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November 9, 2012

Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, N.W. Room 1A
Washington, DC 20426

Re: AES Huntington Beach, L.L.C. and California Independent System Operator
Docket No. ER13-____-000

Dear Ms. Bose:

Pursuant to Section 205 of the Federal Power Act (“FPA”)¹ and Part 35 of the Commission’s regulations,² AES Huntington Beach, L.L.C. (“AESHB”) and the California Independent System Operator Corporation (“ISO”) hereby jointly submit for filing, as AESHB Rate Schedule FERC No. 2, and acceptance of an executed Reliability Must-Run Service Agreement between AESHB and the ISO, and accompanying AESHB rate schedules for Huntington Beach Generating Station Units 3 and 4 (“RMR Agreement”). Under the RMR Agreement, AESHB will collect a cost-of-service rate in exchange for operating two synchronous condensers necessary to provide voltage support in the Los Angeles Basin and San Diego/Imperial Valley local areas that is critically needed as the result of the unexpected long-term outage of San Onofre Nuclear Generating Station (“SONGS”) Units 2 and 3.

The rates, terms and conditions reflected in the RMR Agreement are the product of extensive negotiation and agreement both between AESHB and the ISO (collectively, the “Parties”) and with Southern California Edison (“SCE”) and San Diego Gas & Electric (“SDG&E”) (collectively, the “Responsible Utilities”). The agreement reached among all these parties, originally reflected in a Term Sheet Agreement agreed to by the Parties and Responsible Utilities, provided the basis for AESHB to begin prior to this filing the process of contracting for the conversion of the existing generating units into the synchronous condensers that will provide Reliability Must-Run (“RMR”) service, thus enabling a

¹ 16 U.S.C. §§ 824d and 824e.

² 18 C.F.R. Part 35 (2012).

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commercial operations date of June 1, 2013 – in time to meet peak summer needs.³ Thus, the Parties respectfully request that the Commission accept the rates, terms, and conditions that are outlined below and included in the RMR Agreement and accompanying schedules (Attachment A), without modification or condition.

I. Description of the Parties and Points of Contact Regarding this Submittal

AESHB is a public utility under the FPA that is authorized to sell electric energy, capacity, and ancillary services at market-based rates,⁴ and an exempt wholesale generator under the Public Utility Holding Company Act of 2005.⁵ As described more fully below, AESHB currently owns and operates part of and leases and operates part of the Huntington Beach Generating Station. AESHB is an indirect, wholly-owned subsidiary of The AES Corporation (“AES”), a Delaware corporation that owns and operates both traditional utilities and competitive generation business segments in the United States and overseas. AES indirectly owns approximately 6,000 MW of competitive generating capacity in the United States through subsidiaries, each of which is a public utility or a qualifying facility under the Public Utility Regulatory Policies Act of 1978.

The ISO is a non-profit public benefit corporation organized under the laws of the State of California. The ISO is the Balancing Authority Area Operator responsible for the reliable operation of a grid consisting of the transmission systems of a number of public utilities, including SCE and SDG&E, as well as the coordination of the day-ahead and real-time energy and ancillary services markets in California.

The Parties request that all communications and correspondence concerning this filing be directed to:

³ The California Public Utilities Commission (“CPUC”) was also consulted during these negotiations, though it was not a signatory party to the Term Sheet Agreement.

⁴ AES Huntington Beach, L.L.C., et al., 83 FERC ¶ 61,100 (1998), and AES Redondo Beach, L.L.C., et al., 83 FERC ¶ 61,358 (1998).

⁵ AES Huntington Beach, L.L.C., 84 FERC ¶ 62,017 (1998).

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II. List of Documents Submitted with this Filing

Attachment A – RMR Agreement between AES Huntington Beach, L.L.C. and ISO (AES Rate Schedule FERC No. 2) – Clean Version

Attachment B – Redlined Comparison of the RMR Agreement with the ISO *Pro Forma* RMR Agreement.

Attachment C – ISO Addendum to the Final Report and Study Results of the 2013 Local Capacity Technical Analysis: Absence of San Onofre Nuclear Generating Station (SONGS) (August 20, 2012).

Attachment D – ISO Memorandum Decision on Conditional Approval to Extend Certain Existing Reliability Must-Run Contracts for 2013 and New Reliability Must-Run Designation for Huntington Beach Units 3 and 4 for Voltage Support (September 7, 2012).

Attachment E – ISO Board of Governors Authorization to ISO to Designate Huntington Beach 3 & 4 for RMR service, “Decision on Conditional Approval to

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Extend Certain Reliability Must Run Contracts for 2013 and New Reliability Must-Run Designation for Huntington Beach Units 3 and 4 for Voltage Support” (September 14, 2012).

Attachment F – Letter of Robert P. Oglesby, Executive Director, California Energy Commission to ISO (September 12, 2012).

Attachment G– Term Sheet Agreement entered into among AESHB, ISO, SDG&E, and SCE (October 15, 2012).

III. Explanation of Filing

a. Need for the RMR Agreement

i. San Onofre Nuclear Generating Station, Units 2 and 3, Extended Forced Outage

In January 2012, SCE, the operator of SONGS, took SONGS Units 2 and 3 out of service to address significant maintenance issues. Since that time, it has become apparent that the forced outage for SONGS Units 2 and 3 will continue for an extended period of time, and no date has been established for the units to be returned to service.

ii. Description of Huntington Beach Units 3 and 4

AESHB currently operates the Huntington Beach Generating Station, a four-unit (Units 1-4), natural gas fired generating facility with a total generating capacity of approximately 904 MW⁶ located on the southern California coast in the city of Huntington Beach, within the balancing authority area operated by the ISO.⁷ The facilities were originally built in the 1950’s and were owned and operated by SCE until May 16, 1998, when they were purchased by AESHB (as assignee of The AES Corporation pursuant to that certain

⁶ Huntington Beach Units 1 and 2 each have a nameplate capacity of 226 MW. Huntington Beach Unit 3 has a nameplate capacity of 225 MW and Huntington Beach Unit 4 has a nameplate capacity of 227 MW.

⁷ The Huntington Beach Generating Station previously also included Unit 5, a multiple jet turbine peaker unit with a nameplate capacity rating of 150 MW.

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Assignment and Novation Agreement, dated as of May 15, 1998, by and among The AES Corporation, AESHB and SCE). Huntington Beach Units 3 and 4 (“HB 3 & 4”) had been taken out of service by SCE in 1995 because of limited use, but, as a result of California’s electricity crisis, AES invested the necessary resources to return HB 3 & 4 to service and received the necessary approval to do so from the California Energy Commission (“CEC”) on May 10, 2001. The upgraded units began commercial operation on July 31, 2002 (Unit 3) and August 7, 2003 (Unit 4).

