loon Lake Reservoir Dam (LL-I2).
- c. Gerle Creek below Gerle Reservoir Dam (impaired reach) (GC-I2).
- d. South Fork Rubicon River below Robbs Peak Reservoir Dam (RPD-I2).
- e. South Fork Silver Creek below Ice House Reservoir Dam (impaired reach) (IH-I2).
- f. Silver Creek below Junction Reservoir Dam (JD-I1 and JD-I2).
- g. Silver Creek below Camino Reservoir Dam (CD-I2 and CD-I3).
- h. SFAR below Slab Creek Reservoir Dam (SC-I2).

Reference streams that were sampled as part of the macroinvertebrate monitoring program during the relicensing shall be incorporated into the monitoring program if FS, CDFG, FWS, and SWRCB determine they are necessary. Reference sites may be substituted upon approval by FS, CDFG, FWS, and SWRCB.

Frequency: Years 5, 6, 10, 11, 15, 16, and thereafter for 2 consecutive years during every 10 years for the term of the license.

Rationale: Compare sites to reference reaches to ensure they have improvement if impaired or maintenance if not (California Energy Commission IBI).

3. Amphibians & Reptiles (Habitat Evaluation & Determination of Species Presence/Distribution for Foothill Yellow-Legged Frog (FYLF), and Western Pond Turtle (WPT))

Foothill Yellow-legged Frog

Within 1 year of license issuance, the licensee shall develop an amphibian and reptile habitat evaluation and species presence monitoring plan in consultation with FS, CDFG, FWS, and SWRCB. The licensee shall provide FS, CDFG, FWS, and SWRCB a 90-day review and approval period for the monitoring plan prior to implementation. The licensee shall implement the plan upon approval.

Methods: Conduct protocol surveys for sensitive species using the procedures of Pacific Gas and Electric Company (2002) or the most current standard in a sub-sample of appropriate habitat types to document species presence and distribution. Identify amphibian breeding and larval periods in Project-affected reaches by periodically surveying reaches of known presence during spring/summer. Qualifications of surveyors shall be reviewed and meet approval of FS, FWS, and CDFG prior to commencing work. The licensee shall also survey for WPT during amphibian and reptile surveys.

The first year of surveys shall be to determine the timing and success of the following life stages of existing known populations: egg laying, tadpole rearing, metamorphosis, and size/condition of metamorphs in late September to estimate probability of overwintering success. The monitoring shall also include the placement of micro hydrothermographs for years 1 – 5 in the stream margin habitats associated with known or suitable breeding sites in the reach below Camino Reservoir Dam and the reach below Slab Creek Reservoir Dam. A minimum of six recorders shall be deployed to ensure that an adequate sample size is attained. For subsequent years, FS, FWS, CDFG, and SWRCB may approve a subset of survey sites or a less intensive program, based on review of the first year's data. In the future, FS, FWS, CDFG, and SWRCB may request additional breeding site habitat data to assess the cause of unexpected or chronic reproductive failures that may be related to Project operations. Licensee shall also survey for western pond turtles during FYLF surveys.

Foothill yellow-legged frog Monitoring Sites:

- a. Silver Creek below Junction Reservoir Dam (site associated with site JDF2).
- b. Silver Creek below Camino Reservoir Dam (C-A3 and SFA-A4).
- c. SFAR below Slab Creek Reservoir (entire reach between and including SCA-6a and SCA-4).
- d. Rock Creek, a tributary located upstream of the White Rock Powerhouse from the confluence with the SFAR to a point 1 mile upstream. This distance may be shortened if it is determined that there is a barrier to movement of FYLF.

Spill flows that occur after water temperatures rise above 12°C mean daily temperature for a 7-day running average (refer to Article 1-6, number 9) at SFAR 6 shall be monitored in the reach below Rock Creek and CA-3 in the reach below Camino Reservoir Dam for effects to aquatic species (amphibians, fish, and aquatic reptiles) as soon as possible after the decline of the spill.

Frequency: (1) Silver Creek below Junction Reservoir Dam: Years 2, 3, 5, 10, 15 and thereafter for every 5 years for the term of the license; (2) SFAR below Slab Creek Reservoir Dam and Silver Creek below Camino Reservoir Dam, spill flows as soon as possible after the decline of this spill; (3) Silver Creek below Camino Reservoir Dam: Years 1, 2, 3, 5, 6, 10, 11, 15, 16 and thereafter for 2 consecutive years during

every 5 years for the term of the license; and (4) SFAR below Slab Creek Reservoir Dam: Years 1, 2, 3, 4, 5, 6, 10, 11, 15, 16 and thereafter for 2 consecutive years during every 5 years for the term of the license; and Rock Creek: Years 1, 2, 3.

Rationale: Determination of presence and distribution of sensitive amphibian species and identification of breeding and larval periods are important in evaluating potential impacts resulting from streamflow modifications (particularly short-term fluctuations and the proposed October recreational boating flows in the SFAR below Slab Creek Reservoir). FYLF monitoring shall determine if any threshold is reached from Project streamflow changes or fluctuations where this species is being affected in any life stage. Monitoring each 5-year period provides an index of changes in amphibian populations, following sufficient response time to streamflow modifications.

Monitoring SFAR below Slab Creek Reservoir Dam and Silver Creek below Camino Reservoir Dam spill flows will assist in determining if there are effects to aquatic species (amphibians, fish, and aquatic reptiles) from untimely spills. Monitoring in the stream margin habitats associated with known or suitable breeding sites in the reach below Camino Reservoir Dam and the reach below Slab Creek Reservoir Dam (years 1 – 5) will establish the mean water temperature trigger for FYLF breeding for these rivers. Suitable water temperatures to initiate FYLF breeding are suspected to be site-specific to the river system (Kupferberg, personal comm. 2006), thus water temperatures suitable for breeding on one river cannot be extrapolated to another. Monitoring on Rock Creek will provide information on whether FYLFs are using this main primary tributary of the reach below Slab Creek Dam, which will assist in determining whether FYLF movement is possible between Rock Creek (1mile distance) to the SFAR.

Mountain Yellow-legged Frog

Within 2 years of license issuance, the licensee shall develop a mountain yellow-legged frog monitoring plan in consultation with FS, CDFG, FWS, and SWRCB. The licensee shall provide FS, CDFG, FWS, and SWRCB a 90-day review and approval period for the monitoring plan prior to implementation. The licensee shall implement the plan upon approval.

Method: Protocol surveys for sensitive species using the procedures of CDFG (2001) in a subsample of appropriate habitat types to document species presence and distribution. Surveys shall focus on presence of the larval stage at sites by periodically surveying reaches of known presence during spring/summer. Qualifications of surveyors shall be reviewed and meet approval of FS, FWS, and CDFG prior to commencing work. If CDFG or FS collect data associated with Rubicon Reservoir, Rockbound Lake, and Buck Island Reservoir, that information can be used to satisfy this requirement after FS, CDFG, FWS, and SWRCB review results and approve use of these data.

Mountain yellow-legged frog Monitoring Sites:

- a. Rubicon Reservoir

- b. Rockbound Lake
- c. Buck Island Reservoir

Frequency: Years 5, 10, 15 and thereafter for every 10 years for the term of the license.

Rationale: Determination of presence and distribution of sensitive amphibian species are important in evaluating long-term population trends. Monitoring at the end of each 5-year period provides an index of changes in amphibian populations.

4. Amphibians (Foothill Yellow-Legged Frog Flow Fluctuations) (Also refer to number 3, above, related to spill flows.)

Within 1 year of license issuance, the licensee shall develop an amphibian flow fluctuation monitoring plan in consultation with FS, CDFG, FWS, and SWRCB. The licensee shall provide FS, CDFG, FWS, and SWRCB a 90-day review and approval period for the monitoring plan prior to implementation. The licensee shall implement the plan upon approval.

Method: Conduct visual surveys for FYLF in Silver Creek below Camino Reservoir Dam at any time June through September when (1) the streamflows are 100 cfs or less and (2) the flows fluctuate more than 40 cfs or more over 1 week's time. Water velocities and discharge shall be recorded. To the extent possible, the licensee shall provide advance notification to FS, SWRCB, FWS, and CDFG if such fluctuations are going to occur and shall conduct visual surveys as described above prior to and after the fluctuations.

Frequency: See above. The surveys can be discontinued if FS, SWRCB, FWS, and CDFG determine that the flow fluctuations can occur without resulting in egg mass or tadpole displacement.

Rationale: Determine if flow fluctuations are displacing egg masses or tadpoles.

5. Riparian Vegetation Monitoring

Within 2 years of license issuance, the licensee shall develop a riparian vegetation monitoring plan in consultation with FS, CDFG, FWS, and SWRCB. The licensee shall provide FS, CDFG, FWS, and SWRCB a 90-day review and approval period for the monitoring plan prior to implementation. The licensee shall implement the plan upon approval.

Method: Aerial photo flights and Greenline method at the 15 Intensive Field Study Sites (riparian) that were surveyed in the Riparian Study filed at FERC as part of the licensee's application for new license on July 15, 2005. Data collected at each site will include transects to document species composition, percent cover, and quantification of length and width of riparian community.

Frequency: Years, 5, 10, 15, and thereafter for every 10 years for the term of the license.

Rationale: Monitoring at the end of each 5-year period provides an index of changes in riparian conditions over that period of modified streamflow (it should be noted that, depending on the water year cycle that occurs, 5 years may be a relatively short response time for riparian vegetation) to determine if riparian areas are in proper functioning condition and if riparian areas are being maintained or in need of restoration.

6. Algae Species Identification and Monitoring

Within 1 year of license issuance, the licensee shall develop an algae species identification and monitoring plan in consultation with FS, CDFG, FWS, and SWRCB. The licensee shall provide FS, CDFG, FWS, and SWRCB a 90-day review and approval period for the monitoring plan prior to implementation. The licensee shall implement the plan upon approval.

Method: Collect, identify, and archive samples of the species of algae inhabiting the stream channel of Silver Creek below Junction Reservoir Dam using a lab approved in consultation with FS, CDFG, FWS, and SWRCB (USEPA Fact Sheet, 2005). Additional baseline samples shall be collected in South Fork Rubicon River below Robbs Peak Reservoir Dam, Silver Creek below Camino Reservoir Dam, and SFAR below Slab Creek Reservoir Dam. Additional sites or reaches may be added should algal species be deemed to have negative effects upon the aquatic ecosystem.

Frequency: A sampling visit to obtain enough material for a positive identification to species.

Rationale: The algae in Silver Creek below Junction Reservoir Dam is a water quality concern and may be an indicator of water temperature, nitrate, or other imbalance issues. Additionally, documentation of baseline algal species in South Fork Rubicon River below Robbs Peak Reservoir Dam, Silver Creek below Camino Reservoir Dam, and SFAR below Slab Creek Reservoir Dam will allow assessment of the distribution and possible adverse affects in Project-affected reaches. Identification to species would determine whether this algae is a native or invasive species.

7. Geomorphology (Sensitive Site Investigation and Mitigation Plan Development)

Within 6 months of license issuance, the licensee shall develop a geomorphology sensitive site investigation and mitigation monitoring plan in consultation with FS, CDFG, FWS, and SWRCB. The licensee shall provide FS, CDFG, FWS, and SWRCB a 90-day review and approval period for the monitoring plan prior to implementation. The licensee shall implement the plan upon approval.

Method: A detailed investigation of fluvial geomorphic properties will be carried out in the Gerle Creek below Loon Lake Reservoir Dam, at LL-DG1 and LL-G2. Refer to Article 1-2, Pulse Flows: Gerle Creek below Loon Lake Reservoir Dam.

Frequency: Years 1 and 2.

Rationale: The fluvial geomorphology study results indicated a problem with channel stability in the Gerle Creek channel(s), with an apparent imbalance in bedload and streamflow in these reaches, and a potential impact on fluvial processes downstream. There is a need to further investigate these sites to determine the most effective method of stabilization. Channel sites with identified problems may benefit from the implementation of channel stabilization techniques.

8. Geomorphology (Continuing Evaluation of Representative Channel Areas)

Within 2 years of license issuance, the licensee shall develop a geomorphology continuing evaluation of representative channel areas monitoring plan in consultation with FS, CDFG, FWS, and SWRCB. The licensee shall provide BLM, CDFG, FWS, and SWRCB a 90-day review and approval period for the monitoring plan prior to implementation. The licensee shall implement the plan upon approval.

Method: Establishment and monitoring of permanent cross-section transects, longitudinal profiles, and channel properties in representative channel areas (Rosgen Level 3). Measurement of cross-section profile and substrate composition at each transect. The following sites shall be evaluated:

- a. Rubicon River below Rubicon Reservoir Dam (RD-G1).
- b. Gerle Creek below Loon Lake Reservoir Dam (LLD-G1 and LL-G2).
- c. South Fork Rubicon River below Robbs Peak Reservoir Dam (RPD-G1).
- d. South Fork Silver Creek below Ice House Reservoir Dam (IH-G1 and IH-G2).
- e. Silver Creek below Camino Reservoir Dam (CD-G1).
- f. SFAR below Slab Creek Reservoir Dam (SC-G1).

In addition, prior to any reservoir dredging, additional downstream cross sections shall be surveyed as determined necessary by FS, CDFG, FWS, and SWRCB.

Frequency: Years 5, 10, 15 and thereafter for every 10 years for the term of the license.

Rationale: Monitoring of permanent cross-sections, in combination with channel properties, provides the basis for evaluating changes in channel condition. Sampling as part of the relicensing process has provided baseline data prior to streamflow

modification and/or measurable response to streamflow modification. Monitoring at the end of each 5-year period provides an index of changes in channel condition relative to changes in streamflow regime.

9. Water Temperature

The licensee shall, within 1 year following license issuance, develop and file with FERC a Water Temperature Monitoring Plan that has been approved by the Chief of the Division of Water Rights for the SWRCB. Within 3 months of license issuance, the licensee shall consult with FS, SWRCB, FWS, and CDFG on the development of a Plan consistent with the method and frequencies described below. The licensee shall provide the draft Plan for a minimum 90-day review by FS, SWRCB, FWS, and CDFG.

Method: Continuous recording devices shall be installed and maintained at a minimum of 17 stream temperature stations as designated below, as soon as weather and flow conditions allow safe installation of these devices. Please refer to the FYLF monitoring program (Article 1-5(3)) for additional water temperature monitoring requirements. Reservoir temperature profiles may be added if stream temperature problems are identified and FS, CDFG, FWS, and SWRCB determine that reservoir temperatures are a controllable factor. Up to five additional monitoring sites may be added to the water temperature program, as determined necessary through review of the monitoring data and annual consultation with FS, CDFG, FWS, and SWRCB. Modifications to the temperature monitoring program and the determination of final monitoring sites shall be made by FS, CDFG, FWS, and SWRCB.

At a minimum, the temperature plan shall address compliance gaging at the following locations:

- a. Rubicon River immediately below Rubicon Reservoir Dam.
- b. Little Rubicon River immediately below Buck Island Reservoir Dam.
- c. Rubicon River below confluence of Little Rubicon River at the Project boundary.
- d. Gerle Creek immediately below Loon Lake Reservoir Dam.
- e. Gerle Creek immediately below Gerle Creek Reservoir Dam.
- f. South Fork Rubicon River immediately below Robbs Peak Reservoir Dam.
- g. South Fork Rubicon River below confluence of Gerle Creek at the Project boundary.
- h. South Fork Silver Creek immediately below Ice House Reservoir Dam.
- i. South Fork Silver Creek immediately upstream of Junction Reservoir.

- j. Silver Creek immediately below Junction Reservoir Dam.
- k. Silver Creek immediately above Camino Reservoir Dam.
- l. Silver Creek immediately below Camino Reservoir Dam.
- m. Silver Creek immediately upstream of SFAR.
- n. Brush Creek immediately below Brush Creek Reservoir Dam.
- o. SFAR immediately below Slab Creek Reservoir Dam.
- p. SFAR approximately ½ mile upstream of White Rock Powerhouse.
- q. A location downstream of White Rock Powerhouse that records the water temperature of discharges from White Rock Powerhouse.

The recorders located in South Fork Silver Creek below Ice House Reservoir Dam and SFAR below Slab Creek Reservoir Dam shall be installed prior to implementation of the applicable recreational and pulse flow releases in these reaches. Recorders in Silver Creek above Camino Reservoir and immediately upstream of SFAR shall be installed within 6 months of license issuance.

Frequency: For streams, from March 15 to September 30 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 FS, SWRCB, FWS, and CDFG. For reservoirs, if a determination as described above is made by FS, SWRCB, FWS, and CDFG, seasonal temperature profiles shall be monitored in applicable reservoir(s) during multiple water year types to develop data necessary for decision-making.

Rationale: Temperature monitoring is needed during summer on an annual basis to determine if the cold water ecological resource objective is being met in designated Project reaches. Temperature monitoring is needed during spring to evaluate breeding conditions for amphibians. Temperature monitoring in the primary storage reservoirs would be needed to understand the extent of cold water availability. Some temperature stations may be deleted if FS, CDFG, FWS, and SWRCB find sufficient temperature data have been collected and find no temperature issue exists for the relevant area.

10. Water Quality

Within 3 months of license issuance, the licensee shall consult with FS, BLM, FWS, CDFG, SWRCB, and Regional Water Quality Control Board, Central Valley Region (RWQCB) on the development of a draft Water Quality Monitoring Program Plan (Plan). The Plan shall include the water quality monitoring elements listed below, and must (1)

provide detail on field sampling locations, sampling frequency, handling methods and QA/QC; 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 6 months of license issuance, the licensee shall submit the draft Plan for review and approval by the Chief, Division of Water Rights, SWRCB. The final Plan shall be filed with FERC for approval. The approved Plan shall be implemented by the licensee as described, through the life of the license. The Plan may be modified pursuant to adaptive management program needs as recommended by FS, BLM, FWS, CDFG, RWQCB, and approved by the Chief, Division of Water Rights, SWRCB.

Water Chemistry Monitoring

Method: The licensee shall conduct a water chemistry sampling program designed to demonstrate seasonal conditions at all reservoir and stream locations affected by operation of the UARP, as described in the Project No. 2101 relicensing Water Quality Study Plan (Plenary approval, January 8, 2003). Laboratory analyses shall be conducted using USEPA Standard Methods adequately sensitive to detect constituent levels for determination of compliance with recognized state and federal criteria.

- a. In situ physical parameters (pH, water temperature, dissolved oxygen, specific conductance, and turbidity) shall be sampled at representative locations on diverted stream reaches below all Project No. 2101 reservoirs. In situ physical parameters shall be monitored at reservoir profiles collected at 1-meter intervals in Loon Lake, Gerle Reservoir, Ice House Reservoir, Union Valley Reservoir, Junction Reservoir, Camino Reservoir, and Slab Creek Reservoir.

Frequency: In stream reaches, once seasonally in spring (April-May), summer (August), fall (November) and winter (January-February, as accessible) each year after license issuance. In reservoirs, in spring (April-May) and fall (October-November) each year. When possible, water quality and water temperature monitoring may be completed coincident with amphibian, fisheries, and macroinvertebrate monitoring.

Rationale: To monitor compliance with state and federal water quality standards and track potential changes in surface waters associated with Project No. 2101.

- b. General chemistry monitoring. In situ parameters, minerals, nutrients, metals (total and dissolved fractions), measured hardness, and petroleum products shall be conducted. General chemistry samples shall be collected from all Project reservoirs and in stream locations, dam release points from reservoirs, and representative sites along all diverted stream reaches greater than 1 mile in length. Reservoir samples shall be collected at the surface and near the bottom at multiple, representative locations within each impoundment. Secchi disc

measurements shall be collected at Loon Lake, Ice House Reservoir, Union Valley Reservoir, and Slab Creek Reservoir.

Frequency: General chemistry samples shall be collected seasonally in spring, summer, fall, and immediately following either the second or third measurable rain event of the fall-winter period, once every 5 years beginning in Year 3 after license issuance. Secchi disk measurements shall be collected in summer and fall seasons, once every 5 years after license issuance. After a minimum of three data sets have been collected, if it is demonstrated that exceedances are not occurring at specific locations, the collection frequency may be reviewed to determine if it can be modified.

Rationale: To monitor for compliance with state and federal water quality standards and track potential changes in surface waters associated with the UARP. Monitoring at 5-year intervals will provide an index of changes in water quality conditions. Data collected will allow for the development of a long-term trend analysis in waters regulated by Project features and operations.

Bacterial Monitoring

Method: The licensee shall conduct bacterial monitoring consistent with Basin Plan objectives for protection of the REC-1 beneficial uses annually, at a minimum of 15 shoreline recreational locations within the Project boundary. Sampling locations shall be selected based on criteria that include: (1) swimming and other water contact recreation activities are known to occur in the area, and (2) there are 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 dispersed sites at reservoir and riverine locations. The bacterial monitoring program shall include sampling at a minimum of four annually rotating stations at Union Valley Reservoir swim areas, and a minimum of two beach locations each at Buck Island Reservoir, Loon Lake, Ice House Reservoir, and Gerle Creek Reservoir along with three other selected stations. Five near-shore samples shall be collected at each of the 15 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. The licensee, in consultation with FS, CDFG, SWRCB, FWS, and RWQCB shall determine sampling locations for each upcoming field season. Licensee shall consult with FS, SWRCB, FWS, and other listed parties for final determination of the locations to be sampled no later than May 31 of each designated sampling year.

Frequency: Bacterial monitoring shall be conducted annually for the first 5 years after license issuance, then may be decreased in frequency to every other year at reservoirs where no exceedances of Basin Plan objectives for protection of REC-1 designated waters have been identified during Years 1-5. If data demonstrates bacterial concentrations that present risks to human health at specific reservoir(s) or riverine sites, the program shall continue annually in the water body, through the life of the license.

Rationale: The UARP provides water contact recreational opportunities that include swimming, angling, and water skiing. Monitoring will be conducted to demonstrate summer bacterial concentrations at swim beaches affected by Project operations, to ensure that pathogen levels are recognized and do not exceed the thresholds acceptable for protection of human health.

Metals Bioaccumulation Monitoring

Method: The licensee shall monitor for potential uptake of mercury, copper, lead, and silver through the aquatic food chain resident in Project-affected impoundments. Resident fish species from Loon Lake Reservoir, Gerle Reservoir, Ice House Reservoir, Union Valley Reservoir, Camino Reservoir, and Slab Creek Reservoir shall be collected and analyzed to determine tissue residue levels of mercury, copper, lead, and silver. Target species, numbers of individuals, sampling strategy, and analytical methods used shall be consistent with current Surface Water Ambient Monitoring Program needs (SWRCB), and shall be defined prior to each sampling event through licensee consultation with FS, CDFG, SWRCB, RWQCB, FWS, and the state Office of Environmental Health Hazard Assessment. Fish tissue samples shall be collected and analyzed for rates of bioaccumulation, and monitoring shall continue through the term of the new Project License.

Frequency: Once every 5 years beginning in year 2 following license issuance.

Rationale: Reservoirs operated by the licensee have the potential to impound sediments and organic materials that may transport bound metals. Impounded metals have the potential to concentrate and become bioavailable to aquatic organisms. Metals that are bioaccumulated in the aquatic prey-base may bioconcentrate up through the food chain where elevated levels could become health risks to human and wildlife consumers. Monitoring at 5-year intervals will provide an index of changes in fish body burdens of silver, mercury, copper and lead.

Overall Water Quality Program Rationale

Through the water quality monitoring program the licensee will monitor compliance with state and federal water quality standards and track potential changes in surface waters associated with the UARP and Chili Bar Hydroelectric Project operations. The monitoring program will provide data necessary to develop a long-term water quality trend assessment through the life of the FERC licenses. Data collected will provide water quality regulators the opportunity to identify trends of risk to human health and wildlife, and to design possible measures to intervene in this degradation. Water quality monitoring will focus on the identification of inorganic constituent levels and physical parameters, along with bacterial concentrations that may impair beneficial uses designated for waters impounded by the project and releases to diverted reaches downstream of Projects' reservoirs.

11. Recreation Survey

Monitoring associated with the recreation survey is described in Article 1-16.

12. Robbs Peak Powerhouse Entrainment

Within 6 months of license issuance, the licensee shall develop a Robbs Peak Powerhouse Entrainment monitoring plan in consultation with FS, CDFG, FWS, and SWRCB. The licensee shall provide FS, CDFG, FWS, and SWRCB a 90-day review and approval period for the monitoring plan prior to implementation. The licensee shall implement the plan upon approval.

Method: Population monitoring as described in number 1, above. Monitoring to determine when and at what flow fish migration is occurring using a method approved by FS, FWS, and CDFG.

Frequency: Years 1 and 2.

Rationale: There is potential for entrainment in Robbs Peak Powerhouse turbines that may contribute to declining fish populations above Robbs Peak Reservoir Dam. The monitoring will assist in determining if fish are going through the powerhouse, and if so, how to minimize this entrainment.

13. Terrestrial Wildlife Monitoring

Bear Management

Within 6 months of license issuance, the licensee shall develop a bear management monitoring plan in consultation with FS, CDFG, FWS, and SWRCB. The licensee shall provide FS, CDFG, FWS, and SWRCB a 90-day review and approval period for the monitoring plan prior to implementation. The licensee shall implement the plan upon approval.

Method: Monitor effectiveness of measures related to bear management using a method acceptable to FS, FWS, and CDFG.

Frequency: Annually.

Rationale: The alternative includes several measures related to managing bear populations to keep them away from recreation sites. This monitoring will determine whether additional or different measures need to be implemented.

Bald Eagle Monitoring

Within 6 months of license issuance, the licensee shall develop a bald eagle monitoring plan in consultation with FS, CDFG, FWS, and SWRCB. The licensee shall provide FS,

CDFG, FWS, and SWRCB a 90-day review and approval period for the monitoring plan prior to implementation. The licensee shall implement the plan upon approval.

Method: Coordinate with FS and FWS to continue monitoring bald eagle nest sites.

Frequency: Annually.

Rationale: To ensure bald eagle nest sites are not being affected by Project-related activities.

14. Heritage Resource Monitoring

Monitoring associated with heritage resources shall be described in the Heritage Resource Management Plan.

15. Review of Recreation Developments

Monitoring associated with the review of recreation developments is described in Article 1-18.

16. Reservoir Levels Evaluation

Monitoring associated with lake levels is described in Article 1-26.

Article 1-6. Adaptive Management Program

The licensee shall, beginning as early as reasonably practicable within 3 months after license issuance, implement an ecological resources adaptive management program as described below. The program generally consists of (a) implementation of a monitoring program described in Article 1-5 and (b) specific adaptive management measures that shall be implemented if the monitoring program and other scientific information indicate that the applicable ecological resource objectives identified in the Rationale Report, will likely not be met without adjustment. Monitoring shall be conducted to determine if the applicable ecological resource objectives are achievable and being met.

Analysis of the monitoring results from a specified period shall be used to determine the need for adaptive management measures. Adaptive management decisions shall be 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 ecological resources 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.

1. Cancellation of Pulse and Recreational Streamflows in South Fork Silver Creek Due to Water Temperature

If foothill yellow-legged frogs (FYLF) are found on South Fork Silver Creek, and water temperatures at SFSC 1 rise above 12°C mean daily temperature for a 7-day running average (refer to Article 1-6, number 9) at USGS gage 11441500, the licensee shall cancel the pulse and recreational flow events in South Fork Silver Creek unless FS, SWRCB, and CDFG determine that such events are compatible with protection of FYLF and other biological resources. The licensee shall provide Notice to FERC, FS, SWRCB, and CDFG within 10 days of determining that the above temperature trigger has been met, causing cancellation of the pulse and recreational flow events. The licensee shall provide Notice to FERC if FS, SWRCB, and CDFG approve a modification to the water temperature trigger.

2. Cancellation of Recreational Streamflows in SFAR Due to Water Temperature

If water temperatures below Slab Creek Reservoir Dam rise above 12°C mean daily temperature for a 7-day running average (refer to Article 1-6, number 9) at SFAR 6, the licensee shall cancel the recreational flow events in SFAR below Slab Creek Reservoir Dam unless FS, SWRCB, FWS, and CDFG determine that such events are compatible with protection of FYLF and other biological resources. The licensee shall provide Notice to FERC, FS, SWRCB, FWS, and CDFG within 10 days of determining that the above temperature trigger has been met, causing cancellation of the recreational flow events. The licensee shall provide Notice to FERC if FS, SWRCB, FWS, and CDFG approve a modification to the water temperature trigger.

3. Untimely Spill Events Below Slab Creek Reservoir Dam and Camino Reservoir Dam

The licensee shall make a good faith effort to avoid spilling at Slab Creek Reservoir Dam and Camino Reservoir Dam once FYLF breeding has been initiated based on a water temperature trigger that is determined through the monitoring program. If a spill does occur, the licensee shall make a good faith effort to manage the spill to minimize flow fluctuations in the SFAR. If FS, SWRCB, FWS, and CDFG determine that spills below Slab Creek Reservoir Dam and/or Camino Reservoir Dam are resulting in unacceptable environmental impacts based on aquatic species and temperature monitoring described in Article 1-5, appropriate mitigation measures that are approved by FS, CDFG, FWS, and SWRCB shall be developed. The licensee shall implement the appropriate adaptive management measures upon approval of FS, CDFG, FWS, and SWRCB.

4. Recreational Streamflows Below Slab Creek Reservoir Dam

If FS, CDFG, FWS, and SWRCB determine that unacceptable environmental impacts are occurring below Slab Creek Reservoir Dam due to October recreational streamflows based on amphibian monitoring described in Article 1-5, adaptive management measures may include but are not limited to cancellation of the October recreational streamflows.

5. Fish Entrainment in South Fork Rubicon River

If monitoring indicates that fish are being entrained in Robbs Peak Powerhouse during fish migration, and FS, FWS, and CDFG determine that the entrainment is having a substantial negative impact on the South Fork Rubicon fishery, the licensee shall develop appropriate adaptive management measures that are approved by FS, CDFG, FWS, and SWRCB. The licensee shall implement the appropriate adaptive management measures upon approval of FS, CDFG, FWS, and SWRCB.

6. Sediment Management

Based on results of geomorphology monitoring, if FS, BLM, SWRCB, FWS, and CDFG determine there is a need to place sediment downstream, and if there is a need to dredge reservoirs associated with the Project during the license term, sediment that results from the dredging shall be placed downstream in consultation with FS, SWRCB, BLM, FWS, and CDFG, after approval by FS, BLM, SWRCB, FWS, and CDFG.

7. Algae Growth in Silver Creek Below Junction Reservoir Dam

If the new streamflow regime does not reduce algae growth in Silver Creek below Junction Reservoir Dam and South Fork Rubicon River below Robbs Peak Reservoir Dam within 2 years of license issuance, the licensee shall reduce or eliminate the excessive algae growth using a method approved by FS, SWRCB, FWS, and CDFG. If any future pervasive algal blooms are identified on any Project-affected stream reaches, the licensee shall reduce or eliminate the algae growth using a method approved by FS, SWRCB, FWS, and CDFG if FS, SWRCB, FWS, and CDFG determine the algae needs to be reduced or eliminated.

8. Metals Bioaccumulation

If the results of metal testing are suspected to adversely affect the health of aquatic species by comparing results with published scientific information, then additional studies may be requested by FS, SWRCB, FWS, and CDFG.

9. Water Temperature for Foothill Yellow-Legged Frogs

If FS, SWRCB, FWS, and CDFG determine that the water temperature that is an indicator of breeding initiation (12°C mean daily temperature for a 7-day running average) should be increased or decreased based on aquatic species and water temperature monitoring (as described in Sec.5 (3)), FS, SWRCB, FWS, and CDFG may increase or decrease the water temperature indicator. Suitable water temperatures to initiate foothill yellow-legged frog breeding are suspected to be site-specific to the river system (Kupferberg, personal comm. 2006), thus water temperatures suitable for breeding on one river cannot be extrapolated to another.

10. Bear/Human Interactions

If, over a 5-year period, monitoring indicates that the number of bear/human interaction incidents does not decline or decrease in severity, the licensee shall work with FS, FWS, and CDFG to identify and implement additional measures necessary to reduce such problems.

11. Coordinated Operations

Coordinated operations, described in Article 1-4, shall be reviewed annually to determine if they are effective in achieving the ecological and recreational streamflows downstream of Chili Bar Reservoir Dam. If they are not effective, other measures shall be investigated to achieve the streamflow requirements and implemented upon approval of FS, BLM, CDFG, FWS, and SWRCB.

Article 1-7. Gerle Creek Channel Stabilization

Within 2 years of license issuance, the licensee shall develop a stabilization plan for the Gerle Creek channel below Loon Lake Reservoir Dam. The licensee will consult with appropriate staff from FS, FWS, CDFG, and the Consultation Group provided under Section 4.12.1 of the Relicensing Settlement Agreement in the development of the stabilization plan. The licensee shall implement the plan once it is approved by FS and shall involve FS in implementing the plan if they desire.

Article 1-8. Fish Passage at Gerle Creek

The reservoir level at Gerle Creek Reservoir shall be maintained at an elevation that provides fish passage into Gerle Creek from August through October.

Article 1-9. Large Woody Debris

The licensee shall ensure, provided conditions permit safe and reasonable access and working conditions, mobile instream large woody debris continues downstream beyond Robbs Reservoir Dam, Junction Reservoir Dam, Camino Reservoir Dam, and Slab Creek Reservoir Dam. At a minimum, all sizes greater than both 20 centimeters wide and 12 meters in length shall be allowed to continue downstream beyond dams. Smaller sizes are also allowed but are not required to be moved beyond these dams.

Article 1-10. Streamflow and Reservoir Elevation Gaging

The licensee shall, within 1 year after license issuance, develop and file with FERC approval a Streamflow and Reservoir Elevation Gaging Plan (gaging plan) that meets United States Geological Survey (USGS) standards. The licensee shall provide copies of the gaging plan and USGS review results to FS, SWRCB, CDFG, FWS, and FERC. The plan shall be approved by the Chief of the Division of Water Rights for the SWRCB prior to filing with FERC. The

licensee shall implement the plan upon approval. At a minimum, the plan shall address compliance gaging at the following locations:

1. Streamflow Gaging Locations
 - a. Rubicon River below Rubicon Reservoir Dam
 - b. Little Rubicon River below Buck Island Reservoir Dam
 - c. Gerle Creek below Loon Lake Reservoir Dam
 - d. Gerle Creek below Gerle Creek Reservoir Dam
 - e. South Fork Rubicon River below Robbs Peak Reservoir Dam
 - f. South Fork Silver Creek below Ice House Reservoir Dam
 - g. Silver Creek below Junction Reservoir Dam
 - h. Silver Creek below Camino Reservoir Dam
 - i. Brush Creek below Brush Creek Reservoir Dam
 - j. SFAR below Slab Creek Reservoir Dam (sufficient to record spills)
2. Reservoir Elevation Gaging Locations
 - a. Rubicon Reservoir
 - b. Loon Lake Reservoir
 - c. Gerle Creek Reservoir
 - d. Ice House Reservoir
 - e. Union Valley Reservoir
 - f. Junction Reservoir
 - g. Camino Reservoir
 - h. Brush Creek Reservoir
 - i. Slab Creek Reservoir

Within 2 years of license issuance, the licensee shall install and maintain simple staff gages at the put-ins for the Slab Creek and Ice House recreational boating runs. The licensee shall perform an investigation to determine whether telemetry equipment can be installed at Rubicon River below Rubicon Reservoir Dam and Little Rubicon River below Buck Island Reservoir Dam to monitor conditions and/or control operations. If the licensee and FS concur that such equipment is economically and technologically feasible and can be installed consistent with law, regulations, and policies applicable to Desolation Wilderness, the licensee shall seek necessary approvals for such installation and shall install this equipment if the necessary approvals are received.

Article 1-11. Canal and Penstock Emergency and Maintenance Release Points

The licensee shall, within 1 year after license issuance, file with FERC a plan approved by FS and SWRCB, to evaluate canal and penstock emergency and maintenance release points to determine if improvements can be made to minimize potential adverse water quality impacts when the release points are used. The licensee shall also consult with CDFG and FWS in the development of the plan. The licensee shall implement the recommendations contained in the plan upon approval.

Article 1-12. Wildlife and Plant Protection Measures

1. To protect wildlife from the hazards of open canals and other Project facilities, the licensee for the term of a new license for the Project shall maintain and operate in working condition all devices and measures for wildlife along Project canals that are deemed necessary by FS, FWS, and CDFG. The licensee shall provide FS, FWS, and CDFG by April 1 of each year an annual report describing the date, location, and species information (deer or other wildlife) found in project canals. Should annual wildlife mortality (deer) during any 3-year period be more than three individuals, the licensee shall develop a Wildlife Exclusion Plan that is approved by FS, FWS, and CDFG. The licensee shall implement the Wildlife Exclusion Plan upon approval. The amount, kind, and location of any future fencing or other protective measures shall be decided upon at the annual meeting described in Article 1-14.
2. Before commencing any new construction or maintenance (including but not limited to proposed recreation developments) authorized by the license on National Forest System lands that may affect a FS, FWS, or CDFG sensitive plant or wildlife species or its habitat, the licensee shall ensure that a biological evaluation (including necessary surveys) is completed that evaluates the potential effects of the action on the species or its habitat and follows the recommendations in the biological evaluation determined necessary by FS. The biological evaluation must be approved by FS. In consultation with FERC, FS, FWS, or CDFG may require mitigation measures for the protection of sensitive species.

Before commencing any activities to construct (including, but not limited to, proposed recreation developments), operate, or maintain the Project that may affect a species proposed for listing or listed under the federal Endangered Species Act, or that may affect

that species' critical habitat, the licensee shall ensure that a Biological Assessment that evaluates the potential effects of the action on the species or its critical habitat is prepared for the relevant Service agency (United States Fish and Wildlife Service or National Marine Fisheries Service) for consultation or conference in accordance with the Endangered Species Act.

3. If occurrences of FS, FWS, or CDFG sensitive plant or wildlife species are detected prior to or during ongoing construction, operation, or maintenance of the Project or during Project operations, the licensee shall immediately notify FS, CDFG, and FWS. If FS, FWS, or CDFG determine that the Project-related activities are adversely affecting the sensitive species, the licensee shall, in consultation with FS, CDFG, and FWS, develop and implement appropriate protection measures.
4. The licensee shall, beginning the first full calendar year after license issuance, in consultation with FS, FWS, and CDFG annually review the current list of special status plant and wildlife species (species that are Federal Endangered or Threatened, FS Sensitive, or Eldorado National Forest Watch Lists) that might occur on National Forest System lands in the Project area directly affected by Project operations. When a species is added to one or more of the lists, FS, FWS, and CDFG, in consultation with the licensee shall determine if the species or un-surveyed suitable habitat for the species is likely to occur on such National Forest System lands. For such newly added species, if FS, FWS, or CDFG determine that the species is likely to occur on such National Forest System lands, the licensee shall develop and implement a study plan in consultation with FS, FWS, and CDFG to reasonably assess the effects of the project on the species. The licensee shall prepare a report on the study including objectives, methods, results, recommended resource measures where appropriate, and a schedule of implementation, and shall provide a draft of the final report to FS, FWS, and CDFG for review and approval. The licensee shall file the report, including evidence of consultation, with FERC and shall implement those resource management measures required by FERC.
5. The licensee shall not undertake maintenance under transmission lines within the Pine Hill Rare Plant Preserve until consultation with BLM, FWS, and CDFG has been completed.
6. The Bird-Powerline Associations Technical Report (Devine Tarbell & Associates 2004c), identifies the following problem designs based on the design and sighting standards developed by the Avian Power Line Interaction Committee (APLIC) for avoidance or minimization of bird electrocutions and collisions (APLIC 1996 and APLIC 1994):
 - a. Eleven type-H five-pole dead end structures used on the Jones Fork- Union Valley 69 kV line, with less than 36 inches of clearance between energized jumper wires and grounded cross-arms.
 - b. Exposed energized hardware and inadequate phase-to-phase and phase to-ground spacing along the 1.2-mile-long Brush Creek 12 kV tap line.

- c. Overhead groundwires existing throughout most of the higher elevation segments of the transmission line from Loon Lake Powerhouse to just west of Camino Powerhouse, including the Jones Fork-Union Valley transmission line segment, and an isolated segment of approximately 3.0 miles near White Rock Powerhouse.

Within 1 year of license issuance, the licensee shall develop an Avian Protection Plan, as described above, that is approved by the FWS that addresses retrofitting transmission lines to meet the design and sighting standards established by APLIC for minimization of bird electrocutions and collisions.

Article 1-13. Vegetation and Invasive Weed Management Plan

Within 2 years of license issuance, the licensee shall file with FERC an Invasive Weed Management Plan developed in consultation with FS, FWS, the appropriate County Agricultural Commissioner, and California Department of Food and Agriculture. Invasive weeds will be those weeds defined in the California Food and Agriculture code, and other species identified by FS. The plan will address both aquatic and terrestrial weeds within the project boundary and adjacent to project features directly affecting National Forest System lands including, roads, and distribution and transmission lines.

1. The Invasive Weed Plan will include and address the following elements:
 - a. Inventory and mapping of new populations of invasive weeds using a FS compatible database and GIS software. The invasive weed GIS data layer will be updated periodically and shared with resource agencies.
 - b. Action and/or strategies to prevent and control spread of known populations or introductions of new populations, such as vehicle/equipment wash stations. Noxious weeds presently identified include: *Aegilops triuncialis*, *Carduus pycnocephalus*, *Centaurea solstitialis*, *Chondrilla juncea*, *Cytisus scoparius*, *Genistia monspessulana*, *Lythrum salicaria*, *Bromus tectorum*, *Bromus diandrus*, and *Taeniatherum caput-medusae*. Where these populations are: (1) contiguous and extend outside the Project boundary or (2) downstream of populations inside the project boundary and have a reasonable nexus to the project, the licensee shall make reasonable efforts to control the entire population unit.
 - c. Development of a schedule for control of all known A, B, Q and selected other rated invasive weed species, designated by resource agencies.
 - d. On-going annual monitoring of known populations of invasive weeds for the life of the license in locations tied to project actions or effects, such as road maintenance, at project facilities, O&M activities, , new construction sites, etc. to evaluate the effectiveness of re-vegetation and invasive weed control measures.

- e. The plan will include an adaptive management element to implement methods for prevention of aquatic invasive weeds, as necessary. These actions may include, but may not be limited to: (1) public education and signing of public boat access, (2) preparation of an Aquatic Plant Management Plan approved by FS, and in consultation with other agencies, and (3) boat cleaning stations at boat ramps for the removal of aquatic Invasive weeds.

New infestations of A& B rated weeds shall be controlled within 12 months of detection or as soon as is practical and feasible (A, B, C, & Q ratings refer to the California Department of Food & Agriculture Action Oriented Pest Rating System). At specific sites where other objectives need to be met all classes of invasive weeds may be required to be treated.

Monitoring will be done in conjunction with other project maintenance and resource surveys, so as not to require separate travel and personnel. Monitoring information, in database and GIS formats, will be provided to FS as part of the annual consultation on affected FS resources (Article 1-14). To assist with this monitoring requirement, training in invasive plant identification will be provided to project employees and contractors by FS.

Licensee shall restore/revegetate areas where treatment has eliminated invasive weeds in an effort to eliminate the reintroduction of invasive weed species. Project-induced ground disturbing activities shall be monitored annually for the first 3 years after disturbance to detect and map new populations of invasive weeds.

2. The Vegetation Management plan shall include and/or address the following elements:
 - a. Hazard tree removal and trimming.
 - b. Powerline/transmission line clearing.
 - c. Vegetation management for habitat improvement.
 - d. Revegetation of disturbed sites.
 - e. Soil protection and erosion control, including use of certified weed free straw.
 - f. Establishment of and/or revegetation with culturally important plant populations.
 - g. Use of clean, weed free seed with a preference for locally collected seed.

The licensee shall comply with the Eldorado National Forest prescriptions for seed, mulch, and fertilizer for restoration or erosion control purposes. Upon FERC approval, the licensee shall implement the plan.

Article 1-14. Annual Review of Ecological Conditions

Each calendar year, by April 1, the licensee shall schedule and facilitate a meeting with FS, CDFG, FWS, and SWRCB to review and discuss the results of implementing these conditions, as well as to discuss other issues related to preserving and protecting ecological values affected by the Project. The licensee shall make available to FS, CDFG, FWS, and SWRCB 2 weeks prior to the meeting, an operations and maintenance plan for the year in which the meeting occurs.

Article 1-15. Recreation Implementation Plan

A recreation implementation plan shall be developed by the licensee in coordination with FS within 6 months of license issuance. The implementation plan shall include a construction schedule for the recreation facilities specified in Article 1-19, as well as other details related to recreation resources, including, but not limited to, signing and sign placement, public information dissemination, and a schedule for design of facilities to be reconstructed. The implementation plan shall be maintained and updated in conjunction with the review of recreation developments required in Article 1-18.

