

**COOPERATION AGREEMENT BETWEEN SACRAMENTO MUNICIPAL UTILITY DISTRICT AND
PACIFIC GAS AND ELECTRIC COMPANY REGARDING UPPER AMERICAN RIVER PROJECT AND
CHILI BAR PROJECT**

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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)**