AESHB is still the owner and operator of Huntington Beach Units 1 and 2. However, in 2011, AESHB and Edison Mission Huntington Beach, LLC (“Edison HB”) entered into a sale and leaseback arrangement whereby AESHB transferred ownership, but not control, of portions of HB 3 & 4 to Edison HB (i.e., principally the boilers, steam turbines, emission controls, and related equipment (collectively, the “Leased Assets”)), and AESHB immediately entered into a lease agreement with Edison HB to lease back and operate such portions of HB 3 & 4 until an agreed-upon shutdown date. AESHB retained ownership of the land and foundations of HB 3 & 4, the units’ interconnection facilities, and all other facilities and equipment other than the Leased Assets. Edison HB also acquired certain non-jurisdictional assets and rights from AESHB, including “Regional Clean Air Incentives Market” (RECLAIM) emission allowances sufficient to allow the Units to operate for one year, and the right to cause the Units to be retired on or after October 31, 2012.⁸ The Commission approved the sale/leaseback transaction on April 15, 2011.⁹

AESHB is also a party to a FERC-approved Capacity Sale and Tolling Agreement with BE CA, LLC, a subsidiary of JPMorgan Chase & Co. (“Tolling Agreement”).¹⁰ The Tolling Agreement was originally entered into in May of 1998 between AESHB (and certain other affiliates of AESHB) and Williams Energy Market & Trading Company (“Williams”), and allowed Williams to exclusively market the output of certain AES-owned plants,

⁸ Edison HB’s acquisition of RECLAIM allowances and the right to cause the Units to be retired and dismantled will facilitate Walnut Creek Energy LLC’s (another Edison Mission Energy subsidiary) development of the Walnut Creek Facility. These aspects of the sale/leaseback transaction between Edison HB and AESHB are not subject to FERC’s jurisdiction.

⁹ AES Huntington Beach, LLC, 135 FERC ¶ 62,049 (2011).

¹⁰ AES Huntington Beach, LLC, 87 FERC ¶ 61,221 (1999). The Tolling Agreement and related documents are at http://www.cers.water.ca.gov/pdf_files/power_contracts/williams/111902wllmsPPA.pdf.

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including Huntington Beach Units 1 and 2. AESHB's counterparty has changed over the years, each time with the approval of the Commission.¹¹ Currently, BE CA, LLC, an indirect, wholly-owned subsidiary of JPMorgan Chase, is AESHB's counterparty to the Tolling Agreement.

AESHB retired HB 3 & 4 in January 2012, but it brought them back out of retirement on May 11, 2012 in response to a request from the CAISO to help maintain system reliability in light of the SONGS outage. HB 3 & 4 ceased operating as generating units on November 1, 2012. HB 3 & 4 were permanently retired from service pursuant to the sale/leaseback agreement, as a condition for commissioning and starting operation of a new power plant within the jurisdiction of the South Coast Air Quality Management District ("SCAQMD"). Pursuant to the permit conditions of the new power plant and the SCAQMD's Rule 1304(a)(2), HB 3 & 4 are no longer able to operate as natural gas generating units without violating applicable air emissions regulations.

iii. ISO's Reliability Designation

Pursuant to Section 41.2 of the ISO tariff, the ISO may at any time, based upon technical analyses of the ISO-controlled grid, designate a generating unit as a RMR Unit. The ISO then enters into an RMR contract with the affected generating unit for the provision of RMR Service pursuant to Section 41.3 of the ISO Tariff, with the rates for such service subject to negotiation between the ISO and the generator. The *pro forma* RMR Agreement was approved by FERC after a long negotiation and settlement among interested stakeholders and the ISO.¹² It is Schedule G to the ISO tariff. The Pro Forma RMR Agreement is modified for application to particular RMR units only as necessary to address the particular

¹¹ In 2007, Williams and Bear Energy LP filed a joint application requesting Commission authorization for Williams to assign certain wholesale power contracts, including the Tolling Agreement, to Bear Energy LP, and then ultimately to its subsidiary, BE CA, LLC. The Commission approved this disposition on July 26, 2007, and the sale was completed on October 25, 2007. See Williams Power Co., Inc., 120 FERC ¶ 62,080 (2007). Less than a year later, JPMorgan Chase & Co. merged with The Bear Stearns Companies Inc. and its public utility subsidiaries, including BE CA, LLC. The merger resulted in each public utility subsidiary of Bear Stearns becoming an indirect, wholly-owned subsidiary of JPMorgan Chase & Co. The Commission approved this merger and disposition on April 28, 2008, and the acquisition was completed on May 29, 2008. See JPMorgan Chase & Co., 123 FERC ¶ 61,088 (2008).

¹² See California Independent System Operator Corp., 87 FERC ¶ 61,250, letter order (May 28, 1999).

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circumstances of a given RMR designation. As described in Section b below, that is the process that the ISO and AES followed here.

The substantial uncertainty surrounding SONGS' return to service required the ISO to reassess its 2013 local reliability analysis under the assumption that SONGS will be unavailable for operation in 2013. As a result, on August 20, 2012, the ISO published an addendum to its 2013 local capacity study to address local reliability needs in the absence of SONGS Units 2 and 3 (Attachment C). The study addendum identified the need for additional voltage support to protect load in the Los Angeles Basin and the San Diego/Imperial Valley local capacity areas. Because of their proximity to SONGS, the addendum identified two projects that together can resolve the voltage support deficiency: 1) the installation by SCE of shunt capacitors at three substations to provide static voltage support, and 2) the conversion of HB 3 & 4 to synchronous condensers to provide dynamic voltage support.

Neither project individually is capable of providing the amount of voltage support required in the absence of the SONGS units. The HB 3 & 4 conversion was determined to be best suited to provide the dynamic voltage support service necessary to avoid load shedding due to its proximity to the SONGS switchyard.¹³ Further, the use of the HB 3 & 4 site and equipment, rather than a new site located in the same local area, permits this project to be brought into service much more quickly than would otherwise be possible, thereby enabling it to meet summer 2013 needs. No other reasonably feasible option was identified to avoid the unprecedented load shedding that is otherwise at risk here.

In a memorandum dated September 7, 2012 (Attachment D), Dr. Keith Casey, the ISO's Vice President of Market & Infrastructure Development, provided a memorandum to the ISO's Board of Governors (the "ISO Board") addressing the implications on ISO grid reliability of the SONGS Units 2 and 3 outages. The memorandum requested that the ISO Board authorize ISO management to enter into an RMR agreement for HB 3 & 4 to provide voltage support for the 2013 contract year, with SCE and SDG&E designated as the Responsible Utilities for purposes of cost recovery.¹⁴

¹³ See Attachment C at 5.

¹⁴ See Attachment D at 2. The memorandum explained that HB 3 & 4 might not be available for generation purposes after November 1, 2012, because of the previously agreed upon transfer of emissions credits from

(Cont'd on following page)

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In response to the memorandum, at its September 13-14, 2012 meeting, the ISO Board approved a motion which, among other matters, authorized ISO management to designate HB 3 & 4 for RMR service, contingent upon execution of an RMR agreement with rates, terms and conditions acceptable to management, as described in the memorandum (Attachment E). Recognizing the critical need for dynamic voltage support in southern Orange County and the San Diego area, the California Energy Commission has expressed its support for the conversion of HB 3 & 4 to synchronous condensers.¹⁵

iv. The Plan for the HB 3 & 4 Synchronous Condensers

In response to the ISO's designation of HB 3 & 4 for RMR service and after reaching an agreement that provides assurance to AES that its costs for the conversion to synchronous condensers will be covered, on October 15, 2012, AESHB's indirect parent company, AES Southland Holdings, LLC ("AESSH"), entered into an agreement with Siemens Energy, Inc. ("Siemens") for the conversion of HB 3 & 4 to synchronous condensers. The Siemens agreement will be transferred from AESSH to AESHB upon receipt of such third party consents or confirmations in connection with its pre-existing contractual arrangements as AESHB determines are required or advisable for it to proceed with the synchronous condenser project, which consents or confirmations are also conditions precedent to the effectiveness of the RMR Agreement pursuant to Section 2.1(a) thereof and described below. Pursuant to this purchase agreement and subject to AESHB's receipt of the above-referenced consents or confirmations, Siemens will manufacture and install two synchronous condensers at the HB 3 & 4 site with a commercial operation date of June 1, 2013. The specifications of the synchronous condensers have been included in Schedule A to the RMR Agreement. As synchronous condensers, HB 3 & 4 will not require a source of combustion to operate. Therefore, no air emissions credits are required.