Article 1-16. Recreation Survey

The licensee shall conduct a Recreational Survey and prepare a Report on Recreational Resources that is approved by FS every 6 years from the date of license issuance. The Recreational Survey shall include, but not be limited to, changes in kinds of use and use patterns, levels of use, user survey as to preferences in recreation activities, kinds and sizes of recreational vehicles, preference for day use versus overnight use, carrying capacity information sufficient to indicate changes in capacity, and recreation user trends within the project area. The Report on Recreational Resources shall comply with FERC's regulations at 18 CFR section 4.51(f) (1996), or as amended, and shall be provided to FS for review and comment prior to being filed with FERC. Within 1 year of submission of the Report on Recreation Resources, FS and the Consultation Group provided under Section 4.12.1 of the Relicensing Settlement Agreement will meet to discuss the results of the Report and make recommendations to address the findings. In accordance with Condition 3-3, FS reserves the authority to require changes in the Project and its operation to accomplish protection and utilization of National Forest System resources identified as a result of these surveys.

Article 1-17. Forest Service Liaison

The licensee shall provide an individual for liaison with FS, whenever planning or construction of recreation facilities, other major Project improvements, and maintenance activities are taking place within the National Forest. The licensee agrees to cooperate with FS through this individual in contract review and work inspection.

Article 1-18. Review of Recreation Developments

The licensee shall schedule a meeting with FS at least every 6 years to review all Project-related recreation facilities described in Sections 18 and 19 and to agree upon necessary maintenance,

rehabilitation, construction, and reconstruction work needed and its timing, as described in Appendix A, Sections 19 and 20. Because the standard life of recreation facilities ranges from 20 to 30 years, it is anticipated that during the life of the license, facilities that are currently in good condition may need to be redesigned and reconstructed to standards applicable at that time. The criteria for project selection will depend on the amount and type of use, current recreation facility policy, condition of facilities, effects on surrounding areas, and other factors. Following the review, the licensee shall develop a 6-year schedule for maintenance, rehabilitation, and reconstruction, which shall be approved by FS prior to being filed with FERC.

The following recreation facilities, which are associated with the Project, shall remain inside the Project boundary. If these facilities are not currently within the license boundary, the boundary shall be adjusted to include them. These locations are mapped in detail in Attachment 1. The following recreation facilities constructed or reconstructed by the licensee in the future shall be included within the Project boundary; the boundary shall be adjusted as necessary.

1. Loon Lake Area
 - a. Pleasant Campground.
 - b. Loon Lake Campground and Boat Ramp Complex.
 - c. Loon Lake Chalet.
 - d. Northshore Recreational Vehicle Campground.
 - e. Red Fir Group Campground.
 - f. Loon Lake Trailhead.
 - g. Loon Lake (Schlein) Dump Station.
2. Gerle Reservoir Area
 - a. Gerle Creek Campground Complex.
 - b. Angel Creek Day Use Area.
3. Union Valley Reservoir Area
 - a. Sunset Campground and Boat Launch Complex.
 - b. Fashoda Campground.
 - c. Jones Fork Campground.
 - d. Big Silver Group Campground.

- e. Camino Cove Campground.
 - f. Yellowjacket Campground and Boat Launch.
 - g. Wolf Creek Campground.
 - h. Wolf Creek Group Campground.
 - i. West Point Campground and Boat Launch.
 - j. Wench Creek Campground and Group Campground.
 - k. Azalea Campground.
 - l. Lone Rock Campground.
 - m. Union Valley Bike Trail.
 - n. Fashoda Picnic Area.
 - o. Yellowjacket Dump Station.
4. Ice House Reservoir Area
- a. Ice House Campground and Boat Launch Complex.
 - b. Ice House Picnic Area.
 - c. Strawberry Point Campground.
 - d. Northshore Campground.
 - e. Ice House Dump Station.
5. Junction Reservoir Boat Launch.
6. Brush Creek Reservoir Boat Launch.
7. Slab Creek Reservoir Area
- a. Forebay Boat Launch.
 - b. West End Boat Launch.
8. Big Hill Overlook.

Article 1-19. Specific Recreation Measures

The following list of initial recreation projects identified at time of license issuance, including construction, reconstruction, and restoration, shall be completed by the licensee at the sites listed below. The licensee will be responsible for the following items requiring FS approval: survey; design; contract preparation and administration; environmental analysis and documentation necessary for construction of proposed facilities, including any permits; and preparation of “as-built” drawings. The licensee will be responsible for funding the actual capital costs of the below-listed measures. All improvements will become property of FS upon completion, final inspection, and acceptance by FS.

With regard to the bear-proof food storage and trash receptacle facilities described in this section, within 2 years of license issuance, the licensee shall develop a plan to install bear-proof food storage lockers and bear-proof trash receptacles at all recreation facilities identified as lacking such equipment. The plan shall include a schedule for installing the bear-proof equipment within 5 years of plan approval by the FS and CDFG. The licensee shall implement the plan according to the schedule.

1. Buck Island Reservoir Area

North Shoreline

Within 4 years of license issuance, construct new vault toilet.

West Shoreline

Within 4 years of license issuance, improve or relocate existing non-motorized trails connecting to the Rubicon Hiking Trail.

2. High Country Area Trails

Rubicon Hiking Trail

Within 2 years of license issuance, reconstruct or relocate portions of the trail to meet FS standards and facilitate proper drainage, including improvement of tread on the portion of the trail using the old construction road. Trail width shall accommodate quads for licensee’s administrative use only up to the wilderness boundary.

Trail Connecting Pleasant Boat-In Campground to Rubicon Hiking Trail

Within 2 years of license issuance, reconstruct trail to standard, including tread, vegetation clearing, drainage, and signage.

3. Crystal Basin

Loon Lake Area

a. Loon Lake Recreation Plan

Within 2 years of license issuance, the licensee shall prepare a development plan, to be approved by FS, which addresses impacts to the lakeshore zone and islands from unmanaged recreation, and the need for additional day use opportunities. The licensee shall be responsible for developing sites and/or implementing the measures identified in this plan within 5 years of license issuance. The following elements shall be addressed:

- Sanitation.
- User conflicts.
- Carrying capacity.
- Day use versus overnight camping.
- Vehicle control.
- Boating access.
- Emergency resource protection measures.

In addition to the elements above, the following specific areas shall also be addressed:

- Evaluate the need for improvements at the old construction road east of the auxiliary dam for use as a car-top boat launch. There is potential for day use and overnight (individual family or group) camping at this site.
- Determine appropriate use for area between North Shore Recreational Vehicle Campground and the Main Dam. Consider day use, or continued dispersed camping with appropriate vehicle parking adjacent to the roadway.
- Survey all existing dispersed sites to determine where use is suitable; engineer suitable dispersed sites to minimize impacts; and close and restore other dispersed sites in the area using standard FS techniques.

b. Ellis Staging Area

Within 2 years of license issuance, construct a 2-unit vault toilet

c. Pleasant Campground

Within 10 years of license issuance, the licensee shall redesign and reconstruct the 10-unit boat-in campground, retaining existing capacity on existing footprint, to meet the current FS design standards and requirements of the Americans with Disabilities Act (ADA). The following describes the specific elements of this condition.

- Replace the two single-unit pit restrooms with new accessible vault restrooms that can be serviced by helicopter (within 2 years).

- Reconstruct pathways/routes between camp units and toilets to meet a difficult level of access, where feasible, by widening the pathways to 36-inch minimum, and reducing sustained grades to 8.33 percent and maximum grades to 10 percent for 50 feet or less.
- Mark a safe channel to the shoreline.
- Regrade camp units to 900-square-foot level compacted surface, with maximum 3 percent cross slope where feasible.
- Install bear proof food lockers.
- Replace 10 tables with accessible ones, and provide for a clear and level surface of at least 36 inches around each table.
- Replace existing stoves with new 18-inch high accessible fire rings and pedestal grills.
- Provide appropriate signing that meets FS standards.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

d. Northshore Recreational Vehicle Campground

Within 5 years of license issuance, the licensee shall upgrade the existing 15-unit campground to meet the current FS design standards and requirements of the Americans with Disabilities Act (ADA), and expand the campground to the east and west to take in areas heavily impacted by dispersed camping. Target capacity will be 35 units. The following are the specific elements of this condition:

- Expand facility to the east and west to take in dispersed use on both sides of campground, including new construction of roads, spurs, campsites, tables, grills, and vault toilets as appropriate (restrooms currently inadequate to deal with overuse in area).
- Reconstruct spurs in existing loop for units 1, 12, and 13 to 16 feet in width, and reset the barrier rocks 4 feet apart for accessibility.
- Replace fire rings in existing loop with 18-inch high accessible fire rings, and provide for a clear and level ground surface of at least 36 inches around each ring.
- Develop a potable water system, and provide faucet units for both existing and expanded campground loops.
- Install bear proof food lockers in both existing and new loops.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

e. Loon Lake Campground (including Equestrian Loop)

Within 12 years of license issuance, the licensee shall redesign and reconstruct the 62 unit campground, retaining existing capacity on existing footprint, to meet the current FS design standards and requirements of the ADA. The following describes the specific elements of this condition.

- Reconstruct campground entrance road off Ice House Road to meet current standards.
- Construct potable water filling station for recreational vehicles (near boat launch).
- Engineer and reconstruct water storage and distribution system, sized to accommodate new flush toilets, recreational vehicle filling station and shower units. Replace potable water distribution in older section of the campground (Units 1 through 34).
- In loop 1-34, reconstruct roadway to reduce grade to 10 percent or less, and repave all roads in the older section.
- Reconstruct all spurs in loop 1-34, and selected spurs in loop 35-53 to 16 feet wide and 25 or 50 feet in length, and reset barrier rocks; reconstruct equestrian loop spurs E-1, E-2, E-8 and E-9.
- Replace the three older toilets with accessible vault toilets, and provide paved turnout in front of each, and paved access route to the toilet entrances.
- Construct one eight-stall shower facility with toilet (including septic system).
- In loop 1-34, replace eight faucets with accessible faucet units with paved apron in front and on sides of units. In loop 35-53, replace faucet controls with paddle-type, self-closing levers and raise height to 32 inches above surface, and raise paved surface around faucets so that it is flush with the top of the sump.
- Replace tables in units 1-24 with accessible ones. Replace or retrofit 24 tables in units 35 through 53 and E-1 through E-9 by replacing the 8-foot-long top boards with 10-foot-long boards and raising the top boards to provide a minimum of 28 inches of clearance under the table ends.
- Replace pedestal grills in units 1 through 34, install at a cooking surface height of 30 to 36 inches and provide a 36-inch clear and level surface around them.
- In units 1 through 34, improve camp pads to minimum of 1,200 square feet level and compacted native surface, no more than 3 percent cross slope. Reset bear proof food lockers if necessary.
- In loop 1-34, construct trash bin pads with paved approaches from the roadway.
- Provide removable stalls at the equestrian units.
- Improve lakeshore access from campground to include accessible trail.
- Reconstruct trail system associated with equestrian camping.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

f. Loon Lake Group Campgrounds

Within 12 years of license issuance, the licensee shall upgrade Loon Lake Group Site 1 (30 PAOT) and Loon Lake Group Site 2 (50 PAOT) to meet the current FS design standards and requirements of the ADA. The following describes the specific elements of this condition.

- Replace the four faucets at Group Site 1 and the two faucets at Group Site 2 with paddle-type, self-closing lever controls, and raise faucets so that the control valve is 32 inches above the ground. Raise grade around faucets flush with the top of the sump.
- At Group Site 1, replace or retrofit the 10 tables by replacing the 8-foot top boards with 10-foot boards and raising them to provide 28 inches of minimum of clearance under the table ends. Replace the old tables in the group eating area with accessible tables. At Group Site 2, replace or retrofit five tables by replacing the 8-foot top boards with 10-foot ones, and raising the boards to provide for 28 inches minimum clearance under the table ends. Install an additional accessible table in the group eating area.
- Widen one spur in Unit 2 to 16 feet and repave surface.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

g. Loon Lake Group Equestrian Campground

Within 12 years of license issuance, the licensee shall redesign and reconstruct the five-unit (30 PAOT) group campground, retaining existing capacity on existing footprint, to meet the current FS design standards and requirements of the ADA. The following describes the specific elements of this condition.

- Replace existing single unit vault toilet with new accessible vault toilet.
- Replace the two faucet units with accessible ones, and provide for a level and compacted surface in front of and on the sides of the faucet.
- Provide new chip seal surface on roads.
- Regrade and widen pathways and compact native surface.
- Widen the five spurs to 16 feet and resurface with compacted aggregate base rock.
- Replace all tables with accessible ones, and provide a clear and level surface of at least 36 inches around each table.
- Replace existing fire rings with 18-inch-high accessible rings, and provide a clear and level surface of at least 36 inches around each ring.
- Replace pedestal grills and provide a clear and level surface of at least 36 inches around the each grill.

- Regrade tent pads, and enlarge to minimum of 1,200 square feet, keeping grades to 3 percent or less.
- Provide removable stalls for holding horses.
- Replace signboards
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

h. Loon Lake Boat Launch (and Day Use Area)

Within 8 years of license issuance, the licensee shall upgrade the facilities to meet the current FS design standards and requirements of the ADA. The following describes the specific elements of this condition.

- Replace two picnic tables with accessible ones. Provide a clear and level ground surface of at least 36 inches around each table.
- Install bear-proof food lockers to serve overnight recreational vehicle campers.
- Level and compact the native surface at each picnic pad. Enlarge the pads to a minimum of 600 square feet to allow room for the table and pedestal grill. Keep grades of the pads to 3 percent or less.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.

i. Red Fir Group Campground

Within 20 years of license issuance, the licensee shall upgrade the 30 PAOT group campground to meet the current FS design standards and requirements of the ADA. The following describes the specific elements of this condition.

- Replace toilet seats in the two-unit vault toilet with 18-inch-high seats.
- Raise control valve on faucet unit to 24 inches above the surface, and replace it with a paddle-type, self-closing lever valve. Pave the surface around the faucet flush with the top of the sump.
- Widen the two double spurs to 32 feet, for four of the units. Repave the surface of the spurs.
- Replace or retrofit all five tables by raising the top boards to provide a minimum of 28 inches of clearance under the ends of the tables and shorten the seat boards to 6 feet in length.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

- Install bear proof food lockers.

j. Loon Lake Chalet

Within 8 years of license issuance, the licensee shall upgrade the facilities to meet the current FS design standards and requirements of the ADA. The following describes the specific elements of this condition.

- Change primary building entrance to south side to address winter safety issues, and provide wheelchair access to second level and deck (consider an interior lift built into south entrance building expansion).
- Provide flush toilets and shower.
- Reroute vehicle access to Chipmunk Bluff Road around the chalet on north side, and provide gate to restrict non Chalet traffic.
- Reconstruct Chalet parking area to improve drainage and ice accumulation during the winter months.
- Continue to provide electrical service and potable water to serve the Chalet through the SMUD/PG&E Fringe Area Service Agreement.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.

k. Loon Lake (Schlein) Sanitation Station

Within 20 years of license issuance, the licensee shall upgrade the facilities to meet the current FS design standards and requirements of the ADA. The following describes the specific elements of this condition.

- Cut out part of the concrete island in front of the water tower in order to reach the control valve from the turn out. Lower the control valve, and replace it with a lever type control.

l. Loon Lake Trailhead

Within 8 years of license issuance, the licensee shall upgrade the facilities to meet the current FS design standards and requirements of the ADA. Opened in 1992, facility components are in good condition and not in immediate need of replacement. The following describes the specific elements of this condition.

- Raise the height of the faucet control valve to 34 inches above the ground and replace it with a paddle-type, self-closing lever valve. Raise the surface around the faucet to the top of the sump edge and repave the surface.
- Designate two accessible spaces in the parking lot, and sign one as van accessible.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.

- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

m. South Shore of Loon Lake

Within 20 years of issuance of license, develop a new campground (500 PAOT) on the South Shore of Loon Lake between the LL Hiking Trail Facility and Deer Camp. Construct a new paved two lane access road from the existing Loon Lake Campground to the new campground site, including new trailhead parking for the Loon Lake and Desolation area. This site was previously identified as proposed Red Fir Campground in the “Recreation Plan for Crystal Basin, Project 2101, November 1973.”

Gerle Creek Reservoir Area

a. Gerle Creek Recreation Plan

Within 2 years of license issuance, licensee shall prepare a development plan, to be approved by FS that addresses impacts to the Gerle Creek area from unmanaged recreation, and the need for additional day use opportunities. Licensee shall be responsible for the development of sites and/or implementation of measures identified in this plan within 15 years of license issuance. The following elements shall be addressed:

- Sanitation.
- User conflicts.
- Carrying capacity.
- Day use versus overnight camping.
- Vehicle control.
- Boating access.
- Emergency resource protection measures.

b. Gerle Creek Campground

Within 5 years of license issuance, the licensee shall redesign and reconstruct the 50-unit campground, retaining existing capacity on existing footprint, to meet the current FS design standards and requirements of the ADA. The following describes the specific elements of this condition.

- Replace all vault toilets with new accessible units.
- Replace faucet controls with paddle type self-closing lever controls, and provide level paved pads at front and side of the faucet units.
- Pave access and all interior campground roads. Include a paved parking turnout adjacent to the entrance station.
- Regrade pathways between camp units and spurs/roadway for accessibility.

- Reconstruct and pave all spurs to 16 feet minimum width and cross-slopes at 2 percent or less. Reset barriers 4 feet apart to allow for access from spur to unit.
- Replace all tables with accessible ones and provide for a clear and level ground surface of at least 36 inches around each.
- Replace fire rings with 18-inch-high accessible ones with a clear and level surface of 36 inches around each ring.
- Reset all grills for a cooking surface height of 30 to 36 inches and provide a clear and level surface of at least 36 inches around each grill.
- Level and compact tent pads to a minimum of 1,200 square feet, with a maximum cross slope of 3 percent.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

c. Gerle Creek Day Use Area

Within 5 years of license issuance, the licensee shall upgrade the facilities to meet the current FS design standards and requirements of the ADA. Site has an accessible fishing pier. The following describes the specific elements of this condition.

- Improve fishing pier to bring up it to current ADA standards.
- Plan and implement hardening improvements along shoreline for hand-launching boats and ADA accessibility.
- Replace seats in vault toilet with 18-inch-high seats.
- Install French drain to improve drainage near toilet at day use parking area.
- Replace faucet with paddle-type, self-closing lever control.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

d. Angel Creek Day Use Area

Within 5 years of license issuance, the licensee shall upgrade the facilities to meet the current FS design standards and requirements of the ADA. The following describes the specific elements of this condition.

- Reconstruct and pave access road and parking. Designate one accessible parking space with a van accessible sign.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.

- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

e. Airport Flat Campground

Within 10 years of license issuance, the licensee shall upgrade the facilities to meet the current FS design standards and requirements of the ADA, and harden adjacent dispersed area on the south side of Gerle Creek. The following describes the specific elements of this condition.

- Per access plan, install accessible picnic table, and accessible fire ring (18-inch height with 36-inch level surface around it) at unit 16.
- Harden adjacent dispersed area on the south side of Gerle Creek to accommodate approximately 30 PAOT, including campfire rings, barrier rock, aggregate base rock, and a vault toilet.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance at both the campground and the hardened dispersed area.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

f. Angel Creek Trail

Within 5 years of license issuance, the licensee shall extend the trail to tie to the Summer Harvest Trail.

g. Summer Harvest Trail

Within 5 years of license issuance, upgrade trail surface to a similar standard (aggregate base) as the new trail at Angel Creek Day Use Area. Replace missing or damaged interpretive signs as needed.

Union Valley Reservoir Area

a. Union Valley Recreation Plan

Within 2 years of license issuance, licensee shall prepare a development plan, to be approved by FS that addresses impacts to the Union Valley area from unmanaged recreation, and the need for additional day use opportunities. Licensee shall be responsible for the development of sites and/or implementation of measures identified in this plan within 10 years of license issuance. The following elements shall be addressed:

- Sanitation (including adequate facilities accessible near the Ice House Road/Jones Fork Silver Creek crossing).
- User conflicts.
- Carrying capacity.
- Day use versus overnight camping.
- Vehicle control.
- Boating access.
- Emergency resource protection measures.

b. Union Valley Reservoir Boating Management

Within 2 years of license issuance, develop and implement a plan approved by FS and CDFG that addresses reservoir surface use and hazards. Elements of this plan will include:

- User conflicts between differing types of watercraft.
- Human and wildlife conflicts.
- Marking or removal of manmade underwater hazards to enhance boater safety.
- Speed limits and need for marker buoys.

c. Azalea Cove Campground

Within 5 years of license issuance, the licensee shall complete the following specific elements:

- Provide paved off site parking area for 10 vehicles at the intersection of the existing service road and the bike trail.
- Develop a potable water source and distribution system.
- Improve shoreline adjacent to facility to enhance boating access.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

d. Big Silver Group Campground

Within 20 years of license issuance, the licensee shall upgrade the existing facilities offered at this 50 PAOT group campground. The following describes the specific elements of this condition.

- Develop a potable water system.
- Construct a shade structure.
- Install bear-proof food lockers.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.

- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

e. Camino Cove Campground

Within 15 years of license issuance, upgrade existing facilities to meet current FS standards. The following are the specific elements of this condition:

- Pave all roads and spurs in the campground.
- Develop campground host site (including septic and water).
- Install accessible picnic tables at all sites.
- Provide a potable water system and faucet units.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Install bear-proof food lockers at all camp units.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

f. Fashoda Campground

Within 10 years of license issuance, the licensee shall upgrade the facilities to meet the current FS design standards and requirements of the ADA. The following describes the specific elements of this condition.

- Repave parking area and access roads. Designate two additional accessible parking spaces (in addition to one for unit 6), including one space to be constructed and signed as van accessible near camp units 12 to 16.
- Retrofit all 29 tables for accessibility by replacing the 8-foot table top boards with 10-foot boards and raising the boards to provide a minimum of 28 inches of clearance under the ends of the table.
- Construct an amphitheatre with accessible access routes, seating to accommodate 200 people,.
- Install bear-proof food lockers at each camp site.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

g. Fashoda Day Use Area

Within 10 years of license issuance, the licensee shall upgrade the facilities to meet the current FS design standards and requirements of the ADA. The following describes the specific elements of this condition.

- Provide a 16-foot-wide designated parking space at unit 4 and sign parking as accessible (similar to the one at unit 5).
- Replace or retrofit the four remaining tables (unit 5 is already accessible) by replacing the 8-foot-long top boards with 10-foot-long boards, and raising the boards to provide a clearance of 28 inches minimum under the table ends.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

h. Jones Fork Campground

Within 20 years of license issuance, the licensee shall upgrade the facilities to meet the current FS design standards and requirements of the ADA. The following describes the specific elements of this condition.

- Where feasible, reconstruct and pave spurs to 16-foot minimum width, with slopes and cross-slopes at 2 percent or less. Reset barrier rocks to allow for 4 feet between them for access to the camp unit.
- Provide potable water source and distribution system.
- Replace fire rings with 18-inch-high accessible fire rings.
- Formalize access routes to the shoreline from the campground.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

i. Lone Rock Campground

Within 20 years of issuance of license, the licensee shall upgrade the facilities to meet the current FS design standards and requirements of the ADA. The following describes the specific elements of this condition.

- Provide potable water system.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

j. Sunset Campground

Within 5 years of license issuance, the licensee shall redesign and reconstruct the 131 unit campground, retaining existing family unit capacity on existing footprint, to meet the current FS design standards and requirements of the ADA, and add a Group Site. The following describes the specific elements of this condition.

- Replace all 15 two-unit vault toilets with a combination of vault and flush toilets (where septic system is feasible). Relocate some toilets to reduce the distance between them and to avoid the steeper sections of the roads that have grades over 10 percent. Construct paved turnouts in front of each toilet, and provide a paved access route to the toilet entrances.
- Construct one eight-stall shower facility with toilet (including septic system).
- Construct potable water filling station for recreational vehicles.
- Engineer and reconstruct water storage and distribution system, sized to accommodate new flush toilets, recreational vehicle filling station and shower units.
- Replace any non-accessible faucet units with new units of ADA- approved design. Provide a level and compacted surface on the sidesand in front of each faucet unit.
- Construct a campground entrance station with building to serve the Sunset peninsula facilities.
- Pave access and all interior campground roads.
- Where feasible, reconstruct and pave all spurs to 16-foot minimum widths and 25- or 50-foot lengths, with slopes and cross slopes at 2 percent or less. Set barrier rocks 4 feet apart for access from spur to unit.
- Replace all tables with accessible ones, level surfaces, and provide 36 inches of clearance around tables.
- Replace all grills that have exceeded their service life, and reset newer grills to accessible cooking surface height of 30 to 36 inches. Provide 36 inches of clear level area around pedestal grills.
- Where feasible, level and regrade tent pads to provide 1,200 square feet each, with a maximum cross-slope of 3 percent in all directions. Where feasible, construct raised tent pads for accessibility (27 potential campsites have been identified).
- Regrade pathways between camp units and spurs/roadways.
- Formalize access routes to the shoreline from the Campground, and consider erosion (wave action) control measures along shoreline.
- Replace control valve at the sanitary dump station to a lever-type valve of accessible design.
- Add a group site (30 PAOT) on the south side of the access road near Loop 2.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Install bear-proof food lockers at all camp units.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

k. Sunset Boat Launch

Within 10 years of license issuance, the licensee shall upgrade the facilities to meet the current FS design standards and requirements of the ADA. The following describes the specific elements of this condition.

- Replace toilet seats in the 2-unit vault toilet with 18-inch-high toilet seats, and install accessible signage on the toilet.
- Develop five day use picnic sites between the lake shore and the parking area.
- Select four spaces close to the launching ramp and the toilet and designate them as accessible spaces. Sign one space as van accessible.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.

l. Wench Creek Campground

Within 18 years of license issuance, the licensee shall redesign and reconstruct the 100-unit campground, retaining existing capacity on existing footprint, to meet the current FS design standards and requirements of the ADA. The following describes the specific elements of this condition.

- Construct potable water filling station for recreational vehicles.
- Engineer and reconstruct water storage and distribution system, sized to accommodate new flush toilets, recreational vehicle filling station and shower units (at both the family and group campgrounds).
- Replace the four two-unit flush toilets and nine two-unit vault toilets with accessible toilets in kind. Relocate the toilets closer to the roadway or to flatter locations. Construct paved turnouts in front of each toilet and a paved access route to the toilet entrances.
- Construct a campground entrance station with building.
- Pave access and all interior campground roads, and restripe.
- Where feasible, widen 16 narrow spurs to 16 feet in width. For the 84 double spurs, widen the first 30 to 16 feet. Repave all spurs. Reset barrier rocks 4 feet apart for access into camp units.
- Level and compact tent pads, enlarging them to 1,200 square feet minimum, with no more than 3 percent cross slope.
- Regrade and compact pathways between camp units and spurs/roadway.
- Replace all 100 tables with accessible ones.
- Reset or replace all pedestal grills to a cooking surface height of 30 to 36 inches above the ground, and provide a clear and level ground surface of at least 36 inches around each grill.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Construct two eight-stall shower facilities with toilet (including septic systems).
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.
- Install bear proof food lockers at each camp site.

m. Wench Creek Group Campground

Within 18 years of license issuance, the licensee shall redesign and reconstruct the two 50 PAOT group sites, retaining existing capacity on existing footprint, to meet the current FS design standards and requirements of the ADA. The following describes the specific elements of this condition.

- Replace the six-unit flush restroom in unit 1 with a flush toilet building of accessible design, and replace the four-unit flush restroom in unit 2 with a six-unit flush toilet building of accessible design. Include two shower stalls in each toilet building.
- Widen all parking spurs to 16 feet, and repave them.
- Widen all pathways in both areas (between cooking and eating areas, restrooms, tent camping areas and group fire ring areas) to 6 feet minimum; level and surface with aggregate base rock.
- Design and construct paved, accessible trails from each group site to the shoreline of Union Valley Reservoir.
- Replace tables with accessible ones. Provide a clear and level ground surface of at least 36 inches around each table.
- Regrade tent pad areas. Provide for a minimum of 25 tent pads in each group area.
- Install bear-proof food lockers at each camp site.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Regrade group cooking and eating areas.
- Pave access and all interior campground roads, and restripe parking lot and designate/sign one van accessible parking space.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

n. West Point Campground

Within 8 years of license issuance, the licensee shall upgrade the facilities to meet the current FS design standards and requirements of the ADA. Design and construct expansion of the existing family campground by 25 units, and add a group campground (30 PAOT) adjacent to the facility, across the road to meet current FS standards. The following are specific elements of this condition.

- Expand campground by 25 additional units to include roads, spurs, barriers, fire rings, tent pads, and additional restrooms.
- Pave all campground roads and spurs.
- Develop a water system to serve the campground, existing and expanded.
- Provide accessible tables at all existing and new campsites.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

- Survey all remaining dispersed sites on the West Point peninsula to determine where use is appropriate; engineer suitable dispersed sites to minimize impacts; and close and restore other dispersed sites in the area using standard FS techniques.
- Install bear-proof food lockers at each camp site.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.

o. West Point Boat Launch

Within 5 years of license issuance, the licensee shall upgrade the facilities to meet the current FS design standards and requirements of the ADA.

- Construct a cut-off wall along shore side of ramp to protect side of ramp from wave action.
- Replace toilet seats in the existing two-unit vault toilet with 18-inch high seats and install the required accessible toilet signs.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Remove and restore dispersed camp sites adjacent to this facility using standard FS techniques.
- Develop boat ramp extension designs for review and approval by FS, CDFG, and SWRCB. Construction of boat ramp extension shall be completed within 2 years of design approval.

p. Wolf Creek Campground

Within 18 years of license issuance, the licensee shall upgrade the facilities to meet the current FS design standards and requirements of the ADA. The following are the specific elements of this condition.

- Pave all roads in the campground.
- Install bear-proof food lockers.
- Construct one eight-stall shower facility with toilets (including septic system).
- Engineer and reconstruct water storage and distribution system, sized to accommodate shower units.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

q. Wolf Creek Group Campground

Within 18 years of license issuance, the licensee shall upgrade the facilities to meet the current FS design standards and requirements of the ADA.

- Pave all roads.
- Construct one eight-stall shower facility with toilets (including septic system).
- Install bear-proof food lockers.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

r. Yellowjacket Campground

Within 8 years of license issuance, the licensee shall redesign and reconstruct the 40-unit campground, retaining existing capacity on existing footprint, to meet the current FS design standards and requirements of the ADA. The following describes specific elements of this condition.

- Replace four two-unit flush toilets and one two-unit vault toilet with accessible buildings in kind.
- Construct one six-stall shower facility with toilets (including septic systems).
- Widen spurs for units 1, 2, 5, and 27 through 31 to 16 feet and repave surface. Reset the barrier rocks 4 feet apart for access to the camp unit.
- Replace all 40 tables with accessible ones, and provide a clear and level ground surface of at least 36 inches minimum around each table.
- Replace or reset pedestal grills to the accessible cooking surface height of 30 to 36 inches, and provide a clear and level ground surface of at least 36 inches around each grill.
- Improve pathways between camp units and spurs/roadway.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Where feasible, level and compact camp units to minimum of 1,200 square feet, with grades to 3 percent or less.
- At sanitary dump station, cut out part of the concrete island in front of the water tower to reach the control valve from the turn out. Lower the control valve, and replace it with a lever-type control valve.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.
- Install bear proof food lockers.

s. Yellowjacket Boat Launch

Within 5 years of license issuance, the licensee shall upgrade the facilities to meet the current FS design standards and requirements of the ADA.

- Engineer and extend boat ramp with cutoff wall to address low-water conditions, to eliminate sand and material from depositing on the ramp and to prevent undercutting of the ramp.
- Engineer and construct a parking facility below the high-water line to extend usability of the boat ramp under low-water conditions.
- Replace existing vault restroom with new accessible restroom.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.

t. Union Valley Bike Trail

Licensee shall complete the bicycle trail system around Union Valley Reservoir. The following are the specific elements of this condition:

- Within 10 years of license issuance, designate accessible parking spaces at Jones Fork Trailhead.
- Within 2 years of license issuance, expand the paved bike trail from Yellowjacket Campground to connect with the existing trail near Tells Creek, including construction of a suspension bridge or through truss bridge across Tells Creek (approximate span of 200 feet).
- Within 8 years of license issuance, expand the paved bike trail from Wolf Creek Campground to the Union Valley Dam (at West Point Campground).
- Within 10 years of license issuance, construct a native surface nonmotorized mountain bike/hiking trail with a design standard of 60 inches around the south side of Union Valley Reservoir from the Union Valley Dam to Jones Fork Trailhead (where the paved trail begins to the north). A bridge will need to be constructed across Jones Fork Silver Creek near its confluence with Union Valley Reservoir.

u. North Union Valley Road

Within 5 years of license issuance, the licensee shall provide access trails from paved (double chip-sealed) turnouts and/or parking pockets along the road to the shore. The licensee shall also restore damaged sites between road and shoreline. (see also Article 1-33).

Ice House Reservoir Area

a. Ice House Recreation Plan

Within 2 years of license issuance, the licensee shall prepare a development plan, to be approved by FS that addresses impacts to the Ice House area from unmanaged recreation, and the need for additional day use opportunities. In addition, this plan shall address the whitewater recreation opportunities in South Fork Silver Creek, above and below Ice House Reservoir. The licensee shall be responsible for the development of sites and/or implementation of measures

identified in this plan within 8 years of license issuance. The following elements shall be addressed:

- Sanitation.
- User conflicts.
- Carrying capacity.
- Day use versus overnight camping.
- Vehicle control.
- Boating access (including day use and overnight camping along the shore).
- Vehicle and foot access to the reservoir.
- Need for day use recreation opportunities at Ice House to mitigate impacts to surrounding areas (for example, Wrights Lake, Jones Fork, Lyons Creek, Silver Creek).
- Determine necessary put-ins, take-outs, and parking for whitewater activities.
- Redesign and reconstruct Silver Creek Campground, if necessary. • Make a good faith effort to purchase at fair market value suitable real property as such property becomes available, or to obtain a long-term lease or easement for use of such property, to facilitate day use recreation opportunities identified in this plan.
- Emergency resource protection measures.
- On-river boat patrol.
- In addition to the elements above, the following specific areas shall also be addressed:
- At the south side of the reservoir, where several dispersed camping sites and user-created access roads exist along the shoreline, determine proper location and size for a small designated boat-in camping area (approximately five units). Determine restoration needs at other areas impacted by dispersed use on south side of reservoir.

b. Ice House Campground

Within 8 years of license issuance, the licensee shall redesign and reconstruct the 83-unit campground, retaining existing capacity on existing footprint, to meet the current FS design standards and requirements of the ADA. The following describes the specific elements of this condition.

- Where feasible, reconstruct and widen all spurs to 16 feet (plus shoulders) and either 25 or 50 feet in length, depending on site features. Reset barrier rocks 4 feet apart for access into the camp unit.
- For all pathways between camp units and spurs/roadway, remove ground protrusions, regrade and widen the pathways, and compact the native surface. Construct 5-foot-wide access routes into the walk in units at less than 10 percent grade, including any necessary retaining walls on upper side, and surface with aggregate base rock. Add steps if necessary.
- Level and harden pads at campsites.
- Redefine user created foot trails to lake shore

- Repave campground roads and spurs.
- Install bear proof food lockers.
- Replace remaining three two-unit toilets with new accessible vault toilets. Replace seats in the six accessible toilets with 18-inch-high seats.
- Replace 80 tables (all except units 81-83) with accessible ones, and provide for a clear ground surface of at least 36 inches minimum around each table.
- Construct a potable water filling station for recreational vehicles.
- Add shower building (with flush toilets) for each half of the campground, or a combined shower facility at the boat launch parking area (between the two campground areas).
- Engineer and reconstruct water storage and distribution system, sized to accommodate recreational vehicle filling station and shower units with flush toilets.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.
- Install bear proof food lockers.

c. Ice House Day Use Area

Within 8 years of license issuance, the licensee shall redesign and reconstruct the existing 10 unit day use area, retaining existing capacity on existing footprint, to meet the current FS design standards and requirements of the ADA. The following describes the specific elements of this condition.

- Replace the two-unit toilet with a new two-unit accessible vault toilet. Locate toilet closer to the parking lot for easier access and servicing.
- Replace the 10 tables with accessible ones. Provide a clear and level ground surface of at least 36 inches around each table.
- Reset all pedestal grills where the cooking height is 30 to 36 inches above the ground. Provide a clear and level ground surface of at least 36 inches around each grill.
- Enlarge picnic pads to a minimum of 600 square feet, removing obstacles and leveling and compacting the native surface. Keep grades to 3 percent or less in all directions.
- Install curb ramps to access sites from the 13-space parking area.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.

d. Northwind Campground

Within 15 years of license issuance, the licensee shall upgrade the facilities at this existing nine-unit campground to meet the current FS design standards and

requirements of the ADA, provide potable water, and address needs for lakeshore access. The following describes the specific elements of this condition.

- Retrofit tables at all nine units by replacing the 8-foot-long table top boards with 10-foot-long boards and raising the boards to provide 28 inches of minimum clearance under the extended ends of the table.
- Reset pedestal grills at all units to provide for a cooking surface height of 30 to 36 inches, and provide a clear and level ground surface of at least 36 inches around each grill
- Replace toilet seats with 18-inch high accessible seats.
- Improve camp pad at each site by removing obstacles, leveling and compacting the native surface. Keep grades to 3 percent or less in all directions
- Reconstruct and widen to 16 feet the spurs for units 2, 7, and 8. Repave the spurs. Reset barrier rocks to provide 4 feet of clearance between them to provide access to these units.
- Install bear proof food lockers.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Develop a potable water system with accessible faucet units.
- Construct lakeshore access (accessible path paved, with a concrete footing/cutoff wall on one side and several level areas for fishing).
- Redesign and pave the fisherman access parking area.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

e. Strawberry Point Campground

Within 15 years of license issuance, the licensee shall upgrade the facilities at this existing ten-unit campground to meet the current FS design standards and requirements of the ADA, provide potable water, and address needs for lakeshore access. The following are specific elements of this condition:

- Retrofit tables at all ten units by replacing the 8-foot-long table top boards with 10-foot-long boards and raising the boards to provide for 28 inches of minimum clearance under the extended ends of the table, and clear ground surface of at least 36 inches around each table.
- Reset pedestal grills at all units to provide for a cooking surface height of 30 to 36 inches, and provide a clear and level ground surface of at least 36 inches around each grill. If there is not enough room, then reset the grills in a new location.
- Replace toilet seats with 18-inch-high accessible seats.
- Improve camp pad at each site by removing obstacles, leveling and compacting the native surface. Keep grades to 3 percent or less in all directions.

- Reconstruct and widen to 16 feet the spurs for units 3 and 8. Repave the spurs. Reset barrier rocks to provide 4 feet of clearance between them to provide access to these units.
- Install bear-proof food lockers.
- Develop potable water system with accessible faucet units.
- Construct a loop trail around the point for day use recreation. Ensure access to the trail is separated from campsites. Construct accessible lakeshore access.
- Reconstruct and pave the day use parking area.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

f. Ice House Boat Launch

Within 8 years of license issuance, the licensee shall upgrade the facilities to meet the current FS design standards and requirements of the ADA and repair damage to boat launch parking lot subgrade and pavement. The following are specific elements of this condition.

- Repair and repave parking area.
- Replace toilet seats with 18-inch-high seats.
- Construct trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.

g. Ice House Sanitation Station

Within 8 years of license issuance, the licensee shall redesign and reconstruct the facility, on existing footprint, to meet the current FS design standards and requirements of the ADA. The following describes the specific elements of this condition.

- Reconstruct, stabilize banks and repave the access road.
- Provide for adequate ground clearance between drain basin and the water tower.
- Replace water control valve with a lever-type control.

h. Ice House Reservoir Lakeshore Road

Within 5 years of license issuance, licensee shall provide access trails from paved (double chip-seaked) turnouts and/or parking pockets along the road to the shore. The licensee shall also restore damaged sites between road and shoreline. (see also Article 1-33).

i. Highland Point Day Use Area

Within 12 years of license issuance, develop Highland Point for fishing access and day use. Land acquisition may be required. Construct new 10- unit picnic area to include:

- Paved access roads, parking and vehicle control
- Accessible vault toilet
- Trails
- Accessible picnic tables and grills
- Accessible access routes
- Trash bin pads with paved approaches, and purchase or retrofit refuse containers for accessibility and bear resistance.
- Provide vegetative screening, and use natural materials to restrict indiscriminate pedestrian and bicycle traffic within and between campsites and use areas.

j. Upper Silver Creek Ice House Day Use

Within 12 years of license issuance, licensee shall develop parking and day use facilities to accommodate existing unmanaged dispersed day use associated with Ice House Reservoir and Silver Creek. The licensee shall make a good faith effort to purchase at fair market value suitable real property as such property becomes available, or to obtain a long-term lease or easement for use of such property, if necessary for these facilities.

- Construct paved parking area for 12 to 16 vehicles at the end of the road,
- Provide one- or two-unit vault restroom with bear-proof trash receptacle adjacent to the parking area.
- Construct a bridge across Silver Creek suitable for bicycle and pedestrian traffic.
- A viewing platform/deck with benches shall be built at the end of the parking area near bridge and beginning of Silver Creek Trail.
- Construct trail up Silver Creek, with other small viewing platforms constructed (possibly mid way and at terminus of trail).
- Provide day use picnic facilities on the southeast side of the bridge with a connecting trail to the paved parking area.

k. Ice House Mountain Bike Trail

Within 10 years of license issuance, extend the Ice House Mountain Bike Trail (native surface) completely around Ice House Reservoir, including stream and spillway crossings. The licensee shall also construct an interconnecting trail between the Ice House mountain bike trail and the Union Valley mountain bike trail.

Other Crystal Basin Facilities

Big Hill Vista

Within 15 years of license issuance, the licensee shall upgrade the facilities to meet the current FS design standards requirements of the ADA and provide visitor amenities. The following describes the specific element of this condition.

- Install two accessible tables and picnic pads, and purchase or retrofit refuse containers for accessibility and bear resistance.

4. Canyonlands

Junction Reservoir

a. Boat Launch at Junction Reservoir Within 10 years of license issuance, improve boat launch (for day use only). The following describes the specific elements of this condition.

- Pave access road to informal boat launch with turnouts for light traffic.
- Provide parking facilities suitable for light trailerable or hand launch boats. Estimate that the site will accommodate up to 10 spaces, but could be fewer because of topographic constraints. Use site design to implement the desired carrying capacity.
- Provide surfaced boat launch extending to low water level.
- Provide one- or two-unit vault restroom.
- Remove existing dispersed campsites near water edge, and install signage (pack-in/out, visitor education, etc).

b. Dispersed Area - Bryant Springs Road and South Fork Silver Creek Bridge

Within 10 years of license issuance, improve access trail (construction road) between Bryant Springs Road and stream. Provide turnouts for parking at take-out site for whitewater boating on South Fork Silver Creek.

Brush Creek Reservoir Boat Launch

Within 5 years of license issuance, licensee shall prepare a development plan, to be approved by FS that addresses reservoir access, day use opportunities, and facility needs or improvements. Licensee shall be responsible for developing sites and/or implementing measures identified in this plan within 8 years of license issuance. The following elements shall be addressed:

- a. Sanitation and garbage.
- b. User conflicts.
- c. Carrying capacity.

- d. Informational and directional signage.
- e. Day use and overnight use.
- f. Vehicle control.
- g. Boating access.
- h. Emergency resource protection measures.

In addition to the elements above, the following areas of concerns shall also be addressed:

- i. Evaluate the need for improvements to provide for shoreline fishing access or an accessible fishing pier on the reservoir.

Slab Creek Reservoir

- a. Boat Launch at Slab Creek Reservoir at Forebay Road

Within 2 years of license issuance, licensee shall prepare a development plan, to be approved by FS that addresses safe and reasonable boating access, impacts from unmanaged recreation, and the need for additional day use and overnight facilities. Licensee shall be responsible for the development of sites and/or implementation of measures identified in this plan within 5 years of license issuance. The following elements shall be addressed:

- Foot access that extends to the minimum reservoir level.
- Sanitation and garbage.
- Parking and vehicle control.
- Carrying capacity.
- Day use and overnight use.
- Informational and directional signage.
- Resource protection measures.

In the event that construction of the Iowa Hill Reservoir causes temporary closure of the boat launch access near the dam, the Forebay boat launch and parking facilities shall be completed before the downstream public access is made unavailable.

- b. Boat launch at Slab Creek Reservoir near Dam

Within 2 years of license issuance, licensee shall prepare a development plan, to be approved by FS, that addresses safe and reasonable boating access, impacts from unmanaged recreation, and the need for additional day use facilities. Licensee shall be responsible for the development of sites and/or implementation

of measures identified in this plan within 5 years of license issuance or at the completion of the Iowa Hill Development. The following elements shall be addressed:

- Needed improvements to road access from North Canyon Road (County Road 8014 and Forest Road 11N96) to provide for public safety, such as widening, turnaround at boat launch, turnouts, signs (no trailer access).
- Provide parking for a minimum of 10 vehicles within a reasonable distance of boat launch.
- Improve boat launch and harden to extend to the minimum reservoir level and restrict trailer use.
- Provide one-unit vault restroom.
- Needs for garbage collection.
- Provide resource protection measures at the boat launch and along the access road from North Canyon Road (Forest Road 11N96).
- Directional sign at intersection of County Road ELD-8014 and North Canyon Road.
- Information kiosk or signboard at boat launch.

The licensee shall be responsible for ensuring that the boat launch is accessible to the minimum reservoir level throughout the license period.