(Cont'd from preceding page)

AESHB to Edison HB to allow the development of the new Walnut Creek Generating Facility. However, the memorandum further explained that converting HB 3 & 4 to synchronous condensers would permit the units to provide the necessary voltage support. *Id.* at 3.

¹⁵ Letter of Robert P. Oglesby, Executive Director, California Energy Commission, (September 12, 2012) (Attachment F).

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The HB 3 & 4 synchronous condenser project is designed to be a short-term solution to the voltage support deficiencies created by the sustained SONGs outages. To reflect this intent, Schedules A and B to the RMR Agreement include the terms, conditions, and rates that have been agreed upon by the Parties and the Responsible Utilities covering annual periods from 2013-2017. HB 3 & 4 can be available for RMR service for annual periods after 2013 upon CAISO request, and beyond 2017 only by mutual consent.

b. Description of RMR Agreement

i. Modifications to the Pro Forma Agreement

The RMR Agreement is substantially in the form of the *pro forma* Reliability Must-Run Service Agreement found in Appendix G to the ISO's Fifth Replacement Electronic Tariff ("Pro Forma RMR Agreement"). The RMR Agreement differs from the Pro Forma RMR Agreement principally to reflect that HB 3 & 4 will only be capable of providing voltage support, not energy or other types of ancillary services.¹⁶ Certain other provisions have been amended to reflect the terms and conditions agreed upon by the Parties under the Term Sheet Agreement (Attachment G). These amendments are designed to ensure that AESHB is fully and fairly compensated for taking the risks associated with commencing, prior to the submission and approval by FERC of the RMR Agreement, the procurement process for the synchronous condensers that will provide the RMR service so as to enable the synchronous condensers to be installed and operational by June 1, 2013, to meet the local voltage support needs, which are greatest during the summer months. A red-lined comparison between the ISO's Pro Forma RMR Agreement and the RMR Agreement is provided as Attachment B.¹⁷ It reflects the following changes from the ISO's Pro Forma RMR Agreement:

¹⁶ There is no question that synchronous condensers can provide RMR Service. Schedule E and Schedule G clearly provide for voltage support from synchronous condensers. In addition, the Commission has previously allowed synchronous condensers to be subject to the ISO's RMR Agreement. *See e.g., California Independent System Operator Corp.*, 87 FERC ¶ 61,250, letter order (May 28, 1999) (approving the RMR Agreements for many facilities, including Contra Costa Units 4 and 5 which only had synchronous condensers, not generating units, and Hunters Point Unit 1, which had both a combustion turbine and a synchronous condenser). Further, a unit that is only capable of providing voltage support and not energy or other types of ancillary services has also been permitted to provide RMR service in other ISO's. *See e.g., Pittsfield Generating Company, L.P.*, 115 FERC ¶ 61,059 (2006).

¹⁷ Certain provisions of the Pro Forma RMR Agreement dating to the time of its original adoption in 1999 are also removed. They would have no practical applicability to any RMR unit today.

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Article 1

Certain definitions in Article 1 of the Pro Forma RMR Agreement have been revised as needed to make the RMR Agreement applicable to a facility that provides only voltage support, not Energy or other types of ancillary services. In particular:

- Several definitions, including “Availability,” “Delivered Ancillary Services,” “Delivery Point,” “Direct Contract,” “Dispatch Notice,” “Distribution Grid,” “Facility,” “Nonmarket Transaction,” “Reliability Must-Run Unit,” “Repair,” “Requested Ancillary Services,” “Requested Operating Period,” “Service Hours,” “Substitute Unit,” “Synchronized,” “Trading Day,” “Unit,” and “Unit Availability Limit,” have been revised so that they are applicable to a facility that is only capable of providing voltage support, not Energy or other types of ancillary services.
- The definitions of “Deliver,” “Dispatch Notice,” “Maximum Net Dependable Capacity,” definitions have been revised to more accurately illustrate how HB 3 & 4 will be dispatched, operated, and compensated. Further, the term “Maximum Net Dependable Capacity” has been changed to “Maximum Net Dependable MVar Capability” to describe the capabilities of a synchronous condenser.
- The terms “MVar,” “MVarh,” and “Requested MVar” have been added in order to reflect that the facility is capable of producing only MVAr, not MWs.
- The terms “Generating Unit” and “Commercial Operation Date” were previously defined only in the ISO’s Tariff, not in the Pro Forma RMR Agreement. The definitions section of the RMR Agreement has been amended to include the term “Generating Unit,” which is defined as unit that is capable of producing and delivering Ancillary Services, rather than net Energy, and “Commercial Operation Date,” which is defined as the date on which AESHB has declared to the ISO that the Facility is available for continuous operation.
- The term "Non-Applicable" or "N/A" has been added to allow AESHB and the ISO to reflect that certain provisions of the Pro-Forma RMR Agreement are not applicable to the agreement between AESHB and the ISO
- The terms “Summer Months and “Non-Summer Months” have been added in order to capture the agreed-upon payment structure that is shaped to favor the

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summer months when voltage support is expected to be most needed and therefore the availability of HB 3 & 4 is most crucial.

- The term “Synchronous Condenser Transaction” has been added to describe the conversion of HB 3 & 4 to synchronous condensers.

There are many definitions in the Pro Forma RMR Agreement, such as “Billable MWh” and “Hourly Metered Total Net Generation,” that are not applicable to a facility that is only capable of producing voltage support. These definitions have not been revised or removed, as the Parties agreed to only change the provisions of the Pro Forma Agreement necessary to make it applicable to the operation of HB 3 & 4 as synchronous condensers.

Article 2

Section 2.1(a) of the Pro Forma RMR Agreement has been modified to reflect that the effectiveness of the RMR Agreement is contingent upon AESHB receiving such consents or confirmations as are required under the pre-existing contractual arrangements under which AESHB operates HB 3 & 4 and required regulatory approval from the CEC to amend the HB 3 & 4 license for the proposed synchronous condensers. The Parties and the Responsible Utilities have further agreed that FERC approval of the RMR Agreement, including all rates, terms and conditions, in a Final order not subject to appeal is a condition precedent to the RMR Agreement taking effect. These modifications of the Pro Forma RMR Agreement were needed to ensure that AESHB is not forced to act contrary to any existing contractual obligations or outside of the scope of its CEC license. Additionally, FERC approval without modification or condition was a critically important provision to AESHB in its willingness to move forward with procurement of the synchronous condensers prior to approval of the RMR Agreement so that the converted HB 3 & 4 would be available when most needed.