Article 1-20. Heavy Maintenance

The licensee will be responsible for the cost of the necessary maintenance, rehabilitation, and reconstruction, including the costs of design and administration, as determined through the Review of Recreation Developments (as described in Article 1-18) for the Project recreation facilities. Heavy maintenance and rehabilitation are defined as work that is necessary to keep existing facilities in serviceable condition to meet FS standards and includes components of recreation facilities such as water systems, traffic control barriers, roads, spurs, and associated drainage structures, grills and fire rings, picnic tables, toilets, and signboards. The licensee shall use FS standards for the frequency of heavy maintenance as a guideline, but not a prescription, for licensee's performance of its heavy maintenance responsibilities. As determined through the Review of Recreation Developments (as described in Article 1-18), heavy maintenance projects may be deferred that would otherwise be timely under FS frequency standards, if FS determines that actual conditions indicate that the project is not yet necessary.

Article 1-21. Recreation Operation, Maintenance, and Administration

Beginning the first full year after license issuance, the licensee shall annually pay to FS \$1,000,000.00 (year 2007 cost basis) The cost shall be escalated annually based on the U.S. Gross Domestic Product – Implicit Price Deflator (GDP-IDP) in accordance with a collection agreement with the FS. These funds are for FS to provide for operation, maintenance, and administration of those developed recreation sites, facilities, or uses that are adjacent to or in the vicinity of Project reservoirs and facilities listed in Articles 1-18 and 1-19 (either developed as part of the original/amended license or affected by operations). This will include, but not be

limited to, managing use within and immediately adjacent to the Project boundary, and performing both regular and annual maintenance. In addition, this will fund the special use permit administration required for facilities developed as part of the original/amended license and operated by a concessionaire. Work to be completed within these areas is to consist of conducting patrols, picking up litter, providing public information, enforcing rules and regulations, rehabilitating impacted areas, addressing sanitation, maintaining day use sites (such as concentrated use areas), maintaining trails, information signs, and regulatory signs, responding to fires and other emergencies, assisting in search and rescue, addressing resource impacts, and area condition monitoring.

Article 1-22. Carrying Capacity on Lands Affected by the Project

The licensee shall provide data to support the determination of carrying capacity on lands affected by the Project, including, but not limited to: visitor perceptions of crowding, user perceptions of “desired conditions,” user preferences for amenities, capacity conditions at developed facilities within or affected by the Project, and resource impacts and social experience. FS reserves the right to make changes to Article 1-19, once these data are made available.

Article 1-23. Reservoir Levels

The licensee shall, beginning as early as reasonably practicable within 6 months after license issuance, meet or exceed the end-of-month reservoir elevations for Loon Lake, Union Valley, and Ice House reservoirs as shown in the attached tables. Compliance will be measured at the licensee’s reservoir elevation gages as published by the USGS.

1. Loon Lake Reservoir

Maintain the reservoir level to meet the end-of-month reservoir storage elevation shown in the table below.

Loon Lake Reservoir Level by Water Year						
	Month	End-of-Month Elevation				
		CD	DRY	BN	AN	WET
	JULY	6388	6395	6399	6400	6400
	AUGUST	6382	6389	6394	6393	6393
	SEPTEMBER	6379	6385	6390	6390	6390

2. Union Valley Reservoir

Maintain the reservoir level to meet the end-of-month reservoir storage elevation shown in the table below.

Union Valley Reservoir Level by Water Year						
Month	End-of-Month Elevation					
	CD	DRY	BN	AN	WET	
JULY	4816	4836	4856	4856	4856	
AUGUST	4803	4827	4835	4841	4842	
SEPTEMBER	4796	4818	4830	4830	4830	

3. Ice House Reservoir

Maintain the reservoir level to meet the end-of-month reservoir storage elevation shown in the table below.

Ice House Reservoir Level by Water Year						
Month	End-of-Month Elevation					
	CD	DRY	BN	AN	WET	
JULY	5435	5437	5440	5441	5441	
AUGUST	5430	5433	5434	5435	5434	
SEPTEMBER	5420	5429	5430	5431	5430	

4. Gerle Reservoir

The licensee shall make every reasonable effort to maintain the water surface in Gerle Reservoir at as high an elevation as practicable, and with a minimum of fluctuation, from May 1 to September 10 of each year in order to provide maximum recreational benefits, including accessibility and the ability to fish from the fishing pier. If the licensee anticipates the reservoir will be drawn down below 5,225 feet during this time period, the licensee shall consult with FS, SWRCB, FWS, and CDFG following the direction in number 8 (Interim Modification) below.

5. Slab Creek Reservoir

The licensee shall make a good faith effort to maintain the reservoir level above 1,830 feet in elevation during daylight hours between 10:00 AM and 8:00 PM during the period between July 1 through September 30. The licensee shall also make a good faith effort to limit daily fluctuations to less than 7 feet per day during daylight hours between 10:00 AM and 8:00 PM during the period between July 1 through September 30.

The minimal reservoir elevation and maximum daily fluctuation shall be reassessed and modified if necessary to accommodate (1) the operation of the proposed Iowa Hill Pump Storage Project, should it be constructed, (2) the recreational use at Slab Creek Reservoir, and (3) other applicable factors. Any modifications shall be approved by the FS prior to implementation. See Appendix C.

6. Other Reservoirs

Maintain the seasonal reservoir levels at Junction, and Brush Creek Reservoirs within the range of levels measured during the period of record between 1975 through 2000. The licensee shall make every reasonable effort to maintain the water surface in Rubicon and Buck Island Reservoirs at as high an elevation as practicable, and with a minimum of fluctuation, from May 1 to September 10 of each year in order to secure the maximum recreational benefits. As described in Article 1-1, the licensee shall maintain an overwintering minimum pool of 6,527 feet in elevation in Rubicon Reservoir for the protection of aquatic species.

7. Super Dry Water Year

A Super Dry (SD) is defined as any CD year that is immediately preceded by a Dry or CD year or any Dry year that is immediately preceded by any combination of two Dry or CD years. In the event of a SD year, the licensee shall, by March 10, notify FS, CDFG, SWRCB, and the Consultation Group provided under Section 4.12.1 of the Relicensing Settlement Agreement of the licensee's concerns related to reservoir levels. By June 1 of a SD year, the licensee shall confer with FS, CDFG, SWRCB, and the Consultation Group to discuss reservoir operations plans and reservoir levels during the SD water year. The licensee may implement the revised operations for a SD year upon approval by FS, FERC, SWRCB and CDFG.

8. Interim Modifications

These reservoir elevations may be modified upon the occurrence of the following events: (1) State or Federal electrical emergencies 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; (2) system events that cause SMUD's Operating Reserves to drop below the Western Energy Coordinating Council Minimum Operating Reliability Criteria; or (3) equipment malfunction, public safety emergency, or law enforcement activity. In the event of such an interim modification during July, August, or September, the licensee shall promptly notify FS, SWRCB, CDFG, FWS, and the Consultation Group (collectively, Interested Parties) and FERC. Each notification shall include: (1) a description of the incident, including the reason the reservoir level was not or will not be met; (2) the licensee's analysis of the implication of the incident on meeting future reservoir levels for that water year; and (3) the licensee's proposal to manage reservoir levels to minimize recreational impacts and address energy and operational requirements for any months in which reservoir levels will not be achieved. In addition, the licensee's proposal shall address: (a) Prioritizing reservoir levels among the three reservoirs; (b) Developing measures as they relate to impacts on recreational resources, if necessary; and (c) Developing other measures as appropriate. The measures in licensee's proposal will be commensurate with the degree and time period during which reservoir levels are not met, and may include actions to be taken by licensee or others, such as increased patrols, extension of boat ramps, or development of/contribution to a mitigation fund. Once the Project is no longer subject to the event and if the end-of-month reservoir elevations for Loon Lake, Union Valley, and/or Ice House Reservoirs cannot be achieved for that month, within 10 business days

the licensee shall confer with Interested Parties (Conference). The purpose of the Conference shall be to review the licensee's proposal to manage reservoir elevations for the remainder of the recreation season. The licensee will implement the proposal upon approval by FERC, FS, and SWRCB. Within 10 business days following this conference, the licensee shall file with FERC a letter summarizing the Conference.

9. Conferences for Abnormal Precipitation Patterns

In (1) water years in which the forecast April – July unimpaired runoff¹ is less than 40 percent of the forecasted total water year unimpaired runoff² or water years that follow a Super Dry water year; and (2) the licensee determines that the end of month elevations may not be achievable for that year, the licensee may request a Conference with Interested Parties by June 1. At least 10 business days prior to the Conference, the licensee shall provide to Interested Parties the licensee's proposal to manage reservoir levels to minimize recreational impacts and address energy and operational requirements for any months in which reservoir levels will not be achieved. The licensee's proposal shall address: (a) Prioritizing reservoir levels among the three reservoirs; (b) Developing measures as they relate to impacts on recreational resources, if necessary; and (c) Developing other measures as appropriate. The measures in licensee's proposal will be commensurate with the degree and time period during which reservoir levels are not met, and may include actions to be taken by licensee or others, such as increased patrols, extension of boat ramps, or development of/contribution to a mitigation fund. The purpose of the Conference shall be to review the licensee's proposal measures to manage reservoir elevations for the remainder of the recreation season. The licensee will implement the plan upon approval by FERC, FS and SWRCB. Within 10 business days following this Conference, the licensee shall file with FERC a letter summarizing the Conference.

10. Reservoir Level Monitoring and Adjustment

Within 5 years of license issuance, and every 5 years thereafter, the licensee shall prepare a report describing whether the target reservoir levels have been achieved, and if not, the reasons and time periods when the target reservoir levels were not achieved. The licensee shall provide a copy of the report to FS, CDFG, SWRCB, FWS, and FERC.

Article 1-24. Recreation Streamflows

Water Year Types. The minimum streamflow schedule has been separated into five water year types: Wet, Above Normal (AN), Below Normal (BN), Dry, and Critically Dry (CD). The licensee shall determine the water year type based on the water year forecast of unimpaired runoff in the American River below Folsom Lake published, near beginning of each month from

¹ Department of Water Resources May Bulletin 120 "Report of Water Conditions in California," table "April-July Unimpaired Runoff," row "American River below Folsom Lake," column "Apr-Jul Forecasts."

² Department of Water Resources May 120 Bulletin "Report of Water Conditions in California," table "Water Year Unimpaired Runoff," row "American River Below Folsom Lake," column "water Year Forecast."

February through May, in the California Department of Water Resources Bulletin 120 “Report of Water Conditions in California.” Specifically, the “American River Below Folsom Lake” forecast is currently shown in the “Water Year Forecast” column of the “Water Year Unimpaired Runoff” table in Bulletin 120. The water year types are defined as follows:

<u>Year Type</u>	<u>American River Water Year Forecast</u>
Wet	greater than or equal to 3.5 MAF
AN	greater than or equal to 2.6 MAF but less than 3.5 MAF
BN	greater than 1.7 MAF or equal to but less than 2.6 MAF
Dry	greater than 0.9 MAF or equal to but less than 1.7 MAF
CD	less than 0.9 MAF

Each February through May the licensee shall determine the water year type based on the DWR Bulletin 120 forecast and shall operate for that month based on that forecast beginning 3 days after issuance of the forecast and continuing until 2 days after issuance of a subsequent monthly forecast. The May forecast shall be used to establish the final water year type for the remaining months of the water year and the month of October. The water year type for the months of November through January shall be based on the Department of Water Resources’ Full Natural Flow record for the American River at Folsom (California Data Exchange Center site AMF sensor 65) for the preceding water year, and the licensee shall operate based on that record beginning November 1. The licensee shall provide Notice to FS, FERC, CDFG, FWS, and SWRCB of the final water year type determination within 30 days of the May forecast.

1. SFAR Below Slab Creek Reservoir Dam

Within 3 months of license issuance, the licensee shall provide recreational streamflows in the SFAR below Slab Creek Reservoir Dam as follows. In BN, AN, and Wet water years, the licensee shall spill water from Slab Creek Reservoir to provide streamflows between 850 and 1,500 cfs between the hours of 10:00 am and 4:00 pm for 6 days in no less than three events in the period beginning March 1 and ending May 31. If conditions permit, one of the events will be replaced with a 3-day event on the Memorial Day weekend, in which case the total number of days for the year will be increased to 7 days.

These recreational streamflows shall be provided until the Iowa Hill Pumped Storage Project is constructed, or if the Iowa Hill Pumped Storage Project is not constructed, until year 15 after license issuance. If the Iowa Hill Pumped Storage Project is not constructed, and the triggers described below for increase in recreational streamflow days have not been met by year 15 after license issuance, these recreational streamflows shall continue to be provided after year 15.

After either (1) the Iowa Hill Pumped Storage Project is constructed or (2) in year 15 of license issuance if the triggers described below for increase in recreational streamflow days have been met, the licensee shall provide recreational streamflows in the SFAR below Slab Creek Reservoir Dam as follows.

Water Year Type	March	April	May	June - September	October
CD		850 cfs - 950 cfs kayak flows from 10am to 1pm for 4 weekend days PLUS 1400 cfs – 1500 cfs rafting flows from 10am to 1pm and 850 – 950 cfs kayak flows from 1:30pm to 4pm for 2 weekend days			
D		850 cfs - 950 cfs kayak flows from 10am to 1pm for 4 weekend days PLUS 1400 cfs - 1500 cfs rafting flows from 10am to 1pm and 850 – 950 cfs kayak flows from 1:30pm to 4pm for 6 weekend days			850 cfs - 950 cfs kayak flows from 10am to 1pm for 2 weekend days
BN		850 cfs - 950 cfs kayak flows from 10am to 1pm for 3 weekend days ¹ /holidays PLUS 1400 cfs – 1500 cfs rafting flows from 10am to 1pm and 850 – 950 cfs kayak flows from 1:30pm to 4pm for 9 weekend days ¹ /holidays			850 cfs - 950 cfs kayak flows from 10am to 1pm for 6 weekend days
AN		1400 cfs - 1500 cfs rafting flows from 10am to 1pm and 850 – 950 cfs kayak flows from 1:30pm to 4pm for 12 weekend days ¹ /holidays			850 cfs - 950 cfs kayak flows from 10am to 1pm for 6 weekend days
W		March 1 through May 31 1400 cfs - 1500 cfs rafting flows from 10am to 1pm and 850 – 950 cfs kayak flows from 1:30pm to 4pm for 12 days, weekend days ¹ /holidays			850 cfs - 950 cfs kayak flows from 10am to 1pm for 6 weekend days

¹ Priority shall be given to providing recreational streamflows on Memorial Day weekend.

The licensee shall only provide the October recreation streamflows specified above upon a determination by the FS, SWRCB, FWS, and CDFG that such streamflows can be provided without unacceptable environmental impact. The determination made by FS, SWRCB, FWS, and CDFG shall be based on an investigation of the potential for ecologically suitable recreational streamflow based on monitoring identified in Article 1-

5. The initial evaluation and determination shall be made within 5 years of license issuance. Absent a determination that such streamflows can be provided, the licensee shall annually request that the subject be reconsidered by the FS, SWRCB, FWS, and CDFG for 10 years after the initial determination.

If October flows cannot be provided for operational, aquatic, or other reasons, the equivalent flow volume will be provided in addition to the specified recreational streamflows for the following spring upon approval of FS, SWRCB, FWS, BLM, and CDFG. Scheduled boating days shall not exceed the total displayed in the table above; however, if October flows are provided the following spring, the boating days in the spring may exceed those displayed in the table. In addition, the frequency and magnitude of the boating flows may be adjusted within the total volume of water displayed in the table after consultation with FS, SWRCB, CDFG, FWS, BLM, and the Consultation Group provided under Section 4.12.1 of the Relicensing Settlement Agreement and upon approval of FS, SWRCB, CDFG, BLM, and FWS.

Recreational streamflows may be modified or suspended in the event: (1) State or Federal electrical emergencies 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; (2) of system events that cause SMUD's Operating Reserves to drop below the Western Energy Coordinating Council Minimum Operating Reliability Criteria; (3) of equipment malfunction, public safety emergency, or law enforcement activity; (4) control of spill events at Slab Creek Reservoir Dam may cause the licensee to spill Loon Lake, Union Valley, or Ice House Reservoirs within 7 days of the recreational spill event; or (5) the licensee determines expected inflows from SFAR into Slab Creek Reservoir are not controllable to 1,500 cfs. In the event boating days are modified or suspended, the licensee shall reschedule days as soon as practicable; however, the licensee shall not be obligated to provide such days if weather or other operational conditions do not permit such days to be rescheduled by May 31. Preference for rescheduled days shall be weekend days; however, weekdays may be substituted if there are not sufficient weekend days prior to May 31.

Consultation shall take place among licensee, FS, BLM and the Consultation Group no later than February 15 each year to determine a preliminary flow schedule, if any. Additional consultation shall take place as necessary and final notification of days of flow will be made no less than 3 days in advance.

Within 3 months of license issuance and continuing at least through year 5, the licensee shall monitor all boating use taking place on days provided for recreational streamflows. The monitoring plan shall include but is not limited to a complete accounting of all boating users entering the SFAR in the 1/2 mile below Slab Creek Reservoir Dam, a description of the type of watercraft being used, and to the extent possible, a determination of where the boaters are ending their trip.

At the end of year 5 after license issuance, if the Iowa Hill Pumped Storage Project construction has not commenced, monitoring shall continue and the licensee shall, in

cooperation with FS, SWRCB, BLM, and the Consultation Group, prepare a Whitewater Boating Recreation Plan describing whitewater recreation use and impacts and establishing triggers that would determine if the licensee shall install a valve or make other facility modifications sufficient to deliver the recreational streamflows described in the table above.

At the end of year 10 after license issuance, if construction of the Iowa Hill Pumped Storage Project has not commenced, the licensee shall, in cooperation with FS, SWRCB, BLM, and the Consultation Group, based on the information collected as a result of the Whitewater Boating Recreation Plan, determine if the facility shall be modified. This determination shall be filed with FERC, following FS approval.

If the Iowa Hill Pumped Storage Project is not constructed, and the triggers specified in the Whitewater Boating Recreation Plan have been met, the facilities shall be modified and functional within 15 years of license issuance. If the triggers have not been met by year 10, use will continue to be monitored and a new determination will be made every 5 years as to whether the triggers have been met. Once they are met, the facilities will be modified and the recreational streamflows described in the table above shall be implemented through the term of the license.

If the licensee cannot provide recreation streamflows due to construction activities associated with the Iowa Hill Pumped Storage Project or other facility modifications, the licensee shall meet with FS, SWRCB, BLM, and the Consultation Group to develop an interim plan to address recreation streamflows. The licensee shall implement the interim plan upon approval of FS, SWRCB, and BLM.

The licensee shall, in cooperation with FS, SWRCB, BLM, and the Consultation Group, prepare, implement, and update as necessary, a plan that will provide easement for access and parking in the immediate vicinity of White Rock Powerhouse for recreational streamflows described above. The licensee shall make a good faith effort to purchase at fair market value suitable real property as such property becomes available, or to obtain a long-term lease or easement for use of such property, if necessary for these facilities. If easements cannot be obtained, licensee shall consult with FS, SWRCB, BLM, and the Consultation Group to determine an alternate location for access. The plan shall be approved by FS, SWRCB, BLM, and the Consultation Group and implemented no later than year 2 after license issuance.

Within 2 years of license issuance, , the licensee shall prepare a recreation management plan, to be approved by FS and BLM that addresses the whitewater recreation needs in the Slab Creek Dam to White Rock Powerhouse. The licensee shall be responsible for the development of sites and/or implementation of measures identified in this plan after approval of the plan on a schedule that is developed in the plan. The following elements shall be addressed:

- a. Use levels and projected future use levels.

- b. Carrying capacity.
- c. Sanitation and garbage.
- d. User conflicts.
- e. Resource effects along the river and including effects to private land.
- f. Necessary put-ins, take-outs and parking for whitewater activities.
- g. Emergency resource protection measures.
- h. Public safety, search and rescue needs and other emergency response needs.
- i. Information and educational signing needs.
- j. Demand for commercial services or outfitting, including shuttle services and guiding.
- k. On-river boat patrol.

2. South Fork Silver Creek Below Ice House Reservoir Dam

Within 3 months after license issuance, the licensee shall provide the recreation streamflows displayed in the following tables for the first 5 years after license issuance:

Recreational Streamflows for South Fork Silver Creek Below Ice House Reservoir Dam

Water Year Type	January – April	May	June	July - December
CD		300 cfs for 1 weekend days ¹		
D		300 cfs for 3 weekend days		
BN		400 cfs for 2 weekend days/holidays PLUS 500 cfs for 2 weekend days/holidays		
AN		400 cfs for 2 weekend days/holidays PLUS 500 cfs for 4 weekend days/holidays		

W		400 cfs for 4 weekend days/holidays or Fridays PLUS 500 cfs for 5 weekend days/holidays or Fridays	

1. Flows shall be provided between the hours of 10:00 am and 3:00 pm.

Prior to the end of the 5-year period, the licensee shall, in cooperation with the Consultation Group, prepare a recreation plan that is approved by FS, to determine triggers for establishing when the licensee shall increase the number of days of recreation streamflows to be provided. Within 5 years of license issuance and every 5 years thereafter, the licensee shall, in cooperation with FS and the Consultation Group, prepare a report describing whitewater recreation use and impacts, whether use has exceeded predetermined triggers such that recreation streamflow days should be adjusted. Boating days shall not exceed the total amount displayed in the table below; however, the frequency and magnitude of the boating flows may be adjusted within the total volume of water displayed in the tables upon approval of the FS. This report shall be filed with FERC, following FS approval.

Water Year Type	January – April	May	June	July - December
CD		300 cfs for 2 weekend days ¹		
D		300 cfs for 6 weekend days		
BN		400 cfs for 5 weekend days/holidays PLUS 500 cfs for 2 weekend days/holidays		
AN		400 cfs for 5 weekend days/holidays PLUS 500 cfs for 6 weekend days/holidays		

W		400 cfs for 7 weekend days/holidays or Fridays PLUS 500 cfs for 9 weekend days/holidays or Fridays	
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1. Flows shall be provided between the hours of 10:00 am and 3:00 pm.

The licensee shall annually, in cooperation with the FS, CDFG, and the Consultation Group, identify large woody debris that is hazardous to recreation streamflow users. The licensee shall relocate within the channel the large woody debris upon approval of the FS.

All provisions for recreation streamflows are subject to the safe operability of the Project facilities and equipment necessary to provide such streamflows. The licensee shall make a good faith effort to maintain the operability of such Project facilities and equipment and shall not schedule discretionary outages of such Project facilities and equipment in conflict with providing the recreation streamflows described above. The licensee shall make a good faith effort to provide scheduled recreation streamflows on the days when such releases are forecast to occur.

The recreation streamflows described above may be temporarily modified for: (1) state or Federal electrical emergencies 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; (2) system events that cause the Operating Reserves to drop below the Western Energy Coordinating Council Minimum Operating Reliability Criteria; or (3) equipment malfunction, public safety emergency, or law enforcement activity. If the described recreation streamflows are so modified, the licensee shall provide Notice to FERC and FS as soon as possible but no later than 10 days after such incident. The described recreation streamflows may also be temporarily modified for short periods in non-emergency situations upon approval of FS for areas within their jurisdiction. If the described recreation streamflows are so modified, the licensee shall provide Notice to FERC and FS.

Article 1-25. Public Information Services

The licensee shall be responsible for the following public information measures:

1. **Streamflow and Reservoir Level Information**

The licensee shall, within 1 year of license issuance, in consultation and coordination with FS, SWRCB, and the Consultation Group provided under Section 4.12.1 of the Relicensing Settlement Agreement, submit a plan to FERC for providing, at a minimum, the following:

- a. Real-time (15-minute increments and refresh rates or at the capacity of the reporting technology) lake stage height and storage information for each of the following reservoirs: Rubicon Reservoir, Loon Lake Reservoir, Ice House Reservoir, Union Valley Reservoir, Gerle Creek Reservoir, Brush Creek Reservoir, Junction Reservoir, and Slab Creek Reservoir.
- b. Installation of up to two simple staff gages for use by the public on each of the following stream reaches: South Fork Silver Creek below Ice House Reservoir Dam, and South Fork American River below Slab Creek Reservoir Dam.
- c. Real-time (15-minute increments at refresh rates or at the capacity of the reporting technology) streamflow and reservoir level information that is available to the public year-round via toll-free telephone number or other appropriate technology approved by FS.
- d. Streamflow information, in cfs, on a website, for the following Project-related stream reaches:
 - Rubicon River Below Rubicon Reservoir Dam
 - Little Rubicon River Below Buck Island Reservoir Dam
 - Gerle Creek Below Loon Lake Reservoir Dam
 - Gerle Creek Below Gerle Creek Reservoir Dam
 - South Fork Rubicon River Below Robbs Peak Reservoir Dam
 - South Fork Silver Creek Below Ice House Reservoir Dam
 - Silver Creek Below Junction Reservoir Dam
 - Silver Creek Below Camino Reservoir Dam
 - Brush Creek Below Brush Creek Reservoir Dam
 - SFAR Below Slab Creek Reservoir Dam

The plan shall be approved by FS and SWRCB prior to filing with FERC. Following approval, the minimum streamflow and recreational streamflow schedules from Articles 1-1 and 1-24, as well as current water year type designation, shall also be published via website.

2. Project Recreation Brochure/Map

The licensee shall develop and print one or more brochures and maps that describes the recreation opportunities, recreation facilities, rules, and responsibilities for the area of the Project, including the canyonlands, high country lakes, and streams. The brochure will be provided to FS for review and approval prior to completion. The licensee shall make the brochure/map available to the public free of charge. The brochure/map shall be made available continuously and shall be updated as conditions change.

3. Interpretive, Education, and Public Information Plan

Within 2 years of license issuance, the licensee, in consultation with FS and other appropriate agencies and the Consultation Group, shall complete an Interpretive, Education, and Public Information Plan that shall be approved by FS and filed with FERC. At a minimum, the plan shall include themes, design, audience, delivery methods, and schedule for implementation for providing up-to-date information such as: sightseeing, hiking, observing wildlife, and utilizing facilities such as boat ramps, campgrounds, and beaches. The licensee shall coordinate this plan with the licensee for the Chili Bar Hydroelectric Project, FERC No. 2155.

Article 1-26. Fish Stocking

The licensee shall match the amount of fish stocked by CDFG, up to a total of 50,000 pounds each, of fish per year, to be distributed among Loon Lake, Union Valley, and Ice House Reservoirs as determined by CDFG. However, in no case shall the amount of fish provided by the licensee be less than 25,000 pounds per year.

Article 1-27. Visual Resource Protection

1. FS and licensee shall meet every 5 years to review opportunities to improve how well Project facilities blend in with the surrounding landscape. The type of rehabilitation/reconstruction work needed will be dependent on current policies, technologies, condition of facilities, impacts to surrounding areas, and other factors.
2. During planning and prior to any new construction or maintenance of facilities that have the potential to affect visual resources of National Forest System lands (including but not limited to the recreation related construction), the licensee shall file with FERC, a plan approved by FS for the protection and rehabilitation of National Forest System visual resources affected by such construction or maintenance. At a minimum, the plan shall address clearings, spoil piles, and Project facilities involved in such construction or maintenance, like diversion structures, penstocks, pipes, ditches, powerhouses, other buildings, transmission lines, corridors, and access roads. The plan shall address facility configurations, alignments, building materials, colors, landscaping, and screening. The plan shall provide a proposed mitigation and implementation schedule to bring the Project facilities involved in such construction and maintenance affecting visual resources on National Forest System lands into compliance with visual resource standards and guidelines in the Eldorado National Forest Land and Resource Management Plan. Mitigation measures identified for either the visual resource plan for new construction or maintenance or the measures identified for existing facilities shall include, but are not limited to: (1) surface treatments with FS approved colors and natural appearing materials that will be in harmony with the surrounding landscape, (2) use of non-specular conductors for the transmission lines, (3) use of native plant species to screen facilities from view, (4) reshaping and revegetating disturbed areas to blend with surrounding visual characteristics, and, (5) locating transmission facilities to minimize visual impacts.

3. The following mitigation measures to existing facilities will be performed to improve visual quality reductions as follows for improvements that have not already been completed:
 - a. Rubicon Reservoir. Within 2 years of license issuance paint the metal components of the gaging station, intake booms, telemetry facilities and cable crossing and bucket a nonreflective black color. Perform a visual inspection every 2 years and touch-up or re-paint as necessary to maintain the facility in good condition. Replace galvanized chain link fence at tunnel outlet with black fencing.
 - b. Robbs Peak Forebay. Within 2 years of license issuance paint galvanized railings with non-reflective black paint. Perform a visual inspection every 2 years and touch-up or re-paint as necessary to maintain the facility in good condition. Replace galvanized chain link fence with black vinyl fencing with black posts. Powder coating is preferred over painted metal. Paint or stain building roof a dark gray color to be approved by FS.
 - c. Robbs Powerhouse Facilities. Within 8 years of license issuance paint all paintable surfaces the same color as the Robbs Penstock.
 - d. Union Valley Dam and Sub-station. Within 13 years of license issuance sand-blast white paint from guardrail. Paint non-reflective black or replace with core-ten guardrail. Replace all chain link fence with black vinyl fencing with black posts. Powder coated posts are preferred over painted metal.
 - e. Loon Lake Sub-station. Within 2 years of license issuance paint doors on building dark gray.
 - f. Loon Lake Passive Reflector (Wentworth Peak). Within 2 years of license issuance move the reflector from the skyline to a location with a back-drop. Paint a camouflage design on reflector in colors that allow it to blend in with the natural surroundings. If re-location is not possible because of site-line, investigate alternative technology to replace the facility with a structure with less visual impact.
 - g. Loon Lake Gate Shaft. Within 2 years of license issuance paint roof and building colors approved by FS.
 - h. Gerle Reservoir Dam. Within 2 years of license issuance paint handrail and guardrail non-reflective black.
 - i. Licensee-owned Weather Stations. Within 4 years of license issuance paint all reflective components with non-reflective black paint, except for meteorological sensors.

- j. Jones Fork Penstock. Within 3 years of license issuance paint the same color as the Robbs Penstock.

Article 1-28. Heritage Resources

Within 6 months after license issuance, the licensee shall complete a Heritage Properties Management Plan (HPMP) for FS approval. The HPMP will be incorporated into the Programmatic Agreement (PA) by reference. The HPMP will take into account Project effects on prehistoric and historic resources, Native American traditional cultural values, direct and indirect effects to heritage resources within the area of potential effect, ethnographic studies, historic archaeological studies, and Project-related recreation impacts to archaeological properties affecting National Forest System lands. The HPMP shall also provide measures to mitigate the identified impacts, a monitoring program, and management protocols for the ongoing protection of archaeological properties. The plan shall be filed with FERC. The licensee shall implement the plan upon approval.

Article 1-29. Heritage Resource Discovery

If, prior to or during ground disturbance or as a result of Project operations, items of potential cultural, historical, archeological, or paleontological value are reported or discovered, or a known deposit of such items is disturbed on National Forest System lands and licensee adjoining property, the licensee shall immediately cease work in the area so affected. The licensee shall then notify FS and shall not resume work on ground disturbing activities until it receives written approval from FS. If it deems it necessary, FS may require the licensee to perform recovery, excavation, and preservation of the site and its artifacts at the licensee's expense through provisions of an Archaeological Resources Protection Act permit issued by FS.

Article 1-30. Transportation System Management

1. Transportation System Management Plan
 - a. Within 1 year of license issuance, the licensee shall file with FERC a Transportation System Management Plan that is approved by FS for roads on or affecting National Forest System lands. The plan shall establish the level of licensee responsibility for Project-related roads. The licensee shall have primary responsibility for non-system roads and for maintenance level 1 and 2 roads. There shall be shared levels of responsibility for maintenance level 3, 4, and 5 roads. FS shall make available to the licensee all information it has about these roads. The licensee shall implement the plan upon approval. At a minimum the Plan shall:
 - b. Include a map showing all roads, both FS system roads (classified), and FS non-system (unclassified) roads associated with the Project.
 - c. Identify and list on a spreadsheet the Project-related uses of all roads described above, including an estimate of the amount of use by season of the year.

- d. Identify and list the condition of the roads described above that are determined to be the primary responsibility of the licensee, including any construction or maintenance needs. Information shall include length and width of road, location and size of culverts, grade, slope position, hydrologic connectivity, surfacing, and jurisdiction sufficient for FS to complete the roads use permit Exhibit A and to complete any required Roads Analysis.
- e. Include a map of a Traffic Safety and Signage plan for all roads described above that are determined to be the responsibility of the licensee. Include both safety and destination/distance information signs at major road intersections and features. An inventory of all signs, together with photographs of each sign, shall be included. Mapping shall be completed using global positioning system (GPS) instrumentation and made available as a digital format layer. Signs shall conform to FS Manual direction and the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD).
- f. Include a map of all drainage crossings of bridges and culverts for all roads described above that are determined to be the responsibility of the licensee. Provide hydraulic calculations verifying that all intermittent and perennial stream crossings shall pass a 100-year storm event and associated bedload and debris, and allow fish passage through all culverts identified as fish habitat areas. The licensee shall develop a plan for FS approval to upgrade those culverts not meeting this standard. Priority for upgrading will be based on the potential impact to the ecological value of the riparian resources affected.
- g. Address measures to control erosion related to Project facilities on or affecting National Forest System lands, including dams, roads, penstocks, powerlines, transformer sites, reservoirs, and reaches. Consider stream sedimentation, dust, and soil movement induced by Project roads and road maintenance activities, preventing loss of roads through ongoing hillside erosion, sediment management of roads within 150 feet of the river, and diversion prevention dips in specified areas to minimize damage from culvert failure.
- h. Identify helispots routinely used to access Project facilities on National Forest System lands, including any staging areas and access roads. Include notification standards for FS (Camino dispatch), including radio frequencies and N (tail) numbers.
- i. Include a map showing easements or other right of way agreements for all roads, associated with the Project and identify roads for which an easement or right of way is needed. Implementation shall include acquisition of any needed easements or right of ways.

Every 5 years, the licensee shall prepare a 5-year plan to identify the maintenance and reconstruction needs for roads associated with the Project. The licensee shall file the plan

with FERC after approval by FS. All road maintenance and construction shall meet FS specifications and best management practices. The licensee shall construct, operate, and maintain Project facilities, including roads, parking and storage lots, reservoir shorelines, bridges, and culverts to maintain natural fluvial and colluvial sediment transport to the Project reaches, as far as feasible.

2. Specific Transportation Needs

- a. Within 5 years of license issuance, the licensee shall, in accordance with the USFS cooperative road use plan for road use, funding and maintenance, improve, by reconstructing and surfacing with a double chip-seal overlay, the “North Union Valley Road” (a system of connecting roads consisting of 12N78-Union Valley, 12N52-Wolf Creek, and 12N30-Deer Knob Peavine; this described work extends from the intersection of 12N78 and Yellowjacket Campground access road westerly to the West Point boat ramp access road). The work shall meet design and construction standards approved by FS. The licensee shall make a good faith effort to purchase at fair market value suitable real property as such property becomes available, or to obtain a long-term lease or easement for use of such property, if necessary. In addition, improvement of the North Union Valley Road shall include:
 - Control of motorized recreational use along both sides of the road.
 - Adequate directional and information signing along roadway.
 - Turnouts and/or parking pockets with barriers along the road, where undeveloped parking and user-created access trails have been created, to restrict vehicle access (see also Article 1-20, Union Valley Road).
- b. Within 10 years of license issuance, the licensee shall close the road to Junction Reservoir Dam (FS Road 12N30D) to public access and construct a turnaround/parking area for one to two vehicles.
- c. Within 5 years of license issuance, the licensee shall, in accordance with the USFS cooperative road use plan for road use, funding and maintenance, realign and construct the Wrights Lake Tie Road (FS Road 11N37) to improve the intersection with the Ice House Campground entrance road to facilitate traffic flow away from the campground.
- d. Within 5 years of license issuance, the licensee shall improve, by reconstructing with a double chip-seal overlay, the Lakeshore Road (FS Road 11N52 from the intersection of the Strawberry Point Campground access road to the end of the road) to design and construction standards approved by FS. The licensee shall make a good faith effort to purchase at fair market value suitable real property as such property becomes available, or to obtain a long-term lease or easement for use of such property, if necessary. In addition, improvement of this segment of the Lakeshore Road shall include:

- Control of motorized recreational use along both sides of the road.
- Adequate directional and information signing along roadway.
- Turnouts and/or parking pockets with barriers along the road, where undeveloped parking and user-created access trails have been created, to restrict vehicle access (see also Article 1-19, Ice House Lakeshore Road).

3. Snow Plowing

The licensee shall annually provide to FS for review, prior to the snow plowing season, a snow plowing plan that addresses public safety and access.

Article 1-31. Trails System Management

1. Trails System Management Plan

Within 1 year of license issuance, the licensee shall file with FERC a Trails System Management Plan that is approved by FS for the trails that are needed for Project operations and are located on or affect National Forest System lands. The licensee shall implement the plan upon approval. At a minimum the Plan shall:

- a. Include a map showing the location of all trails, both FS system (classified) trails and FS non-system (unclassified) trails associated with the Project.
- b. Map trail locations using a global positioning system (GPS), software, pre and post-processing standards, collection standards and data dictionary approved by FS, to ensure that data collected meet national standards.
- c. Identify the season(s) of use and the amount of use by the licensee for each trail annually.
- d. Identify the condition of the trails described above, including any construction or maintenance needs.

Every 5 years, the licensee shall prepare a 5-year plan identifying maintenance and reconstruction needs for trails required for Project operations. The licensee shall file the plan with FERC after approval by FS. All trail maintenance and construction shall meet FS specifications and best management practices.

2. Specific Trail System Needs

See Article 1-19.

Article 1-32. Facility Management

Within 1 year of license issuance, the licensee shall file with FERC a Facility Management Plan for lands within the FERC Project boundary that is approved by FS. The licensee shall implement the plan upon approval. At a minimum, the Plan shall:

1. Include a map showing all Project facilities, including structures on or affecting National Forest System or BLM lands (and associated water and septic systems, and other utilities); above- and below-ground storage tanks; etc.
2. Identify the type and season of use of each structure.
3. Identify the condition of each structure, and planned maintenance or removal.

Every 5 years, the licensee shall prepare a 5-year plan that will identify the maintenance, reconstruction, and removal needs for Project facilities, including transmission lines. The licensee shall file the plan with FERC after approval by FS. Transmission lines shall not be removed from the FERC license until the licensee has obtained the appropriate rights of way or permits for transmission lines that affect National Forest System or BLM lands.

Article 1-33. Vegetation Management Plan

The licensee shall file with FERC, within 2 years of license issuance or prior to any ground-disturbing activities, a Vegetation Management Plan that is approved by FS, FWS, and CDFG. At a minimum the plan shall:

1. Identify and prioritize (into high, moderate, and low priority sites) all inadequately vegetated areas to be re-vegetated or rehabilitated along with an implementation schedule.
2. List the plant species to be used along with planting locations, methods, and densities (emphasis shall be given to use of native plant species, especially those with cultural importance). Emphasis shall also be given to using seed from certified weed-free sources and using seed from local sources.
3. Address vegetation management under existing project-associated distribution and transmission lines on National Forest System lands.

Article 1-34. Fire Management and Response Plan

Within one year of license issuance, the licensee shall file with FERC a Fire Prevention and Response Plan that is approved by FS and developed in consultation with appropriate State and local fire agencies. The plan shall set forth in detail the licensee's responsibility for the prevention (excluding vegetation treatment as described in Article 1-33), cost sharing, coordination with other agencies, reporting, control, and extinguishing of fires in the vicinity of

the Project resulting from Project operations. At a minimum the plan shall address the following categories:

2. Fuels Treatment/Vegetation Management
Identification of fire hazard reduction measures to prevent the escape of project-induced fires.
3. Prevention
 - a. Availability of fire access roads, community road escape routes, helispots to allow aerial firefighting assistance in the steep canyon, water drafting sites and other fire suppression strategies.
 - b. Address fire danger and public safety associated with project induced recreation, including fire danger associated with dispersed camping, existing and proposed developed recreation sites, trails, and vehicle access.
3. Emergency Response Preparedness
Analyze fire prevention needs including equipment and personnel availability.
4. Reporting
Licensee shall report any project related fires to FS within 24 hours.
5. Fire Control/Extinguishing
 - a. Provide FS a list of the locations of available fire suppression equipment and the location and availability of fire suppression personnel.
 - b. Assure fire prevention measures will conform to water quality protection practices as enumerated in USDA, Forest Service, Pacific Southwest Region, Water Quality Management for National Forest System Lands in California-Best Management Practices.
6. Investigation of Project-Related Fires
The licensee agrees to fully cooperate with FS on all fire Investigations. The licensee shall produce upon request all materials and witnesses not subject to the attorney-client or attorney work product privileges, over which the licensee has control, related to the fire and its investigation including:
 - a. All investigation reports.
 - b. All witness statements.

- c. All photographs.
- d. All drawings.
- e. All analysis of cause and origin.
- f. All other, similar materials and documents regardless of how collected or maintained.

The licensee shall preserve all physical evidence, and give custody to FS of all physical evidence requested. FS shall provide the licensee with reasonable access to the physical evidence and documents the licensee requires in order to defend any and all claims, which may arise from a fire resulting from Project operations, to the extent such access is not precluded by ongoing criminal or civil litigation.

Article 1-35. Reservation of Authority Under FPA Section 18

Authority is reserved for the Department of Commerce, through the National Marine Fisheries Service, and the Department of Interior, through FWS, to prescribe construction, operation, and maintenance of fishways at the Project, including measures to determine, ensure, or improve the effectiveness of such prescribed fishways, pursuant to Section 18 of the Federal Power Act, as amended, during the term of the license.

Article 1-36. BLM Reservation of FPA Section 4(e) Authority

BLM reserves its authority under Section 4(e) of the Federal Power Act consistent with the Recreation Payment Agreement (RPA) dated February 1, 2007, to provide for the protection and utilization of BLM lands to require inclusion of conditions in the license for Project No. 2101, unopposed by the licensee and the licensee of Project No. 2155, as provided in Section 6 of the RPA. These conditions shall require that licensee shall make a one-time payment to BLM of \$270,000 and make annual payments to BLM of \$270,000, as annually adjusted, on or before October 1 of each year during the term of the license, and all annual renewals thereof. The payment shall be by the method established under Section 4 of the RPA and the amount of payment shall be adjusted annually based on the U.S. Gross Domestic Product – Implicit Price Deflator (GDP-IDP) with 2007 as the base year.

Article 1-37. Implementation Schedule

1. The licensee shall prepare a Project implementation plan that sets forth a schedule for implementing the articles in this license.
2. The licensee shall develop a schedule for filing the plans and related documents set forth in license Articles 1-1 through 1-50. The schedule shall be filed for FERC approval no later than six months from the date of license issuance.

3. The licensee shall include, with the proposed schedule, documentation of consultation with the Consultation Group provided under Section 4.12.1 of the Relicensing Settlement Agreement, copies of comments and recommendations on the proposed schedule after it has been prepared and specific descriptions of how the Consultation Group's comments are accommodated by the proposed schedule. The licensee shall allow a minimum of 30 days for the Consultation Group to comment and to make recommendations before filing the plan with FERC. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.
4. Upon FERC approval, the licensee shall implement the schedule, including any changes required by FERC.

II. PROPOSED LICENSE ARTICLES TO ADDRESS THE IOWA HILL PUMPED STORAGE DEVELOPMENT

Article 1-38. Requirement to Obtain a Forest Service Special-Use

Authorization for Additional National Forest System Lands and for Certain Activities on National Forest System Lands

The licensee shall secure a special-use authorization from FS for the occupancy and use of National Forest System lands. The licensee shall obtain the executed authorization before beginning ground-disturbing activities on National Forest System lands. The licensee may commence ground-disturbing activities authorized by the license and special-use authorization no sooner than 60 days following the date the licensee files FS special-use authorization with FERC, unless FERC prescribes a different commencement schedule. In the event there is a conflict between any provision of the license and Forest Service special-use authorization, the special-use authorization shall prevail to the extent that FS, in consultation with FERC, deems necessary to protect and utilize National Forest System resources. Notwithstanding the authorizations granted under the Federal Power Act, National Forest System lands added to the project boundaries shall be managed by FS under the laws, rules, and regulations application to the National Forest System. The terms and conditions of FS special-use authorization are enforceable by FS under the laws, rules, and regulations applicable to the National Forest System. The violation of such terms and conditions also shall be subject to applicable sanctions and enforcement procedures of FERC at the request of FS. In the event there is a conflict between any provisions of the license and FS special-use authorization, the special-use authorization shall prevail on matters which FS deems to affect National Forest System resources.

Article 1-39. Compliance with Non-Iowa Hill Measures in this License

The licensee shall ensure that Articles 1-1 through 1-38 of this license, with the exception of those that specifically reference changes once the Iowa Hill Pumped Storage Project is constructed, shall be met through the license term.

Article 1-40. Aquatic Resources

1. For 2 years prior to and 2 years after the Iowa Hill Pumped Storage Project begins to operate, monitor hardhead during all four seasons of the year to establish the locations of all life stages in Slab Creek Reservoir (including edgewater locations) and in the water fluctuation zone upstream on SFAR above and below the Iowa Hill Pumped Storage Project..
2. Demonstrate that temperatures in shallow water areas of the Slab Creek Reservoir are not affecting hardhead distribution by pump discharge by monitoring edgewater temperatures of Slab Creek Reservoir between May and September in locations approved by FS, CDFG, and SWRCB.
3. In the SFAR Slab Creek Reservoir Dam reach below Mosquito Bridge, the operation of Iowa Hill will not further reduce water temperature below 12°C during the months of June (after the descending limb of the hydrograph), July, and August.
4. The licensee shall ensure that flow fluctuations in the SFAR below Slab Creek Reservoir Dam do not occur as a result of the Iowa Hill Pumped Storage Project, with the exception of flow fluctuations that occur as a result of specific requirements of the license, that is, recreation streamflows.
5. The licensee shall monitor hardhead using a method approved by FS, CDFG, FWS, and SWRCB to determine whether entrainment is occurring as a result of the Iowa Hill Pumped Storage Project. If entrainment is occurring, FS, CDFG, FWS, and SWRCB reserve the right to establish appropriate mitigation measures.

Article 1-41. Terrestrial Resources

To mitigate the loss of wildlife habitat associated with the Iowa Hill Development, prior to initiating construction of the development, the licensee shall purchase lands with an equivalent habitat value (or a conservation easement for an equivalent habitat value) to be managed as wildlife habitat over the term of the license. FS, FWS and CDFG will determine the in-kind value of lands proposed for this purpose.

Article 1-42. Water Quality and Water Pollution

The licensee shall consult with FS, SWRCB, RWQCB, CDFG, FWS, US Army Corps of Engineers, and other resource agencies with authority over public trust resources within the area of potential affects from construction and operation of facilities of the Iowa Hill Pumped Storage Project. Prior to initiating any construction activities, the licensee shall provide to appropriate state and federal regulatory agencies, detailed design plans and a proposed timeline for construction, and must obtain all necessary permits including but not limited to National Pollutant Discharge Elimination System Permit, Waste Discharge Requirements, Section 404 Permit, Section 401 Certification, Streambed Alteration Permit and/or other authorizations or

certifications as determined necessary under State or Federal Law. Prior to undertaking activities on National Forest System lands, the licensee shall file with FERC a Storm Water Pollution Prevention Plan that is approved by FS, SWRCB, and CDFG. During construction, and during operation and maintenance of the project, the licensee shall prevent water pollution by implementing management practices identified in the Storm Water Pollution Prevention Plan and other requirements identified by FS, SWRCB, and RWQCB. No equipment for construction of the tunnel shall be staged within 100 feet of the SFAR. Any material that is used within the river bed must be removed, including siltation fabric, after construction activities are completed.

Article 1-43. Groundwater

Prior to undertaking activities on National Forest System lands, the licensee shall file with FERC a plan that has been approved by FS for managing groundwater inflows during construction and for groundwater monitoring and management once construction is completed. The plan shall include the following: (1) a completed survey that encompasses the portion of the project area that would be potentially affected by the proposed tunnel; (2) monitoring of the springs and creeks for 5 years after the tunneling operation is completed with monitoring data submitted to FS monthly and written monitoring reports submitted to FS biannually by June 1 and December 1 of each year; (3) a method for accurate quantification of groundwater encountered during tunnel boring operations; (4) a method for verifying that groundwater seepage is not occurring or has been minimized after tunnel construction; (5) identification of corrective measures that will be taken if the tunnel boring operation encounters more groundwater than originally predicted in the environmental assessment for the project or the completed tunnel seeps; and (6) the monitoring program must also include mitigation of any and all identified impacts. The licensee shall consult with the RWQCB and SWRCB to establish water quality and soils characterization treatment measures.

Article 1-44. Compliance with Visual Quality Standards

The licensee shall develop a design for the Iowa Hill Development that meets the visual quality standards of the Eldorado National Forest Land and Resource Management Plan to ensure adequate protection during utilization of the Forest. The licensee shall provide FS plan specifications and simulated views of the design so FS may determine whether it meets Eldorado National Forest Land and Resource Management Plan standards.

Article 1-45. Heritage Resources Protection

Section 106 requirements of the National Historic Preservation Act and its implementing regulations, found at 36 CFR 800, must be met prior to the licensee undertaking activities on National Forest System lands. If, prior to or during ground disturbance or as a result of project operations, items of potential cultural, historical, archeological, or paleontological value are reported or discovered, or a known deposit of such items is disturbed, the licensee shall immediately cease work in the area so affected. The licensee shall then notify FS and shall not resume work on ground disturbing activities until it receives written approval from FS.

Article 1-46. Road Use Permit

Prior to undertaking activities on National Forest System lands, the licensee shall file with FERC a road use permit approved by FS for all National Forest System roads that will be used for project construction activities. The licensee shall confine all project vehicles, including but not limited to administrative and transportation vehicles and construction and inspection equipment, to roads or specifically designed access routes. FS reserves the right to close any and all such routes during project operations where damage is occurring to the roadbed or adjacent soil, water, or vegetation resources as a result of project activities. FS may require reconstruction/construction by the licensee to the extent needed to accommodate the licensee's use or repair damage from Project activities.

Article 1-47. Spoils Disposal

The licensee shall consult with FS, SWRCB, and RWQCB to obtain Waste Discharge Requirements or other permitting approvals, as necessary, for discharge of spoils to land. Spoils shall not be deposited on National Forest System lands without prior review and approval by FS.

Article 1-48. Construction Noise

Prior to undertaking construction activities affecting National Forest System lands, the licensee shall prepare a plan to address construction noise. The licensee shall implement the plan upon approval by FS. The following measures to address construction noise shall be addressed in the plan:

1. Vehicle idling.
2. Advance notification of any materials transport and construction activities within 0.5 mile of the tract.
3. Notices for residents indicating the nature, timing, and duration of all materials transport and construction activities occurring within 0.5 mile of their residences.
4. Noise Hot Line telephone system for reporting construction noise disturbances.
5. Monitoring to address compliance with the above measures.
6. Actions to mitigation violation of the above measures.

Monitoring reports will be filed with FS on a monthly basis throughout the Project construction activity. Monitoring reports will also list any noise disturbance complaints received.

Article 1-49. Recreation Access Plan for Slab Creek Reservoir

The licensee shall develop a Recreation Access Plan that addresses recreation access to the reservoir. This plan shall address recreation access (1) during the time of construction of Iowa Hill Reservoir and the tunnel connecting to Slab Creek Reservoir, and (2) when Iowa Hill Reservoir and associated powerhouse are operational.

Article 1-50. Future Revisions to the Iowa Hill Pumped Storage Development

In the event that the licensee seeks a revision or amendment to the description and/or proposed operation of the Iowa Hill Pumped Storage Project as approved in this license, and such revision would affect resources under their jurisdiction, CDFG, SWRCB, FS, BLM, and/or FWS each reserves the right to seek modification of Articles 1-38 through 1-49 (related to the Iowa Hill Project) in consultation with the licensee. Prior to approving any changes to the license under this article, FERC shall provide notice and opportunity for hearing.

APPENDIX 2

**PROPOSED LICENSE ARTICLES
FOR THE CHILI BAR HYDROELECTRIC PROJECT, FERC No. 2155**

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Article 2-1. Minimum Streamflows

The licensee, in consultation and coordination with the UARP licensee, shall, beginning as early as reasonably practicable within 3 months after license issuance, maintain minimum streamflows as set forth in the schedule below in SFAR below Chili Bar Reservoir Dam provided that inflows to Chili Bar Reservoir and Chili Bar Reservoir elevations are sufficient to maintain these streamflows. For compliance purposes, the point of measurement for the required minimum streamflows shall be USGS gage 11444500 (PG&E gage A49). All specified streamflows are in cubic feet per second (cfs). The schedule specifies minimum streamflows, by month and water year type.

The minimum streamflows specified in the schedule may be temporarily modified if required by equipment malfunction or operating emergencies reasonably beyond the control of the licensee. If the streamflow is so modified, the licensee shall provide Notice to FERC, BLM, CDFG, FWS, and the SWRCB as soon as possible, but no later than 10 days after such incident. The minimum streamflows specified may also be temporarily modified for short periods in non-emergency situations 5 days after Notice to FERC, and upon approval of the CDFG, BLM, FWS, and SWRCB.

Where facility modification is required to maintain the specified minimum streamflows, the licensee shall complete such modifications as soon as reasonably practicable and no later than 3 years after license issuance. Prior to such required facility modifications, the licensee shall make a good-faith effort to provide the specified minimum streamflows within the capabilities of the existing facilities.

In order for the licensee to adjust operations to meet the required minimum streamflows, the licensee shall have a 3-year period after the license is issued or 3 years after completion of necessary facility modifications, whichever is later, in which daily mean streamflows may vary up to 10 percent below the amounts specified in the minimum streamflow schedules, provided that the average monthly streamflow in any given month equals or exceeds the required minimum streamflow for the month. After the applicable period, the licensee shall meet the minimum streamflow requirements specified in the minimum streamflow schedules.

Water Year Types. The minimum streamflow schedule has been separated into six water year types: Wet, Above Normal (AN), Below Normal (BN), Dry, Critically Dry (CD), and Super Dry (SD). The licensee shall determine the water year type based on the water year forecast of unimpaired runoff in the American River below Folsom Lake published, near the beginning of each month from February through May, in the California Department of Water Resources (DWR) Bulletin 120 "Report of Water Conditions in California." Specifically, the "American River Below Folsom Lake" forecast is currently shown in the "Water Year Forecast" column of the "Water Year Unimpaired Runoff" table in Bulletin 120. The water year types are defined as follows:

<u>Year Type</u>	<u>American River Water Year Forecast</u>
Wet	greater than or equal to 3.5 MAF
AN	greater than or equal to 2.6 MAF but less than 3.5 MAF
BN	greater than 1.7 MAF or equal to but less than 2.6 MAF
Dry	greater than 0.9 MAF or equal to but less than 1.7 MAF
CD	less than 0.9 MAF
SD	any CD year that is immediately preceded by a Dry or CD year or any Dry year that is immediately preceded by any combination of two Dry or CD years.

Each February through May the licensee shall determine the water year type based on the DWR Bulletin 120 forecast and shall operate for that month based on that forecast beginning 3 days after issuance of the forecast and continuing until 2 days after issuance of a subsequent monthly forecast. The May forecast shall be used to establish the final water year type for the remaining months of the water year and the month of October. The water year type for the months of November through January shall be based on the Department of Water Resources' Full Natural Flow record for the American River at Folsom (California Data Exchange Center site AMF sensor 65) for the preceding water year, and the licensee shall operate based on that record beginning November 1. The licensee shall provide Notice to FERC, CDFG, BLM, FWS, and SWRCB of the final water year type determination within 30 days of the May forecast.

South Fork American River Below Chili Bar Reservoir Dam							
Month	Minimum Streamflow by Water Year (cfs)						
	SD	CD	DRY	BN	AN	WET	
OCT	150	185	200	250	250	250	
NOV	150	185	200	200	200	250	
DEC	150	185	200	200	200	250	
JAN	150	185	200	200	200	250	
FEB	150	185	200	200	200	250	
MAR	150	185	200	200	200	250	
APR	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	
AUG	150	185	200	250	300	300	
SEPT	150	185	200	250	250	250	

Article 2-2. Ramping Rates

The licensee, in consultation and coordination with the UARP licensee, shall, beginning as early as reasonably practicable within 3 months after license issuance, use the following ramping rates for licensee-controlled streamflow releases, provided that inflows to Chili Bar Reservoir and Chili Bar Reservoir elevation are sufficient to maintain these ramping rates:

South Fork American River Below Chili Bar Reservoir Dam Ramping Rates	
Ramp Up	Ramp Down
500 cfs per hour for flows between 150 and 1,000 cfs	1 foot/hour for flows between 1,950 and 1,000 cfs
1 foot per hour for flows between 1,000 and 1,950 cfs	500 cfs per hour for flows between 1,000 and 600 cfs
	250 cfs per hour for flows between 600 and 150 cfs

Where facility modification is required to provide the specified ramping rates, the licensee shall complete such modifications as soon as reasonably practicable and no later than 3 years after license issuance. Prior to such required facility modifications, the licensee shall make a good faith effort to provide the specified ramping rates within the capabilities of the existing facilities. The licensee shall make available to BLM, CDFG, FWS, and SWRCB the streamflow records related to ramping upon request.

The ramping rates specified in the schedules may be temporarily modified if required by equipment malfunction or operating emergencies reasonably beyond the control of the licensee or whenever water spills occur over Chili Bar Reservoir Dam. If the ramping rate is so modified, the licensee shall provide Notice to FERC, BLM, CDFG, FWS, and the SWRCB as soon as possible, but no later than 10 days after such incident. The ramping rates specified may also be temporarily modified for short periods in non-emergency situations 5 days after Notice to FERC, and upon approval of the CDFG, BLM, FWS, and SWRCB.

The licensee shall provide notice, for events other than spill, to BLM, CDFG, FWS, and SWRCB within 10 days after such an event occurs and shall provide a report documenting the reason that ramping rates were not followed within 1 month after such an event occurs.

Article 2-3. Coordination with UARP Licensee

Coordination of Operations

The licensee shall coordinate operation of the Project with the licensee of the Upper American River Project, FERC No. 2101 (UARP) to enable the licensee to comply with Article 2-1 (minimum streamflows), Article 2-2 (ramping rates), and Article 2-15 (recreational streamflows) of this license. The licensee's responsibilities for achieving coordinated operations of the two projects are described in Exhibit 1 of the *[date] Cooperation Agreement Between Sacramento Municipal Utility District and Pacific Gas and Electric Company Regarding Upper American River Project and Chili Bar Project*. Within 120 days after license issuance, the licensee shall, jointly with the UARP licensee, prepare and file with FERC for approval a plan for coordinated operations of the two projects as described in Exhibit 1. Upon FERC approval, the Licensee shall implement the plan, including any changes required by FERC.

Coordination in Implementing Certain License Conditions

The licensee shall consult and coordinate with the licensee of the Upper American River Project, FERC No. 2101 (UARP) as described in Exhibit 2 of the January 29, 2007 *Cooperation Agreement Between Sacramento Municipal Utility District and Pacific Gas and Electric Company Regarding Upper American River Project and Chili Bar Project* in implementation of Article 2-1 (minimum streamflows), Article 2-2 (ramping rates), Article 2-4 (monitoring program), Article 2-5 (adaptive management program), Article 2-6 (sediment management plan), Article 2-14 (public information services), and Article 2-15 (recreational streamflows) of this license.

Article 2-4. Monitoring Program

The licensee, in consultation and coordination with the UARP licensee, shall implement the following Monitoring Program after license issuance and through the term of the new license and any annual licenses, in coordination with BLM, CDFG, FWS, and SWRCB.

The licensee shall ensure that the final monitoring plan for each element of the Monitoring Program is reviewed and approved by BLM, CDFG, FWS, and SWRCB prior to implementation of the monitoring element, as described below under each monitoring element.

BLM, CDFG, FWS, and SWRCB have the flexibility to 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 objective has been met or no change in resource response is expected. Within the scope of the specified monitoring program, BLM, CDFG, FWS, and

SWRCB may select an equal number of alternative years to ensure that surveys occur during a range of water year types.

The licensee shall file with FERC by June 30 of each year an annual report fully describing the monitoring efforts of the previous calendar year. BLM, CDFG, FWS, and SWRCB shall have at least 30 days to review and comment on the draft report prior to filing with FERC. The licensee shall provide copies of the annual report to BLM, CDFG, FWS, and SWRCB.

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 establishing compliance with license conditions, and (c) monitoring and studies shall be as cost-effective as possible.

For purposes of the ecological resources adaptive management program, 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 streamflows required by the license are implemented by May 1.

1. Fish Populations

Within 2 years of license issuance, the licensee shall develop a fish population monitoring plan in consultation with BLM, CDFG, FWS, and SWRCB. The licensee shall provide BLM, CDFG, FWS, and SWRCB a 90-day review and approval period for the monitoring plan prior to implementation. The licensee shall implement the plan upon approval.

Method: Electrofishing and/or snorkeling (as conducted in 2002-2003 by the licensee) at the following stations: SFAR below Chili Bar Reservoir Dam (snorkeling sites upper and lower sample section of sites CB-F1 and CB-F4). Frequency: Rainbow trout and brown trout: Years 5, 6, 10, 11, 15, 16, and thereafter for 2 consecutive years during every 10 years for the term of the license.. Any hardhead that are detected shall be noted.

Rationale: Sampling for 2 years in the beginning of each 5-year period provides a mean of 2 years for comparison to the ecological biomass resource objectives and reduces electroshocking effects to individuals, with sufficient response time to the new streamflow regimes.

2. Aquatic Macroinvertebrates

Within 2 years of license issuance, the licensee shall develop an aquatic macroinvertebrate monitoring plan in consultation with BLM, CDFG, FWS, and SWRCB. The licensee shall provide BLM, CDFG, FWS, and SWRCB a 90-day review and approval period for the monitoring plan prior to implementation. The licensee shall implement the plan upon approval.

Method: A method accepted by BLM, CDFG, FWS, and SWRCB. The results shall be compared to an aquatic health index approved by FS, CDFG, FWS, and SWRCB. The following sites shall be included: SFAR below Chili Bar Reservoir Dam (CB-I1 and CB-I4). Frequency: Years 5, 6, 10, 11, 15, 16, and thereafter for 2 consecutive years during every 10 years for the term of the license.

Rationale: Compare sites to reference reaches to ensure they have improvement if impaired or maintenance if not (California Energy Commission IBI).

3. Amphibians & Reptiles (Habitat Evaluation & Determination of Species Presence/Distribution for Foothill Yellow-Legged Frog (FYLF), California Red-Legged Frog (CRLF), and Western Pond Turtle (WPT))

Within 1 year of license issuance, the licensee shall develop an amphibian and reptile habitat evaluation and species presence monitoring plan in consultation with BLM, CDFG, FWS, and SWRCB. The licensee shall provide BLM, CDFG, FWS, and SWRCB a 90-day review and approval period for the monitoring plan prior to implementation. The licensee shall implement the plan upon approval.

Method: Conduct protocol surveys for special status, sensitive (FYLF and WPT), and listed amphibian species (CRLF) using the procedures of the FWS and the Pacific Gas and Electric Company (2002) in a sub-sample of appropriate habitat types to document species presence and distribution. Identify amphibian breeding and larval periods in Project-affected reaches by periodically surveying reaches of known presence during spring/summer. The licensee shall also survey for WPT and CRLF during amphibian and reptile surveys. The first year of surveys shall be to determine the timing and success of the following life stages of existing known populations: egg laying, tadpole rearing, metamorphosis, and size/condition of metamorphs in late September to estimate probability of overwintering success. For subsequent years, BLM, FWS, CDFG, and SWRCB may approve a subset of survey sites or a less intensive program, based on review of the first year's data. In the future, BLM, FWS, CDFG, and SWRCB may request additional breeding site habitat data to assess the cause of unexpected or chronic reproductive failures that may be related to Project operations. The licensee shall also survey for WPT during FYLF surveys.

Monitoring Sites: SFAR below Chili Bar Reservoir Dam (entire reach from CB-A15 to Ponderosa Campground on right and left banks).

Frequency: Years 2, 3, 5, 6, 10, 11, 15, 16, and thereafter for 2 consecutive years during every 5 years for the term of the license.

Rationale: Determination of presence and distribution of special-status amphibian and reptile species and identification of breeding and larval periods are important in evaluating potential impacts resulting from streamflow modifications (particularly short-term fluctuations). FYLF, CRLF, and WPT monitoring shall determine if any threshold is reached from Project flow changes or fluctuations where these species are being affected

in any life stage. Monitoring around each 5-year period provides an index of changes in amphibian and reptile populations, following sufficient response time to streamflow modifications.

4. Riparian Vegetation Species Composition

Within 2 years of license issuance, the licensee shall develop a riparian vegetation monitoring plan in consultation with BLM, CDFG, FWS, and SWRCB. The licensee shall provide BLM, CDFG, FWS, and SWRCB a 90-day review and approval period for the monitoring plan prior to implementation. The licensee shall implement the plan upon approval.

Method: Aerial photo flights and Greenline method at the five Intensive Field Study Sites (riparian) that were surveyed in the Riparian Study filed at FERC as part of the licensee's application for new license on July 15, 2005.

Frequency: Every 5 years for the first 15 years of the new license and thereafter every 10 years for the term of the license.

Rationale: Monitoring at the end of each 5-year period provides an index of changes in riparian conditions over that period of modified streamflow (it should be noted that, depending on the water year cycle that occurs, 5 years may be a relatively short response time for riparian vegetation) to determine if riparian areas are in proper functioning condition and if riparian areas are being maintained or in need of restoration.

5. Water Temperature

The licensee shall, within 1 year following license issuance, develop and file with FERC a Water Temperature Monitoring Plan that has been approved by the Chief of the Division of Water Rights for the SWRCB. Within 3 months of license issuance, the licensee shall consult with SWRCB, BLM, FWS, and CDFG on the development of a Plan consistent with the method and frequencies described below. The licensee shall provide the draft Plan for a minimum 90-day review by the SWRCB, BLM, FWS, and CDFG.

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, CDFG, FWS, and SWRCB determine that reservoir temperatures are a controllable factor in the Chili Bar stream reach or if impoundment chemistry dictates a need for additional temperature considerations. Initial monitoring sites shall be determined in consultation with BLM, CDFG, FWS, and SWRCB, and up to two additional stream sites may be added if temperature problems are identified. Approval of final monitoring sites shall be made by BLM, CDFG, FWS, and SWRCB. At a minimum, the temperature plan shall address compliance gaging at the following locations:

- a. SFAR immediately below Chili Bar Dam.
- b. SFAR upstream of Dutch Creek confluence.
- c. SFAR immediately upstream of Camp Lotus.
- d. SFAR immediately upstream of Greenwood Creek.

Frequency: For the preceding monitoring sites, 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, SWRCB, FWS, and CDFG. For Chili Bar Reservoir, if a determination as described above is made by BLM, SWRCB, FWS, and CDFG, seasonal temperature profiles shall be monitored at applicable locations within the reservoir during multiple water year types to develop data necessary for decision-making.

Rationale: Temperature monitoring is needed during summer on an annual basis to determine if the cold water ecological resource objective is being met in the designated Project reach. Temperature monitoring is needed during spring to evaluate breeding conditions for amphibians. Temperature monitoring in the reservoir would be needed to understand the extent of cold water availability. Some temperature stations may be deleted if CDFG, BLM, FWS, and SWRCB find sufficient temperature data have been collected and find no temperature issue exists for the relevant area.

6. Water Quality

Within 3 months of license issuance, the licensee shall consult with BLM, CDFG, SWRCB, FWS, and RWQCB on the development of a draft Water Quality Monitoring Program Plan (Plan). The Plan shall include the water quality monitoring elements listed below, and must (1) provide detail on field sampling locations, sampling frequency, handling methods and QA/QC; 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 6 months of license issuance, the licensee shall submit the draft Plan for review and approval by the Chief, Division of Water Rights, State Water Resources Control Board. The final Plan shall be filed with FERC for approval. The approved Plan shall be implemented by the licensee as described, through the life of the license. The Plan may be modified pursuant to adaptive management program needs as recommended by BLM, CDFG, FWS, and RWQCB and approved by the Chief, Division of Water Rights, SWRCB.

Water Chemistry Monitoring

Method: The licensee shall conduct a water chemistry sampling program designed to demonstrate seasonal conditions at all reservoir and stream locations affected by operation of the Chili Bar Hydroelectric Project, as described in the Project No. 2101/2155 relicensing Water Quality Study Plan (Plenary approval, January 8, 2003). Laboratory analyses shall be conducted using USEPA Standard Methods adequately sensitive to detect constituent levels for determination of compliance with recognized state and federal criteria.

- a. In situ physical parameters (pH, water temperature, dissolved oxygen, specific conductance, and turbidity) shall be sampled at representative locations in the SFAR downstream of the Chili Bar Reservoir. In situ physical parameters shall be monitored in Chili Bar Reservoir as vertical profiles collected at 1-meter intervals from surface to bottom.

Frequency: In stream reaches, once seasonally in spring (April-May), summer (August), fall (November) and winter (January-February) each year after license issuance. In Chili Bar Reservoir, in spring (April-May and fall (October-November) each year after license issuance. When possible, water quality and temperature monitoring may be completed coincident with amphibian, fisheries, and macroinvertebrate monitoring.

Rationale: To monitor for compliance with state and federal water quality standards and track potential changes in surface waters associated with Project No. 2155 operations.

- b. General chemistry monitoring (in situ parameters, minerals, nutrients, metals [total and dissolved fractions], measured hardness, and petroleum products) shall be conducted. General chemistry samples shall be collected from Chili Bar Reservoir and at a minimum of three representative sites along the SFAR 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.

Frequency: Seasonally in spring, summer, fall, and immediately following either the second or third measurable rain event of the fall-winter period, once every 5 years beginning in year 3 after license issuance. After a minimum of three data sets have been collected, if it is demonstrated that exceedances are not occurring at specific locations, the collection frequency may be reviewed to determine if it can be modified.

Rationale: To monitor for compliance with state and federal water quality standards and track potential changes in surface waters associated with Chili Bar Hydroelectric Project operations. Monitoring at 5-year intervals will provide an index of changes in water quality conditions. Data collected will allow for the

development of a long-term trend analysis in water regulated by Project features and operations.

Bacterial Monitoring

Method: The licensee shall conduct bacterial monitoring consistent with Basin Plan objectives for protection of the REC-1 beneficial uses annually, at a minimum of eight shoreline recreational locations in the Project-affected reach. Sampling locations shall be selected based on criteria that include: (1) swimming and other water contact recreation activities are known to occur in the area, and (2) there are 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 reach downstream of Chili Bar Reservoir Dam of the SFAR. 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. 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. The licensee, in consultation with BLM, CDFG, SWRCB, FWS, and RWQCB shall determine sampling locations for each upcoming field season. The licensee shall consult with SWRCB and other listed parties for final determination of the locations to be sampled no later than May 31 of each designated sampling year.

Frequency: Bacterial monitoring shall be conducted annually for the first 5 years after license issuance, then may be decreased in frequency to every other year if data demonstrates no exceedances of the Basin Plan bacterial objective for protection of REC-1 designated waters during Years 1 through 5. If data demonstrate bacterial concentrations that present risks to human health at specific stream sites, the program shall continue annually, through the life of the license.

Rationale: The Project provides water contact recreational opportunities that include swimming, angling, and white water boating. Monitoring will be conducted to demonstrate summer bacterial concentrations at swim beaches and recreational areas influenced by Project operations, to ensure that pathogen levels are recognized and do not exceed the thresholds acceptable for protection of human health.

Metals Bioaccumulation Monitoring

Method: The licensee shall monitor for potential uptake of mercury, copper, lead, and silver through the aquatic food chain resident in Chili Bar Reservoir. Resident fish species from Chili Bar Reservoir shall be collected to determine tissue residue levels of mercury, copper, lead, and silver. Target species, numbers of individuals, sampling strategy, and analytical methods used shall be consistent with Surface Water Ambient Monitoring Program needs (State Water Resources Control Board), and shall be defined prior to each sampling event through licensee consultation with BLM, CDFG, SWRCB,

RWQCB, FWS, and the state Office of Environmental Health Hazard Assessment. Fish tissue samples shall be collected and analyzed for rates of bioaccumulation once every 5 years beginning in the second year after License issuance, and monitoring shall continue through the term of the New Project License.

Frequency: Once every 5 years beginning in year 2 following license issuance.

Rationale: Reservoirs have the potential to impound sediments and organic materials that may transport bound metals. Impounded metals have the potential to concentrate and become bioavailable to aquatic organisms. Metals that are bioaccumulated in the aquatic prey-base may bioconcentrated up through the food chain where elevated levels could become health risks to human and wildlife consumers. Monitoring at 5-year intervals will provide an index of changes in fish body burdens of silver, mercury, copper, and lead.

Algae Monitoring

Method: *Didymosphenia geminata* (invasive diatomaceous algae) monitoring shall be completed in conjunction with the annual water quality monitoring for the in the SFAR downstream of Chili Bar Reservoir Dam.

Frequency: The licensee shall monitor the presence or absence of this algae annually in conjunction with the other water quality monitoring.

Rationale: There is a known invasive diatomaceous algae (*Didymosphenia geminata*) blanketing the bottoms of some western streams and there is concern about potential adverse effects upon aquatic ecosystems (National Institute of Water and Atmospheric Research, Ltd. 2004).

Overall Water Quality Program Rationale

Through the water quality monitoring program the licensee will monitor compliance with state and federal water quality standards and track potential changes in surface waters associated with Chili Bar Hydroelectric Project operations. The monitoring program will provide data necessary to develop a long-term water quality trend assessment through the life of the FERC licenses. Data collected will provide water quality regulators the opportunity to identify trends of risk to human health and wildlife, and to design possible measures to intervene in this degradation. Water quality monitoring will focus on the identification of inorganic constituent levels and physical parameters, along with bacterial concentrations that may impair beneficial uses designated for waters impounded by the project and releases to diverted reaches downstream of the Project reservoir.

7. Heritage Resource Monitoring

Monitoring associated with heritage resources shall be described in the Heritage Resource Management Plan.

Article 2-5. Adaptive Management Program

The licensee shall, beginning as early as reasonably practicable within 3 months after license issuance, in consultation and coordination with the UARP licensee, implement an adaptive management program as described below. The program generally consists of: (a) implementation of a monitoring program and (b) 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 Report 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 from a specified period shall be used to determine the need for adaptive management measures. Adaptive management decisions shall be 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.

1. Coordinated Operations

Coordinated operations, described in Article 2-4, shall be reviewed annually to determine if they are effective in achieving the ecological and recreational streamflows in SFAR downstream of Chili Bar Reservoir Dam.

2. Sediment Management

Based on results of geomorphology monitoring and the Sediment Management Plan in Article 2-6, if the licensee determines there is a need to dredge Chili Bar Reservoir during the license term, the licensee shall place sediment that results from the dredging in SFAR below Chili Bar Reservoir Dam in consultation with BLM, SWRCB, FWS, and CDFG, if it is determined appropriate by BLM, SWRCB, FWS, and CDFG.

Article 2-6. Sediment Management Plan

Within 1 year of license issuance, the licensee shall, in consultation and coordination with the UARP licensee, plan and implement a geomorphology monitoring program to be performed once every 5 years for the duration of the license term. The following data will be collected at three sampling sites in the SFAR downstream of Chili Bar Reservoir Dam as identified in the geomorphology study plan used during the relicensing (CB-G1, CB-G2, and CB-G3):

1. Bed profile measurements at three cross-sectional transects.
2. Longitudinal profile extending through the vicinity of the three cross-sectional transects.

3. Bed characterization using pebble count to determine substrate composition at the three cross-sectional transects.
4. Channel stability and bank characterization using Pfankuch characteristics.
5. Large woody debris characterization within the site.

If the licensee, in consultation with the UARP licensee, elects to dredge Chili Bar Reservoir, the licensee will consult with the resource agencies in the development of a Sediment Management Plan including consideration of depositing the material in SFAR downstream of Chili Bar Reservoir Dam. The Sediment Management Plan shall be implemented upon concurrence by the UARP licensee and approval by BLM, CDFG, FWS, and SWRCB.

Article 2-7. Large Woody Debris

The licensee shall ensure, provided conditions permit safe and reasonable access and working conditions, mobile instream large woody debris in Chili Bar Reservoir continues downstream beyond Chili Bar Reservoir Dam using reasonable means that include short-term spill flows at the dam. At a minimum, all sizes greater than both 20 centimeters wide 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.

Article 2-8. Streamflow and Reservoir Elevation Gaging

The licensee shall, within 1 year after license issuance, develop and file for FERC approval a Streamflow and Reservoir Elevation Gaging Plan (gaging plan) that meets United States Geological Survey (USGS) standards. The licensee shall provide copies of the gaging plan and USGS review results to BLM, SWRCB, CDFG, FWS, and FERC. The plan shall be approved by the Chief of the Division of Water Rights for the SWRCB prior to filing with FERC. The licensee shall implement the plan upon approval. At a minimum, the plan shall address compliance gaging at the following locations:

1. Streamflow Gaging Location

SFAR Below Chili Bar Reservoir Dam (existing USGS gage number 11444500 or its successor).

2. Reservoir Elevation Gaging Location

Chili Bar Reservoir

Article 2-9. Wildlife and Plant Protection Measures

1. Before commencing any new construction or maintenance (including but not limited to proposed recreation developments) authorized by the license on BLM lands that may affect a BLM, FWS, OR CDFG sensitive plant or wildlife species or its habitat, the licensee shall ensure that a biological evaluation (including necessary surveys) is completed that evaluates the potential impacts of the action on the species or its habitat and follows the recommendations in the biological evaluation determined necessary by BLM, FWS, or CDFG. The biological evaluation must be approved by BLM. In consultation with FERC, BLM, FWS, or CDFG may require mitigation measures for the protection of sensitive species. Before commencing any activities to construct (including but not limited to proposed recreation developments), operate, or maintain the Project that may affect a species proposed for listing or listed under the federal Endangered Species Act, or that may affect that species' critical habitat, the licensee shall ensure that a Biological Assessment that evaluates the potential impacts of the action on the species or its critical habitat is prepared for the relevant Service agency (FWS or National Marine Fisheries Service) for consultation or conference in accordance with the Endangered Species Act.
2. If occurrences of BLM, CDFG, or FWS sensitive plant or wildlife species are detected prior to or during ongoing construction, operation, or maintenance of the Project, the licensee shall immediately notify BLM, CDFG, and FWS. If BLM, FWS, or CDFG determine that the Project-related activities are adversely affecting the sensitive species, the licensee shall, in consultation with BLM, CDFG, and FWS, develop and implement appropriate protection measures.
3. The licensee shall, beginning the first full calendar year after license issuance, in consultation with BLM, FWS, and CDFG annually review the current list of special status plant and wildlife species (species that are Federal Endangered or Threatened, Forest Service Sensitive) that might occur on BLM lands in the Project area directly affected by Project operations. When a species is added to one or more of the lists, BLM, FWS, and CDFG, in consultation with the licensee, shall determine if the species or unsurveyed suitable habitat for the species is likely to occur on such BLM lands. For such newly added species, if BLM, FWS, or CDFG determine that the species is likely to occur on such BLM lands, the licensee shall develop and implement a study plan in consultation with BLM, CDFG, and FWS to reasonably assess the effects of the Project on the species. The licensee shall prepare a report on the study including objectives, methods, results, recommended resource measures where appropriate, and a schedule of implementation, and shall provide a draft of the final report to BLM, CDFG, and FWS for review and approval. The licensee shall file the report, including evidence of consultation, with FERC and shall implement those resource management measures required by FERC.

Article 2-10. Invasive Weed and Vegetation Management Plans

Within 2 years of license issuance, the licensee shall file with FERC an Invasive Weed Management Plan developed in consultation with BLM, FWS, the appropriate County Agricultural Commissioner, and California Department of Food and Agriculture. Invasive weeds will be those weeds defined in the California Food and Agriculture code, and other species identified by BLM. The plan will address both aquatic and terrestrial invasive weeds within the project boundary and adjacent to project features directly affecting BLM lands including, roads, and distribution and transmission lines.

1. The Invasive Weed Plan will include and address the following elements:
 - a. Inventory and mapping of new populations of invasive weeds using a BLM compatible database and GIS software. The invasive weed GIS data layer will be updated periodically and shared with resource agencies.
 - b. Action and/or strategies to prevent and control spread of known populations or introductions of new populations, such as vehicle/equipment wash stations. Where these populations are: 1) contiguous and extend outside the Project boundary or 2) downstream of populations inside the project boundary and have a reasonable nexus to the project, the licensee shall make reasonable efforts to control the entire population unit.
 - c. Development of a schedule for control of all known A, B, Q and selected other rated invasive weed species, designated by resource agencies.
 - d. On-going annual monitoring of known populations of Invasive weeds for the life of the license in locations tied to project actions or effects, such as road maintenance, at project facilities, O&M activities, , new construction sites, etc. to evaluate the effectiveness of re-vegetation and invasive weed control measures.
 - e. The plan will include an adaptive management element to implement methods for prevention of aquatic invasive weeds, as necessary. These actions may include, but may not be limited to: 1) public education and signing of public boat access, 2) preparation of an Aquatic Plant Management Plan approved by BLM, and in consultation with other agencies, and 3) boat cleaning stations at boat ramps for the removal of aquatic Invasive weeds.

New infestations of A& B rated weeds shall be controlled within 12 months of detection or as soon as is practical and feasible (A, B, C, & Q ratings refer to the California Department of Food & Agriculture Action Oriented Pest Rating System). At specific sites where other objectives need to be met all classes of Invasive weeds may be required to be treated.

Monitoring will be done in conjunction with other project maintenance and resource surveys, so as not to require separate travel and personnel. Monitoring information, in database and GIS formats, will be provided to BLM as part of the annual consultation on affected BLM resources (Article 2-11). To assist with this monitoring requirement, training in invasive plant identification will be provided to project employees and contractors by BLM.

Licensee shall restore/revegetate areas where treatment has eliminated invasive weeds in an effort to eliminate the reintroduction of invasive weed species. Project-induced ground disturbing activities shall be monitored annually for the first 3 years after disturbance to detect and map new populations of invasive weeds.

2. The Vegetation Management plan shall include and/or address the following elements:
 - a. Hazard tree removal and trimming.
 - b. Powerline/transmission line clearing.
 - c. Vegetation management for habitat improvement.
 - d. Revegetation of disturbed sites.
 - e. Soil protection and erosion control, including use of certified weed free straw.
 - f. Establishment of and/or revegetation with culturally important plant populations.
 - g. Use of clean, weed free seed with a preference for locally collected seed.

Upon FERC approval, the licensee shall implement the plan.

Article 2-11. Annual Review of Ecological Conditions

Each calendar year, by April 1, the licensee shall schedule and facilitate a meeting with the CDFG, BLM, FWS, and SWRCB to review and discuss the results of implementing these conditions, as well as to discuss other issues related to restoring and protecting ecological values affected by the Project. The licensee shall make available to BLM, CDFG, FWS, and SWRCB 2 weeks prior to the meeting, an operations and maintenance plan for the year in which the meeting occurs.

Article 2-12. BLM Liaison

The licensee shall provide an individual for liaison with the BLM, whenever planning or construction of recreation facilities, other major Project improvements, and maintenance activities are taking place on BLM lands within the FERC boundary. The licensee agrees to cooperate with BLM through this individual in contract review and work inspection.

Article 2-13. BLM Recreation Improvements

Within 3 years of license issuance, the licensee shall construct the following public recreation facilities:

1. A gravel parking area for three to four vehicles off Rock Creek Road.
2. A 36-inch-wide trail that meets a grade of 5 percent or less from the parking area to Chili Bar Reservoir.
3. A kiosk sign along the trail near the beginning of the trail, explaining the rules of the area.
4. One picnic table of coated wire mesh material in a leveled out area that is outside of the Chili Bar Reservoir floodplain.

Article 2-14. Public Information Services

1. Streamflow and Reservoir Level Information

The licensee shall, within 6 months of license issuance, in consultation and coordination with the UARP licensee, BLM, SWRCB, and the Consultation Group provided under Section 4.12.1 of the Relicensing Settlement Agreement, submit a plan to FERC for providing, at a minimum, the following:

- 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 toll-free telephone number or other appropriate technology approved by BLM.
- d. Streamflow information collected consistent with the standard USGS gaging practices for the existing stream gage facilities downstream of Chili Bar Reservoir Dam (using USGS gage 11444500) on a website that includes 15-minute increments and stream flows releases from the past 7 days.

The plan shall be approved by BLM and SWRCB prior to filing with FERC. Following approval, the minimum streamflow and recreational streamflow schedules from Articles 2-1 and 2-15, as well as current water year type designation, shall be published via website.

2. Beginning the first full year after license issuance, in consultation and coordination with the UARP licensee, the licensee shall annually pay \$15,000.00 (year 2007 cost basis) for BLM to provide Project recreation brochure/maps and an interpretive, education, and

public information plan. The payment shall be made in a manner acceptable to BLM and the amount of payment shall be escalated annually based on the U.S. Gross Domestic Product – Implicit Price Deflator (GDP-IDP).

Article 2-15. Recreational Streamflows

The licensee, in consultation and coordination with the UARP licensee, shall, beginning as early as reasonably practicable within 3 months after license issuance, maintain minimum recreational streamflows as set forth in the schedule below in SFAR below Chili Bar Reservoir Dam provided that inflows to Chili Bar Reservoir and Chili Bar Reservoir elevations are sufficient to maintain these flows. For compliance purposes, the point of measurement for the required minimum streamflows shall be USGS gage 11444500 (PG&E gage A49). All specified recreational streamflows are in cubic feet per second (cfs). The schedule specifies minimum recreational streamflows, by season, day of week, and water year type. Specific times are as follows:

1. Minimum recreational streamflows scheduled for 3 hours shall meet or exceed the specified minimum from at least 9:00 am until at least noon.
2. Minimum recreational streamflows scheduled for 4 hours shall meet or exceed the specified minimum from at least 8:00 am until at least noon.
3. Minimum recreational streamflows scheduled for 5 hours shall meet or exceed the specified minimum from at least 7:00 am until at least noon on Saturdays and 8:00 am until at least 1:00 pm on Sundays.
4. Minimum recreational streamflows scheduled for 6 hours shall meet or exceed the specified minimum from at least 7:00 am until at least 1:00 pm.

If SWRCB, CDPR, and BLM determine there should be changes to the times listed above, the licensee shall adjust the minimum recreational streamflows accordingly 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: (1) State or Federal electrical emergencies 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; (2) system events that cause the Operating Reserves to drop below the Western Energy Coordinating Council Minimum Operating Reliability Criteria; or (3) 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. Licensee shall make a Good Faith effort to avoid scheduling unit outages when recreational streamflows of 1,750 cfs are specified. If the recreational streamflow is so modified, the licensee shall provide Notice to FERC, BLM, CDPR, and the SWRCB 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 3 years after license issuance. Prior to such required facility modifications, the licensee shall make a good-faith effort to provide the specified minimum recreational streamflows within the capabilities of the existing facilities.

Water Year Types. The minimum streamflow schedule has been separated into six water year types: Wet, Above Normal (AN), Below Normal (BN), Dry, Critically Dry (CD), and Super Dry (SD). The licensee shall determine the water year type based on the water year forecast of unimpaired runoff in the American River below Folsom Lake published, near the beginning of each month from February through May, in the California Department of Water Resources Bulletin 120 "Report of Water Conditions in California." Specifically, the "American River Below Folsom Lake" forecast is currently shown in the "Water Year Forecast" column of the "Water Year Unimpaired Runoff" table in Bulletin 120. The water year types are defined as follows:

<u>Year Type</u>	<u>American River Water Year Forecast</u>
Wet	greater than or equal to 3.5 MAF
AN	greater than or equal to 2.6 MAF but less than 3.5 MAF
BN	greater than 1.7 MAF or equal to but less than 2.6 MAF
Dry	greater than 0.9 MAF or equal to but less than 1.7 MAF
CD	less than 0.9 MAF
SD	any CD year that is immediately preceded by a Dry or CD year or any Dry year that is immediately preceded by any combination of two Dry or CD years.

Each February through May the licensee shall determine the water year type based on the DWR Bulletin 120 and shall operate for that month based on that forecast beginning 3 days after issuance of the forecast and continuing until 2 days after issuance of a subsequent monthly forecast. The May forecast shall be used to establish the final water year type for the remaining months of the water year and the month of October. The water year type for the months of November through January shall be based on the Department of Water Resources' Full Natural Flow record for the American River at Folsom (California Data Exchange Center site AMF sensor 65) for the preceding water year, and the licensee shall operate based on that record beginning November 1. The licensee shall provide Notice to FERC, CDPR, BLM, FWS, and SWRCB of the final water year type determination within 30 days of the May forecast.