Section 2.1(b) and portions of Section 2.2 and 2.5 of the Pro Forma RMR Agreement have been revised to reflect the Parties’ agreement that, if the local reliability need persists, the ISO may extend the term of the RMR Agreement for both, but not just one, of HB 3 & 4 for Contract Years 2014 through 2016, and for HB 4 only for Contract Year 2017, subject to the terms, conditions, and rates that have been included in Schedules A and B for those future Contract Years for each Unit. Any extension beyond those years must be by mutual consent of the parties.

Section 2.5(a) of the Pro Forma RMR Agreement has been modified to allow AESHB to send the ISO a notice stating the date on which HB 3 & 4 will be Closed and the amount of Termination Fee due to AESHB prior to when the Unit is Closed, but after AESHB has received notice from the ISO that the term of the RMR Agreement will not be extended for the subsequent Contract Year.

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Section 2.5(a) and (c) reflect the agreement that the termination fee will be payable over 12 months rather than 36 months.

Section 2.5(b) has been modified to reflect the method agreed to by the Parties for determining the termination fee.

Article 3

Section 3.1 of the Pro Forma RMR Agreement has been revised to clarify that, as a Condition 2 Unit providing only voltage support, HB 3 & 4 will not participate in Market Transactions. This change has been incorporated throughout the RMR Agreement as needed. In addition, other sections of the Pro Forma RMR Agreement, such as Section 4.9(iv) and Section 5.2, have been revised or designated as “not applicable” to reflect that HB 3 & 4 will not participate in Market Transactions.

Article 4

Sections 4.7(e) and 4.10 of the Pro Forma RMR Agreement have been revised to reflect that, unlike a unit capable of producing Energy that is dispatched, operated, and compensated in accordance with the amount of MWs produced, the HB 3 & 4 synchronous condensers will be dispatched, operated, and compensated on the basis of Service Hours.

Section 4.11(a) of the Pro Forma RMR Agreement has been modified to clarify that the Contract Service Limits and payments for each year after the initial Contract Year shall be the values listed in Schedules A and B for the applicable future Contract Year. These Contract Service Limits and payments were agreed to by the Parties and the Responsible Utilities under the Term Sheet Agreement, and will therefore not be calculated in the manner described in Section 4.11(a) of the Pro Forma RMR Agreement.

Article 7

Sections 7.4(c) and (d) of the Pro Forma RMR Agreement have been amended to clarify that the Schedule L-1 for Capital Items for the 2013 Contract Year that is included with this filing has been approved by the ISO.

Section 7.5 has been modified to approve recovery of the unrecovered upfront costs that AESHB and its affiliates have incurred in connection with the implementation of the synchronous condensers up to an aggregate maximum of \$875,000. Further, Section 7.9(a) has been amended to clarify that the Responsible Utilities have approved AESHB's recovery of the Capital Items and unrecovered upfront costs for the 2013 Contract Year.

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Article 8

Section 8.6 of the Pro Forma RMR Agreement has been revised to ensure that AESHB will not be subject to additional costs during the 2013 Contract Year if it is able to complete the synchronous condenser construction in a shorter period of time than currently anticipated.

Article 9

Section 9.4 of the Pro Forma RMR Agreement has been revised to clarify that two utilities will be severally liable for the “Responsible Utility” obligations, SCE (80%) and SDG&E (20%).

Article 11

Section 11.4(b) of the Pro Forma RMR Agreement has been revised to delete the last sentence dealing with certain payments in the event of termination for default to make the provision consistent with the agreement of the Parties and the Responsible Utilities.

Article 14

Section 14.4 and the related Schedules B(7)–(8) of the Pro Forma RMR Agreement have been modified to reflect the Parties’ agreement under the Term Sheet Agreement that, if the ISO extends the term of the RMR Agreement for subsequent Contract Years, the rates contained in Schedule B for each of the subsequent Contract Years will govern and will not be modified absent agreement from the Parties and the Responsible Utilities.

Section 14.10 of the Pro Forma RMR Agreement has been modified to clarify that the ISO’s tariff provisions applicable to generating units will apply to the HB 3 & 4 except where the context makes them clearly inapplicable to synchronous condensers.

Schedules to the RMR Agreement

A small number of changes have been made to the Schedules to the Pro Forma RMR Agreement to reflect the changes that have been made to the body of the RMR Agreement and the agreed-upon Capital Item and unrecovered upfront cost reimbursements, as described in Article 7 and the Schedule L-1 accompanying this filing.

ii. RMR Service and Rates, Terms, and Conditions

The RMR Agreement establishes the rates, terms, and conditions under which AESHB will provide RMR Service to the ISO beginning on June 1, 2013, when installation of the synchronous condensers is expected to be completed. This RMR Service will be for voltage

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support only and is consistent with the service described in the Pro Forma RMR Agreement for a Condition 2 unit. As described in the recitals to the RMR Agreement, the agreement will provide the ISO the ability to dispatch HB 3 & 4 to provide voltage support when required by the ISO for local reliability.

The RMR Agreement provides that the ISO will make fixed payments to AESHB for such RMR Service, based on an Annual Fixed Revenue Requirement ("AFRR") in the amounts specified in Schedule B, Table B-6 to the RMR Agreement. These fixed payments may be lower if AESHB is unable to meet the availability target specified in Schedule B, Table B-5, but will in no event be more than the amounts specified in Schedule B, Table B-6. The Parties have further agreed that the payment of the AFRR will be "shaped" to favor the summer months, when the synchronous condensers are most needed. This AFRR was not calculated in accordance with Schedule F of the Pro Forma RMR Agreement. Rather, the AFRR is based on the values that were negotiated by AESHB, the ISO, and the Responsible Utilities, which ultimately resulted in the execution of the Term Sheet Agreement in a manner that all parties believe is just and reasonable and that allows AESHB to recover its costs incurred to purchase and operate the synchronous condensers. As a result, the Commission should approve the RMR Agreement without modification.

iii. Term and Termination

The Parties seek approval of the RMR Agreement for HB 3 & 4 for a term of one Contract Year, subject to satisfaction of the conditions precedent included in Section 2.1(a) of the RMR Agreement and described above. The Agreement is subject to extension for additional Contract Years under the terms set out in Section 2.1(b) of the Agreement.

c. Requested Effective Date, Subject to Conditions Precedent and Waiver of 60-Day Notice Requirement

Pursuant to 18 C.F.R. § 35.3, the Parties request an effective date for the RMR Agreement, with all accompanying rates schedules, of the later of January 1, 2013, or the date on which the conditions precedent that have been agreed to by AES, the ISO, SCE and SDG&E have been satisfied, as set forth in Section 2.1(a) of the RMR Agreement and described above.

Pursuant to 18 CFR § 35.11, the Parties respectfully request that the Commission grant waiver of the sixty (60) day prior notice requirement to permit an effective date for the RMR Agreement of January 1, 2013, subject to satisfaction of the conditions precedent described above. The grant of a waiver is in the public interest because, assuming the

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conditions precedent are satisfied, it will allow AES to proceed expeditiously with work on the synchronous condenser conversion project so as to assure availability of the needed voltage support by the beginning of the summer, when it is most needed.