South Fork American River Below Chili Bar Reservoir Dam Minimum Recreational Flow by Water Year (cfs)								
WATER YEAR TYPE	PERIOD	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
Super Dry	April - Memorial Day	3 Hrs @ 1300					3 Hrs @ 1300	3 Hrs @ 1300
	Memorial Day - Labor Day	3 Hrs @ 1300			3 Hrs @ 1300	3 Hrs @ 1300	5 Hrs @ 1300	5 Hrs @ 1300
	Labor Day - September						3 Hrs @ 1300	3 Hrs @ 1300
	October - March						3 Hrs @ 1300	
Critically Dry	March - Memorial Day	3 Hrs @ 1300					3 Hrs @ 1300	3 Hrs @ 1300
	Memorial Day - Labor Day	3 Hrs @ 1300			3 Hrs @ 1300	3 Hrs @ 1300	5 Hrs @ 1500	5 Hrs @ 1500
	Labor Day - September					3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1300
	October - February						3 Hrs @ 1300	
Dry	March - Memorial Day	3 Hrs @ 1300	3 Hrs @ 1300			3 Hrs @ 1300	3 Hrs @ 1500	3 Hrs @ 1500
	Memorial Day - Labor Day	3 Hrs @ 1300	3 Hrs @ 1300		3 Hrs @ 1300	3 Hrs @ 1300	5 Hrs @ 1500	5 Hrs @ 1500
	Labor Day - September					3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1300
	October - February						3 Hrs @ 1300	3 Hrs @ 1300
Below Normal	March - Memorial Day	3 Hrs @ 1300	3 Hrs @ 1300		3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1500	3 Hrs @ 1500
	Memorial Day - Labor Day	3 Hrs @ 1300	3 Hrs @ 1300		3 Hrs @ 1300	3 Hrs @ 1300	6 Hrs @ 1500	6 Hrs @ 1500
	Labor Day - September				3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1500	3 Hrs @ 1500
	October	3 Hrs @ 1300				3 Hrs @ 1300	3 Hrs @ 1500	3 Hrs @ 1500
	November - February						3 Hrs @ 1300	3 Hrs @ 1300
Above Normal	March - Memorial Day	3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1300	3 Hrs @ 1300	4 Hrs @ 1750	4 Hrs @ 1750
	Memorial Day - Labor Day	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	6 Hrs @ 1750	6 Hrs @ 1750
	Labor Day - September				3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500
	October	3 Hrs @ 1300				3 Hrs @ 1300	3 Hrs @ 1500	3 Hrs @ 1500
	November - February						3 Hrs @ 1500	3 Hrs @ 1500
Wet	March - Memorial Day	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	6 Hrs @ 1750	6 Hrs @ 1750
	Memorial Day - Labor Day	4 Hrs @ 1500	4 Hrs @ 1500	4 Hrs @ 1500	4 Hrs @ 1500	4 Hrs @ 1500	6 Hrs @ 1750	6 Hrs @ 1750
	Labor Day - September				3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500	3 Hrs @ 1500
	October	3 Hrs @ 1300				3 Hrs @ 1300	3 Hrs @ 1500	3 Hrs @ 1500
	November - February						3 Hrs @ 1500	3 Hrs @ 1500

Note: The “Memorial Day – Labor Day” period in the above chart means the Saturday of Memorial Day weekend through the Monday of Labor Day weekend.

Article 2-16. Visual Resource Protection

1. Licensee shall meet with BLM every 5 years to review opportunities to improve how well Project facilities on or affecting BLM lands blend in with the surrounding landscape. The type of rehabilitation/reconstruction work needed will be dependent on current policies, technologies, condition of facilities, impacts to surrounding areas, and other factors.
2. During planning and prior to any new construction or maintenance of Project facilities that have the potential to affect visual resources of BLM lands(including but not limited to the recreation-related construction), the licensee shall file with FERC, a plan approved by BLM for the protection and rehabilitation of BLM visual resources affected by such construction or maintenance. At a minimum, the plan shall address clearings, spoil piles, and Project facilities involved in such construction or maintenance like diversion structures, penstocks, pipes, ditches, powerhouses, other buildings, transmission lines, corridors, and access roads. The plan shall address facility configurations, alignments, building materials, colors, landscaping, and screening. The Plan shall provide a proposed mitigation and implementation schedule to bring the Project facilities involved in such construction or maintenance affecting visual resources on BLM lands into compliance with visual resource standards and guidelines in the South Fork American River: A Management Plan (USDI 2004) and The Cronan Ranch Draft Management Plan (USDI

2006). Mitigation measures identified for either the visual resource plan for new construction or maintenance or the measures identified for existing facilities shall include, but are not limited to: (1) surface treatments with BLM-approved colors and natural appearing materials that will be in harmony with the surrounding landscape, (2) use of non-specular conductors for the transmission lines, (3) use of native plant species to screen facilities from view, (4) reshaping and revegetating disturbed areas to blend with surrounding visual characteristics, and, (5) locating transmission facilities to minimize visual impacts.

Article 2-17. Heritage Resources

Within 6 months after license issuance, the licensee shall complete a Heritage Properties Management Plan (HPMP) for BLM approval. The HPMP will be incorporated into the Programmatic Agreement (PA) by reference. The HPMP will take into account Project effects on prehistoric and historic resources, Native American traditional cultural values, direct and indirect effects to heritage resources within the area of potential effect, ethnographic studies, historic archaeological studies, and Project-related recreation impacts to archaeological properties affecting BLM lands. The HPMP shall also provide measures to mitigate the identified impacts, a monitoring program, and management protocols for the ongoing protection of archaeological properties. The plan shall be filed with FERC. The licensee shall implement the plan upon approval.

Article 2-18. Heritage Resource Discovery

If, prior to or during ground disturbance or as a result of Project operations, items of potential cultural, historical, archeological, or paleontological value are reported or discovered, or a known deposit of such items is disturbed on BLM lands and licensee adjoining property, the licensee shall immediately cease work in the area so affected. The licensee shall then notify BLM and shall not resume work on ground disturbing activities until it receives written approval from BLM. If it deems it necessary, BLM may require the licensee to perform recovery, excavation, and preservation of the site and its artifacts at the licensee's expense through provisions of an Archaeological Resources Protection Act permit issued by BLM.

Article 2-19. Reservation of Authority Under FPA Section 18

Authority is reserved for the Department of Commerce, through the National Marine Fisheries Service, and the Department of Interior, through FWS, to prescribe construction, operation, and maintenance of fishways at the Project, including measures to determine, ensure, or improve the effectiveness of such prescribed fishways, pursuant to Section 18 of the Federal Power Act, as amended, during the term of the license.

Article 2-20. BLM Reservation of FPA Section 4(e) Authority

BLM reserves its authority under Section 4(e) of the Federal Power Act consistent with the Recreation Payment Agreement (RPA) dated February 1, 2007, to provide for the protection and

utilization of BLM lands to require inclusion of conditions in the license for Project No. 2155, unopposed by the licensee and the licensee of Project No. 2101, as provided in Section 6 of the RPA. These conditions shall require that licensee shall make a one-time payment to BLM of \$30,000 and make annual payments to BLM of \$30,000, as annually adjusted, on or before October 1 of each year during the term of the license, and all annual renewals thereof. The payment shall be by a method established under Section 5 of the RPA and the amount of payment shall be adjusted annually based on the U.S. Gross Domestic Product – Implicit Price Deflator (GDP-IPD) with 2007 as the base year.

Article 2-21. Implementation Schedule

1. The licensee shall prepare a project implementation plan that sets forth a schedule for implementing the articles in this license.
2. The licensee shall develop a schedule for filing the plans and related documents set forth in license Articles 2-1 through 2-18. The schedule shall be filed for FERC approval no later than six months from the date of the license issuance.
3. The licensee shall include, with the proposed schedule, documentation of consultation with the Consultation Group provided under Section 4.12.1 of the Relicensing Settlement Agreement, copies of comments and recommendations on the proposed schedule after it has been prepared and specific descriptions of how the Consultation Group's comments are accommodated by the proposed schedule. The licensee shall allow a minimum of 30 days for the Consultation Group to comment and to make recommendations before filing the plan with FERC. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.
4. Upon FERC approval, the licensee shall implement the schedule, including any changes required by FERC.

APPENDIX 3

DRAFT U.S. FOREST SERVICE “STANDARD” SECTION 4(e) CONDITIONS FOR THE UPPER AMERICAN RIVER PROJECT, FERC NO. 2101

Condition No. 3-1 - Forest Service Approval of Final Design

Before any new construction of the Project occurs on National Forest System lands, the licensee shall obtain prior written approval of FS for all final design plans for Project components, which FS deems as affecting or potentially affecting National Forest System resources. The licensee shall follow the schedules and procedures for design review and approval specified in the conditions herein and in the Special Use Permit. As part of such written approval, FS may require adjustments to the final plans and facility locations to preclude or mitigate impacts and to insure that the Project is either compatible with on-the-ground conditions or approved by FS based on agreed upon compensation or mitigation measures to address compatibility issues. Should such necessary adjustments be deemed by FS, FERC, or the licensee to be a substantial change, the licensee shall follow the procedures of FERC Standard Article 2 of the license. Any changes to the license made for any reason pursuant to FERC Standard Article 2 or Article 3 shall be made subject to any new terms and conditions of the Secretary of Agriculture made pursuant to Section 4(e) of the Federal Power Act.

Condition No. 3-2 - Approval of Changes

Notwithstanding any license authorization to make changes to the project, when such changes directly affect National Forest System lands the licensee shall obtain written approval from FS prior to making any changes in any constructed Project features or facilities, or in the uses of Project lands and waters or any departure from the requirements of any approved exhibits filed with FERC. Following receipt of such approval from FS, and a minimum of 60-days prior to initiating any such changes, the licensee shall file a report with FERC describing the changes, the reasons for the changes, and showing the approval of FS for such changes. The licensee shall file an exact copy of this report with FS at the same time it is filed with FERC. This article does not relieve the licensee from the amendment or other requirements of FERC Standard Article 2 or Article 3 of this license.

Condition No. 3-3 - Consultation

Each year between February 15 and April 15, the licensee shall consult with FS with regard to measures needed to ensure protection and utilization of the National Forest resources affected by the Project. Within 60 days following such consultation, the licensee shall file with FERC evidence of the consultation with any recommendations made by FS. FS reserves the right, after notice and opportunity for comment, to require changes in the Project and its operation through revision of the 4(e) conditions that require measures necessary to accomplish protection and utilization of National Forest resources.

Condition No. 3-4 - Modification of 4(e) Conditions After Biological Opinion or Water Quality Certification

FS reserves the right, after notice and opportunity for comment, to modify these conditions, if necessary, to respond to any Final Biological Opinion issued for this Project by the United States Fish and Wildlife Service, NOAA Fisheries, or any Certification or permit issued for this Project by the State Water Resources Control Board or Army Corps of Engineers.

Condition No. 3-5 - Surrender of License or Transfer of Ownership

Prior to any surrender of this license, the licensee shall provide assurance acceptable to FS that the licensee shall restore any Project area directly affecting National Forest System lands to a condition satisfactory to FS upon or after surrender of the license, as appropriate. To the extent restoration is required, the licensee shall prepare a restoration plan, which shall identify the measures to be taken to restore such National Forest System lands and shall include or identify adequate financial mechanisms to ensure performance of the restoration measures.

In the event of any transfer of the license or sale of the project, the licensee shall assure that, in a manner satisfactory to FS, the licensee or transferee will provide for the costs of surrender and restoration. If deemed necessary by FS to assist it in evaluating the licensee's proposal, the licensee shall conduct an analysis, using experts approved by FS, to estimate the potential costs associated with surrender and restoration of any project area directly affecting National Forest System lands to FS specifications. In addition, FS may require the licensee to pay for an independent audit of the transferee to assist FS in determining whether the transferee has the financial ability to fund the surrender and restoration work specified in the analysis.

Condition No. 3-6 - Valid Claims and Existing Rights

The licensee shall be subject to all valid claims and existing rights.

Condition No. 3-7 - Compliance with Regulations on National Forest System Lands

The licensee shall comply with the regulations of the Department of Agriculture for activities on National Forest System lands, and all applicable Federal, State, county, and municipal laws, ordinances, or regulations in regards to the area or operations on or directly affecting National Forest System lands, to the extent those laws, ordinances or regulations are not preempted by federal law.

Condition No. 3-8 - Damage to Land, Property, and Interests of the United States

The licensee has an affirmative duty to protect the land, property, and interests of the United States from damage arising from the licensee's construction, maintenance, or operation of the project works or the works appurtenant or accessory thereto under the license. The licensee's

liability for fire and other damages to National Forest System lands shall be determined in accordance with the Federal Power Act and FERC Standard Form L-1 Articles 22 and 24.

Condition No. 9 - Indemnification

The licensee shall indemnify, defend, and hold the United States harmless for:

- any violations incurred under any laws and regulations applicable to, or
- judgments, claims, penalties, fees, or demands assessed against the United States caused by, or
- costs, damages, and expenses incurred by the United States caused by, or
- the releases or threatened release of any solid waste, hazardous substances, pollutant, contaminant, or oil in any form in the environment related to

the construction, maintenance, or operation of the project works or of the works appurtenant or accessory thereto under the license.

The licensee's indemnification of the United States shall include any loss by personal injury, loss of life or damage to property caused by the construction, maintenance, or operation of the project works or of the works appurtenant or accessory thereto under the license. Indemnification shall include, but is not limited to, the value of resources damaged or destroyed; the costs of restoration, cleanup, or other mitigation; fire suppression or other types of abatement costs; third party claims and judgments; and all administrative, interest, and other legal costs. Upon surrender, transfer, or termination of the license, the licensee's obligation to indemnify and hold harmless the United States shall survive for all valid claims for actions that occurred prior to such surrender, transfer or termination.

Condition No. 3-10 - Surveys, Land Corners

The licensee shall avoid disturbance to all publicland survey monuments, private property corners, and forest boundary markers. In the event that any such land markers or monuments on National Forest System lands are destroyed by an act or omission of the licensee, in connection with the use and/or occupancy authorized by this license, depending on the type of monument destroyed, the licensee shall reestablish or reference same in accordance with (1) the procedures outlined in the "Manual of Instructions for the Survey of the Public Land of the United States," (2) the specifications of the County Surveyor, or (3) the specifications of FS. Further, the licensee shall ensure that any such official survey records affected are amended as provided by law.

Condition No. 3-11 - Hazardous Substances Plan

Within 1 year of license issuance or prior to undertaking activities on National Forest System lands, the licensee shall file with FERC a plan approved by FS, *SWRCB*, *CDFG*, and *RWQCB* for oil and hazardous substances storage and spill prevention and cleanup. In addition, during planning and prior to any new construction or maintenance not addressed in an existing plan, the

licensee shall notify FS, *SWRCB*, *CDFG*, and *RWQCB*, and these entities shall make a determination whether a plan approved by FS for oil and hazardous substances storage and spill prevention and cleanup is needed. Any such plan shall be filed with FERC.

At a minimum, the plan must require the licensee to (1) maintain in the project area, a cache of spill cleanup equipment suitable to contain any spill from the project; (2) to periodically inform FS, *SWRCB*, *CDFG*, and *RWQCB* of the location of the spill cleanup equipment on National Forest System lands and of the location, type, and quantity of oil and hazardous substances stored in the project area; and (3) to inform FS, *SWRCB*, *CDFG*, and *RWQCB* immediately of the magnitude, nature, time, date, location, and action taken for any spill. The plan shall include a monitoring plan that details corrective measures that will be taken if spills occur. The plan shall include a requirement for a weekly written report during construction documenting the results of the monitoring.

Condition No. 3-12 - Use of Explosives

Use of explosives shall be consistent with state and local requirements.

1. The licensee shall use only electronic detonators for blasting on National Forest System lands and licensee adjoining property, except near high-voltage powerlines. FS may allow specific exceptions when in the public interest.
2. In the use of explosives, the licensee shall exercise the utmost care not to endanger life or property and shall comply with the requirements of FS. The licensee shall contact FS prior to blasting to obtain the requirements from FS. The licensee shall be responsible for any and all damages resulting from the use of explosives and shall adopt precautions to prevent damage to surrounding objects. The licensee shall furnish and erect special signs to warn the public of the licensee's blasting operations. The licensee shall place and maintain such signs so they are clearly evident to the public during all critical periods of the blasting operations, and shall ensure that they include a warning statement to have radio transmitters turned off.
3. The licensee shall store all explosives on National Forest System lands in a secure manner, in compliance with State and local laws and ordinances, and shall mark all such storage places "DANGEROUS - EXPLOSIVES." Where no local laws or ordinances apply, the licensee shall provide storage that is satisfactory to FS and in general not closer than 1,000 feet from the road or from any building or camping area.
4. When using explosives on National Forest System lands, the licensee shall adopt precautions to prevent damage to landscape features and other surrounding objects. When directed by FS, the licensee shall leave trees within an area designated to be cleared as a protective screen for surrounding vegetation during blasting operations. The licensee shall remove and dispose of trees so left when blasting is complete. When necessary, and at any point of special danger, the licensee shall use suitable mats or some other approved method to smother blasts.

Condition No. 3-13 - Pesticide Use Restrictions

Pesticides may not be used to control undesirable woody and herbaceous vegetation, aquatic plants, fish, insects, and rodents on National Forest System lands without the prior written approval of FS. The licensee shall submit a request for approval of planned uses of pesticides on National Forest System lands. The request must cover annual planned use and be updated as required by FS. The licensee shall provide information essential for review, including a forest-specific pesticide risk assessment, in the form specified. Exceptions to this schedule may be allowed only when unexpected outbreaks of pests require control measures that were not anticipated at the time the request was submitted. In such an instance, an emergency request and approval may be made.

The licensee shall use on National Forest System lands only those materials registered by the U.S. Environmental Protection Agency for the specific purpose planned. The licensee must strictly follow label instructions in the preparation and application of pesticides and disposal of excess materials and containers.

Condition No. 3-14 - Risks and Hazards on National Forest System Lands

As part of the occupancy and use of the Project area, the licensee has a continuing responsibility to reasonably identify and report all known or observed hazardous conditions on or directly affecting National Forest System lands within the Project boundary that would affect the improvements, resources, or pose a risk of injury to individuals. The licensee will abate those conditions, except those caused by third parties or not related to the occupancy and use authorized by the license. Any non-emergency actions to abate such hazards on National Forest System lands shall be performed after consultation with FS. In emergency situations, the licensee shall notify FS of its actions as soon as possible, but not more than 48 hours, after such actions have been taken. Whether or not FS is notified or provides consultation; the licensee shall remain solely responsible for all abatement measures performed. Other hazards should be reported to the appropriate agency as soon as possible.

Condition No. 3-15 - Project Access Roads

The licensee shall, in consultation with FS, take appropriate measures to rehabilitate existing erosion damage and minimize further erosion of the non-public Project access roads on National Forest System lands. Gates or other vehicle control measures will be installed and maintained where necessary to achieve erosion protection or other resource protection needs.

Condition No. 3-16 - Traffic Safety

When construction for Project purposes is in progress adjacent to or on FS Service-controlled roads open to public travel, the licensee shall furnish, install, and maintain temporary traffic controls to provide the public with adequate warning and protection from hazardous or potentially hazardous conditions associated with the licensee's operations. Devices must be appropriate to current conditions and must be covered or removed when not needed. Except as

otherwise agreed, flagmen and devices must be as specified in the "Manual on Uniform Traffic Control Devices."

Condition No. 3-17 – Access and Road Use by Licensee

The licensee shall confine all vehicles being used for Project purposes including, but not limited to, administrative and transportation vehicles and construction and inspection equipment, to roads or specifically designed access routes, as identified in the Transportation System Management Plan (refer to Condition No. 61, Transportation System Management Plan). FS reserves the right to close any and all such routes where damage is occurring to the soil or vegetation or, if requested by the licensee, to require reconstruction/construction by the licensee to the extent needed to accommodate the licensee's use. FS agrees to provide notice to the licensee and FERC prior to road closures, except in an emergency, in which case notice will be provided as soon as practicable.

Condition No. 3-18 - Crossings

The licensee shall maintain existing crossings as required by FS for all FS roads and trails that intersect the right-of-way occupied by linear Project facilities (powerline, penstock, ditch, pipeline).

Condition No. 3-19 – Access by the United States

The United States shall have unrestricted use of any road over which the licensee has control within the Project area for all purposes deemed necessary and desirable in connection with the protection, administration, management, and utilization of Federal lands or resources. When needed for the protection, administration, and management of Federal lands or resources, the United States shall have the right to extend rights and privileges for use of the right-of-way and road thereon to States and local subdivisions thereof, as well as to other users. The United States shall control such use so as not to unreasonably interfere with the safety or security uses, or cause the licensee to bear a share of costs disproportionate to the licensee's use in comparison to the use of the road by others.

Condition No. 3-20 - Signs

The licensee shall consult with FS prior to erecting signs related to safety issues on National Forest System lands covered by the license. Prior to the licensee erecting any other signs or advertising devices on National Forest System lands covered by the license, the licensee must obtain the approval of FS as to location, design, size, color, and message. The licensee shall be responsible for maintaining all licensee-erected signs to neat and presentable standards.

The licensee shall participate in joint licensee and FS road and sign surveys to be conducted as frequently as needed, but at least annually. The licensee shall be responsible for replacing or repairing traffic safety and information signs damaged by Project operations.

Condition No. 3-21 - Construction Inspections

Within 60 days of planned ground-disturbing activity on or affecting National Forest System lands, the licensee shall file with FERC a Safety During Construction Plan that identifies potential hazard areas and measures necessary to address public safety. Areas to consider include construction activities near public roads, trails, and recreation areas and facilities.

The licensee shall perform daily (or on a schedule otherwise agreed to by FS in writing) inspections of licensee's construction operations on National Forest System lands and licensee adjoining property while construction is in progress. The licensee shall document these inspections (informal writing sufficient) and shall deliver such documentation to FS on a schedule agreed to by FS. The inspections must specifically include fire plan compliance, public safety, and environmental protection. The licensee shall act immediately to correct any items found to need correction.

A registered professional engineer of the appropriate specialty shall regularly conduct construction inspections of structural improvements on a schedule approved by FS.

Condition No. 3-22 - Unattended Construction Equipment

The licensee shall not place construction equipment on National Forest System lands prior to actual use or allow it to remain on National Forest System lands subsequent to actual use, except for a reasonable mobilization and demobilization period agreed to by FS. The licensee shall remove equipment from National Forest System lands unless a permit is issued for equipment storage.

Condition No. 3-23 - Maintenance of Improvements

The licensee shall maintain the improvements and premises on National Forest System lands and licensee adjoining property to standards of repair, orderliness, neatness, sanitation, and safety. For example, trash, debris, and unusable machinery will be disposed of separately; other materials will be stacked, stored neatly, or placed within buildings. Disposal will be at an approved existing location, except as otherwise agreed to by FS.

Condition No. 3-24 - Erosion Control Plan

During planning and before any new construction or non-routine maintenance projects with the potential for causing erosion and/or stream sedimentation on or affecting National Forest System lands, the licensee shall file with FERC an Erosion Control Measures Plan that is approved by FS. The Plan shall include measures to control erosion, stream sedimentation, dust, and soil mass movement attributable to the Project.

The plan shall be based on actual-site geological, soil, and groundwater conditions and shall include:

1. A description of the actual site conditions.
2. Detailed descriptions, design drawings, and specific topographic locations of all control measures.
3. Measures to divert runoff away from disturbed land surfaces.
4. Measures to collect and filter runoff over disturbed land surfaces, including sediment ponds at the diversion and powerhouse sites.
5. Revegetating disturbed areas in accordance with current direction on use of native plants and locality of plant and seed sources.
6. Measures to dissipate energy and prevent erosion.
7. A monitoring and maintenance schedule.

Upon FERC approval, the licensee shall implement the plan.

Condition No. 3-25 - Solid Waste and Waste Water Plan, New Construction and Project Operation and Maintenance

During planning and prior to any new construction or maintenance on or affecting National Forest System lands not addressed in an existing plan (including, but not limited to, any recreation-related construction), the licensee shall notify FS, and FS shall make a determination whether a plan shall be filed with FERC. At a minimum, the plan must address the estimated quantity of solid waste and waste water generated each day, the location of disposal sites and methods of treatment, the implementation schedule, areas available for disposal of wastes, design of facilities, comparisons between on- and off-site disposal, and maintenance programs.

Condition No. 3-26 - Water Quality and Water Pollution

The licensee shall comply with state water quality standards to ensure compliance with the Clean Water Act, protection of beneficial uses, and adequate protection during utilization of the Forests.

The licensee shall discharge no waste or byproduct on or affecting National Forest System lands if it contains any substances in concentrations that would result in violation of water quality standards set forth by the State; would impair present or future beneficial uses of water; would cause pollution, nuisance, or contamination; or would unreasonably degrade the quality of any waters in violation of any federal or state law. Prior to construction on or affecting National Forest System lands, and during operation and maintenance of the Project if such operation and maintenance would affect National Forest System lands, the licensee shall develop a plan approved by FS and subject to requirements of other federal and state water quality agencies.

APPENDIX 4

DRAFT BUREAU OF LAND MANAGEMENT “STANDARD” SECTION 4(e) CONDITIONS FOR THE UARP PROJECT, FERC NO. 2101, AND THE CHILI BAR PROJECT, FERC NO. 2155

Condition 4-1. Bureau of Land Management Approval of Final Design

Before any new construction of the Project occurs on Bureau of Land Management lands, the Licensee shall obtain prior written approval of BLM for all final design plans for Project components, which BLM deems as affecting or potentially affecting Bureau of Land Management lands within the Project boundary. The Licensee shall follow the schedules and procedures for design review and approval specified in the conditions herein. As part of such written approval, BLM may require adjustments to the final plans and facility locations to preclude or mitigate impacts and to insure that the Project is either compatible with on-the-ground conditions or approved by BLM based on agreed upon compensation or mitigation measures to address compatibility issues. Should such necessary adjustments be deemed by BLM, FERC, or the Licensee to be a substantial change, the Licensee shall follow the procedures of FERC Standard Article 2 of the license. Any changes to the license made for any reason pursuant to FERC Standard Article 2 or Article 3 shall be made subject to any new terms and conditions of the Secretary of Interior made pursuant to Section 4(e) of the Federal Power Act to address Project effects within the Project boundary.

Condition 4-2. Approval of Changes

Notwithstanding any license authorization to make changes to the Project, when such changes directly affect BLM lands within the Project boundary, the Licensee shall obtain written approval from BLM prior to making any changes in any constructed project features or facilities, or in the uses of project lands and waters or any departure from the requirements of any approved exhibits filed with FERC. Following receipt of such approval from BLM, and a minimum of 60 days prior to initiating any such changes, the Licensee shall file a report with FERC describing the changes, the reasons for the changes, and showing the approval of the BLM for such changes. The Licensee shall file an exact copy of this report with BLM at the same time it is filed with FERC. This article does not relieve the applicant from the amendment or other requirements of FERC Standard Article 2 or Article 3 of this license.

Condition 4-3. Consultation

Each year between February 15 and April 15, the Licensee shall consult with BLM with regard to measures needed to ensure protection and utilization of BLM resources within the Project boundary affected by the Project. Within 60 days following such consultation, the Licensee shall file with FERC evidence of the consultation with any recommendations made by BLM. BLM reserves the right, after notice and opportunity for comment, to require changes in the Project and its operation through revision of the 4(e) conditions that require measures necessary to accomplish protection and utilization of BLM resources within the Project boundary.

Condition 4-4. Modification of 4(e) Conditions After Biological Opinion or Water Quality Certification

BLM reserves the right, after notice and opportunity for comment, to modify these conditions for BLM lands within the Project boundary, if necessary, to respond to any Final Biological Opinion issued for this Project by the United States Fish and Wildlife Service, NOAA Fisheries, or any Certification or permit issued for this Project by the State Water Resources Control Board or Army Corps of Engineers.

Condition 4-5. Surrender of License or Transfer of Ownership

Prior to any surrender of this license, the Licensee shall provide assurance acceptable to BLM that the Licensee shall restore any Project area directly affecting BLM lands to a condition satisfactory to BLM upon or after surrender of the license, as appropriate. To the extent restoration is required, Licensee shall prepare a restoration plan which shall identify the measures to be taken to restore such BLM lands and shall include adequate financial mechanisms to ensure performance of the restoration measures.

In the event of any transfer of the license or sale of the Project, the Licensee shall assure that, in a manner satisfactory to BLM, the Licensee or transferee will provide for the costs of surrender and restoration. If deemed necessary by BLM to assist it in evaluating the applicant's proposal, the applicant shall conduct an analysis, using experts approved by BLM, to estimate the potential costs associated with surrender and restoration of any Project area directly affecting BLM lands to BLM specifications. In addition, BLM may require the Licensee to pay for an independent audit of the transferee to assist BLM in determining whether the transferee has the financial ability to fund the surrender and restoration work specified in the analysis.

Condition 4-6. Valid Claims and Existing Rights

The Licensee shall be subject to all valid claims and existing rights.

Condition 4-7. Compliance with Regulations on Bureau of Land Management Lands

The Licensee shall comply with the regulations of the Department of Interior for activities on BLM lands, and all applicable Federal, State, county, and municipal laws, ordinances, or regulations in regards to the area or operations on or directly affecting BLM lands, to the extent those laws, ordinances or regulations are not preempted by federal law.

Condition 4-8. Damage to Land, Property, and Interests of the United States

The Licensee has an affirmative duty to protect the land, property, and interests of the United States from damage arising from the Licensee's construction, maintenance, or operation of the Project works or of the works appurtenant or accessory thereto under the license. The Licensee's

liability for fire and other damages to BLM lands shall be determined in accordance with the Federal Power Act and FERC Standard Form L-1 Articles 22 and 24.

The Licensee's liability under this condition shall not extend to acts or omissions of third parties outside of the Licensee's control. The Licensee's contractors or employees of contractors are not considered third parties.

Condition 4-9. Indemnification

The Licensee shall indemnify, defend, and hold the United States harmless for:

- any violations incurred under any laws and regulations applicable to, or
- judgments, claims, penalties, fees, or demands assessed against the United States caused by, or
- costs, damages, and expenses incurred by the United States caused by, or
- the releases or threatened release of any solid waste, hazardous substances, pollutant, contaminant, or oil in any form in the environment related to

the construction, maintenance, or operation of the Project works or of the works appurtenant or accessory thereto under the license; provided, however, that the provisions of this condition do not apply to any damages, judgments, claims, or demands arising out of the negligence, recklessness, or willful misconduct of the United States, its agencies, bureaus, departments, contractors, or concessionaires, or other third parties, or to damages, judgments, claims, or demands arising out of any activity initially occurring outside the project boundary or outside BLM lands.

The Licensee's indemnification of the United States shall include any loss by personal injury, loss of life or damage to property caused by the construction, maintenance, or operation of the Project works or of the works appurtenant or accessory thereto under the license. Indemnification shall include, but is not limited to, the value of resources damaged or destroyed; the costs of restoration, cleanup, or other mitigation; fire suppression or other types of abatement costs; third party claims and judgments; and all administrative, interest, and other legal costs. Upon surrender, transfer, or termination of the license, the Licensee's obligation to indemnify and hold harmless the United States shall survive for all valid claims for actions that occurred prior to such surrender, transfer or termination.

Condition 4-10. Surveys, Land Corners

The Licensee shall avoid disturbance to all BLM land survey monuments, private property corners, and forest boundary markers within the Project boundary. In the event that any such land markers or monuments on BLM lands are destroyed by an act or omission of the Licensee, in connection with the use and/or occupancy authorized by this license, depending on the type of monument destroyed, the Licensee shall reestablish or reference same in accordance with (1) the procedures outlined in the "Manual of Instructions for the Survey of the Public Land of the United States," (2) the specifications of the County Surveyor, or (3) the specifications of BLM.

Further, the Licensee shall ensure that any such official survey records affected are amended as provided by law.

Condition 4-11. Hazardous Substances Plan

Prior to undertaking activities on BLM lands the Licensee shall file with FERC a plan approved by BLM for oil and hazardous substances storage and spill prevention and cleanup. In addition, during planning and prior to any new construction or maintenance not addressed in an existing plan, the Licensee shall notify BLM and these entities shall make a determination whether a plan approved by BLM for oil and hazardous substances storage and spill prevention and cleanup is needed. Any such plan shall be filed with FERC.

At a minimum, the plan must require the Licensee to (1) maintain in the Project area, a cache of spill cleanup equipment suitable to contain any spill from the Project; (2) to periodically inform BLM of the location of the spill cleanup equipment on BLM lands and of the location, type, and quantity of oil and hazardous substances stored in the Project area; and (3) to inform BLM immediately of the magnitude, nature, time, date, location, and action taken for any spill. The plan shall include a monitoring plan that details corrective measures that will be taken if spills occur. The plan shall include a requirement for a weekly written report during construction documenting the results of the monitoring.

Condition 4-12. Use of Explosives

Use of explosives shall be consistent with state and local requirements.

1. The Licensee shall use only electronic detonators for blasting on BLM lands and Licensee adjoining property, except near high-voltage powerlines. BLM may allow specific exceptions when in the public interest.
2. In the use of explosives, the Licensee shall exercise the utmost care not to endanger life or property and shall comply with the requirements of BLM. The Licensee shall contact BLM prior to blasting to obtain the requirements from BLM. The Licensee shall be responsible for any and all damages resulting from the use of explosives and shall adopt precautions to prevent damage to surrounding objects. The Licensee shall furnish and erect special signs to warn the public of the Licensee's blasting operations. The Licensee shall place and maintain such signs so they are clearly evident to the public during all critical periods of the blasting operations and shall ensure that they include a warning statement to have radio transmitters turned off.
3. The Licensee shall store all explosives on BLM lands in a secure manner, in compliance with State and local laws and ordinances, and shall mark all such storage places "DANGEROUS - EXPLOSIVES." Where no local laws or ordinances apply, the Licensee shall provide storage that is satisfactory to BLM and in general not closer than 1,000 feet from the road or from any building or camping area.

4. When using explosives on BLM lands, the Licensee shall adopt precautions to prevent damage to landscape features and other surrounding objects. When directed by the BLM, the Licensee shall leave trees within an area designated to be cleared as a protective screen for surrounding vegetation during blasting operations. The Licensee shall remove and dispose of trees so left when blasting is complete. When necessary, and at any point of special danger, the Licensee shall use suitable mats or some other approved method to smother blasts.

Condition 4-13. Pesticide Use Restrictions

Pesticides may not be used to control undesirable woody and herbaceous vegetation, aquatic plants, fish, insects, and rodents on BLM lands without the prior written approval of BLM. The Licensee shall submit a request for approval of planned uses of pesticides on BLM lands. The request must cover annual planned use and be updated as required by BLM. The Licensee shall provide information essential for review, including a forest-specific pesticide risk assessment. Exceptions to this schedule may be allowed only when unexpected outbreaks of pests require control measures that were not anticipated at the time the request was submitted. In such an instance, an emergency request and approval may be made.

The Licensee shall use on BLM lands only those materials registered by the U. S. Environmental Protection Agency for the specific purpose planned. The Licensee must strictly follow label instructions in the preparation and application of pesticides and disposal of excess materials and containers.

Condition 4-14. Risks and Hazards on BLM Lands

As part of the occupancy and use of the Project area, the Licensee has a continuing responsibility to reasonably identify and report all known or observed hazardous conditions on or directly affecting BLM lands within or contiguous to the Project boundary that would affect the improvements, resources, or pose a risk of injury to individuals. The Licensee will abate those conditions, except those caused by third parties or not related to the occupancy and use authorized by the license. Any non-emergency actions to abate such hazards on BLM lands shall be performed after consultation with BLM. In emergency situations, the applicant shall notify BLM of its actions as soon as possible, but not more than 48 hours, after such actions have been taken. Whether or not BLM is notified or provides consultation, the Licensee shall remain solely responsible for all abatement measures performed. Other hazards should be reported to the appropriate agency as soon as possible.

Condition 4-15. Access and Road Use by Government

The United States shall have unrestricted use of any road over which the Licensee has control within the project area for all purposes deemed necessary and desirable in connection with the protection, administration, management, and utilization of Federal lands or resources. When needed for protection, administration, and management of Federal lands or resources the United States shall have the right to extend rights and privileges for use of the right-of-way and road

thereon to States and local subdivisions thereof, as well as to other users. The United States shall control such use so as not unreasonably to interfere with the safety or security uses, or cause the Licensee to bear a share of the costs disproportionate to the Licensee's use in comparison to the use of the road by others.

Condition 4-16. Access and Road Use By Licensee

The Licensee shall confine all Project vehicles on BLM lands, including, but not limited to, administrative and transportation vehicles and construction and inspection equipment, to roads or specifically designed access routes. BLM reserves the right to close any and all such routes where damage is occurring to the soil or vegetation, or, if requested by Licensee, to require reconstruction/construction by the Licensee to the extent needed to accommodate the Licensee's use. BLM agrees to provide notice to the Licensee and FERC prior to road closures, except in an emergency, in which case notice will be provided as soon as possible.

Condition 4-17. Crossings

The Licensee shall maintain existing crossings as required by BLM for all BLM roads and trails that intersect the right-of-way occupied by linear Project facilities (powerline, penstock, ditch, pipeline) within the Project boundary.

Condition 4-18. Signs

The Licensee shall consult with BLM prior to erecting signs related to safety issues on BLM lands within the Project boundary. Prior to the Licensee erecting any other signs or advertising devices on BLM lands covered by the license, the Licensee must obtain the approval of BLM as to location, design, size, color, and message. The Licensee shall be responsible for maintaining all Licensee-erected signs to neat and presentable standards.

Condition 4-19. Construction Inspections

Within 60 days of planned ground-disturbing activity on BLM lands within the Project boundary, the Licensee shall file with FERC a Safety During Construction Plan that identifies potential hazard areas and measures necessary to address public safety. Areas to consider include construction activities near public roads, trails, and recreation areas and facilities.

The Licensee shall perform daily (or on a schedule otherwise agreed to by BLM in writing) inspections of Licensee's construction operations on BLM lands within the Project boundary and Licensee adjoining property while construction is in progress. The Licensee shall document these inspections (informal writing sufficient) and shall deliver such documentation to BLM on a schedule agreed to by BLM. The inspections must specifically include fire plan compliance, public safety, and environmental protection. The Licensee shall act immediately to correct any items found to need correction.

A registered professional engineer of the appropriate specialty shall regularly conduct construction inspections of structural improvements on a schedule approved by BLM.

Condition 4-20. Unattended Construction Equipment

The Licensee shall not place construction equipment on BLM lands prior to actual use or allow it to remain on BLM lands subsequent to actual use, except for a reasonable mobilization and demobilization period agreed to by BLM. The Licensee shall remove equipment from BLM lands unless a permit is issued for equipment storage.

Condition 4-21. Maintenance of Improvements

The Licensee shall maintain the improvements and premises on BLM lands within the Project boundary and Licensee adjoining property to standards of repair, orderliness, neatness, sanitation, and safety. For example, trash, debris, and unusable machinery will be disposed of separately; other materials will be stacked, stored neatly, or placed within buildings. Disposal will be at an approved existing location, except as otherwise agreed to by BLM.

Condition 4-22. Erosion Control Plan

During planning and before any new construction or non-routine maintenance projects with the potential for causing erosion and/or stream sedimentation on or affecting BLM lands, the Licensee shall file with FERC an Erosion Control Measures Plan that is approved by BLM. The Plan shall include measures to control erosion, stream sedimentation, dust, and soil mass movement attributable to the Project.

The plan shall be based on actual-site geological, soil, and groundwater conditions and shall include:

1. A description of the actual site conditions.
2. Detailed descriptions, design drawings, and specific topographic locations of all control measures.
3. Measures to divert runoff away from disturbed land surfaces.
4. Measures to collect and filter runoff over disturbed land surfaces, including sediment ponds at the diversion and powerhouse sites.
5. Revegetating disturbed areas in accordance with current direction on use of native plants and locality of plant and seed sources.
6. Measures to dissipate energy and prevent erosion.
7. A monitoring and maintenance schedule.

Upon FERC approval, the Licensee shall implement the plan.

Condition 4-23. Solid Waste and Waste Water Plan, New Construction and Project Operation and Maintenance

During planning and prior to any new construction or maintenance potentially producing solid waste or waste water on or affecting BLM lands not addressed in an existing plan (including, but not limited to, any recreation-related construction), the Licensee shall notify BLM, and BLM shall make a determination whether a plan shall be filed with FERC. At a minimum, the plan must address the estimated quantity of solid waste and waste water generated each day; the location of disposal sites and methods of treatment; the implementation schedule; areas available for disposal of wastes; design of facilities; comparisons between on- and off-site disposal; and maintenance programs.

Condition 4-24. Water Quality and Water Pollution

The Licensee shall comply with state water quality standards to ensure compliance with the Clean Water Act, protection of beneficial uses, and adequate protection during utilization of the BLM lands.

The Licensee shall discharge no waste or byproduct on or affecting BLM lands if it contains any substances in concentrations that would result in violation of water quality standards set forth by the State; would impair present or future beneficial uses of water; would cause pollution, nuisance, or contamination; or would unreasonably degrade the quality of any waters in violation of any federal or state law. Prior to construction, on or affecting BLM lands and during operation and maintenance of the Project if such operation and maintenance would affect BLM lands, the Licensee shall develop a plan approved by BLM and subject to requirements of other federal and state water quality agencies.

APPENDIX 5

AUTHORIZED REPRESENTATIVES OF THE PARTIES

For Sacramento Municipal Utility District:

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Name:
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For California Department of Parks and Recreation:

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E-mail:

For American Whitewater:

Name:
Title:
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Fax:
E-mail:

For Friends of the River:

Name:
Title:
Address:
Telephone:
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For California Outdoors:

Name:
Title:
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APPENDIX 6

**RECREATION PAYMENT AGREEMENT
WITH BUREAU OF LAND MANAGEMENT**

**RECREATION PAYMENT AGREEMENT
BETWEEN U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND
MANAGEMENT, SACRAMENTO MUNICIPAL UTILITY DISTRICT
AND PACIFIC GAS AND ELECTRIC COMPANY**

This *Recreation Payment Agreement* ("RPA" or "Agreement") is entered into between the U.S. Department of the Interior Bureau of Land Management ("BLM"), Sacramento Municipal Utility District ("SMUD") and Pacific Gas and Electric Company ("PG&E") in connection with the relicensing and operations of SMUD's Upper American River Project FERC No. 2101 ("UARP") and PG&E's Chili Bar Project, FERC No. 2155 ("Chili Bar") (UARP and Chili Bar are sometimes individually called "Project" and collectively the "Projects" depending on the context). This Agreement is effective as of the Effective Date defined below. SMUD and PG&E are referred to in this Agreement individually as "Licensee" or collectively as "Licensees" depending on the context. SMUD, PG&E and BLM are sometimes referred to in this Agreement collectively as "Parties".

RECITALS

A. PG&E, SMUD and BLM anticipate becoming signatories to the *Relicensing Settlement Agreement for the Upper American River Project and Chili Bar Hydroelectric Project* ("Settlement Agreement"). This RPA is Appendix 6 to the Settlement Agreement, and the RPA will be submitted to FERC for informational purposes only with the Settlement Agreement.

B. PG&E, SMUD and BLM are entering into this RPA as part of the overall settlement process leading to issuance by FERC of New Project Licenses for each of the Projects. The parties to the RPA acknowledge that the creation of the RPA was intended to foster a comprehensive settlement for the UARP and Chili Bar Projects; however, due to its independent nature and inclusive terms, the RPA is intended to operate on its own. Therefore, nothing in the administrative provisions for the Settlement Agreement are intended to, or shall be construed to, modify in any manner provisions in the RPA. Likewise the parties' obligations under the RPA shall be interpreted independently of the Settlement Agreement except as may be provided herein.

C. On November 1, 2005, BLM and various other state and federal agencies, other groups and individuals participating in the relicensing process filed the Comprehensive Resource Agency/NGO Alternative ("Agency Alternative") with FERC, which set forth proposed PM&E measures for the New Project Licenses.

D. During September and October 2006, after FERC had accepted the Licensees' applications for New Project Licenses, FERC solicited preliminary recommendations, prescriptions, terms and conditions under Sections 4(e), 10(a), 10(j) and 18 of the Federal Power Act ("FPA") from federal and state resource agencies, nongovernmental organizations, and members of the public who filed for intervention in the FERC

relicensing proceedings for the Projects. Those participants submitted preliminary proposed terms and conditions, most of which were consistent with the Agency Alternative, which had been revised in several material respects to address issues raised by SMUD and PG&E. BLM filed preliminary FPA Section 4(e) mandatory conditions related to both Projects at that time.

E. Following the filing of preliminary recommendations, prescriptions, terms and conditions with FERC, the Licensees, agencies and other participants reconvened the settlement negotiation group, which had met periodically since the filing of the Licensees' applications for New Project Licenses to explore the possibility of reaching a comprehensive settlement in the relicensing of the Projects. Such settlement negotiations led to an Agreement in Principle, which was filed with FERC on November 16, 2006.

F. One of the subjects discussed by the settlement negotiation group was the prospects for, and mechanics of, the Licensees making a monetary contribution to BLM related to recreational facilities owned and managed by BLM on the South Fork American River ("SFAR") downstream of Chili Bar.

G. This RPA resolves all issues among PG&E, SMUD and BLM regarding the Licensees making a monetary contribution to BLM for improvements to and annual operation, maintenance, and administration of such recreation facilities owned and managed by BLM.

DEFINITIONS APPLICABLE TO THIS AGREEMENT

401 Certification shall mean SWRCB's issuance of a water quality certification pursuant to Section 401 of the CWA, 33 U.S.C. § 1341.

Chili Bar shall mean the Chili Bar Hydroelectric Project, licensed to PG&E as FERC Project No. 2155.

Downstream Reach shall mean the approximately 20 mile section of the South Fork American River downstream of the Chili Bar Project.

Effective Date shall mean the date set forth in Section 1.1 of this RPA

FERC shall mean the Federal Energy Regulatory Commission.

Final, with respect to each Licensee's New Project License under this RPA, shall mean that Licensee's acceptance of FERC's license for its Project that is no longer subject to any administrative or judicial appeal or review.

FPA shall mean the Federal Power Act, 16 U.S.C. §§ 791a *et seq.*

Good Faith shall mean honesty of purpose, free from intention to defraud, and faithful to one's duty or obligation.

Licensee or Licensees shall mean PG&E and/or SMUD.

New Project License shall mean the new license issued by FERC pursuant to Section 15 of the FPA for each Project, as follows:

- (i) For the UARP, the New Project License shall mean the new license issued by FERC to SMUD in response to SMUD's application for new license filed July 15, 2005.
- (ii) For Chili Bar, the New Project License shall mean the new license issued by FERC to PG&E in response to PG&E's application for new license filed July 15, 2005.

Notice shall mean a written communication that meets the requirements of Section 8 of this RPA and any other requirements for notice specifically provided in any other applicable section of this Agreement.

PM&E shall mean protection, mitigation and enhancement.

Project or Projects shall mean the UARP and/or Chili Bar.

Section 4(e) Conditions or Section 4(e) for the purpose of this RPA shall mean final mandatory terms and conditions submitted to FERC in the UARP and/or Chili Bar relicensing proceedings by BLM under Section 4(e) of the FPA related to payments for the improvements to and annual operation, maintenance, and administration of facilities owned and managed by BLM in the Downstream Reach.

Settlement Agreement shall mean the *Relicensing Settlement Agreement for the Upper American River Project and Chili Bar Hydroelectric Project*, dated February 1, 2007, between SMUD, PG&E, BLM and various other state and federal agencies, groups and individuals who have participated in the relicensing of the Projects.

SFAR shall mean the South Fork of the American River.

UARP shall mean the Upper American River Project, licensed to SMUD as FERC Project No. 2101.

Uncontrollable Force shall include natural events, civil disruption, [action or non-action of a governmental agency] (other than SMUD). Uncontrollable Force will not include any willful, negligent, or foreseeable acts or omissions by SMUD or PG&E.

TERMS OF AGREEMENT

NOW THEREFORE, in consideration of the mutual covenants set forth herein, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1 GENERAL PROVISIONS

1.1 Effective Date and Term of RPA

This RPA shall become effective on the date this RPA is executed by PG&E, SMUD, and BLM. The term of this RPA shall commence on the Effective Date and shall continue, with respect to each Project, through each New Project License including any annual license(s) that may be issued after the New Project License expires, or until the effective date of any FERC order approving surrender of the New Project License.

1.2 Effective Date of Licensee's Payment Obligations

The contractual obligations for payment of each Licensee under the RPA, as stated in Sections 4 and 5, shall become effective on the date each Licensee's New Project License becomes Final, and the first payments shall be retroactive and contain the annual payments which have accrued from the date of issuance of each New Project License by FERC.

2 PURPOSE OF RPA

2.1 Purpose

PG&E, SMUD and BLM have entered into this RPA to resolve issues regarding the Licensees making a monetary contribution to BLM for improvements to and annual operation, maintenance, and administration of recreation facilities owned and managed by BLM on the SFAR downstream of Chili Bar. This RPA enhances the benefits of BLM's recreation facilities for the public and local communities. The Licensees acknowledge that BLM owns and administers certain public lands within the present Project boundaries of each Project. BLM contends, but the Licensees do not concede, that these lands constitute a "reservation" within the meaning of FPA Section 4(e). Nonetheless, pursuant to the Parties' various rights, authorities, and responsibilities under Sections 4(e) and 10(a), of the FPA, this RPA establishes certain obligations of Licensees for payments to BLM to help fund improvements to and annual operation, maintenance and administration of recreation facilities owned and managed by BLM on the SFAR downstream of Chili Bar. For these purposes, PG&E, SMUD and BLM agree that this RPA is fair and reasonable, and in the public interest. PG&E, SMUD and BLM agree that the Licensees' performances of their obligations under this RPA and the Settlement Agreement are consistent with and fulfill any and all of the Licensees' statutory and regulatory obligations known to BLM relating to the relicensing of the Projects. PG&E, SMUD, and BLM acknowledge and agree that each will comply with and be bound by

the terms of this RPA irrespective of the existence or non-existence of the Settlement Agreement.

2.2 No Precedent for Other Proceedings

2.2.1 This RPA is made upon the express understanding that it constitutes a negotiated resolution of certain issues among PG&E, SMUD and BLM relating to the New Project Licenses and operation of the Projects. Accordingly, this RPA shall not be offered against PG&E, SMUD or BLM as argument, admission or precedent in any mediation, arbitration, litigation, or other administrative or legal proceeding that does not involve or relate to the New Project Licenses or the operation of the Projects.

2.3 Future Relicensings

Nothing in this RPA is intended or shall be construed to affect or restrict PG&E's, SMUD's or BLM's participation in or comments about the provisions of any future relicensing of the Projects subsequent to the current relicensings, or any other hydroelectric project licensed to SMUD or PG&E under the FPA.

3 RESERVATION OF MANDATORY CONDITIONING AUTHORITY

3.1 Except as provided in the Settlement Agreement, and consistent with this RPA, BLM agrees to file by February 1, 2007, reservations of its Section 4(e) mandatory conditioning authority under the FPA in each New Project License in the form provided in Section 3.1.1 and 3.1.2. BLM agrees not to change these reservations in the New Project Licenses as long as the Licensees comply with the payment requirements of this RPA.

3.1.1 BLM's Section 4(e) Reservation Condition for UARP

"BLM reserves its authority under Section 4(e) of the Federal Power Act consistent with the Recreation Payment Agreement (RPA) dated February 1, 2007, to provide for the protection and utilization of BLM lands to require inclusion of conditions in the license for Project No. 2101, unopposed by the licensee and the licensee of Project No. 2155, as provided in Section 6 of the RPA. These conditions shall require that licensee shall make a one-time payment to BLM of \$270,000 and make annual payments to BLM of \$270,000, as annually adjusted, on or before October 1 of each year during the term of the license, and all annual renewals thereof. The payment shall be by the method established under Section 4 of the RPA and the amount of payment shall be adjusted annually based on the U.S. Gross Domestic Product – Implicit Price Deflator (GDP-IDP) with 2007 as the base year."

3.1.2 BLM's Section 4(e) Reservation Condition for Chili Bar

"BLM reserves its authority under Section 4(e) of the Federal Power Act consistent with the Recreation Payment Agreement (RPA) dated February 1, 2007, to

provide for the protection and utilization of BLM lands to require inclusion of conditions in the license for Project No. 2155, unopposed by the licensee and licensee of Project No. 2101, as provided in Section 6 of the RPA. These conditions shall require that licensee shall make a one-time payment to BLM of \$30,000 and make annual payments to BLM of \$30,000, as annually adjusted, on or before October 1 of each year during the term of the license, and all annual renewals thereof. The payment shall be by a method established under Section 5 of the RPA and the amount of payment shall be adjusted annually based on the U.S. Gross Domestic Product – Implicit Price Deflator (GDP-IDP) with 2007 as the base year.”

4 SMUD PAYMENTS TO BLM

4.1 SMUD's One-Time Payment Obligation

SMUD shall fund a portion of BLM recreation improvements on the SFAR below Chili Bar by making a one-time payment of \$270,000 within 90 days of the date the License becomes Final for UARP. Payment instructions shall be provided by BLM to SMUD within 30 days of the FERC's license issuance. SMUD shall make payments pursuant to such instructions.

4.2 SMUD's Annual Payment Obligation to BLM

SMUD shall, beginning on or before the initial October 1 following the date the UARP New Project License becomes Final pursuant to Section 1.2, annually pay to BLM \$270,000 for BLM to partially fund the annual operation, maintenance, and administration costs for BLM public river access and river-related recreation facilities along the SFAR below Chili Bar . The initial payment shall be made pursuant to instructions provided by BLM to SMUD within 30 days of the FERC New Project License becoming Final for UARP. The amount of payment shall be adjusted annually based on the U.S. Gross Domestic Product – Implicit Price Deflator (GDP-IDP) (year 2007 cost basis).

5 PG&E PAYMENTS TO BLM

5.1 PG&E's One-Time Payment to BLM

PG&E shall fund a portion of BLM recreation improvements on the SFAR below Chili Bar by making a one-time payment of \$30,000 within 90 days of the date the License becomes Final for Chili Bar. Payment instructions shall be provided by BLM to PG&E within 30 days of the FERC's license issuance. PG&E shall make payments pursuant to such instructions.

5.2 PG&E's Annual Payment Obligation to BLM

PG&E shall, beginning on or before the initial October 1 following the date the Chili Bar New Project License becomes Final pursuant to Section 1.2, annually pay to BLM \$30,000 for BLM to partially fund the annual operation, maintenance, and

administration costs for BLM public river access and river-related recreation facilities along the SFAR below Chili Bar. The initial payment shall be made pursuant to instructions provided by BLM to PG&E within 30 days of the FERC New Project License becoming Final for Chili Bar. The amount of payment shall be adjusted annually based on the U.S. Gross Domestic Product – Implicit Price Deflator (GDP-IDP) (year 2007 cost basis).

6 BLM AUTHORITY TO FILE MANDATORY CONDITIONS

6.1 In the event a Licensee fails to make the one-time payment or the annual payments to BLM as provided in this RPA, and after Notice and following the procedures as provided in Section 8, BLM may exercise its reserved authority under Section 4(e) of the FPA consistent with Section 3 of this agreement and file the conditions as expressly stated in 6.1.1 and 6.1.2 as applicable, to be included in only the license of the Licensee that has failed to make the payments. And if FERC fails to enforce payment obligations as provided in the initial Section 4(e) filing BLM may file a motion and/or a new Section 4(e) Condition with rationale to seek expansion of the Project boundary, as provided in Section 7, for the license of the Licensee that has failed to make the payments. The Licensees agree that neither one shall contest in any manner either BLM's filing of Section 4(e) Conditions related to this paragraph or BLM's request for expansion of the breaching Licensee's(s') Project boundary.

6.1.1 UARP License Conditions

6.1.1.1 Unless otherwise paid previously, the Licensee shall fund a portion of BLM recreation improvements on the SFAR below Chili Bar by providing BLM a one-time payment of \$270,000 using a payment method acceptable to BLM. FERC shall not by its own action cause a change to this amount.

6.1.1.2 To provide for the protection and utilization of BLM lands, the Licensee shall partially fund the annual operation, maintenance, and administration costs for BLM river access and whitewater boating facilities along the SFAR below Chili Bar Reservoir Dam. The Licensee shall annually pay to BLM, by October 1, \$270,000. The costs shall be escalated based on the U.S. Gross Domestic Product – Implicit Price Deflator (GDP-IDP) (year 2007 cost basis). FERC shall not by its own action cause a change to this amount.

6.1.2 Chili Bar License Conditions

6.1.2.1 Unless otherwise paid previously, the Licensee shall fund a portion of BLM recreation improvements on the SFAR below Chili Bar by providing BLM a one-time payment of \$30,000 using a payment method acceptable to BLM. FERC shall not by its own action cause a change to this amount.

6.1.2.2 To provide for the protection and utilization of BLM lands, the Licensee shall partially fund the annual operation, maintenance, and administration costs for BLM river access and whitewater boating facilities along the SFAR below Chili

Bar Reservoir Dam. The Licensee shall annually pay to BLM, by October 1, \$30,000. The costs shall be escalated based on the U.S. Gross Domestic Product – Implicit Price Deflator (GDP-IDP) (year 2007 cost basis). FERC shall not by its own action cause a change to this amount.

7 PROJECT BOUNDARY

7.1 Expansion of Boundary

BLM will not take any action to expand the Project boundaries of either Project so long as the Licensees continue to fully perform their payment obligations to BLM as required by this RPA. In the event a Licensee breaches this RPA by failing to make its full payment and FERC fails or refuses to order payment pursuant to the Section 4(e) Condition filed under Section 6.1.1 or 6.1.2, then BLM, in addition to other actions provided herein, may file a motion and/or a new Section 4(e) Condition with supporting rationale to expand that Licensee's Project boundary to include the areas described in Section 7.3.

7.2 BLM's Motion to Expand a Project Boundary

In the event that BLM requests that FERC expand a Project's boundary upon filing of the Section 4(e) Conditions as provided in Section 6, SMUD and PG&E waive all rights they had or may have to oppose the expansion of Project boundary over the areas identified in Section 7.3.

7.3 Areas to be encompassed under Project boundary expansion under Section 7.1.

1. River use areas at Miners Cabin – T11/N, R 10E, S22.
2. Upper Greenwood Creek – T12/N, R9E, S11.
3. Lower Greenwood Creek – T12N, R9E, S10.
4. River access at Cronan Ranch – T12N, R9E, S15 & 16.
5. River access at Lorang Beach – T11N, R9E, S21.

7.3.1 Maps

Maps of the BLM lands identified in this Section 7.3 are attached.

8 NOTICES

8.1 Representatives of PG&E, SMUD and BLM to Receive Notice

8.1.1 Any verbal or written Notice to be provided under this RPA shall be given to the following person on behalf of PG&E, SMUD and BLM

8.1.2 BLM – Folsom Field Manager

William Haigh
916-985-4474
Bureau of Land Management
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Folsom, CA 95630

8.1.2.1 SMUD – Assistant General Manager Energy Supply

James R. Shetler
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Sacramento Municipal Utility District
MS B 408
P.O. Box 15830
Sacramento, CA 95852-1830

8.1.2.2 PG&E – Senior Director of Power Generation

Randal S. Livingston
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Pacific Gas and Electric Company
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San Francisco, CA 94177-0001

8.1.3 Each of PG&E, SMUD and BLM may change its designated representative by giving written Notice to the other entities as soon as practicable after learning that its designated representative will change.

8.2 Verbal and Written Notice in the Event of a Failure of BLM to Receive Payment

8.2.1 In the event that BLM believes that a Licensee has failed to make a timely and/or full payment under this RPA, then BLM's representative identified in Section 8.1.1.1 shall make verbal contact with the Licensee's representative designated in Section 8.1.1.2 or 8.1.1.3, as appropriate, to notify and discuss the apparent lack of payment. If contact is not successfully made with the Licensee's representative within 5 business days of BLM's attempt to make verbal contact under this Section, then BLM may proceed under Section 8.2.3 below.

8.2.2 When verbal contact is made under Section 8.2.1, the representatives of BLM and that Licensee shall cooperate and take the time mutually agreed is reasonably necessary to determine the status of payment. If no mutual agreement is reached regarding the time necessary to determine the status of payment, the licensees will have no more than 10 business days to determine and communicate the status of payment to the BLM.

8.2.3 In the event no verbal contact has been made under Section 8.2.1, or if verbal contact is made and the time provided under Section 8.2.2 expires, then BLM shall give the Licensee written Notice as provided in Section 8.2.5 of this RPA, that if payment is not made to BLM within 20 business days, BLM may exercise its rights under Section 6 of this RPA to file Section 4(e) Conditions in the New Project License of that Licensee, and if needed to move to expand Project boundary.

8.2.4 Except as otherwise provided in this Section 8, all Notices required by this RPA shall be in writing.

8.2.5 To the extent practicable, a written Notice shall be sent by U.S. Mail overnight or comparable method of distribution with a certificate of service attached.

8.2.6 For the purpose of this RPA, and unless otherwise specified, a written Notice shall be effective upon the next business day after mailing.

8.2.7 PG&E, SMUD and BLM acknowledge that if practicable, e-mail or facsimile may also be used as additional methods of providing written Notice under this RPA.

9 REINSTATEMENT OF RPA

9.1 In the event that BLM files Section 4(e) Conditions in circumstances not authorized by Sections 3 and 6, BLM agrees voluntarily to take all necessary steps to withdraw the Section 4(e) Condition and, if applicable, withdraw the boundary expansion request from the New Project License.

9.2 If such actions are not successful, the Licensee's remedy includes, but is not limited to, the right to seek and obtain an order from FERC or a court of competent jurisdiction that FERC delete and/or BLM withdraw the Section 4(e) Condition and, if applicable, withdraw the boundary expansion from the New Project License.

9.3 Upon such withdrawal or cancellation of the Section 4(e) Condition and, if applicable the boundary expansion from the New Project License, this RPA shall be reinstated in full between the Licensee and BLM.

10 NO JOINT AND SEVERAL OBLIGATION BETWEEN LICENSEES

10.1 The Licensees are individually responsible for making their own payments to BLM under this RPA; there is no joint and several liability as between the Licensees for the payments required by this RPA.

10.2 BLM shall not seek to obtain payment in any manner or forum from one Licensee for the obligations of the other Licensee under this RPA.

10.3 The Licensees have no rights between each other for contribution or indemnity relating to the payments each has agreed to make to BLM under this RPA.

11 WAIVER OF RIGHTS UNDER THE ENERGY POLICY ACT OF 2005 AND AT FERC

11.1 Regarding BLM's reservation of authority pursuant to the Section 4(e) Conditions filed with FERC under Section 3, or in the event BLM properly files Section 4(e) Conditions in a New Project License as authorized by the terms of this RPA in Section 6, each Licensee waives any right it may have to request an agency trial-type hearing on issues of material fact under Sections 4(e) of the FPA and to propose alternatives under Section 33 of the FPA, and, each Licensee waives its rights to challenge in any manner or forum at FERC or in federal court the Section 4(e) Conditions as provided in this RPA or the authority of BLM to file the Section 4(e) Conditions as provided in this RPA.

11.2 The Licensees shall not support any trial-type hearing requested by any other entity related to the subject matter of this RPA and will make reasonable efforts to support BLM as appropriate, if a trial-type hearing is requested by any other entity. If another entity requests a trial-type hearing related to the subject matter of this RPA, the Licensees may intervene in the hearing to support this RPA.

11.3 Notwithstanding the above, each Licensee reserves its rights to request a trial-type hearing under Section 4(e) or propose alternatives under Section 33 for any Section 4(e) Condition filed with FERC in circumstances not authorized by Sections 3 and 6.

11.4 In the event FERC takes actions to impose on the Licensees an expansion of the Project boundaries beyond those which are identified in Section 7.3, and/or FERC takes actions to impose on the Licensees payment requirements to the BLM beyond amounts expressed in Section 6, the Licensees may challenge such actions by FERC in any manner or forum as necessary to maintain compliance with terms and conditions as expressed in this RPA. In response to this limited right of challenge, the BLM shall remain silent. Furthermore, in the event a Licensee is unsuccessful in challenging FERC's expansion of its Project boundary that is inconsistent with this RPA, BLM agrees not to use the fact of a boundary expansion to obtain more payments or other benefits from the Licensees that are greater than what is provided in this RPA.

11.5 Notwithstanding the above and excluding that which is agreed upon in the Settlement Agreement, each Licensee reserves its rights, and is not waiving any rights in any manner whatsoever, to make and assert any arguments or legal challenges in any forum regarding BLM's Section 4(e) authority under the FPA over their Projects for any other purpose other than as provided in this RPA.

12 SUPPORT BY THE PARTIES OF THE RPA

12.1 Support of RPA

Except as necessary to fulfill a statutory, regulatory or other legal requirement, PG&E, SMUD and BLM have a continuing duty to support this RPA, or as appropriate, recommend such support, during an administrative rehearing or judicial review.

12.2 Cooperation Among PG&E, SMUD and BLM

PG&E, SMUD and BLM shall cooperate in the implementation of this RPA. None of PG&E, SMUD and BLM shall exercise discretion in a manner that results in an action or requirement that is non-compliant with this RPA unless necessary to comply with statutory, regulatory or other legal requirement.

12.3 Support for Implementation

Upon the request of either Licensee, the BLM and/or other non-requesting Licensee shall provide written communications (or orally, in the event written communication is impossible/inappropriate under the circumstances) of support in any administrative approval process that may be required for implementation or support of this RPA, but in the case of BLM subject to available agency resources and agency authority.

13 MISCELLANEOUS

13.1 Preliminary Negotiations Privileged and Confidential

PG&E, SMUD and BLM have entered into the negotiations and discussions leading to this RPA with the understanding that all discussions, communications, drafts, work papers, and notes relating to this RPA are privileged and confidential. This material shall not prejudice the position of any entity taking part in such discussions and negotiations, and shall not be used by any entity in any manner, including but not limited to admission into evidence, admission, or argument in any forum or proceeding for any purpose, to the fullest extent allowed by law, including but not limited to 18 C.F.R. § 385.606. This provision does not apply to any information that was in the public domain prior to the development of this RPA or that became part of the public domain at some later time through no unauthorized act or omission by PG&E, SMUD and BLM. This provision does not apply to any information held by a federal agency that is not protected from disclosure pursuant to the Freedom of Information Act or other applicable law. This Section shall survive any termination of this RPA.

13.2 Entire Agreement

This RPA contains the complete and exclusive agreement of PG&E, SMUD and BLM with respect to the subject matter thereof, and supersedes all discussions, negotiations, representations, warranties, commitments, offers, contracts, agreements in principle, and other writings prior to the Effective Date of this RPA, with respect to its subject matter.

13.3 Non-Severable Terms of RPA

The terms of this RPA are not severable one from the other. This RPA is made on the understanding that each term is in consideration and support of every other term, and

each term is a necessary part of the entire RPA. If a court of competent jurisdiction rules that any provision in this RPA is invalid, this RPA is deemed modified to conform to such ruling, unless PG&E, SMUD or BLM objects. If PG&E, SMUD or BLM objects, the others agree to meet and confer regarding the continued viability of this RPA. If agreement cannot be reached, any Licensee may terminate its participation in this RPA. The RPA shall continue in full force and effect with regard to the remaining parties.

13.4 No Third Party Beneficiaries

Without limiting the applicability of rights granted to the public pursuant to applicable law, this RPA shall not create any right or interest in the public, or any member thereof, as a third party beneficiary hereof, and shall not authorize any entity other than PG&E, SMUD and BLM to maintain a suit at law or equity pursuant to this RPA. The duties, obligations and responsibilities of PG&E, SMUD and BLM with respect to third parties shall remain as imposed under applicable law.

13.5 Expenses

Each Party shall use its own resources in asserting its rights and performing its obligations under this RPA, and no Party shall be required to reimburse the other Party for any expense or cost incurred hereunder.

13.6 Successors and Assigns

This RPA shall apply to, and be binding on, and inure to the benefit of the PG&E, SMUD and BLM and their successors and assigns, unless otherwise specified in this RPA.

13.7 Continuation of Certain Obligations

Upon completion of a succession or assignment, the initial party shall no longer be a party to this RPA. The initial party shall not take any action adverse to this RPA, or the New Project Licenses.

13.8 Change of Ownership of Projects

No change in ownership of the Projects or transfer of the existing or New Project Licenses by SMUD or PG&E shall in any way modify or otherwise affect the other Licensee's or BLM's interests, rights, responsibilities or obligations under this RPA. Unless prohibited by applicable law, a Licensee shall provide in any transaction for a change in ownership of its Project or transfer of its existing or New Project License, that such new owner shall be bound by, and shall assume the rights and obligations of the Licensee under this RPA upon completion of the change of ownership and approval by FERC of the license transfer.

13.9 Extension of Time; Inability to Perform

None of PG&E, SMUD and BLM shall be in breach of this RPA as a result of a failure to perform or for delay in performance of any contractual obligation under this RPA, if it is unable to perform or delays performance due to any Uncontrollable Force reasonably beyond its control.

13.9.1 Notice of Delay or Inability to Perform

The entity among PG&E, SMUD and BLM whose performance of an obligation under this RPA is affected by any delay or inability to perform this RPA due to any Uncontrollable Force reasonably beyond its control shall provide verbal and written Notice under Section 8 above. This Notice shall include: (1) a description of the event causing the delay or anticipated delay; (2) an estimate of the anticipated length of the delay; (3) a description of the measures taken or to be taken to avoid or minimize the delay; and (4) a proposed timetable for the implementation of the measures or performance of the obligation. The affected entity shall make all reasonable efforts to promptly resume performance of the obligation. It shall provide verbal and written Notice when it resumes performance of the obligation. Upon a Licensee providing Notice to BLM under this Section, BLM shall not exercise its authority to file a Section 4(e) Condition as provided in Section 6 for a period of no more than 60 days.

13.10 Waiver

The failure of PG&E, SMUD or BLM to insist, on any occasion, upon strict performance of any provision of this RPA shall not be considered a waiver of any obligation, right or duty of, or imposed upon, such entity.

13.11 Governing Law

The New Project Licenses and any other terms of this RPA over which a federal agency has statutory or regulatory jurisdiction shall be governed, construed, and enforced in accordance with the statutory and regulatory authorities of such agency. By executing this RPA, BLM is not consenting to the jurisdiction of a state court unless such jurisdiction is determined to govern. All activities undertaken pursuant to this RPA shall be in compliance with all applicable law.

13.12 Elected Officials Not to Benefit

No elected officials shall be entitled to any share or part of this RPA or to any benefit that may arise from it.

13.13 Relationship of the Parties

Except as otherwise expressly set forth herein, nothing contained in this RPA is intended or shall be construed to create an association, trust, partnership or joint venture, or impose any trust or partnership duty, obligation or liability on PG&E, SMUD or BLM, or create an agency relationship between or among PG&E, SMUD and BLM or between any of PG&E, SMUD and BLM and any employee of another entity.

13.14 No Changes to Existing Contracts and Agreements

Except as otherwise stated here, this RPA is entirely separate from and independent of other contracts and agreements among PG&E, SMUD and BLM. This RPA does not and will not be deemed to change any rights or obligations under previously executed contracts or agreements between or among PG&E, SMUD and BLM except as may be provided herein.

13.15 Reference to Regulations

Any reference in this RPA to any federal or state law or regulation shall be deemed to be a reference to such law or regulation, or successor law or regulation, in existence as of the date of the action at the time in question or which becomes applicable during the term of this RPA.

13.16 Section Titles for Convenience Only

The titles for the Sections of this RPA are used only for convenience of reference and organization, and shall not be used to modify, explain, or interpret any of the provisions of this RPA or the intentions of PG&E, SMUD and BLM. This RPA has been jointly drafted by PG&E, SMUD and BLM and therefore shall be construed according to its plain meaning and not for or against any of PG&E, SMUD and BLM.

14 EXECUTION OF RPA

14.1 Signatory Authority

Each signatory to this RPA certifies that he or she is authorized to execute this RPA and to legally bind the entity he or she represents, and that such entity shall be fully bound by the terms hereof upon such signature without any further act, approval, or authorization by such entity.

14.2 Signing in Counterparts

This RPA may be executed in any number of counterparts, and each executed counterpart shall have the same force and effect as an original instrument as if all the signatories to all of the counterparts had signed the same instrument. Any signature page of this RPA may be detached from any counterpart of this RPA without impairing the legal effect of any signatures thereon, and may be attached to another counterpart of this RPA identical in form hereto but having attached to it one or more signature pages.

IN WITNESS THEREOF,

PG&E, SMUD and BLM, through their duly authorized representatives, have caused this RPA to be executed as of the date set forth in this RPA.

Sacramento Municipal Utility District

lad

Jana R Shetler

by *James R. Shetler, AGM - Energy Supply*
(Print) (Title)

Date: *1/29*, 2007

Pacific Gas and Electric Company

John S Keenan

by *John S. Keenan*
Sr. VP Generation and Chief Nuclear Officer
(Print) (Title)

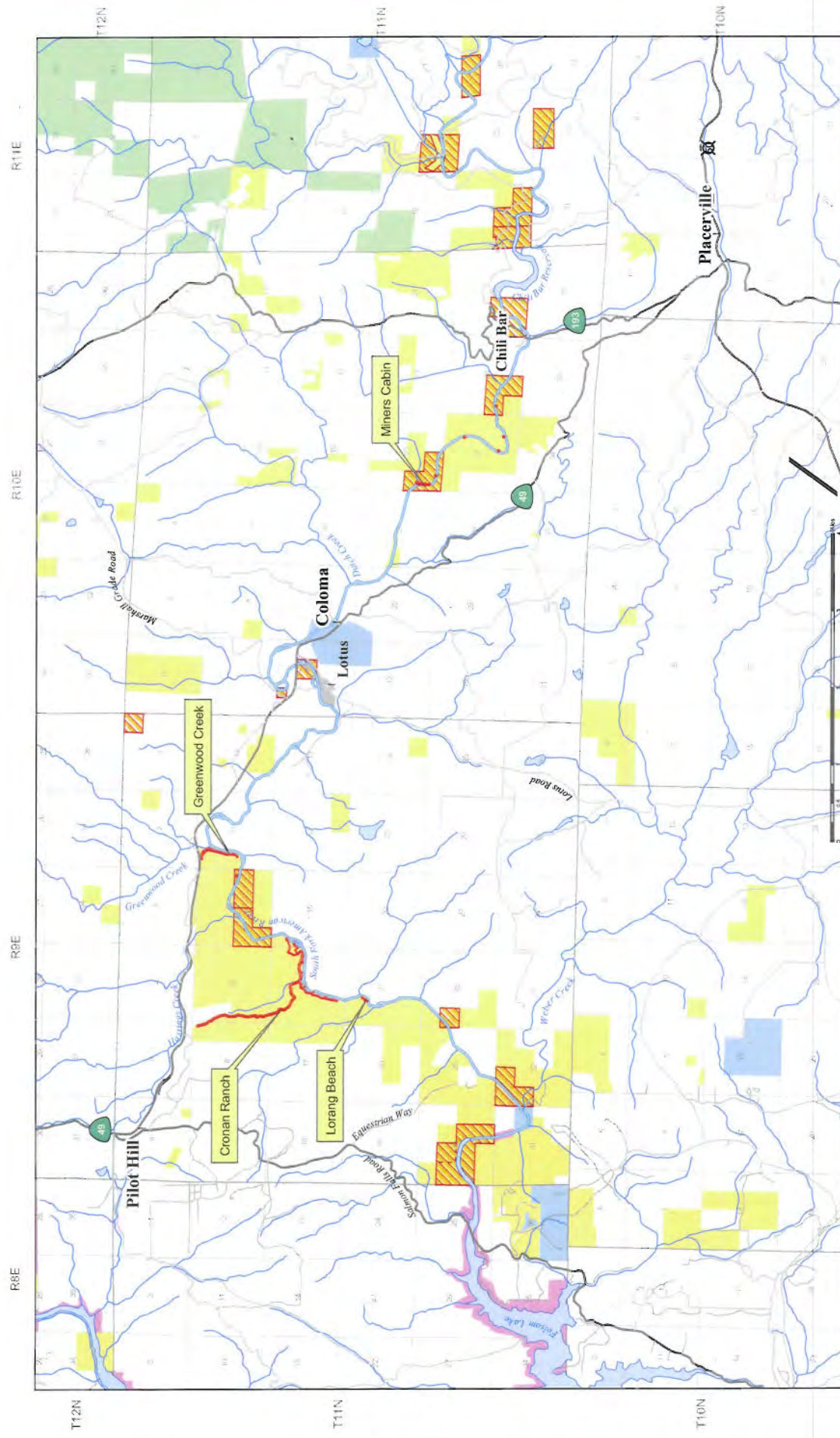
Date: *1/29*, 2007

United States Department of the Interior Bureau of Land Management

Mike Fool

by *Mike Fool SD*
(Print) (Title)

Date: *1/29*, 2007



- Bureau of Land Management
- Bureau of Reclamation
- Local Government
- State
- US Forest Service
- Project Related Facilities
- Power Site Withdrawals



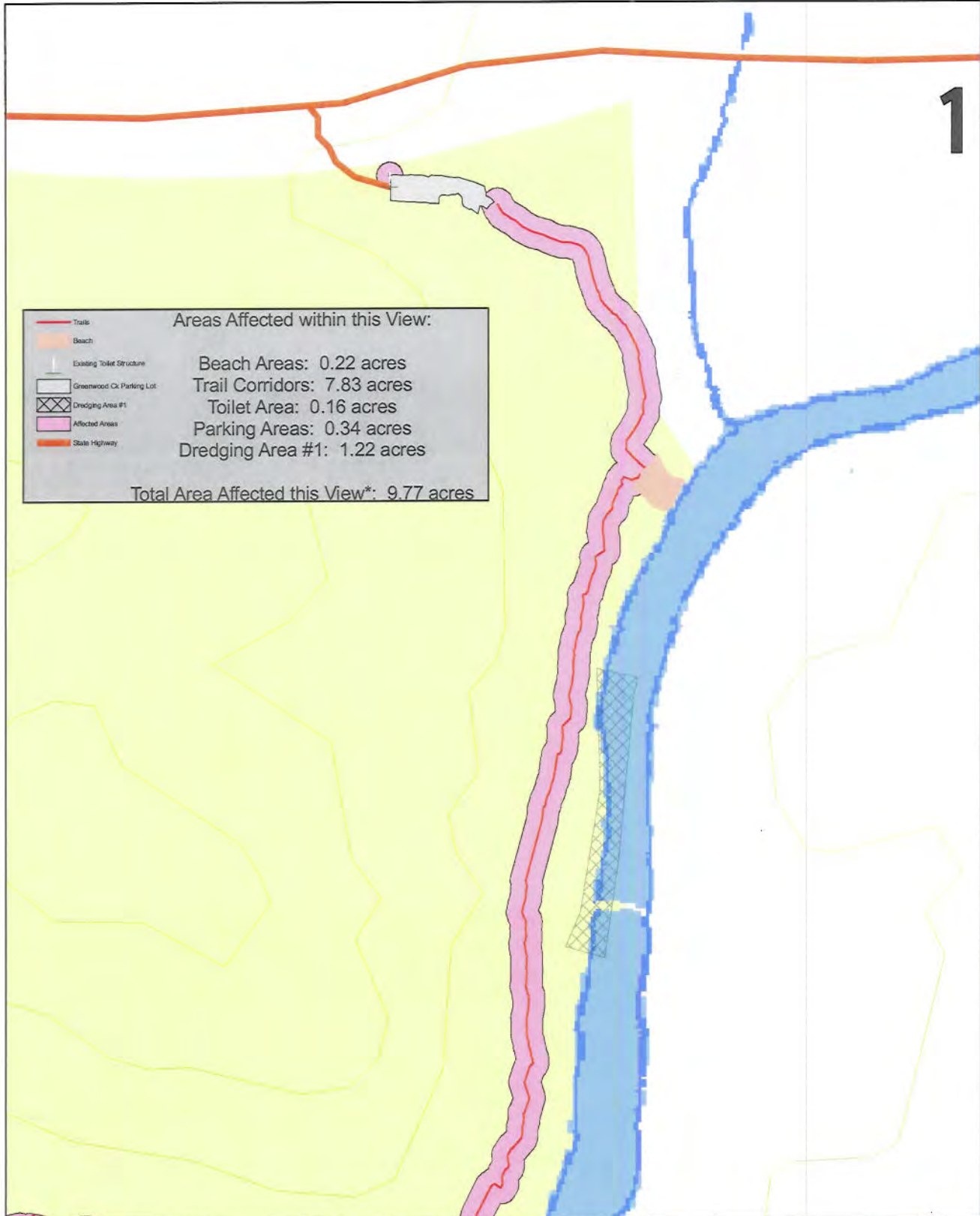
South Fork of the American River
Project Related Facilities in the
Chili Bar 2155 Boundary and UARP 2101



US Department of the Interior
BUREAU OF LAND MANAGEMENT
 Folsom Field Office
 Folsom, California
 (916) 955-4474
www.ca.blm.gov/folsom
 Date Prepared: 10/10/2006
 Project: sfam_chilibar2155boundary

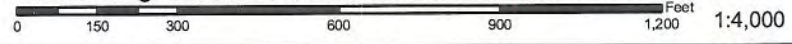
River Access at Greenwood Creek

1

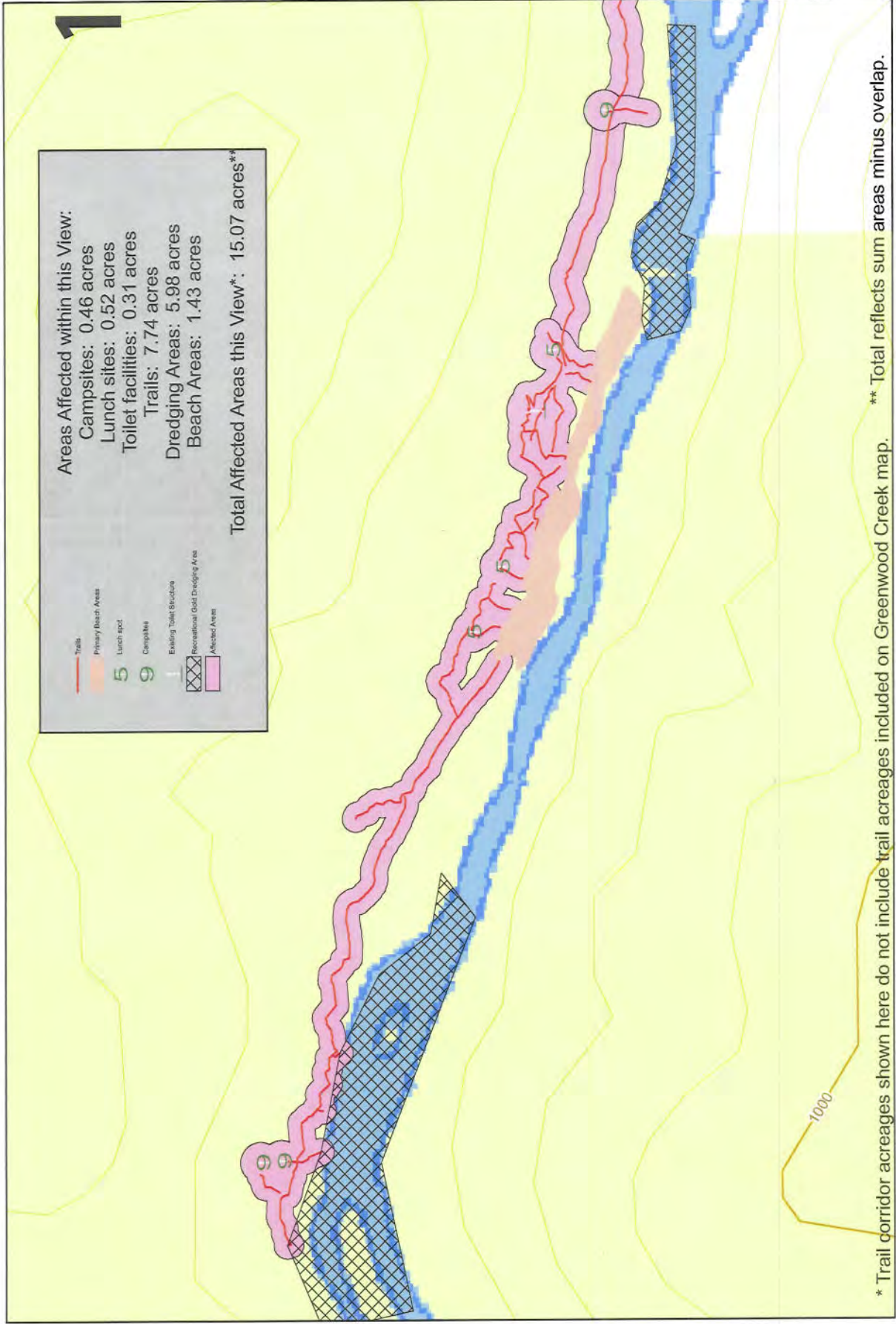


Areas Affected within this View:	
	Trails
	Beach
	Existing Toilet Structure
	Greenwood Ck. Parking Lot
	Dredging Area #1
	Affected Areas
	State Highway
Beach Areas: 0.22 acres Trail Corridors: 7.83 acres Toilet Area: 0.16 acres Parking Areas: 0.34 acres Dredging Area #1: 1.22 acres Total Area Affected this View*: 9.77 acres	

* Trail Total includes corridor acreages which are shown on Greenwood Beach map. These acreages are NOT added into the totals on the Greenwood Beach Map.



River Access Trails Downstream of Greenwood Creek



Trails:
 Primary Beach Area:
 Lunch site:
 Campsite:
 Existing Toilet Structure:
 Recreational Boat Dredging Area:
 Affected Area:

Areas Affected within this View:
 Campsites: 0.46 acres
 Lunch sites: 0.52 acres
 Toilet facilities: 0.31 acres
 Trails: 7.74 acres
 Dredging Areas: 5.98 acres
 Beach Areas: 1.43 acres

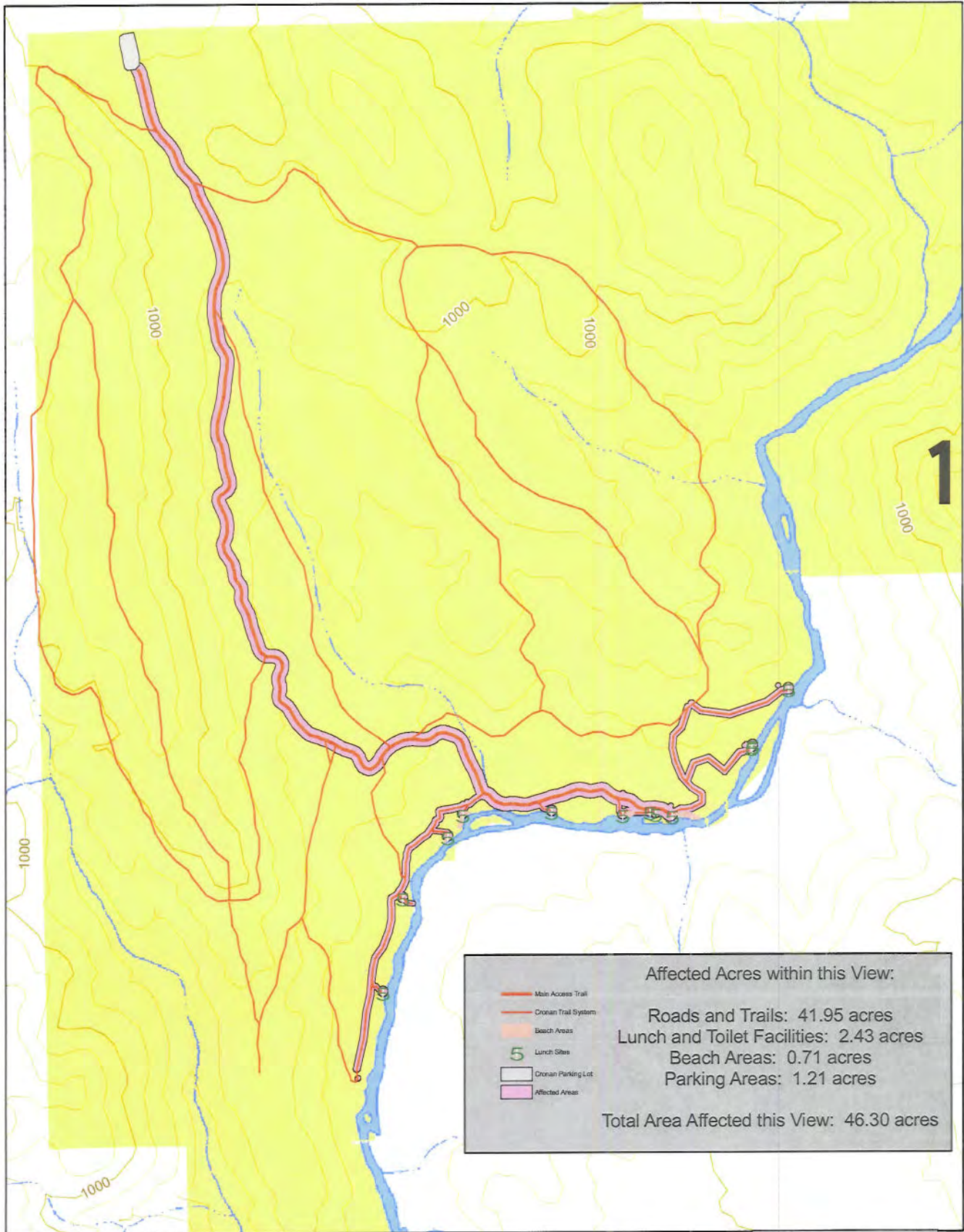
Total Affected Areas this View*: 15.07 acres**

* Trail corridor acreages shown here do not include trail acreages included on Greenwood Creek map. ** Total reflects sum areas minus overlap.