IV. Request for Waiver of the Commission's Part 35 Filing Requirements

The Parties respectfully request that the Commission grant a waiver of all remaining filing requirements under Part 35 of the Commission's regulations, including the information required by 18 CFR § 35.12(b) (2012). The rates, terms, and conditions contained in the RMR Agreement arose out of lengthy negotiations between AESHB, ISO, SCE, and SDG&E, that ultimately resulted in the execution of the Term Sheet Agreement. The Commission previously has waived Part 35 filing requirements with respect to the filing of RMR Agreements.¹⁸ Accordingly, the Commission should waive any remaining filing requirements of Part 35 of its regulations, including Section 35.12(b), and accept the RMR Agreement for filing effective as requested above.

V. Conclusion

For all the foregoing reasons, the modified RMR Agreement and the accompanying rates schedules should be approved by the Commission, without modification, and subject only to the conditions precedent agreed to by the Parties and the Responsible Utilities as described above and as set forth in Section 2.1 of the RMR Agreement.

¹⁸ See, e.g., NEO California Power, LLC, Docket No. ER03-1010-000, letter order (Aug. 2, 2003); Reliant Energy Etiwanda, Inc., Docket Nos. ER04-959-000 and ER05-959-001, letter order (July 23, 2004); and San Diego Gas & Electric Co., Docket No. ER06-577-000, letter order (Mar. 16, 2006).

CHADBOURNE
& PARKE LLP

Kimberly D. Bose

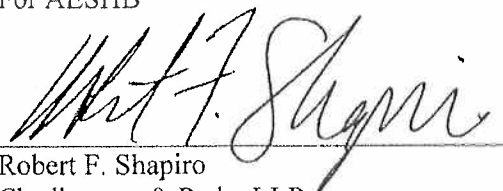
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November 9, 2012

A copy of this filing is being served upon the CPUC, SCE, and SDG&E.

Respectfully submitted,

For AESHB



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ATTACHMENT A

**RMR Agreement between AES Huntington Beach,
L.L.C. and ISO (AES Rate Schedule FERC No. 2) –
Clean Version**

AES Huntington Beach, L.L.C.
Rate Schedule FERC No. 2

**CALIFORNIA INDEPENDENT SYSTEM
OPERATOR CORPORATION**

AND

AES HUNTINGTON BEACH, L.L.C.

MUST-RUN SERVICE AGREEMENT

MUST-RUN SERVICE AGREEMENT

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MUST-RUN SERVICE AGREEMENT

THIS MUST-RUN SERVICE AGREEMENT is made as of the 8th day of November, 2012, between AES Huntington Beach, L.L.C., a limited liability company organized under the laws of the State of Delaware (the "Owner"), and the CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION, a nonprofit public benefit corporation incorporated under the laws of the State of California (the "CAISO").

RECITALS

- A. Owner is the owner or lessee of, or is otherwise entitled to dispatch the Ancillary Services produced from and provided by, the Units located at the Facility described in Schedule A to this Agreement;
- B. Under Section 345 of the California Public Utilities Code, CAISO is responsible for the efficient use and reliable operation of the CAISO Controlled Grid;
- C. CAISO has determined that it needs the ability to dispatch Units under the terms and conditions of this Agreement to have Owner provide Ancillary Services to the CAISO Controlled Grid when required by CAISO to ensure the reliability of the CAISO Controlled Grid; and
- D. Each Unit covered by this Agreement has been designated as a Reliability Must-Run Unit.

In consideration of the covenants and agreements contained in this Agreement, the Parties agree as follows:

ARTICLE 1 DEFINITIONS

Terms, when used with initial capitalization in this Agreement and the attached schedules shall have the meanings set out below. The singular shall include the plural and vice versa. "Includes" or "including" shall mean "including without limitation." References to a section, article or schedule shall mean a section, article or schedule of this Agreement, unless another agreement or instrument is specified. Unless the context otherwise requires, references to any law shall be deemed references to such law as amended, replaced or restated from time to time. Unless the context otherwise requires, any reference to a "person" includes any individual, partnership, firm, company, corporation, joint venture, trust, association, organization or other entity, in each case whether or not having separate legal identity. References to "Owner" or "CAISO" shall, unless the context otherwise requires, mean Owner and CAISO respectively and their permitted assigns and successors. References to sections or

provisions of the CAISO Tariff include any succeeding sections or provisions of the CAISO Tariff.

“Adjusted RMR Invoice” is defined in Section 9.1(b).

“ADR” means alternative dispute resolution pursuant to Section 11.1 and Schedule K.

“Agreement” means this Must-Run Service Agreement, including schedules, as amended from time to time.

“Ancillary Services” means those ancillary services identified in Schedule E.

“Applicable UDC Tariff” means the applicable retail tariff(s), of the utility distribution company in whose service territory the Unit is located, under which the Unit is eligible to purchase power to meet its auxiliary power requirements, whether or not the Unit actually purchases auxiliary power under the tariff(s). The Applicable UDC Tariff for the Facility is set out on Schedule A.

“Availability” means, in relation to a Unit, the maximum quantity of Ancillary Services, measured at the Delivery Point, the Unit is capable of producing at any given time assuming adequate time to ramp the Unit to that maximum quantity. For hydroelectric Units, Availability measures the extent to which the Unit is capable of producing Energy or providing Ancillary Services, given sufficient usable water to produce Energy or provide Ancillary Services. The Availability of a Unit is measured by the capability of Delivering MVAR.

“Availability Deficiency Factor” is calculated as set forth in Section 8.5.

“Availability Payment” means the payment to Owner described in Section 8.1 for Condition 1 and 8.2 for Condition 2.

“Availability Test” means a test of a Unit’s Availability requested by CAISO or Owner pursuant to Section 4.9(a).

“Bid Sufficiency Test” means the test described in Section 4.1(c).

“Billable MWh” is defined in Section 8.3(a).

“Billing Month” is defined in Section 9.1(b).

“Black Start” means the ability of a Unit to start without an external source of electricity or the process of doing so.

“Business Day” means any of Monday through Friday, excluding any day which is a Federal bank holiday.

“CAISO Availability Notice” means a notice given by CAISO to Owner modifying the Availability of the Unit under Section 4.9 (a)(vi) or Section 5.4 (b).

“CAISO Controlled Grid” is defined in Appendix A to the CAISO Tariff.

“CAISO Invoice” is defined in Section 9.1(b).

“CAISO’s Repair Share” is defined in Section 7.5 (g).

“CAISO Settlements Calendar” is defined in Section 9.1(b).

“CAISO Tariff” means the California Independent System Operator Tariff on file with FERC and in effect from time to time.

“California Agency” means the agency or agencies responsible for representing the State of California in FERC proceedings involving the rates, terms and conditions of service under this Agreement.

“Capital Item” means an addition or modification to, change in or repair, replacement or renewal of plant, equipment or facilities used by Owner to fulfill Owner’s obligations under this Agreement. A Capital Item does not include Repairs to such plant, equipment or facilities. A Capital Item does not include an Upgrade, unless recovery of costs of the Upgrade has been approved by CAISO. For purposes of this Agreement, Capital Items are “retirement units” or other items the costs of which are properly capitalized in accordance with the FERC Uniform System of Accounts, 18 C.F.R. Part 101.

“Closed” is defined in Section 2.5.

“Collateral” is defined in Section 9.7.

“Commercial Operations Date” means the date on which the Owner has declared to CAISO that the Facility is available for continuous operation.

“Comparable RMR Unit” is defined in Section 4.7 (f).

“Competitive Constraint Run” is defined in Appendix A to the CAISO Tariff.

“Condition 1” means the terms of this Agreement applicable to a Unit providing service under Condition 1 as described in Section 3.1.

“Condition 2” means the terms of this Agreement applicable to a Unit providing service under Condition 2 as described in Section 3.1.

“Confidential Information” is defined in Section 12.5.

“Contract Service Limits” for a given Unit means the Maximum Annual MWh, Maximum Annual Service Hours, Maximum Annual Start-ups, and, if applicable, the Maximum Monthly MWh as stated in Section 12 of Schedule A.

“Contract Year” means a calendar year; provided, however, that the initial Contract Year shall commence on the Effective Date and expire at the end of the calendar year in which the Effective Date occurred. If the Agreement terminates during a calendar year, the last Contract Year shall end on the termination date.

“Counted MWh” is defined in Section 5.3.

“Counted Service Hours” is defined in Section 5.3.

“Counted Start-ups” is defined in Section 5.3.

“Credit Carryforward” is defined in Section 9.1(e) and Section 9.1(f).

“Day Ahead Schedule” is defined in Appendix A to the CAISO Tariff.

“Deliver” means to provide Ancillary Services pursuant to a Dispatch Notice and the terms “Delivered” and “Delivering” shall be construed accordingly.

“Delivered Ancillary Services” means the type and, if applicable, the MVA of Ancillary Services Delivered by Owner.

“Delivered MWh” means the MWh of Energy Delivered by Owner and shall be equal to the sum of Billable MWh, Hybrid MWh, MWh deemed Delivered under Section 5.1 (f); and MWh Delivered from Substitute Units under Section 5.1 (c) or Section 5.1 (d).

“Delivery Point” means the point identified in Section 4 of Schedule A where Ancillary Services are to be Delivered.

“Direct Contract” means a contract between Owner and one or more identified persons for the sale of Ancillary Services other than under this Agreement, and shall in no event include a transaction in a market run by CAISO.

“Dispatch Notice” means a notice delivered by CAISO to Owner’s Scheduling Coordinator on a daily, hourly or real-time basis requesting dispatch of one or more Unit(s) to provide Ancillary Services under this Agreement. Dispatch Notices include: (a) Day-Ahead Schedules and Real-Time Dispatches where the RMR Unit or Units are flagged as RMR Dispatches as a result of the Market-Power Mitigation and Reliability Requirements Determination processes pursuant to the CAISO Tariff, (b) Manual RMR Dispatch Notices, and (c) Test Dispatch Notices given by CAISO under Section 4.9 other than Test Dispatch Notices issued at Owner’s request to test Availability or heat input of the Unit.

“Distribution Grid” means the radial lines, distribution lines and other facilities used to transmit or distribute Ancillary Services from the Facility other than the CAISO Controlled Grid.

“Due Date” means the date which is the 30th day after the date on which a Party submits an invoice to the other Party. Notwithstanding the above, the Due Dates for the Revised Estimated RMR Invoice, the Revised Adjusted RMR Invoice, and the CAISO Invoice shall be as specified in Section 9.1(b). If the 30th day, or other Due Date as specified in Section 9.1(b), is not a Business Day, the Due Date shall be the next Business Day.

“Effective Date” means the date this Agreement becomes effective pursuant to Section 2.1 thereof.

“Energy” means electrical energy.

“Estimated RMR Invoice” is defined in Section 9.1(b).

“Existing Contractual Limitation” means a contractual limitation on the Start-up or operation of a Unit existing prior to the date the Unit was designated as a

Reliability Must-Run Unit. All Existing Contractual Limitations are described in Section 14 of Schedule A.

“Facility” means the facility described in Schedule A. A hydroelectric facility may include one or more electric generating facilities which are hydraulically linked by a common water system.

“Facility Trust Account” is defined in Section 9.2.

“FERC” means the Federal Energy Regulatory Commission, any successor agency, or any other agency to whom authority under the Federal Power Act affecting this Agreement has been delegated.

“Final Invoice” is defined in Section 9.10(a).

“Financing Agreement” means agreements for financing the Facility or any portion of the Facility.

“Fixed Option Payment Factor” is set forth in Section 2 of Schedule B.

“Force Majeure Event” means any occurrence beyond the reasonable control of a Party which causes the Party to be unable to perform an obligation under this Agreement in whole or in part and which could not have been avoided by the exercise of Good Industry Practice. Force Majeure Event includes an act of God, war, civil disturbance, riot, strike or other labor dispute, acts or failures to act of Governmental Authority, fire, explosion, flood, earthquake, storm, drought, lightning and other natural catastrophes. A Force Majeure Event shall not include lack of finances or the price of fossil fuel.

“Forced Outage” means a reduction in Availability of a Unit for which sufficient notice is not given to allow the outage to be factored into CAISO’s day-ahead or hour-head scheduling process.

“Generating Unit” means an individual generator and its associated plant and apparatus whose output is capable of being separately identified and metered or a Physical Scheduling Plant that, in either case, is: (a) located within the CAISO Balancing Authority Area (which includes a Pseudo-Tie of a generating unit to the CAISO Balancing Authority Area); (b) connected to the CAISO Controlled Grid, either directly or via interconnected transmission, or distribution facilities or via a Pseudo-Tie; and (c) capable of producing and delivering Ancillary Services.

“Good Industry Practice” means any of the practices, methods, and acts engaged in or approved by a significant portion of the electric power industry during the relevant time period, or any of the practices, methods, and acts which, in the exercise of reasonable judgment in the light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Industry Practice does not require use of the optimum practice, method, or act, but only requires use of practices, methods, or acts generally accepted in the region covered by the Western Systems Coordinating Council.

“Governmental Authority” means the government of any nation, any state or other political subdivision thereof, including any entity exercising executive, legislative, judicial, regulatory or administrative functions of or pertaining to a government.

“Hourly Metered Total Net Generation” means the electric generation in MWh for the Unit in any Settlement Period as measured by the Unit’s electrical meter described in Schedule A, Section 5, “Metering and Related Arrangements”, minus any auxiliary loads metered on the load side of such electrical meter for that Settlement Period in accordance with the CAISO Tariff.

“Hybrid MWh” is defined in Section 8.3(b).

“Hydroelectric Dependable Capacity” is the amount of MWh forecast to be produced by a hydroelectric Facility in an adverse hydrologic year.

“Interest Rate” means the lesser of the rate of interest per annum calculated in accordance with 18 C.F.R. 35.19a of the FERC’s Regulations or the maximum rate permitted by law.

“Local Capacity Area” is defined in Appendix A to the CAISO Tariff.

“Long-term Planned Outage” means a planned interruption, in whole or in part, in the output of a Unit to permit Owner to perform a major equipment overhaul and inspection or for new construction work but only if the outage is scheduled to last 21 consecutive days or more (which may span more than one Contract Year) and either (a) is scheduled in accordance with the CAISO’s outage coordination protocol prior to the beginning of the Contract Year or (b) was scheduled as a Long-term Planned Outage for the last quarter of the expiring Contract Year but, with approval of the CAISO Outage Coordination Office, was postponed and rescheduled into the new Contract Year.

“Manual RMR Dispatch Notice” is a Dispatch Notice issued other than as a result of the Market Power Mitigation and Reliability Requirements Determination process as described in the CAISO Tariff.