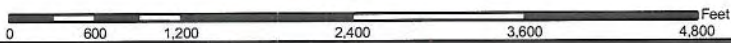


Edison Field Office
 Bureau of Land Management
 63 Helena Street
 Folsom, CA 95630
 (916)865-4174

River Access At Cronan Ranch

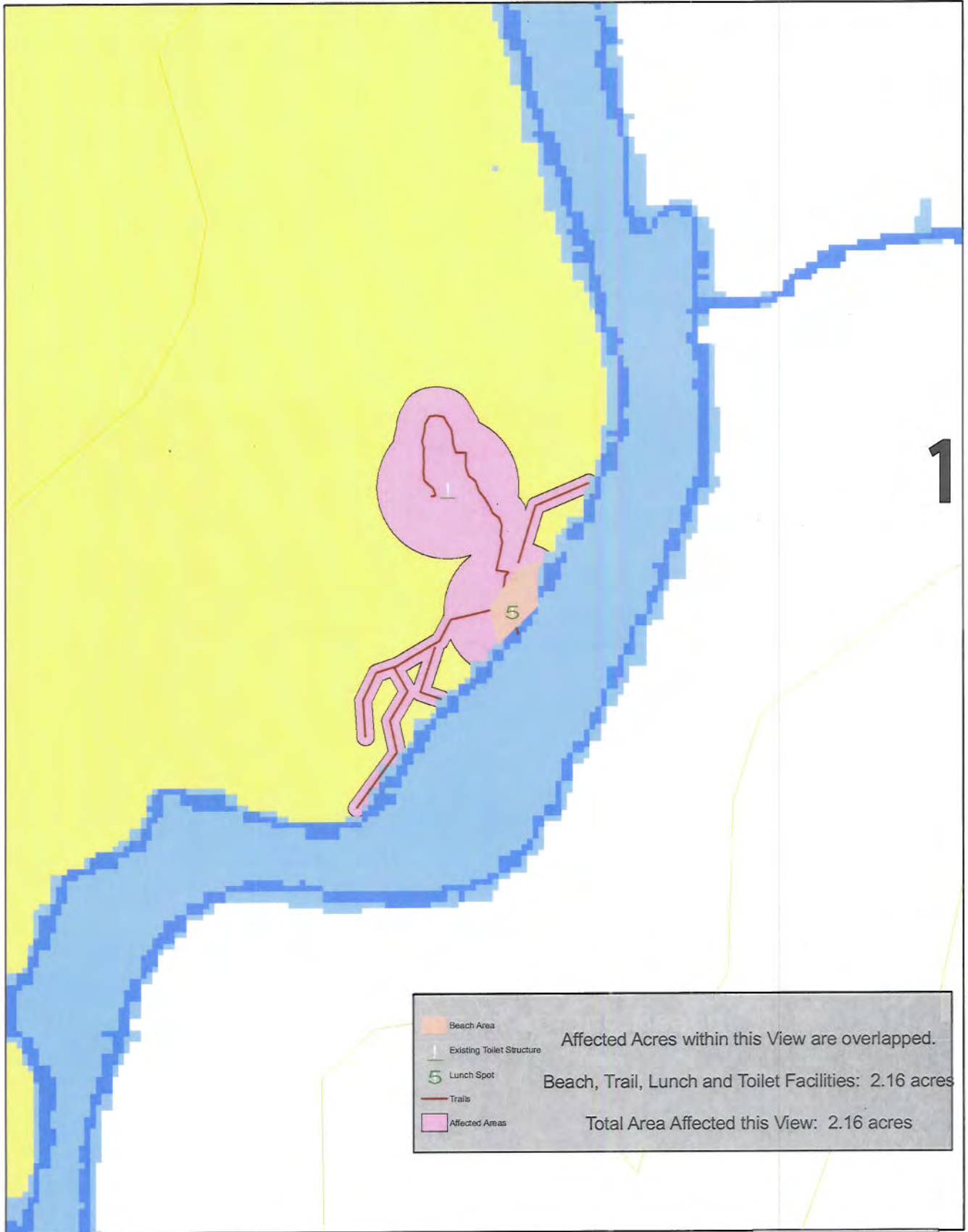


1:15,000



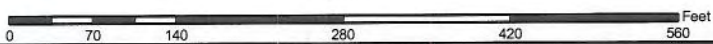
Folsom Field Office
Bureau of Land Management
63 Natoma Street
Folsom, CA 95630
(916)885-4474


River Access At Lorang Beach



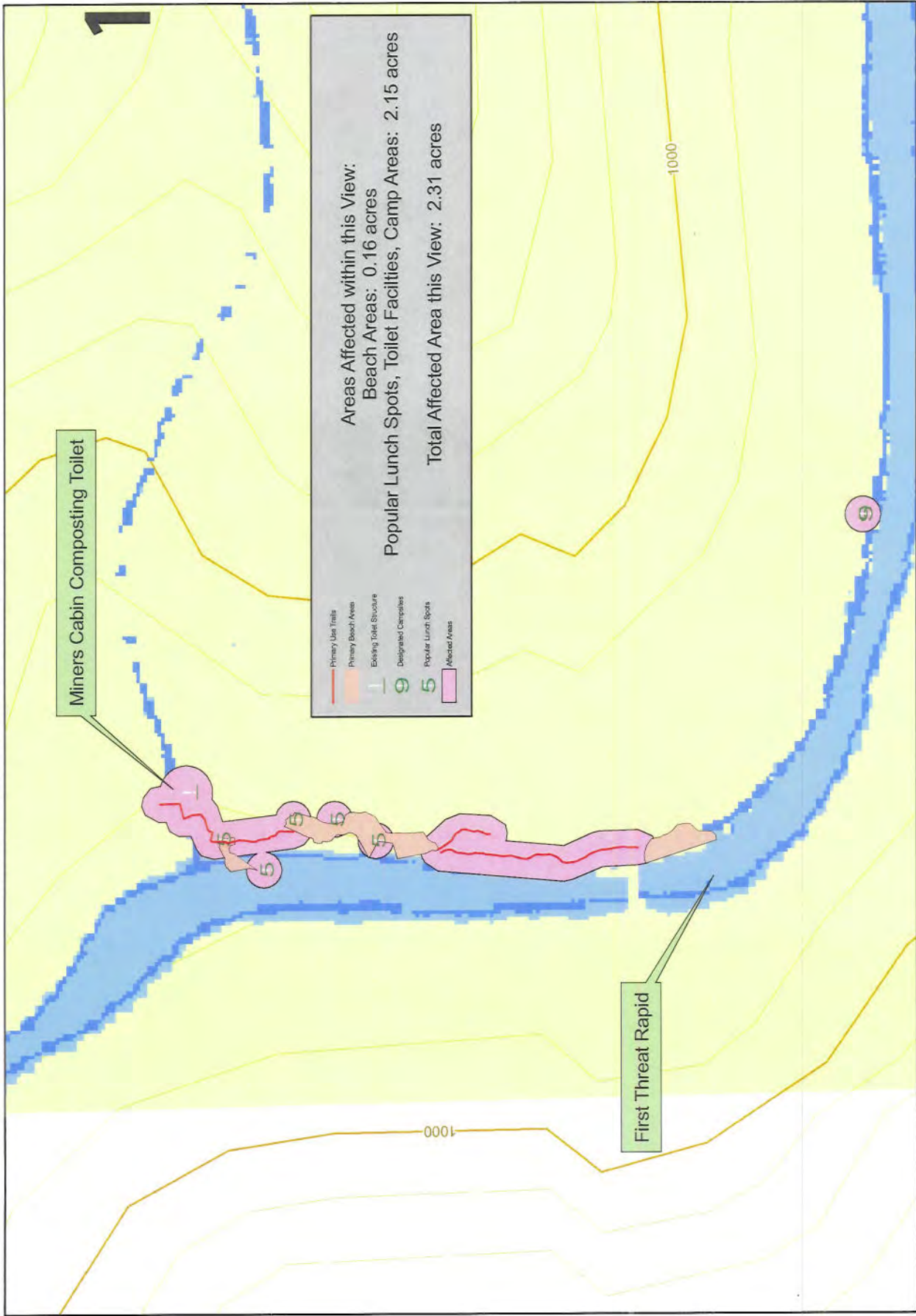
Beach Area	Affected Acres within this View are overlapped. Beach, Trail, Lunch and Toilet Facilities: 2.16 acres Total Area Affected this View: 2.16 acres
Existing Toilet Structure	
Lunch Spot	
Trails	
Affected Areas	

1:1,800



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Bureau of Land Management
63 Natoma Street
Folsom, CA 95630
(916)965-4474

River Use Areas at Miners Cabin



APPENDIX 7

**COOPERATION AGREEMENT BETWEEN SACRAMENTO MUNICIPAL UTILITY DISTRICT AND
PACIFIC GAS AND ELECTRIC COMPANY REGARDING UPPER AMERICAN RIVER PROJECT AND
CHILI BAR PROJECT**

**COOPERATION AGREEMENT BETWEEN
SACRAMENTO MUNICIPAL UTILITY DISTRICT AND
PACIFIC GAS AND ELECTRIC COMPANY REGARDING
UPPER AMERICAN RIVER PROJECT AND CHILI BAR PROJECT**

This Cooperation Agreement Between Sacramento Municipal Utility District and Pacific Gas and Electric Company Regarding Upper American River Project and Chili Bar Project (“Agreement”) is entered into between the Sacramento Municipal Utility District (“SMUD”) and Pacific Gas and Electric Company (“Company”) to facilitate coordination and cooperation in the relicensing and post-licensing operation of SMUD’s Upper American River Project FERC No. 2101 (“UARP”) and the Company’s Chili Bar Project, FERC No. 2155 (Chili Bar or Chili Bar Project) (individually “Project” and collectively the “Projects”) and is effective as of the Effective Date, as defined herein. SMUD and the Company are referred to in this Agreement individually as “Party” or “Licensee” and collectively as the “Parties” or “Licensees.”

RECITALS

1. The Parties own hydropower projects in close proximity on the South Fork American River (“SFAR”) in El Dorado County, California. SMUD’s UARP is a multi-facility project of 11 reservoirs and 8 powerhouses, utilizes water from two distinct watersheds, and has a maximum generating capacity of 688 MW. Company’s Chili Bar Project consists of a single powerhouse and reservoir located on SFAR just downstream of SMUD’s White Rock Powerhouse with a nominal generating capacity of 7 MW. The 50-year licenses issued to each Project by the Federal Energy Regulatory Commission (“FERC” or

“Commission”) will expire in 2007; therefore, each Party is presently seeking to obtain a new license from FERC (“relicensing”).

2. Because the Parties have common interests, stakeholders, and issues in their respective relicensing efforts given the close proximity of the Projects, the Parties entered into the *Memorandum of Understanding for Cooperation Between Sacramento Municipal Utility District and Pacific Gas and Electric Company on Relicensing of Upper American River Project and Chili Bar Project* (“MOU1”), dated May 31, 2002. Pursuant to MOU1, the Parties also entered into the *Co-funding Agreement Among Pacific Gas and Electric Company & Sacramento Municipal Utility District & Framatome ANP* (“Co-Funding Agreement”), dated October 29, 2002, for the Parties to jointly fund and conduct specific studies on Overlapping Issues. On February 13, 2004, the Parties entered into the *Second Memorandum of Understanding for Cooperation Between Sacramento Municipal Utility District and Pacific Gas and Electric Company on Relicensing of Upper American River Project and Chili Bar Project* (“MOU2”). The Parties entered into MOU2 to further minimize licensing costs and confusion in the relicensing proceedings, to clarify positions for relicensing settlement negotiations, and to avoid conflicts in the operations of their Projects during the terms of their new licenses. The Parties have been working in cooperation and coordination on the relicensing of their respective Projects under MOU1, MOU2 and the Co-Funding Agreement. Given that the Licensees and others have entered into a Settlement Agreement (as defined herein) governing both relicensings, the Parties believe that this Agreement is necessary to delineate more fully the relationships and interactions between the Parties for the duration of their licensing processes and after the new licenses are issued by FERC.

3. The new license issued by FERC for each Project will include Protection, Mitigation and Enhancement (“PM&E”) measures as license conditions. The Parties entered into negotiations with appropriate relicensing stakeholders that resulted in a November 15, 2006, Agreement in Principle that

includes PM&E measures to be proposed by the Parties' and other signatories to FERC for inclusion in the new licenses. The Agreement in Principle also includes proposed Overlapping PM&E Measures, as defined herein. The Agreement in Principle has been expanded and revised to become the final Settlement Agreement.

4. Within the context of its relicensing proceeding, SMUD has also incorporated into its relicensing of the UARP the development of the Iowa Hill Pumped Storage Development ("IHPSD") that will be located at the Slab Creek Reservoir, upstream of Chili Bar if constructed. The impacts, if any, of the IHPSD on Chili Bar's power generation, flexibility to maximize Generation Value, and operations and maintenance have not yet been identified or quantified.

5. The Parties acknowledge that this Agreement reflects responsibilities for cost allocations, implementation, operational priorities, and other considerations between the Parties related to Overlapping PM&E Measures anticipated to be included in the new licenses for the Projects that equitably balance the benefits and risks to each Party, including consideration of intangible benefits and risks.

6. Upon its Effective Date, this Agreement will supersede MOU1, MOU2, the Co-Funding Agreement, and any amendments thereto.

7. SMUD and the Company acknowledge the existence and applicable terms and conditions of the *Contract Relating to Chili Bar and American River Projects*, a.k.a. *Transfer of Ownership Agreement*, dated January 5, 1962 between the Parties, a copy of which is attached to this Agreement as Exhibit 5.

8. SMUD and Company acknowledge the existence and applicable terms and conditions of the *Agreement for Operation of Slab Creek Reservoir (Withdrawal of Slab Creek Protest)*, a.k.a. *Whitewater*

Coordination Agreement, dated July 15, 1982, between SMUD and California Department of Boating and Waterways, a copy of which is attached to this Agreement as Exhibit 6.

DEFINITIONS

The following definitions will apply to this Agreement:

Actual Generation: The quantity and timing of measured electric power generation as reflected by a minimum 25 years of historic energy production “on-peak” and “off-peak”.

Adjustment Factors Table: A reference table (Exhibit 3A – Step 3) in GWh prepared by the Parties for determining compensation over the term of the new licenses for annual Chili Bar Lost Generation Value caused by the UARP without IHPSD.

Base Case: The simulated operation of the existing UARP and Chili Bar projects utilizing the Model, current license conditions without IHPSD, current operating assumptions, and a minimum of 25 years of historic and simulated hydrology data.

Base Case Generation: Model results in GWh describing the simulated Base Case Generation for Chili Bar and the simulated Base Case Generation for White Rock.

Base Case Generation for Chili Bar: The simulated generation for Chili Bar Powerhouse, as applicable, agreed upon by the Parties utilizing a minimum of 25 years of historic and simulated hydrology data and current license conditions without IHPSD. Base Case Generation for Chili Bar includes simulated average annual, monthly, on-peak and off-peak and summarized by water year types, Chili Bar energy production in GWh, unless otherwise agreed to by the Parties.

Base Case Generation for White Rock: The simulated generation for White Rock Powerhouse, as applicable, agreed upon by the Parties utilizing a minimum of 25 years of historic and simulated hydrology data and current license conditions without IHPSD. Base Case Generation for White Rock includes simulated average annual, monthly, on-peak and off-peak and summarized by water year type, White Rock energy production in GWh, unless otherwise agreed to by the Parties.

Billing Period: The calendar year in which generation impacts occurred per Section 2.4 or work is performed per Section 4.2.

BLM: The United States Department of Interior, Bureau of Land Management or any successor agencies or departments.

CDPR: The California Department of Parks and Recreation or any successor agencies or departments.

Chili Bar or Chili Bar Project: Company's Chili Bar Project, FERC Project No. 2155.

Chili Bar Lost Generation: The difference in Generation between (a) Base Case Generation for Chili Bar and (b) Relicensed Generation at Chili Bar without IHPSD derived on a monthly on-peak and off-peak basis in GWh and summarized by water year types.

Chili Bar Generation Factor: The Chili Bar Lost Generation divided by the Base Case Generation for Chili Bar in percent derived on a monthly on-peak and off-peak basis and by water year types.

Chili Bar Lost Generation Value: The product in dollars of the Contemporary Wholesale Electric Market Price times the Adjustment Factors Table, computed on a monthly on-peak and off-peak basis. Values will vary by water year type.

Chili Bar Lost Generation with IHPSD: The difference in Generation in GWh between (a) Relicensed Generation for Chili Bar and (b) Relicensed Generation with IHPSD derived on a monthly on-peak and off-peak basis and as summarized by water year type.

Consultation/Consulting/Consult: Regular attendance (in person or by telephone) by a Party at meetings related to Overlapping PM&E Measures for which consulting with the other Party is specified; provision by a Party of technical support to the other Party in implementing Overlapping PM&E Measures for which consulting with the other Party is specified; meeting and conferring when necessary to resolve issues among the Parties; and providing reviews and concurrences, where necessary, to the other Party for purposes of planning and implementing Overlapping PM&E Measures for which consulting with the other Party is specified, which concurrences shall not be unreasonably withheld.

Contemporary Wholesale Electric Market Price: A mutually agreed-upon, then current, regulator-accepted, Northern California (e.g., NP15), average monthly wholesale electric market price index in \$/MWh. Company shall, within 90 days of License issuance, make a one time election to use either day ahead or real time electric prices for the then current regulator-accepted, Northern California wholesale electric prices. For this Agreement, these prices averaged on a monthly basis will be grouped utilizing standard market products of monthly “on-peak” and “off-peak” periods.

Coordinated Operations: Coordinated Operations, as more fully described in Exhibit 1, is the cooperation, prioritization, and coordination of operations between Chili Bar and UARP to create the most efficient use of water and maximize UARP power generation while allowing the Chili Bar Licensee to comply with its flow-related license conditions. Further, during periods when UARP operation is the primary factor controlling flows out of the UARP’s Slab Creek Reservoir (i.e., primarily during the

summer and fall months), Coordinated Operations shall include a good-faith effort to reduce the magnitude and frequency of spills at Chili Bar Dam.

Effective Date: The date that this Agreement is executed by the Parties. In the event that this Agreement is executed by the Parties on different days, the Effective Date shall be the day this Agreement is last signed by one of the Parties.

FERC: The Federal Energy Regulatory Commission or any successor commissions, agencies, or departments.

Generation: In general, electric generation components including energy, dependable capacity, ancillary services, and operational flexibility. For this Agreement, Generation will be represented by simulated average annual, monthly, and on-peak and off-peak White Rock and Chili Bar energy production unless otherwise agreed by the Parties.

Generation Related Overlapping PM&E Measures: Those Overlapping PM&E Measures in the new license for the UARP or Chili Bar Project that affect Chili Bar Project Generation, such as minimum or maximum instream flows, reservoir storage constraints, pulse flows and ramping rates.

Generation Value: The monetary value in dollars of electric generation produced at a powerhouse over a specified period of time, including, but not limited to the value of energy, dependable capacity, ancillary services, and operational flexibility using Contemporary Wholesale Electric Market Prices forecast. For the purpose of this Agreement, and because of the limited re-regulating nature of the Chili Bar Project, the value of operational flexibility as well as dependable capacity including, but not limited to, ancillary services for Chili Bar will be deemed to be 10% of the Contemporary Wholesale Electric Market Price.

Therefore, the total Generation Value for Chili Bar will equal 1.1 times the Contemporary Wholesale Electric Market Price times the Adjustment Factors Table.

Implementation Plans: Those plans developed by the Parties for implementation of Generation Related Overlapping PM&E Measures and Non-Generation Related Overlapping PM&E Measures.

Iowa Hill Pumped Storage Development (IHPSD): A proposed addition to the UARP that SMUD included in its relicense application, comprised of a new storage reservoir atop Iowa Hill (adjacent to the existing UARP Slab Creek Reservoir), a new subterranean powerhouse/pumping facility between the two reservoirs, and a new transmission line connecting to the existing UARP transmission line.

Lost Generation Table with IHPSD: A reference document prepared by the Parties (Exhibit 3A) determining compensation over the term of the new licenses after operations at IHPSD begin, in GWh.

Model: The customized CHEOPS computer model and spreadsheet previously created by the Parties and used to develop the Base Case Generation for Chili Bar and the Base Case Generation for White Rock

Net Annual Chili Bar Lost Generation Value: The net annual summation of the monthly on-peak and off-peak Chili Bar Lost Generation Values for the appropriate water year type on an annual calendar basis with units in \$1,000's.

Non-Generation Related Overlapping PM&E Measures: Those Overlapping PM&E Measures in the new licenses for the UARP and/or Chili Bar Project that do not affect Chili Bar generation. Non-Generation Related Overlapping PM&E Measures exclude all Generation Related Overlapping PM&E Measures.

Operational Guidance: Operational Guidance, as more fully described in Exhibit 1, is operating information developed and updated by the UARP licensee, considering projected inflows to Chili Bar Reservoir including flows from the UARP and flow accretions, projected Chili Bar Reservoir levels and SMUD recommended generation-related flows for Chili Bar Project at hourly intervals to enable the Chili Bar Licensee to comply with Chili Bar Project license requirements.

Overlapping Issues: Overlapping Issues are those issues common to or affected by both Projects, including, but not limited to: (a) quantity of flow into and out of Chili Bar Reservoir; (b) timing of flows into and out of Chili Bar Reservoir; and (c) operational coordination between White Rock Powerhouse and Chili Bar Powerhouse. Overlapping Issues also include those issues arising from and relating to implementation by the Parties of the following within Chili Bar Project or the Reach Downstream of Chili Bar: minimum streamflows; ramping rates; resource monitoring programs; Coordinated Operations; adaptive management programs; sediment management plans; stream recreation related facility improvements, operation and maintenance (or “in-lieu” payments); public information services; and recreational streamflows.

Overlapping PM&E Measures: In general, “protection, mitigation and enhancement measures” to address Overlapping Issues. For purposes of determining impacts and responsibilities, Overlapping PM&E Measures may also be characterized as Generation Related Overlapping PM&E Measures and Non-Generation Related Overlapping PM&E Measures.

Payment Year: The calendar year following the Billing Year per Section 2.4 or 4.2.

Reach Downstream of Chili Bar: The 19.1 mile-long section of the South Fork American River from Chili Bar Dam to the normal high waterline of Folsom Lake.

Recreation Payment Agreements (RPAs): Licensees' agreements with BLM and/or CDPR to make payments to BLM and/or CDPR to help fund improvements to BLM and/or CDPR recreation facilities or to help fund operation, maintenance and administration of BLM and/or CDPR recreation facilities.

Relicensed Case: The simulated operation of the existing UARP and Chili Bar projects utilizing the Model, new license conditions without IHPSD, operating assumptions and a minimum of 25 years of historic and simulated hydrology data.

Relicensed Generation: Model results describing the simulated Relicensed Generation for Chili Bar and the simulated Relicensed Generation for White Rock, in GWh.

Relicensed Generation for Chili Bar: The simulated generation for Chili Bar Powerhouse, as applicable, agreed upon by the Parties utilizing a minimum of 25 years of historic and simulated hydrology data and under the new license conditions without IHPSD. Relicensed Generation for Chili Bar will include simulated average annual, monthly, on-peak and off-peak, and summarized by water year type, Chili Bar energy production in GWh, unless otherwise agreed to by the Parties.

Relicensed Generation for White Rock: The simulated generation for White Rock Powerhouse under the new license conditions without IHPSD. Relicensed Generation for White Rock will include simulated average annual, monthly, on-peak and off-peak, and summarized by water year type, White Rock energy production in GWh, unless otherwise agreed to by the Parties.

Relicensed Generation with IHPSD: The simulated generation for Chili Bar Powerhouse under the new license, including any new license conditions resulting from the construction of IHPSD. Relicensed Generation with IHPSD for Chili Bar will include simulated average annual, monthly, and on-peak and

off-peak, and summarized by water year type, Chili Bar energy production in GWh, unless otherwise agreed to by the Parties.

Settlement Agreement: That agreement among the Parties and other signatories on proposed Overlapping PM&E Measures and non-Overlapping PM&E Measures (both Jurisdictional and Non-Jurisdictional) for the UARP and Chili Bar Projects dated January 29, 2007 entitled *Relicensing Settlement Agreement for the Upper American River Project and Chili Bar Hydroelectric Project*, a copy of which will be attached upon execution as Exhibit 4, hereto.

UARP: SMUD's Upper American River Project, FERC Project No. 2101.

White Rock Lost Generation: The difference in Generation between (a) Base Case Generation for White Rock and (b) Relicensed Generation for White Rock derived on a monthly on-peak and off-peak basis, and summarized by water year types, in GWh.

White Rock Generation Factor: The White Rock Lost Generation divided by the Base Case Generation for White Rock in percent derived on a monthly on-peak and off-peak basis, and summarized by water year types, in GWh.

AGREEMENT

Purpose of the Agreement. This Agreement establishes equitable allocations and responsibilities between the Parties for potential costs, operational priorities and constraints, and for planning and implementing Overlapping PM&E Measures anticipated to be included in the new licenses for the Projects. The Parties agree that SMUD will provide to Company and Company will follow Operational Guidance for the operation of the Chili Bar Project with the intent of achieving Coordinated Operations. Should the Operational Guidance provided by SMUD negatively impact Company, the Parties agree to a

methodology, described herein, by which SMUD will compensate Company to the extent the sum of on-peak and off-peak Chili Bar Generation Factors exceed the sum of on-peak and off-peak White Rock Generation Factors in any given year. With respect to Coordinated Operations, this Agreement supports flow regime options that achieve balanced beneficial uses and environmental goals, while also protecting electric system reliability, operational flexibility, and other generation values of the UARP and minimizing the reduction in Generation Value of Chili Bar. To achieve these goals, the Parties therefore agree to the following provisions:

1. **COORDINATED OPERATIONS OF THE PROJECTS**

The Parties anticipate that the new license for Chili Bar will contain license conditions requiring the Chili Bar Licensee to maintain certain minimum streamflows based on water year type, to control ramping rates, and to provide recreational streamflows, all in the Reach Downstream of Chili Bar. To comply with such license conditions, Chili Bar generally must receive adequate inflows of water in a timely manner from UARP. The Parties believe that cooperation, prioritization, and coordination of operations between Chili Bar and UARP will create (i) the most efficient use of water, (ii) maximize UARP power generation while allowing the Chili Bar Licensee to comply with its license conditions, and (iii) reduce the magnitude and frequency of spills at Chili Bar Dam during periods when UARP operation is the primary factor controlling flows out of the UARP's Slab Creek Reservoir (i.e. primarily during the summer and fall months). SMUD agrees to provide to Company 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. To assist in achieving this, SMUD and Company have developed a framework for Coordinated Operations between the Projects which is set forth in

Exhibit 1 to this Agreement. As described in greater detail in Exhibit 1, SMUD and Company intend to achieve Coordinated Operations by developing and following a Coordinated Operations Plan and an Operational Guidance Implementation Plan. The Parties agree to propose in the Settlement Agreement, and in any relevant filings they make with FERC regarding conditions for the new licenses, a Coordinated Operations license condition for each license. Such Coordinated Operations license conditions shall require the Licensees to Consult and coordinate with each other to achieve Coordinated Operations and shall make specific reference to the provisions contained in Exhibit 1 as defining the responsibilities of each Licensee for achieving Coordinated Operations. The Parties agree to achieve Coordinated Operations of their Projects and to fulfill their individual responsibilities defined in Exhibit 1 whether or not the provisions of Exhibit 1 ultimately are referenced or included in whole or in part in the Settlement Agreement or the new licenses for their respective Projects, *provided however* that neither Party is obligated by this Agreement to act in a manner that would violate the conditions of its license. The Parties anticipate that Exhibit 1 and the plans developed thereunder may be amended and modified from time to time by mutual agreement of the Parties in order to successfully perform and improve Coordinated Operations of the Projects.

2. RESPONSIBILITIES FOR IMPACTS OF GENERATION RELATED OVERLAPPING PM&E MEASURES WITHOUT IHPSD

2.1 The Parties agree that compensation from SMUD to the Company, including replacement power costs, resulting from impacts of Generation Related Overlapping PM&E Measures in the new licenses without IHPSD, to Chili Bar, will be determined in accordance with this Section of the Agreement.

2.2 *Determining Impacts of Generation Related Overlapping PM&E Measures in the new Licenses.* The Parties have developed a Model for purposes of determining the impacts of Generation Related Overlapping PM&E Measures in the new licenses on the Generation Value of White Rock and Chili Bar. Within 90 days of the Effective Date of this Agreement, the Model and appropriate modeling assumptions will be deposited with a third party software escrow company at SMUD's expense so that the generation can be replicated at the time FERC issues new licenses to SMUD and Company. Either Party may initiate, and the Parties agree to take necessary steps to assure the Model is validated by comparing the simulated average annual, monthly, and on-peak and off-peak Chili Bar energy production under the Base Case to a minimum of 25-year historic energy production (or as otherwise agreed by the Parties) and achieving: (a) simulated average annual energy within limits agreed by the Parties and (b) simulated monthly energy and on-peak to off-peak energy that mimics the historical seasonal and hourly energy production. The Model and appropriate modeling assumptions in the escrow account shall be updated within 90 days after any agreed to changes are made to the Model.

2.2.1 The Parties will utilize the Model and its results to determine the impacts of Generation Related Overlapping PM&E Measures in the new licenses. Specific calculation methodology has been documented as embedded formulae in the Excel Spreadsheet entitled "MOU2exampleSMUDRevisedJan2204.xls" within the compact disk attached hereto as Exhibit 3. A paper/hard copy of a sample calculation utilizing the embedded formulae is attached to this Agreement as Exhibit 3A for illustrative purposes only. If compact disk technology changes or becomes obsolete, the Parties will cooperate to preserve the spreadsheets in a software and/or hardware format that can continue to be used to implement this

Agreement. No later than 12 months after both new licenses have become final and non-appealable for the Projects, specific Model analysis and results will be computed by the Parties as follows:

2.2.1(a) Modify the Model to simulate the actual new license conditions and operating parameters as needed. Re-run the Base Case utilizing the potentially modified Model to ensure the potentially modified Base Case Generation, for the record period with a minimum of 25 years, replicates the Base Case Generation produced pursuant to the Model.

2.2.1(b) Run Relicensed Case utilizing the potentially modified Model to determine the Relicensed Generation, for the same record period as that used in Section 2.2.1(a). Actions in Sections 2.2.1(a) and 2.2.1(b) are illustrated in Step 1, Exhibit 3A, pages 2 and 3 of 7.

2.2.1(c) Summarize the monthly on-peak and off-peak generation patterns for the Base Case Generation and the Relicensed Generation for both White Rock and Chili Bar by water year types that match the hydrologic water year types specified in the new licenses. This is illustrated in Step 2, Exhibit 3A, page 4 of 7.

The generation values representing the Base Case and Relicensed Case for White Rock and Chili Bar and the resulting Adjustment Factors Table by water-year type as defined in Exhibit 1 will be fixed for the term of the new licenses for the Projects and will be used as appropriate on an annual basis for determination of Net Annual Chili Bar Lost Generation Value.

2.2.1(d) Compute the Chili Bar Lost Generation and the White Rock Lost Generation by water year types. This is illustrated in Step 2, Exhibit 3A, page 4 of 7.

2.2.1(e) Compute the monthly on-peak and off-peak Chili Bar Lost Generation Factor in percent and the White Rock Lost Generation Factor in percent by water year types. This is illustrated in Step 2, Exhibit 3A, page 4 of 7.

2.2.1(f) Compute the Adjustment Factors Table by subtracting the monthly on-peak and off-peak White Rock Lost Generation Factor from the respective Chili Bar Lost Generation Factor and multiplying by the Base Case Generation for Chili Bar. The values as computed in this table will be fixed for the term of the new licenses for the Projects and will be used as appropriate on an annual basis for determination of Net Annual Chili Bar Lost Generation Value. This is illustrated in Step 3, Exhibit 3A, page 4 of 7.

2.3 *Determining Net Annual Chili Bar Lost Generation Value.* Unless otherwise agreed, the Net Annual Chili Bar Lost Generation Value will be determined by Company and provided to SMUD in summary form, as illustrated in Exhibit 3A, pages 1-7.

2.3.1 For the purposes of this Agreement, the Parties have agreed to apply to each calendar year a specific water-year type, consistent with definitions in Exhibit 1, as may be modified in the new licenses. Thus, the water-year type for a given calendar year will be based on the California Department of Water Resources'

October confirmation of the water year ending September 30th of the Billing Period.

2.3.2 Unless otherwise agreed, to enable timely calculation for this Section 2, the Contemporary Wholesale Electric Market Prices for a given calendar year will be obtained by the Company no later than January 31 of the next calendar year.

2.3.3 Company will determine the Net Annual Chili Bar Lost Generation Value in dollars by summing the products of the monthly on-peak and off-peak Contemporary Wholesale Electric Market Prices, times the appropriate values of the Adjustment Factors Table, times 1.1, for the appropriate water year type. This is illustrated in Steps 1 and 2, Exhibit 3A, page 5 of 7.

2.3.4 Net Annual Chili Bar Lost Generation Value represents the net annual summation of the monthly on-peak and off-peak Chili Bar Lost Generation Value on a calendar year basis.

2.4 Determining Compensation for Net Annual Chili Bar Lost Generation Value in the new Licenses.

2.4.1 Neither Party is entitled to compensation from the other Party if the Net Annual Chili Bar Lost Generation Value is zero or a negative number, as determined utilizing the calculation methodology illustrated in Exhibit 3A, page 5 of 7.

2.4.2 SMUD agrees to compensate the Company, if the Net Annual Chili Bar Lost Generation Value is a positive number, as determined utilizing the calculation methodology illustrated in Exhibit 3A, page 5 of 7.

2.4.3 If it is determined that Chili Bar Powerhouse will, as a result of the new license, lose Generation Value in an amount determined to be compensable under Section 2.4.2, SMUD will compensate Company for the Net Annual Chili Bar Lost Generation Value as follows. The determination of Net Annual Chili Bar Lost Generation Value for the appropriate water year type will be made on an annual basis for each calendar year (January 1 through December 31) in which the generation impacts occurred (“Billing Period”) in the following year (“Payment Year”), with Company submitting an invoice to SMUD by February 15th of each Payment Year. SMUD will have until March 1st to review and accept the summary or SMUD may notify Company of SMUD’s request for additional information or clarification of the summary. The procedure described herein shall commence in the first calendar year after the new licenses have become final and non-appealable. The Parties agree to use good faith efforts to resolve any issues associated with the summary. If SMUD accepts the billing or if the Parties resolve any issues regarding the invoice, SMUD will pay the invoice no later than March 31st. If the Parties are unable to reach agreement regarding the summary by March 15th, the Parties agree to invoke the Dispute Resolution provisions of Section 11, herein. An interest rate of 1% per month will begin accruing on unpaid and ultimately due balances thereafter until such payment is made.

At Company’s request and SMUD’s agreement, Net Annual Chili Bar Lost Generation Value may be compensated by SMUD through an equivalent delivery of Generation products of equal Generation Value at a mutually agreed upon

delivery point as determined through a mutually acceptable future written generation replacement agreement.

2.4.4 SMUD agrees that it is not entitled to compensation from the Company for generation impacts resulting from the new licenses or this Agreement, except as set forth in Section 2.5.

2.5 Determining Compensation for Additional Supplemental Water if Requested by Company

2.5.1 This Subsection 2.5.1 shall apply only after the end of the trial period and final FERC approval and implementation of the Coordinated Operations Plan described in Exhibit 1. If the Company, for reasons reasonably within its control (such as operational error), operates Chili Bar inconsistent with Operational Guidance which if it had followed, within the range of operational flexibility established in the Coordinated Operations Plan, would have enabled the Company to meet the conditions of the Chili Bar license, and the Company requests additional supplemental water from SMUD to enable it to meet the conditions of the Chili Bar license, the rate for such supplemental water shall be calculated as follows: the product of (i) the volume of additional supplemental water provided by SMUD measured in acre-feet, (ii) 0.7 MWh per acre-ft, and (iii) the Differential in the Market Price of Energy in dollars per MWh. The "Differential in the Market Price of Energy" shall be the average price of energy, in dollars per MWh, delivered at SMUD's intertie points(s) to the Northern California energy market during the period of actual water delivery compared to the average price of energy delivered at SMUD's intertie points(s) during the most expensive four hours of the next on-

peak scheduling day, including in each case, all costs associated with delivery of such energy (i.e. delivery fees, ancillary service charges, transmission charges, and congestion charges). SMUD and the Company shall determine a maximum amount of supplemental water over a specified period of time that can be called on by the Chili Bar Licensee at the price specified above in accordance with Operational Guidance and this Section. The price for any supplemental water beyond this maximum amount shall be at a negotiated price that makes SMUD whole.

2.5.2 SMUD will advise Company on a monthly basis as needed whether it believes it is entitled to compensation under this Section 2.5 and, if so, will provide Company with an invoice and appropriate backup documentation supporting the invoice. Company will have 15 days to review and accept the invoice or Company may notify SMUD of Company's request for additional information or clarification. The Parties agree to use good faith efforts to resolve any issues associated with the invoice. If Company accepts the invoice or if the Parties resolve any issues regarding the invoice, Company will pay the invoice no later than 30 days after the invoice date or the date of resolution, whichever is later. If the Parties are unable to reach agreement regarding the invoice within 30 days after the invoice date, the Parties agree to invoke the Dispute Resolution provisions of Section 11, herein. An interest rate of 1% per month will begin accruing on unpaid and ultimately due balances thereafter until such payment is made.

3. RESPONSIBILITIES FOR IMPACTS OF DEVELOPMENT OF THE IOWA HILL PUMPED STORAGE PROJECT ON CHILI BAR

3.1 If SMUD develops the IHPSD, the Parties agree that compensation from SMUD to the Company for all one-time, recurring annual costs, and replacement power costs, resulting from impacts of license conditions included in SMUD's license, the construction phase, or operation of the IHPSD, whether to Chili Bar or the Reach Downstream of Chili Bar, will be determined in accordance with this Section of the Agreement.

3.2 If SMUD elects to proceed with construction of the IHPSD, SMUD agrees to develop and implement its construction plan and process in a manner that will minimize adverse effects on the operation of Chili Bar during the construction and start-up phases. SMUD agrees to inform Company of its construction plans and seek Company's input on how to minimize impacts to Company's operations. The Parties agree to negotiate in good faith for SMUD to reimburse Company for demonstrated adverse impacts on Chili Bar during the construction and start-up phases of IHPSD.

3.3 For purposes of determining the impacts of IHPSD operation and Overlapping PM&E Measures in the new licenses on the Chili Bar Generation Value, the Parties will utilize the Model and economic spreadsheets for the UARP including IHPSD (Model with Iowa Hill input parameters), including key modeling assumptions, to determine any Chili Bar Lost Generation Value With IHPSD.

3.3.1 The Model will be run to simulate the Relicensed Case and the Relicensed Generation with IHPSD Cases. The Relicensed Generation for Chili Bar will be summarized by water-year types as specified in Exhibit 1, as may be modified in

the new licenses. The Relicensed Generation with IHPSD will be summarized in a similar manner for the same water-year types. A sample calculation template is included as Exhibit 3A, pages 6 and 7.

3.3.2 The Lost Generation Table with IHPSD will identify the incremental change in Generation by water-year type determined by subtracting the Relicensed Generation with IHPSD from the Relicensed Generation for Chili Bar. This is illustrated in Step 2, Exhibit 3A, page 7 of 7.

3.3.3 The compensation from SMUD to Company for annual Chili Bar Lost Generation Value with IHPSD will be the sum of the monthly products of the Lost Generation Table with IHPSD for the applicable water-year type times the sum of the Contemporary Wholesale Electric Market Prices including the value of the operational flexibility (See Generation Value definition). The Chili Bar Lost Generation Value with IHPSD will be computed by the Parties at the end of each calendar year.

3.3.4 SMUD agrees to compensate the Company, in addition to the Net Annual Chili Bar Lost Generation Value determined in accordance with Sections 2.3 through 2.4, for the incremental increase to the Net Annual Chili Bar Lost Generation Value due to the effects of IHPSD as determined utilizing the calculation methodology illustrated in Exhibit 3A, pages 6 and 7. A sample calculation for the summary of combined compensation is illustrated in Exhibit 3A, page 1 of 7.

3.3.5 Company will determine whether compensation is due on an annual basis and, if so, provide to SMUD a request for payment as part of the summary form and according to the same timetable specified in Section 2.4.3.

3.3.6 SMUD agrees that it is not entitled to compensation from the Company for generation impacts resulting from the new licenses with the operation of IHPSD except as provided in Section 2.5 of this Agreement.

4. RESPONSIBILITIES FOR COSTS AND IMPLEMENTATION OF NON-GENERATION RELATED OVERLAPPING PM&E MEASURES

4.1 The Parties agree that cost-sharing between the Parties for all one-time and recurring annual costs resulting from Non-Generation Related Overlapping PM&E Measures in the new licenses applicable to Chili Bar or the Reach Downstream of Chili Bar will be determined in accordance with this Section of the Agreement. The Parties further agree that responsibilities between the Parties for implementation of such Non-Generation Related Overlapping PM&E Measures will be as defined in this Section of the Agreement. The Parties anticipate that the new license for Chili Bar will contain Non-Generation Related Overlapping PM&E Measures. The Parties agree to allocate responsibilities for costs and implementation for such Non-Generation Related Overlapping PM&E Measures as set forth in Exhibit 2 to this Agreement. The Parties agree to propose Non-Generation Related Overlapping PM&E Measures solely in the new Chili Bar license, provided that the new UARP license will contain a corresponding license condition that (i) requires the UARP Licensee to Consult and coordinate with the Chili Bar Licensee, and (ii) makes specific reference to the provisions contained in Exhibit 2 to this Agreement as defining the responsibilities of each Licensee, with regard to Non-Generation Related Overlapping PM&E

Measures in the new Chili Bar license. The Parties agree to propose in the Settlement Agreement, and in any relevant filings they make with FERC regarding conditions for the new licenses, such a condition for the UARP license. The Parties agree to fulfill their responsibilities consistent with Exhibit 2 whether or not the details of Exhibit 2 ultimately are referenced or included in whole or in part in the Settlement Agreement or the new licenses for their respective Projects, *provided however* that (i) neither Party is obligated by this Agreement to act in a manner that would violate the conditions of its license; and (ii) neither Party is obligated to implement, or Consult or coordinate with respect to, Non-Generation Related Overlapping PM&E Measures to the extent such measures are not included in either of the new licenses or otherwise contractually required by the Settlement Agreement. The Parties anticipate that Exhibit 2 and the plans developed thereunder may be amended and modified from time to time by mutual agreement of the Parties in order to successfully implement Non-Generation Related Overlapping PM&E Measures.

4.2 For costs subject to cost-sharing between the Parties pursuant to Exhibit 2, SMUD shall pay all contractor invoices in full and Company will reimburse SMUD as provided in this Subsection, *provided however*, Company has the option on a given contract and at its discretion to be invoiced directly by the contractor. No later than November 1 of each year, SMUD shall provide Company with its estimate of reimbursable costs for the next calendar year.

4.2.1 Payments due to SMUD from Company for contractor services will be assessed and invoiced to Company by SMUD on an annual basis for the Billing Period in the Payment Year. By February 15th of each Payment Year, SMUD will determine the amount due from Company for the cost of these services and issue an invoice to Company for the Billing Period. The invoice will include sufficient supporting information, including services provided, for Company to verify the amount due.

4.2.2 Company will have until March 1st to review and accept the invoice or Company may notify SMUD of Company's request for additional information or clarification of the invoice. The Parties agree to use good faith efforts to resolve any issues associated with the invoice. If Company accepts the billing or if the Parties resolve any issues regarding the invoice, Company will pay the invoice no later than 30 days after the invoice date or the date of resolution, whichever is later. If the Parties are unable to reach agreement regarding the invoice by March 15th, the Parties agree to invoke the Dispute Resolution provisions of Section 11, herein. An interest rate of 1% per month will begin accruing on unpaid and ultimately due balances on the 1st day of April after issuance of the invoice.

5. PROVISIONS RELATED TO RECREATION PAYMENT AGREEMENTS

5.1 For purposes of this Agreement, the Parties' obligations under the respective RPAs shall not be deemed Overlapping Issues.

5.2 Notwithstanding the preceding paragraph, if for any reason, including but not limited to FERC or BLM or other state or federal agency asserting jurisdiction in one or both of the new licenses for UARP or Chili Bar, that additional recreational payments to BLM or CDPR for the Reach Downstream of Chili Bar are required of one or both Parties beyond what is provided in the RPAs, then the Parties agree to share those additional costs on the basis of 90% to be paid by SMUD and 10% to be paid by Company regardless of any allocation of such payments prescribed by FERC or other third party; *provided however*, that if the additional recreation payments are required as a result of a breach by one of the Parties of its obligations under the applicable RPA, then that breaching Party shall be responsible for 100% of the additional recreation payments

regardless of any allocation of such additional recreation payments prescribed by FERC or other third party.

6. **TERM, TERMINATION, AND OTHER ISSUES TO BE ADDRESSED BY THE PARTIES**

6.1 The Provisions of this Agreement will remain in effect until the expiration dates of the new licenses for UARP and Chili Bar, whichever will occur last, unless terminated earlier:

6.1.1 by mutual agreement of the Parties;

6.1.2 by a Party rejecting without appeal the new license for its Project in its entirety when issued, or surrendering its license for its Project;

6.1.3 by a Party transferring its license for its Project to a third-party other than its parent, subsidiary or affiliate without receiving the other Party's consent to an assignment of this Agreement to the transferee pursuant to Section 8 below; or

6.1.4 by FERC denying a new license to a Party for its Project.

6.2 This Agreement will remain in full force and effect even if the new license(s) for UARP or Chili Bar are inconsistent with the provisions of Section 1, Section 4, Exhibit 1, or Exhibit 2 of this Agreement, *provided however* that neither Party is obligated by this Agreement to act in a manner that would violate the conditions of its license.

6.3 This Agreement will remain in full force and effect even if the Settlement Agreement is not effective, is terminated, or if some parties to the Settlement Agreement withdraw, and this Agreement also will remain in full force and effect if either of the new licenses is inconsistent with the provisions of Section 1, Section 4, Exhibit 1, or Exhibit 2 of this Agreement, *provided*

however that neither Party is obligated by this Agreement to act in a manner that would violate the conditions of its license.

6.4 If any of the events identified in Subsection 6.1.1, 6.1.2, 6.1.3, or 6.1.4 above occur, each Party shall remain obligated to the other Party for the share of all costs and expenses for studies or other cooperative activities and tasks actually performed that it had previously agreed to pay under the provisions of Section 4 above.

7. ASSIGNMENT

7.1 This Agreement is binding on the Parties, their parents, successors, affiliates, and assigns. No consent to an assignment of this Agreement is required when there is an assignment or transfer of this Agreement to any subsidiary or affiliate. Any other transfer or a subsequent transfer by the entity described in the preceding sentence is subject to Section 7.2.

7.2 When consent to an assignment of this Agreement is needed, the assigning Party shall give written Notice to the other Party of the proposed transfer of the Party's license to its Project, and request consent to the assignment of this Agreement to the proposed transferee, at least 30 days prior to transfer of the license to its Project. Such consent shall not be unreasonably withheld. A Party cannot assign this Agreement to the proposed assignee unless and until the other Party has given its consent to assignment of the Agreement in writing and FERC has approved the transfer of that Party's license to the transferee/assignee.

7.3 Nothing in this Agreement is intended to prevent a proposed transferee from exercising rights and performing obligations regarding a Project, which may include operating the Project, under agreements with the current Licensee and consistent with the Project license.

7.4 Upon transfer of the license for a Project, all benefits and obligations of the transferor under this Agreement are also transferred, provided that the other Party has consented to the assignment of the Agreement as provided in this Section 7, and the transferor is released from all such benefits and obligations, except those described in Section 8, below.

7.5 Nothing in this Agreement shall prevent a Party from participating in bidding for the other Party's Project in the event the other Party decides to transfer its Project through a competitive bidding process.

8. **CONFIDENTIALITY**

8.1 Proprietary Information under this Agreement is information disclosed by one Party to the other, pursuant to the purposes of this Agreement

- (i) in written, printed, electronic or other material form or representation, which is marked, stamped or otherwise identified in writing as proprietary or confidential, or
- (ii) oral and indicated at the time of its disclosure as proprietary or confidential, or
- (iii) information disclosed or created during the term of this Agreement that the Parties designate in writing as Jointly Developed Proprietary Information.

8.2 Each Party shall keep Proprietary Information in confidence and shall not provide such information or otherwise make it available, in any form or manner, to any other person (a "third party") without the prior written consent of the disclosing Party. Third parties do not include a Party's directors, officers, employees, agents or contractors, provided that an agent or contractor (i) is performing work in support of the purposes of this Agreement and (ii) has agreed in writing

to an obligation of confidentiality as extensive as that of a Party under this Agreement before it receives Proprietary Information disclosed by the other Party.

8.3 Each Party shall use Proprietary Information received hereunder only for internal evaluation and review consistent with the purpose of this Agreement. Any other use shall be only with the prior written consent of the disclosing Party.

8.4 The Parties believe that Proprietary Information disclosed or created under this Agreement, with limited if any exceptions, constitutes confidential or proprietary information or trade secrets exempt from disclosure to third parties under provisions of the California Public Records Act (including but not limited to California Government Code sections 6254(e), 6254(h) and 6254.7, or all of them).

8.5 No Party shall be liable for any special or indirect damage arising out of, or in connection with this Section 8.

8.6 Upon termination of this Agreement, all Proprietary Information in the possession of each Party, including its agents and contractors, shall be returned promptly to the disclosing Party unless otherwise instructed in writing by the disclosing Party. The obligation to return Proprietary Information does not apply to Jointly Developed Proprietary Information.

8.7 The Parties further agree that certain information that may otherwise be confidential may be disclosed as otherwise required by FERC, by state or federal resource agencies, or by applicable law. Such disclosures do not violate the confidentiality provisions of this Agreement.

9. **SEVERABILITY** If any clause, sentence, section or part of this Agreement should for any reason be finally adjudged by any court, or any regulatory agency or body of competent jurisdiction to be invalid,

such judgment shall not affect, impair or invalidate the remainder of this Agreement, but shall be confined in its operation to the clause, sentence, paragraph or any part thereof directly involved in the controversy.

10. **ACCEPTANCE OF NEW LICENSES** Nothing in this Agreement requires a Party to accept a new license for a Project, or any other permit, approval, authorization or agreement required for its continued operation, which in that Party's sole good faith judgment is unacceptable.

11. **DISPUTE RESOLUTION**

11.1 The Parties desire that disputes and breaches arising out of or in connection with this Agreement shall be resolved in a manner that is timely, economical, equitable, consistent with the provisions of this Agreement, and in support of each Party successfully operating its Project in compliance with its license.

11.2 A Party claiming a dispute shall give Notice to the other Party of the dispute within 30 days of the Party's actual knowledge of the act, event or other cause of the dispute or the Party's reasonable recognition that the dispute cannot be resolved without resort to the provisions of this Section, but in no case later than 6 months after the act, event or other cause of the dispute.

11.3 Upon receipt of a Notice of Dispute, the Parties agree to timely implement, in good faith, each of the following steps in the sequence listed to resolve the dispute:

(a) Step 1: informal negotiations between the Parties at the staff level (such efforts may involve solicitation of advice or opinion from a mutually agreeable third party);

(b) Step 2: informal negotiations between the Parties at the management level;

(c) Step 3a: if the dispute involves a license condition in either the UARP license or the Chili Bar license, or other matter within FERC's jurisdiction, the Party claiming the dispute will present the matter to FERC for resolution pursuant to FERC's administrative regulations;

(d) Step 3b: if the dispute does not involve a license condition in either the UARP license or the Chili Bar license, or other matter within FERC's jurisdiction, then non-binding mediation; and

(e) Step 4: binding arbitration.

11.4 The Steps 1 and 2 referenced in Subsection 11.3 shall occur within 30 days of receipt of the Notice of Dispute unless the Parties mutually agree to extend this schedule.

11.5 Non-binding mediation (Step 3b referenced in Subsection 11.3) shall begin within 45 days of the Notice of Dispute and be conducted pursuant to then current Commercial Dispute Resolution Procedures (Including Mediation and Arbitration Rules) and the Optional Procedures for Large, Complex Commercial Disputes ("ADR Rules") of the American Arbitration Association ("AAA").

11.6 Binding arbitration (Step 4 referenced in Subsection 11.3) shall begin within 90 days of the Notice and be initiated and conducted pursuant to then current ADR Rules of the AAA. The arbitrator may exercise discretion to modify the ADR Rules as necessary to enable the Parties to meet legal or regulatory deadlines. The arbitrator shall allow each Party to present proposed findings of fact and conclusions of law at the close of the hearing. The arbitrator shall provide a reasoned award including findings of fact and conclusions of law in writing within 30 days from

the date the Parties' submit their proposed findings of fact and conclusion of law. The arbitrator's award must be based on the Agreement, applicable California law, and the facts in the record.

11.7 A monetary award for breach of this Agreement shall be limited to actual, direct and proven damages or losses, and may not include consequential or punitive damages regardless of the legal theory giving rise to the claim or liability.

11.8 Mediation and arbitration, if needed, shall be conducted in either Sacramento or San Francisco, California at the option of the Party first filing the Notice of Dispute, or some other mutually agreeable location.

11.9 The Parties agree that the proper court in which to file any petition for entry of judgment in conformity with an arbitration award under this Section, for seeking injunctive relief, or for judicial review of an arbitration award, shall be the Superior Court of the State of California in either the City and County of San Francisco or County of Sacramento. The Parties agree that an arbitration award may be vacated or corrected by the Superior Court pursuant to the provisions of California Code of Civil Procedure section 1286.2 and 1286.6, or if the arbitration award is clearly erroneous.

11.10 If at any time during the four steps of the dispute resolution procedure described in Subsection 11.3 there are less than four months remaining in which to resolve a dispute prior to a legal or regulatory deadline, a Party may send a written Notice for Arbitration to the other Party which will have the effect of commencing the binding arbitration step. In this case, the arbitrator shall establish the schedule for arbitration so that the arbitration will be completed and an award will be issued at least one month before the applicable legal or regulatory deadline.

11.11 Each Party shall bear its own costs of participating in dispute resolution. Common costs of participating in dispute resolution shall be borne equally between the Parties.

12. **PUBLIC ANNOUNCEMENTS**

12.1 To the extent that announcements, statements, press releases, newsletters or other materials relating to this Agreement or the cooperative activities and tasks conducted hereunder are to be made public, the Parties will make all reasonable efforts to agree in advance on the content of such material, and coordinate their efforts regarding the time, place and manner for distribution or dissemination of such material. Unless otherwise agreed by the Parties, such material shall not contain any documents and information that are not Public Records, or any information that either Party has identified as Proprietary Information.

12.2 This section does not apply to a public announcement or statement that is required by applicable law, regulation, or rule or regulation of a securities exchange, provided that a Party making a public announcement pursuant to this sentence makes all reasonable efforts to agree with the other Party concerning the timing and content of such public announcement before it is made.

13. **RELATIONSHIP OF THE PARTIES** Nothing contained in this Agreement is intended or will be construed to create an association, trust, partnership or joint venture, or impose any trust or partnership duty, obligation or liability on either Party, or create any agency relationship between or among the Parties or between either Party and any employee of the other Party.

14. **ENTIRE AGREEMENT** This Agreement contains the complete and exclusive agreement of the Parties with respect to the subject matter thereof, and supersedes all discussions, negotiations,

representations, warranties, commitments, offers, contracts, and writings prior to the Effective Date of this Agreement, with respect to its subject matter.

15. **NOTICES**

15.1 All Notices, requests, demands, and other communications required or permitted under this Agreement shall be in writing, unless otherwise agreed by the Parties, and shall be delivered in person or sent by certified mail, postage prepaid, by overnight delivery, or by electronic facsimile transmission with an original sent immediately thereafter by postage-prepaid mail, and properly addressed as follows:

If to SMUD:

James R. Shetler
Assistant General Manager, Energy Supply
P.O. Box 15830, MS B408
Sacramento, CA 95852-1830

Arlen Orchard
General Counsel
P.O. Box 15830, MS B406
Sacramento, CA 95852-1830

If to Company:

Randal S. Livingston
Senior Director, Power Generation
Pacific Gas and Electric Company
245 Market Street, N11E
San Francisco, CA 94105

Matthew A. Fogelson
Law Department
Pacific Gas and Electric Company
P.O. Box 7442
San Francisco, CA 94120

15.2 Any Party may from time to time change its representative(s) or address for the purpose of Notices to that Party by a similar Notice specifying new representative(s) or address, but no such change shall be deemed to have been given until such Notice is actually received by the Party being notified.

16. **ACCOUNTING** Each Party shall establish and maintain accounting to identify and track internal and external costs it incurs through implementation of this Agreement. Such accounting shall conform with Generally Accepted Accounting Principles and will be made available to the other Party for inspection upon request. At a minimum, such accounting shall have separate accounts for all cooperative activities and tasks that involve allocation of costs to more than one Party.

17. **NO THIRD PARTY BENEFICIARIES** Except as may be specifically set forth in this Agreement, nothing in this Agreement, whether express or implied, is intended to confer any rights or remedies under or by reason of this Agreement on any person or party other than the Parties and their successors and assigns, nor is anything in this Agreement intended to relieve or discharge the obligation or liability of any third person or party to any Party, nor does any provision give any third person or party any rights of subrogation or action against any Party to this Agreement.

18. **AMENDMENT** This Agreement may be amended only by written agreement of the Parties. No changes, alterations, or modifications to this Agreement will become effective unless made in writing and executed by a duly authorized representative of each Party making explicit reference to such document as a modification of this Agreement.

19. **CONSTRUCTION OF AGREEMENT** Ambiguities or uncertainties in the wording of this Agreement will not be construed for or against any Party but will be construed in the manner that most accurately reflects the Parties' intent as of the date they executed this Agreement.

20. **GOVERNING LAW** This Agreement is made in the State of California and will be governed by and interpreted in accordance with its laws.

21. **SIGNATURE AUTHORITY** Each person signing below warrants that he or she has been duly authorized by the Party for whom he or she signs to execute this Agreement on behalf of that Party.

Dated: 6/29, 2007

Pacific Gas and Electric Company

Date: 6/29, 2007

Sacramento Municipal Utility District

By: John S Keenan

Name: John S. Keenan

Title: Sr. VP Generation & CNO

By: James R Shetler

Name: James R. Shetler

Title: AGM, Energy Supply

Approved as to Form for SMUD:

Reggie Dunsworth

EXHIBIT 1

Coordination of Operations of UARP and Chili Bar Projects

The Licensees anticipate that the new license for Chili Bar will contain license conditions requiring the Chili Bar Licensee to maintain certain minimum streamflows based on water year type, to control ramping rates, and to provide recreational streamflows, all in the Reach Downstream of Chili Bar. To comply with such license conditions, Chili Bar generally must receive adequate inflows of water in a timely manner from UARP. The Licensees believe that cooperation and coordination of operations between Chili Bar and UARP will create the most efficient use of water and maximize power generation while allowing the Chili Bar Licensee to comply with its license conditions. The UARP Licensee agrees to provide to the Chili Bar Licensee Operational Guidance and associated water inflows into Chili Bar Reservoir sufficient to enable Chili Bar Licensee to comply with the flow-related conditions of the Chili Bar Project license, and Chili Bar Licensee agrees to follow such Operational Guidance in a manner that will comply with the Chili Bar Project license. Each Licensee shall Consult and coordinate with the other Licensee to achieve Coordinated Operations and shall fulfill its individual responsibilities as defined below, *provided however* that neither Licensee is obligated to operate its Project in a manner that would violate the conditions of its license. The specified responsibilities and the plans developed thereunder may be amended and modified by mutual agreement of the Licensees from time to time in order to successfully perform and improve Coordinated Operations of the Projects.

I Responsibilities of UARP Licensee¹

Licensee shall: (i) within 120 days after license issuance, jointly with the Chili Bar Licensee, prepare and file with the Commission for approval a Coordinated Operations Plan developed by Licensee in Consultation with the Chili Bar Licensee; and (ii) upon Commission approval, implement the plan, including any changes required by the Commission. Licensee may amend the Coordinated Operations Plan in writing, as needed, provided Licensee has obtained written concurrence by the Chili Bar Licensee and provided notice to the Commission, unless the proposed amendment requires modification of license conditions.

In the event Licensee cannot obtain written concurrence from the Chili Bar Licensee on the Coordinated Operations Plan or any proposed amendment to the Coordinated Operations Plan within 90 days, Licensee shall request resolution of the matter through mediation with the Chili Bar Licensee using the Commission's Alternative Dispute Resolution Process. Thirty days after the conclusion of a mediation that does not resolve the dispute, Licensee may file a petition with the Commission for a hearing for resolution of the matter.

¹ References to Licensee in this section refer to the UARP Licensee.

The Coordinated Operations Plan shall, at a minimum, consist of the three elements and associated requirements listed below which shall be developed and implemented consistent with each other. The Coordinated Operations Plan shall establish a reasonable range of operating flexibility to enable each Licensee to comply with Operational Guidance while allowing for the imprecision, including timing, inherent in operating hydroelectric projects such as Chili Bar and UARP. The Coordinated Operations Plan shall also provide for a trial period of not less than three months after the Plan is approved by the Commission and implemented, during which the Licensees will test and confirm the viability of the Plan and make any modifications necessary to support Coordinated Operation of the Projects.

1. Operational Guidance Implementation Plan:

The Operational Guidance Implementation Plan (OGIP) shall define all necessary operational procedures, data transfer, and communications protocols between Licensee and the Chili Bar Licensee necessary to enable the Licensee to provide Operational Guidance to the Chili Bar Licensee on a timely basis. The OGIP shall also address procedures and communications regarding coordination of Chili Bar Project planned maintenance and outage scheduling with Licensee.

2. Operational Guidance:

Operational Guidance is operating information developed and updated by the Licensee considering projected inflows to Chili Bar Reservoir including flows from the UARP and accretion flows, projected Chili Bar Reservoir levels, and Licensee recommended generation-related flows for Chili Bar Project at hourly intervals to enable the Chili Bar Licensee to comply with flow-related Chili Bar Project license requirements. Pre-schedule Operational Guidance is for the pre-schedule day (the definition of “pre-schedule day” shall be as defined annually by the Western Energy Coordinating Council (WECC) Pre-scheduled Calendar). Real Time Operational Guidance is for “real time” scheduling, and shall be provided at least as far in advance of operational changes as the longer of the standard scheduling timeframes (minimum time in advance required by entities with jurisdiction for setting such timeframes) applicable to each Licensee. If Operational Guidance includes information the Licensee considers proprietary, except as otherwise agreed between the Licensees, the Chili Bar Licensee shall not disclose such information to others or use it for purposes other than for the purposes of the Coordinated Operations Plan.

Operational Guidance shall be prepared by the Licensee and provided to Chili Bar Licensee for each hour of each day of the year to enable the Chili Bar Licensee to comply with Chili Bar Project license requirements, including but not limited to Minimum Streamflows Downstream of Chili Bar Dam, Maximum Ramping Rates Downstream of Chili Bar Dam, and Minimum Recreational Streamflows Downstream of Chili Bar Dam. Unless otherwise agreed by the Licensees, as soon as practicable after the Effective Date of this Agreement and continuing for the remainder of the existing license and the term of

the new license for the UARP, Licensee will make a good faith effort, and at a minimum, as necessary for Licensee and/or the Chili Bar Licensee to comply with the conditions of their new licenses, to provide to Chili Bar Licensee the pre-scheduled White Rock Powerhouse flow release estimates and hour-ahead updates. Chili Bar Licensee acknowledges that Licensee does not guarantee that actual flow releases will conform to the estimates or updates provided to Chili Bar Licensee.

During periods when UARP operation is the primary factor controlling flows out of the UARP's Slab Creek Reservoir (i.e. primarily during the summer and fall months), the objectives of Operational Guidance by the Licensee shall include a good-faith effort to reduce the magnitude and frequency of spills at Chili Bar Dam.

Licensee shall timely provide Operational Guidance to Chili Bar Licensee and sufficient inflows to Chili Bar Reservoir provided it can do so. For purposes of this article, all notices between the Licensee and Chili Bar Licensee shall be communicated "as soon as reasonably practical," unless otherwise specified.

- In the event the Licensee is unable to provide sufficient inflows to Chili Bar Reservoir in accordance with Operational Guidance due to an exigency, physical operating condition, or an order issued by a court or federal or state agency that the Licensee knows or reasonably should know would cause a variance from the Chili Bar Project license, Licensee shall notify the Chili Bar Licensee, stating the reason Licensee is unable to provide sufficient inflows. Licensee and Chili Bar Licensee, in Consultation, shall determine the appropriate and timely action to be taken by Licensee, if any, to meet Chili Bar Project license requirements.
- In the event Licensee receives notice from Chili Bar Licensee that it is unable to follow the Operational Guidance provided by the Licensee (i) due to failure of the Licensee to provide sufficient inflows to Chili Bar Reservoir in accordance with the Operational Guidance, or (ii) because following the Operational Guidance could result in a variance from the Chili Bar Project license requirements for Minimum Streamflows, Ramping Rates, and/or Recreational Streamflows, Licensee and Chili Bar Licensee, in Consultation, shall determine the appropriate and timely action to be taken by Licensee, if any, to meet Chili Bar Project license requirements.
- In the event Licensee receives notice from Chili Bar Licensee that it followed Operational Guidance provided by the Licensee and, as a result, a variance from the Chili Bar Project license requirements for Minimum Streamflows, Ramping Rates, and/or Recreational Streamflows occurred, Licensee and Chili Bar Licensee, in consultation, shall determine the appropriate and timely action to be taken by the Licensee to prevent continuing variances from Chili Bar Project license requirements.

Licensee may temporarily deviate from providing inflows from the UARP to Chili Bar Project to support the Operational Guidance for Recreational Streamflows if due to (1) State or Federal electrical emergencies 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; (2) system events that cause the Operating Reserves to drop below the Western Energy Coordinating Council Minimum Operating Reliability Criteria; or (3) equipment malfunction, public safety emergency, or law enforcement activity. In the event Operational Guidance and/or inflows from the UARP to Chili Bar Reservoir are such that the Chili Bar Licensee cannot reasonably meet the Recreational Streamflows specified in the Chili Bar Project license, the Licensee shall provide Notice to the Chili Bar Licensee, the Commission, and USFS as soon as possible but no later than 10 days after such incident.

3. Operations and Maintenance Constraints:

Licensee shall incorporate Chili Bar Project operational and maintenance constraints into its Operational Guidance to enable the Chili Bar Licensee to meet or exceed Chili Bar Project Minimum Streamflows, Ramping Rates, and Recreational Streamflows requirements specified in the Chili Bar Project license. Chili Bar Project operational constraints are declared physical constraints including, but not limited to, turbine head/discharge capability, minimum preferred operating elevation (El. 984NGVD), and minimum usable storage elevation for Chili Bar Project. Chili Bar Project maintenance constraints include planned maintenance outages.

Determination of Water Year Type

Each February through May the Licensee shall determine the water year type based on the DWR Bulletin 120 forecast and shall operate for that month based on that forecast beginning 3 days after issuance of the forecast and continuing until 2 days after issuance of a subsequent monthly forecast. The May forecast shall be used to establish the final water year type for the remaining months of the water year and the month of October. The water year type for the months of November through January shall be based on the Department of Water Resources' Full Natural Flow record for the American River at Folsom (California Data Exchange Center site AMF sensor 65) for the preceding water year, and the Licensee shall operate based on that record beginning November 1. The Licensee shall provide Notice to USFS, the Commission, BLM, CDFG, FWS, and SWRCB of the final water year type determination within 30 days of the May forecast.

<i>Water Year Type</i>	<i>DWR Forecast Annual Unimpaired Inflow—Folsom Lake (acre-feet)</i>
<i>Super Dry</i>	<i>Any Critically Dry year that is immediately preceded by a Dry or Critically Dry year or any Dry year that is immediately preceded by any combination of two Dry or Critically Dry years</i>
<i>Critically Dry</i>	<i>Less than or equal to 900,000</i>
<i>Dry</i>	<i>Greater than 900,000 and less than or equal to 1,700,000</i>
<i>Below Normal</i>	<i>Greater than 1,700,000 and less than or equal to 2,600,000</i>
<i>Above Normal</i>	<i>Greater than 2,600,000 and less than 3,500,000</i>
<i>Wet</i>	<i>Greater than or equal to 3,500,000</i>

II Responsibilities of Chili Bar Licensee²

Licensee shall: (i) within 120 days after license issuance, jointly with the UARP Licensee, prepare and file with the Commission for approval a Coordinated Operations Plan developed by Licensee in Consultation with the UARP Licensee; and (ii) upon Commission approval, implement the plan, including any changes required by the Commission. Licensee may amend the Coordinated Operations Plan in writing, as needed, provided Licensee has obtained written concurrence by the UARP Licensee and provided notice to the Commission, unless the proposed amendment requires modification of license conditions.

In the event Licensee cannot obtain written concurrence from the UARP Licensee on the Coordinated Operations Plan or any proposed amendment to the Coordinated Operations Plan within 90 days of beginning discussions, Licensee shall request resolution of the matter through mediation with UARP Licensee using the Commission’s Alternative Dispute Resolution Process. Thirty days after the conclusion of a mediation that does not resolve the dispute, Licensee may file a petition with the Commission for a hearing for resolution of the matter.

The Coordinated Operations Plan shall, at a minimum, consist of the three elements and associated requirements listed below which shall be developed and implemented consistent with each other. The Coordinated Operations Plan shall establish a reasonable range of operating flexibility to enable each Licensee to comply with Operational Guidance while allowing for the imprecision, including timing, inherent in operating hydroelectric projects such as Chili Bar and UARP. The Coordinated Operations Plan shall also provide for a trial period of not less than three months after the Plan is approved by the Commission and implemented, during which the Licensees will test and confirm the viability of the Plan and make any modifications necessary to support Coordinated Operation of the Projects.

² References to Licensee in this section refer to the Chili Bar Licensee.

1. Operational Guidance Implementation Plan:

The Operational Guidance Implementation Plan (OGIP) shall define all necessary operational procedures, data transfer, and communications protocols between Licensee and the UARP Licensee to enable Licensee to comply with its license requirements. The OGIP shall also address procedures and communications regarding coordination of Chili Bar Project planned maintenance and outage scheduling with UARP Licensee.

2. Operational Guidance:

Operational Guidance is operating information developed and updated by the UARP Licensee, considering projected inflows to Chili Bar Reservoir including flows from the UARP and accretion flows, projected Chili Bar Reservoir levels, and recommended generation-related flows for Chili Bar Project at hourly intervals to enable Licensee to comply with flow-related Chili Bar Project license requirements. Pre-schedule Operational Guidance is for the pre-schedule day (the definition of “pre-schedule day” shall be as defined annually by the Western Energy Coordinating Council (WECC) Pre-scheduled Calendar). Real-time Operational Guidance is for “real time” scheduling, and shall be provided at least as far in advance of operational changes as the longer of the standard scheduling timeframes (minimum time in advance required by entities with jurisdiction for setting such timeframes) applicable to each Licensee.. If Operational Guidance includes information the UARP Licensee considers proprietary, except as otherwise agreed between the Licensees, the Licensee shall not disclose such information to others or use it for purposes other than for the purposes of the Coordinated Operations Plan.

Licensee shall provide comments to the UARP Licensee on Operational Guidance as necessary to enable Licensee to comply with Chili Bar license requirements, including but not limited to Minimum Streamflows Downstream of Chili Bar Dam, Maximum Ramping Rates Downstream of Chili Bar, and Minimum Recreational Streamflows Downstream of Chili Bar Dam. Unless otherwise agreed by the Licensees, as soon as practicable after the effective date of this Agreement and continuing for the remainder of the existing UARP license and the term of the new license for the UARP, UARP Licensee will make good faith effort, and at a minimum, as necessary for UARP Licensee and/or the Licensee to comply with the conditions of their new licenses, to provide to Chili Bar Licensee the pre-scheduled White Rock Powerhouse flow release estimates and hour-ahead updates. Chili Bar Licensee acknowledges that UARP Licensee does not guarantee that actual flow releases will conform to the estimates or updates provided to Chili Bar Licensee.

Licensee shall operate Chili Bar Powerhouse in compliance with its license and shall implement the Real Time Operational Guidance from the UARP Licensee provided it can do so in a manner consistent with the Chili Bar Project license.

- In the event Licensee is unable to follow the Operational Guidance provided by the UARP Licensee, for example, due to (a) failure of the UARP Licensee to provide sufficient inflows to Chili Bar Reservoir, or (b) physical operating conditions at Chili Bar Project that would cause a variance from the Chili Bar Project license, or (c) equipment malfunction, Licensee shall notify the UARP Licensee as soon as reasonably practical, stating the reason Licensee is unable to follow the Operational Guidance. Licensee and UARP Licensee, in consultation, shall determine the appropriate and timely action to be taken by UARP Licensee, if any, to enable Licensee to meet Chili Bar Project license requirements.
- In the event Licensee could, but does not, follow the Operational Guidance provided by the UARP Licensee, due to, for example, (a) urgent requirements (operating emergencies reasonably beyond the control of the Licensee), or (b) planned operations and maintenance outages, or (c) operating error, Licensee shall notify the UARP Licensee as soon as reasonably practical, stating the reason Licensee is unable to follow the Operational Guidance. Licensee and UARP Licensee, in consultation, shall determine the appropriate and timely action to be taken by UARP Licensee, if any, to enable Licensee to meet Chili Bar Project license requirements.

Licensee may temporarily deviate from providing minimum Recreational Streamflows specified in the Chili Bar Project license if due to (1) State or Federal electrical emergencies 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; (2) system events that cause the Operating Reserves to drop below the Western Energy Coordinating Council Minimum Operating Reliability Criteria; or (3) 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. Licensee shall make a good faith effort to avoid scheduling unit outages when recreational streamflows of 1,750 cfs are specified. If recreational streamflow is so modified, the Licensee shall provide Notice to the Commission, UARP Licensee, BLM, CDPH, and SWRCB as soon as possible, but no later than 10 days after such incident.

3. Operations and Maintenance Constraints:

Licensee shall communicate to the UARP Licensee during preparation of the Coordinated Operations Plan, any Chili Bar Project operational constraints needed to coordinate planning and operations through Operational Guidance. Licensee shall make a reasonable effort to coordinate scheduling of Chili Bar Project maintenance outages with the UARP Licensee. Chili Bar Project operational constraints are physical constraints including, but not limited to, turbine head/discharge capability, minimum preferred operating elevation (El. 984 NGVD), and minimum usable storage elevation for Chili Bar Project.

EXHIBIT 2

Coordination in Overlapping PM&E Measures and Related License Conditions

1. General Responsibilities

The Chili Bar and UARP Licensees will share responsibility for the cost and implementation of Overlapping PM&E Measures and for achieving compliance with Related License Conditions over the term of the new licenses for the Projects. For purposes of this Exhibit 2, "Related License Conditions" are (i) those license conditions in the Chili Bar license pertaining to minimum streamflows; ramping rates; Coordinated Operations; resource monitoring programs; adaptive management programs; sediment management plans; public information services; and recreational streamflows; and (ii) the following license articles proposed for the Chili Bar license in the January 29, 2007 *Relicensing Settlement Agreement for the Upper American River Project and Chili Bar Hydroelectric Project*: Article 2-1 (minimum streamflows), Article 2-2 (ramping rates), Article 2-4 (monitoring program), Article 2-5 (adaptive management program), Article 2-6 (sediment management plan), Article 2-14 (public information services), and Article 2-15 (recreational streamflows).

2. Cost Responsibilities

The Parties agree to allocate all costs, other than internal, administrative costs, incurred to implement Overlapping PM&E Measures and to achieve compliance with Related License Conditions as follows:

2.1 Water temperature related modeling will be funded 100% by SMUD.

2.2 If the Chili Bar and UARP licensees jointly determine that incremental water storage modifications or related measures applicable to Chili Bar Reservoir, Powerhouse, and Dam (examples include but are not limited to use of a crest-gate rubber dam, bathymetry surveys/sediment removal) are necessary to comply with the conditions of either Party's license, such modifications or measures will be funded 95% by SMUD and 5% by Company. If the new FERC licenses for UARP and/or Chili Bar specify a flow regime requiring significant mechanical modifications to Chili Bar in order for Chili Bar to control flows in a coordinated manner with flow releases from White Rock Powerhouse and/or Slab Creek Reservoir, then the Parties agree that resulting costs for such modifications exceeding \$10,000 will be allocated in accordance with this Subsection. "Significant mechanical modifications" for the purpose of this Subsection are defined as equipment modifications, replacements, or new equipment/systems to provide flow control in a reliable manner over the term of the new license, including but not limited to the turbine bypass and valves, low-level outlets and ancillary systems, excluding minor equipment, adjustments, or modifications of control equipment settings.

2.3 All other tasks regarding Overlapping PM&E Measures and Related License Conditions will be funded 90% by SMUD and 10% by PG&E.

3. Implementation Responsibilities

SMUD and the Company will Consult and cooperate on the preparation of Implementation Plans for all tasks related to implementing Overlapping PM&E Measures and to achieving compliance with Related License Conditions, consistent with the cost sharing provisions of Section 2, above, and shall complete such plans as appropriate based on the required completion date of the task. The Implementation Plans will include the scope of work, project team responsibilities and estimated payment schedules for both Parties. The Implementation Plans will identify all tasks in separate categories, non-recurring (one-time project) costs and annually recurring costs. Unless otherwise agreed to by the Parties, SMUD and Company will retain a mutually acceptable contractor(s) to prepare the Implementation Plans to the Parties' mutual satisfaction and, at the mutual direction of the Parties, to manage implementation of the subject activities and tasks, in a manner to assure compliance with relevant FERC license requirements. The Parties agree that all deliverables furnished by any contractor(s) hired shall be owned by both Parties. Both Parties shall have full rights to use all deliverables furnished by the contractor(s). The Parties will enter into a separate written agreement(s) on specific responsibilities and implementation methods for any physical work to be performed within Chili Bar Project, including but not limited to Subsection 2.2, above. Each Party will obtain the other Party's written approval of the relevant Implementation Plan prior to incurring any reimbursable costs, which approval will not be unreasonably withheld. A description of each Party's respective responsibilities in the implementation of Overlapping PM&E Measures and in achieving compliance with Related License Conditions is provided in the table below.

Responsibilities of SMUD and Company in the implementation of Overlapping PM&E Measures and the Achievement of Compliance with Related License Conditions		
Activity	Responsibility	
	SMUD	Company
Hire, provide oversight, and otherwise manage contractor(s)	Full responsibility	Consult with SMUD on scope of work, costs, and selection of contractor(s)
Consult with specified stakeholders regarding Monitoring Requirement	Participate, with contractor(s)	Initiate and conduct consultation process
Develop a draft Implementation Plan based on information developed during consultations	Oversee development of draft plan by contractor(s)	Consult with SMUD
Review of draft Implementation Plan by specified stakeholders	Participate, with contractor(s), in review process	Initiate and conduct review process
Modify draft Implementation Plan as deemed appropriate by the Parties based on results of review	Consult with Company on appropriate modifications and generate, with contractor(s), revised draft plan	Consult with SMUD on appropriate modifications

Submit revised draft Implementation Plan and stakeholder comments to FERC for approval	Review	Full responsibility
Respond to comments and additional information requests by FERC, if any, regarding revised draft Implementation Plan	Supply support in appropriate technical areas in obtaining additional information and preparation of response, with contractor(s)	Prepare response and additional information and submit to FERC
Gather and assign resources to implement monitoring plans as approved by FERC.	Consult with Company and assign resources	Consult with SMUD
Take all actions specified in the approved Plan, including managing the actions of contractors	Full responsibility, with contractor(s)	Review and consult with SMUD if Chili Bar facilities are affected
Consolidate, summarize, interpret and prepare conclusions and reports of results from implementing Plan	Oversee preparation of draft reports by contractor (s)	Consult with SMUD
Consultation with specified stakeholders on review of Plan results	Participate, with contractor(s), in review process	Initiate and conduct review process
Develop any proposed additional actions under the Plan	Consult with Company on appropriate report modifications and additional actions. Oversee report modifications and any additional actions involving contractor(s)	Consult with SMUD on appropriate report modifications and additional actions.
Submit reports of Monitoring Requirements to FERC for approval	Review	Full responsibility
Implement additional actions, including adaptive management measures, as directed by FERC	Consult with Company on FERC-required additional actions. Oversee any additional actions involving contractor(s)	Consult with SMUD on FERC-required additional actions.

**COOPERATION AGREEMENT APPENDICES OMITTED FOR
CONVENIENCE PURPOSES ONLY**

Exhibit 3. MOU 2 Examples SMUD Revised Jan 2204.xls

Exhibit 3a. Sample Calculation Template

**Exhibit 4. January 29, 2007 - Relicensing Settlement Agreement for the
Upper American River Project and Chili Bar Hydroelectric Project**

**Exhibit 5. Contract Relating to Chili Bar and American River Projects
(Transfer of Ownership Agreement)**

**Exhibit 6. Agreement for Operation of Slab Creek Reservoir (Whitewater
Coordination Agreement)**

APPENDIX 8

**DRAFT FORM OF
RECREATION PAYMENT AGREEMENT WITH
CALIFORNIA DEPARTMENT OF PARKS AND RECREATION**

**Recreation Payment Agreement
Among the State of California Department of Parks and Recreation,
Sacramento Municipal Utility District
and Pacific Gas and Electric Company**

This Recreation Payment Agreement ("Agreement") is entered into by and between the State of California, acting through the Department of Parks and Recreation ("State" or "DPR"), the Sacramento Municipal Utility District ("SMUD") and Pacific Gas and Electric Company ("PG&E"). This Agreement is in connection with the Relicensing and operation of SMUD's Upper American River Project ("UARP") FERC No. 2101 and PG&E's Chili Bar Project FERC No. 2155.

Recitals

WHEREAS, DPR, SMUD and PG&E are signatories to the *Relicensing Settlement Agreement for the Upper American River Project and Chili Bar Hydroelectric Project* ("Settlement Agreement"), which addresses the relicensings of both the UARP and the Chili Bar Project.

WHEREAS, DPR, SMUD and PG&E enter into this Agreement as part of the overall settlement process leading to the issuance of new hydroelectric project licenses by the Federal Energy Regulatory Commission ("FERC"). The new licenses for the UARP Project and the Chili Bar Project are referred to in this Agreement individually as "New Project License" and collectively as the "New Project Licenses."

WHEREAS, DPR operates, manages, maintains and administers river access facilities and river recreation use on the South Fork of the American River at Marshall Gold Discovery State Historic Park (SHP) and Folsom Lake State Recreation Area (SRA) which are downstream of the UARP and Chili Bar Projects.

WHEREAS, DPR, on one hand, and SMUD and PG&E, on the other hand, dispute whether SMUD and/or PG&E have any responsibility under the Federal Power Act, or any other law, to provide for any construction, maintenance, operation or administration of public recreation areas managed by DPR on the South Fork of the American River.

WHEREAS, DPR, SMUD and PG&E desire to resolve any dispute and to enter into an agreement which, without modifying the Proposed License Articles of the Settlement Agreement, will resolve issues regarding monetary payment for the construction, operation and maintenance, management, and administration of river recreation use and river access facilities with respect to the New Project Licenses by SMUD and PG&E making monetary contributions to DPR for the partial funding of the construction, operation and maintenance, management,

and administration of river recreation use and river access recreation facilities managed by DPR along the South Fork of the American River at Marshall Gold Discovery SHP and Folsom Lake SRA for the terms of the New Project Licenses.

Terms of the Agreement

NOW THEREFORE, in consideration of the forgoing, the parties agree as follows:

1. Purpose

DPR, SMUD and PG&E enter into this Agreement to resolve, for the terms of the New Project Licenses, all issues regarding monetary payment for the construction, operation and maintenance, management, and administration, of river recreation use and river access facilities managed by DPR for the benefit of the public along the South Fork of the American River at Marshall Gold Discovery SHP and Folsom Lake SRA through agreed upon monetary contributions to DPR by SMUD and PG&E for partial funding of the operation, maintenance, management and administration of such facilities.

2. Term

The term of this Agreement shall commence on the date of execution of this Agreement by the parties and shall continue through the term of the New Project License for the UARP and the term of the New Project License for the Chili Bar Project, including any annual license(s) that may be issued after the New Project Licenses expire.

3. SMUD Obligations to DPR

A. SMUD's One-time Payment

SMUD shall make a one-time payment of \$45,000 ("SMUD One-time Payment") within 90 days of the SMUD's affirmative acceptance of its New Project License for the UARP. The payment shall be made to DPR pursuant to instructions provided by DPR to SMUD within 30 days of SMUD's affirmative acceptance of its New Project License for the UARP. Ownership of any improvements funded through the SMUD One-time Payment shall vest to the State.

B. SMUD's Annual Payment Obligation

SMUD shall, beginning on or before July 1 of the year after SMUD's affirmative acceptance of a New Project License for the UARP, annually pay to DPR \$67,500 (year 2007 cost basis) ("SMUD Annual Payment"). The payment shall be made to DPR pursuant to instructions provided by DPR to SMUD within 30 days of SMUD's affirmative acceptance of its New Project License for the UARP. The amount of the payment shall be adjusted annually based on the U.S. Gross Domestic Product – Implicit Price Deflator (GDP-IPD).

4. PG&E Obligations to DPR

A. PG&E's One-time Payment

PG&E shall make a one-time payment of \$5,000 ("PG&E One-time Payment") within 90 days of PG&E's affirmative acceptance of its New Project License for the Chili Bar Project. The payment shall be made to DPR pursuant to instructions provided by DPR to PG&E within 30 days of PG&E's affirmative acceptance of its New Project License for the Chili Bar Project. Ownership of any improvements funded through the PG&E One-time Payment shall vest to the State.

B. PG&E's Annual Payment Obligation

PG&E shall, beginning on or before July 1 of the year after PG&E's affirmative acceptance of a New Project License for the Chili Bar Project, annually pay to DPR \$7,500 (year 2007 cost basis) ("PG&E Annual Payment"). The payment shall be made to DPR pursuant to instructions provided by DPR to PG&E within 30 days of PG&E's affirmative acceptance of its New Project License for the Chili Bar Project. The amount of the payment shall be adjusted annually based on the U.S. Gross Domestic Product – Implicit Price Deflator (GDP-IPD).

5. DPR Obligation to SMUD and PG&E

A. Application of One-time Payment

DPR shall apply the amount of the One-Time Payments from SMUD and PG&E to the partial cost of construction of river access and related improvements at Marshall Gold Discovery SHP managed by DPR.

B. Application of Annual Payment

DPR shall apply the amount of the Annual Payments from SMUD and PG&E for the partial cost of the operation, maintenance, management and administration of river recreation use and facilities along the South Fork of the American River below Chili Bar Reservoir Dam managed by DPR.

C. Support of RPA

Upon the request of either Licensee, the DPR and/or other non-requesting Licensee shall provide written communications (or orally, in the event written communication is impossible/inappropriate under the circumstances) of support in any administrative approval process that may be required to effectuate the purposes of this RPA, but in the case of DPR subject to available agency resources and agency authority.

6. Method of Payment

Both the One-Time and Annual Payments by SMUD and PG&E to DPR shall be made in the form of a valid bank check made payable to the "California Department of Parks and Recreation" and sent to the following address:

California Department of Parks and Recreation
Gold Fields District
7806 Folsom-Auburn Road
Folsom, CA 95630

Payment may also be made by wire transfer pursuant to instructions provided by DPR upon mutual agreement by DPR, and SMUD or PG&E.

7. Notices

All written notices pursuant to this Agreement shall be addressed as set forth below as any of the parties may hereinafter designate by written notice and shall be personally delivered or sent via first-class United States Postal Service mail:

DPR: Scott Nakaji, District Superintendent
Gold Fields District
7806 Folsom-Auburn Road
Folsom, CA 95630

SMUD: James R. Shetler
Assistant General Manager – Energy Supply
Sacramento Municipal Utility District MS B408
P. O. Box 15830
Sacramento, CA 95852

PG&E: Randal S. Livingston
Senior Director, Power Generation
Pacific Gas and Electric Company
245 Market Street, Room 1103
San Francisco, CA 94177-0001

8. No Joint and Several Obligation Between Licensees

SMUD and PG&E are individually responsible for making their own respective One-Time Payment and Annual Payments to DPR under this Agreement; there is no joint and several liability between SMUD and PG&E for payments required by this Agreement.

9. Change in Ownership of UARP Project and Prohibitions Against Assignment

Change in the ownership of the UARP or transfer of the existing or New Project License by SMUD shall not in any way modify or otherwise affect SMUD's or DPR's interests, rights, responsibilities or obligations under this Agreement. This Agreement, or any interest therein, may be assigned, delegated, or otherwise transferred by SMUD after obtaining the prior written consent of State, which shall not be withheld unreasonably.

10. Change in Ownership of Chili Bar Project and Prohibitions Against Assignment

Change in the ownership of the Chili Bar Project or transfer of the existing or New Project License by PG&E shall not in any way modify or otherwise affect PG&E's or DPR's interests, rights, responsibilities or obligations under this Agreement. This Agreement, or any interest therein, may be assigned, delegated, or otherwise transferred by PG&E after obtaining the prior written consent of State, which shall not be withheld unreasonably.

11. Successors in Interest

Unless otherwise provided in this Agreement, the terms, covenants and conditions contained herein shall apply to and bind the heirs, successors, executors, administrators, and assigns of all the parties hereto.

12. Agreement in Counterparts

This Agreement may be executed in counterparts, each of which shall be deemed an original.

13. Agreement in Writing

This Agreement contains and embraces the entire agreement between the parties hereto and neither it nor any part of it may be changed, altered, modified, limited or extended orally, or by any Agreement between the parties unless such Agreement be expressed in writing, signed and acknowledged by DPR, SMUD and PG&E or their respective successors in interest.

14. Partial Invalidity

If any term, covenant, condition or provision of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remainder of the provisions hereof shall remain in full force and effect and in no way shall be affected, impaired or invalidated thereby.

15. Waiver of Rights

The failure of DPR, SMUD or PG&E to insist upon strict performance of any of the terms, conditions, and covenants in this Agreement shall not be deemed a waiver of any right or remedy that DPR, SMUD or PG&E may have, and shall not be deemed a waiver of any right or remedy for a subsequent breach or default of the terms, conditions, and covenants herein contained.

16. Defaults and Remedies

In the event of any breach of this Agreement by DPR of terms applicable to SMUD, SMUD shall notify DPR in writing of such breach, and DPR shall have thirty (30) days to cure said breach.

In the event of any breach of this Agreement by DPR of terms applicable to PG&E, PG&E shall notify DPR in writing of such breach, and DPR shall have thirty (30) days to cure said breach.

In the event of breach of this Agreement by SMUD and/or PG&E, State shall notify the breaching party(ies) in writing of said breach, and the breaching party(ies) shall have thirty (30) days to cure such breach.

17. Disputes

This Agreement shall be enforced, construed and interpreted, as to both the validity and performance of the parties, in accordance with the laws of the State of California.

18. Paragraph Titles

The paragraph titles in this Agreement are inserted only as a matter of convenience and for reference, and in no way define, limit or describe the scope or intent of this Agreement or in any way affect this Agreement.

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DRAFT FOR SETTLEMENT DISCUSSION PURPOSES

01/29/2007

IN WITNESS THEREOF, the parties hereto have caused this Agreement to be duly executed with all the formalities required by law on the respective dates set forth opposite their signatures.

Sacramento Municipal Utility District

Jan Schori, General Manager

Date _____

Pacific Gas and Electric

John S. Kennan, Sr. VP Generation and
Chief Nuclear Officer

Date _____

California Department of Parks and Recreation

Ruth Coleman, Director
Department of Parks and Recreation

Date _____