“Market Power Mitigation and Reliability Requirements Determination” or **“MPM-RRD”** is as defined in the CAISO Tariff.

“Market Schedule” is defined in Section 8.3(c)(i)(C).

“Market Transaction” means a delivery of Energy or provision of Ancillary Services from a Unit pursuant to a Direct Contract or bids into markets run by the, CAISO or any similar entity.

“Maximum Annual MWh” means, for each Unit, the maximum MWh of Energy that Owner may be obligated to Deliver from the Unit in each Contract Year without becoming entitled to charges for excess service under Schedule G. The Maximum Annual MWh for each Unit is set out in Section 12 of Schedule A. The rules for counting MWh are set out in Section 5.3.

“Maximum Annual Service Hours” means, for each Unit, the maximum Service Hours that Owner may be obligated to provide service from the Unit in each Contract Year without becoming entitled to charges for excess service under Schedule G. The Maximum Annual Service Hours for each Unit is set out in Section 12 of Schedule A. The rules for counting Service Hours are set out in Section 5.3.

“Maximum Annual Start-ups” means, for each Unit, the maximum number of times Owner may be obligated to Start-up the Unit in each Contract Year without becoming entitled to charges for Start-ups under Schedule G. The Maximum Annual Start-ups for each Unit is set out in Section 12 of Schedule A. The rules for counting Start-ups are set out in Section 5.3.

“Maximum Monthly MWh” means, for each hydroelectric Unit, the maximum MWh of Energy that Owner may be obligated to Deliver from the Unit without becoming entitled to charges for excess service under Schedule G. The Maximum Monthly MWh for each hydroelectric Unit is set out in Section 12 of Schedule A. The rules for counting MWh are set out in Section 5.3.

“Maximum Net Dependable MVar Capability” means the amount shown in Section 1 of Schedule A as the Maximum Net Dependable MVar Capability of a Unit.

“Minimum Load” means, for each Unit, the higher of (1) the lowest level in MW at which the Unit can maintain stable continuous operations, or (2) the Minimum Load for the Unit as shown in Section 9 of Schedule A.

“Minimum Off Time” means, for each Unit, the minimum time following Shutdown that the Unit must remain off line before initiation of the next Start-up. The Minimum Off Time for each Unit is shown in Section 11 of Schedule A.

“Minimum Run Time” means, for each Unit, the minimum time the Unit must remain Synchronized following Start-up. The Minimum Run Time for each Unit is shown in Section 10 of Schedule A.

“Month” means a calendar month.

“Monthly Option Payment” is defined in Section 8.1(a) for Condition 1 and Section 8.2(a) for Condition 2.

“Motoring Charge” means the payment in accordance with Schedule E for the Energy required to spin a generator or condenser that is electrically connected to the CAISO Controlled Grid or Distribution Grid to provide Ancillary Services in circumstances where the generator is not producing Energy.

“MVA_r” means one megavar.

“MVA_rh” means one megavar hour.

“MW” means one megawatt.

“MWh” means one megawatt hour.

“Net Repair Costs” is defined in Section 7.5(a).

“New Responsible Utility” is defined in Section 9.4 (f).

“Nonmarket Transaction” means a Delivery of Ancillary Services from a Unit pursuant to a Dispatch Notice.

“Non-Performance Penalty” means a penalty computed pursuant to Section 8.5.

“Non-Summer Months” means other months in the Contract Year not defined as Summer Months.

“Not Applicable” or **“N/A”** means that the relevant provision to which the term "Not Applicable" or "N/A" is mentioned is not applicable to this Agreement.

“Other Outage” means any reduction in the Availability of a Unit as reflected in an CAISO Availability Notice or Owner’s Availability Notice (whether characterized by the North American Electric Reliability Council (“NERC”) as a “forced outage”, “planned outage” or “maintenance outage”) other than a Long-term Planned Outage.

“Owner’s Availability Notice” means a notice given under Section 4.9(a)(vii) or Section 7.3(b) by Owner to CAISO notifying CAISO of the Availability of a Unit.

“Owner’s Repair Cost Obligation” is an allowance for Repairs to be made during the Contract Year calculated pursuant to Section 7.5 (k). Owner’s Repair Cost Obligation is set out in Section 13 of Schedule A.

“Party” means either CAISO or Owner, and “Parties” means CAISO and Owner.

“Penalty Period” is defined in Section 8.5 (a).

“Pre-empted Dispatch Payment” is defined in Schedule E.

“Prepaid Start-ups” is defined in Section 8.4.

“Prepaid Start-up Charge” means the payment to Owner for Prepaid Start-ups described in Section 8.1.

“Prepaid Start-up Cost” is defined in Schedule D.

“Prior Period Change(s)” is defined in Section 9.1(g).

“Prior Period Change Examples” is defined in Section 9.1(l).

“Prior Period Change Guidelines” is defined in Section 9.1(l).

“Prior Period Change Worksheet” is defined in Section 9.1(g).

“Ramp Rate” is the applicable Ramp Rate as stated in Section 8 of Schedule A.

“Ramping Constraint” means the limits on ramping a Unit to higher or lower output as set out in Section 7 of Schedule A.

“Real-Time Dispatch” is defined in Appendix A of the CAISO Tariff.

“Recalculation Settlement Statement” is defined in Appendix A of the CAISO Tariff.

“Reliability Must-Run Unit” means a “reliability must-run unit” as defined in Appendix A of the CAISO Tariff, as modified by the definition of Generating Unit in Article 1 of this Agreement.

“Repair” means repairs or replacement required to remedy or prevent any loss or damage that impairs the capability of the Unit to Deliver Ancillary Services, the cost of which is properly treated as an expense in accordance with the FERC Uniform System of Accounts, 18 C.F.R. Part 101.

“Repair Payment Factor” is determined pursuant to Section 7.5(g).

“Requested Ancillary Services” means the Ancillary Services CAISO requests Owner to Deliver from a Unit pursuant to a Dispatch Notice.

“Requested MW” means the MW of Energy CAISO requests Owner to Deliver pursuant to a Dispatch Notice.

“Requested MWh” means the product of the Requested MW of Energy and the time in hours (or fraction thereof) during which the Dispatch Notice requested Delivery of the Requested MW. This includes ramping energy calculated pursuant to the CAISO Tariff.

“Requested MVar” means the MVar of Ancillary Services CAISO requests Owner to Deliver pursuant to a Dispatch Notice.

“Requested Operation Period” means the time during which CAISO requests that a Unit Deliver Ancillary Services pursuant to a Dispatch Notice.

“Response Notice” is defined in Section 14.3(b)(ii).

“Responsible Utility” is an entity which, under the CAISO Tariff, is responsible for paying all or part of the costs incurred by CAISO under this Agreement.

“Responsible Utility Facility Trust Account” is defined in Section 9.2.

“Revised Adjusted RMR Invoice” is defined in Section 9.1(b).

“Revised Estimated RMR Invoice” is defined in Section 9.1(b).

“RMR Dispatch” is as defined in Appendix A of the CAISO Tariff.

“RMR Invoices” means the four invoices issued each Billing Month by Owner to CAISO pursuant to Section 9.1 for payment of charges under this Agreement. The four invoices are the Estimated RMR Invoice, Revised Estimated RMR Invoice, Adjusted RMR Invoice, and Revised Adjusted RMR Invoice.

“RMR Invoice Template” is defined in Section 9.1(d).

“RMR Owner Facility Trust Account” is defined in Section 9.2.

“RMR Payments Calendar” means the calendar issued by CAISO pursuant to Section 11.13 of the CAISO Tariff.

“Scheduling Coordinator” means an entity certified by CAISO for the purposes of undertaking the functions specified in Section 4.5 of the CAISO Tariff with respect to a unit.

“Scheduling Coordinator Revenues” is defined in Section 9.1(f).

“Service Hours” means the amount of time (measured in hours or fractions thereof) a Unit is Delivering Ancillary Services pursuant to a Dispatch Notice.

“Settlement Period” means the period beginning at the start of the hour and ending at the end of the hour.

“Shutdown” means the condition of a Unit when it is not Synchronized and not in Start-up.

“Small Project Estimate” is defined in Section 7.4 (b).

“Start-up” means the action of bringing a Unit from Shutdown to Minimum Load and the terms “Starts-up”, “Started-up” and “Starting-up” shall be construed accordingly.

“Start-up Lead Time” means, for each Unit, the amount of time required to Start-up the Unit, as shown in Section 6 of Schedule A.

“Start-up Payment” is defined in Schedule D.

“Substitute Unit” means a Generating Unit or combination of units, other than the Unit identified in the Dispatch Notice (whether or not located at the Facility, whether or not designated as a Reliability Must-Run Unit and whether or not owned by Owner), which, under the circumstances existing at the time, is capable of providing system reliability benefits equivalent to the system reliability benefits provided by the Unit identified in the Dispatch Notice. In the case of Units providing Ancillary Services, a Substitute Unit must (i) be certified to provide the requested type of Ancillary Service, (ii) provide the same or higher MVA_r of Ancillary Services and, (iii) is located in the same Local Capacity Area as the Unit identified in the Dispatch Notice.

“Summer Months” means July, August, and September for the Contract Year 2013, while for the remaining Contract Years means June, July, August, and September.

“Surcharge Payment” means the payment to Owner for Capital Items described in Section 8.1 for Condition 1 and Section 8.2 for Condition 2.

“Surcharge Payment Factor” means the percentage of the cost of a Capital Item that CAISO is obligated to pay.

“Synchronized” means the condition where a Unit is electrically connected to and capable of delivering Ancillary Services to the CAISO Controlled Grid or Distribution Grid.

“Synchronous Condenser Transaction” means the conversion of Huntington Beach Units #3 & 4 to synchronous condensers, including the development, procurement, construction, and operation under this Agreement of such synchronous condensers.

“Termination Fee” means amounts determined pursuant to the termination fee formula contained in Section 2.5(b).

“Termination Fee Invoice” is defined in Section 9.9(a).

“Test Dispatch Notice” means a notice issued to test a Unit pursuant to Section 4.9.

“Trading Day” means the day on which Ancillary Services are to be Delivered.

“Unit” means an individual Generating Unit which has been designated a Reliability Must-Run Unit and is part of the Facility identified in Schedule A.

“Unit Availability Limit” means for any hour the maximum MVA_r which Owner is obligated to make available to CAISO from a Unit. The Unit Availability Limit shall be the lower of (a) the Maximum Net Dependable MVA_r Capability of the Unit or (b) the Availability of the Unit as stated in the currently effective Owner’s Availability Notice or CAISO Availability Notice.

“Unplanned Capital Item Notice” is defined in Section 7.6(b).

“Unplanned Repair Notice” is defined in Section 7.5(b).

“Upgrade” means any change or modification to the Facility that increases the nameplate capacity rating of an existing Unit or adds a new unit.

“Variable Cost Payment” means the payment to Owner for Billable MWh described in Schedule C.

ARTICLE 2 TERM

2.1 Term

- (a) This Agreement shall become effective on the latest to occur of (1) January 1, 2013, (2) the date it is permitted to become effective by FERC, or (3) the satisfaction of the following conditions precedent as set forth in this Section 2.1(a) on or before the applicable date set forth in each such condition precedent, as such dates may be extended as provided in Schedule B, in each case on terms and conditions acceptable to Owner in its reasonable discretion:
- (i) Receipt, on or before June 1, 2013, of approval of this Agreement by FERC in a final and non-appealable order on the same terms and conditions contained in this Agreement as filed with FERC;
 - (ii) Receipt, on or before January 7, 2013, of approval of such amendments to California Energy Commission license relating to Huntington Beach Units #3&4 as are required for the proposed Synchronous Condenser Transaction to be constructed by Owner;
 - (iii) Receipt, on or before January 7, 2013, of such consent, confirmation or other acknowledgment as may be required from BE CA LLC ("BE CA") under the existing agreements between Owner and BE CA, to the effect that:
 - (x) while reserving on any determination as to whether Owner's participation in the Synchronous Condenser Transaction requires any consent or waiver by BE CA under such contractual agreements between BE CA and Owner, BE CA agrees that it will not claim that any such participation constitutes a breach or violation of any such contractual arrangement, or
 - (y) BE CA confirms that its consent or waiver is not required under such contractual agreements between BE CA and Owner in connection with or as a result of Owner's participation in the Synchronous Condenser Transaction, or
 - (z) BE CA consents to Owner's participation in the Synchronous Condenser Transaction for all purposes of such contractual agreements between BE CA and Owner;
 - (iv) Receipt, on or before February 1, 2013, of consent to this Agreement by the lenders under that certain Credit Agreement dated as of May 15, 1998 (as amended, the "Credit Agreement"), among AES Southland, L.L.C., AES Alamitos, L.L.C., AES Huntington Beach, L.L.C. and AES Redondo Beach, L.L.C.

(collectively, the "AES Parties"), certain lenders and issuing banks named therein, Credit Suisse, New York Branch, as Agent and Collateral Agent, and Credit Suisse, New York Branch, as Securities Intermediary and Depositary Bank;

- (v) Receipt, on or before January 7, 2013, of consent to the Synchronous Condenser Transaction by Edison Mission Huntington Beach, LLC in respect of its existing lease arrangements in respect of certain components of Huntington Beach Units #3&4, and any amendment to such lease agreement as may be required to implement the same; and
- (vi) Receipt, on or before February 1, 2013, of confirmation from Owner to CAISO that each of the conditions precedent set forth in clauses (iii), (iv) and (v) of this Section 2.1(a) have been satisfied on terms and conditions that provide Owner with assurances that Owner's participation in this Synchronous Condenser Transaction will not subject such Owner or its affiliates to an unacceptable risk of claims under any existing contractual arrangements;

provided, however, that for the avoidance of doubt, if any of the above-specified conditions precedent shall not have been satisfied to the satisfaction of Owner in its reasonable discretion on or before the applicable date for such condition precedent as set forth therein, as such dates may be extended as provided in Schedule B, this Agreement shall terminate and be of no further force and effect.

- (b) Once effective, this Agreement shall continue in effect for one Contract Year.
- (c) CAISO may extend the term of this Agreement for an additional calendar year as to all Units only for Contract Years 2014 through 2016, or for Unit 4 in Contract Year 2017, by notice given not later than October 1 of the expiring Contract Year, subject to the terms set forth in the attached Schedules for those future Contract Years for each Unit. CAISO may extend the term for less than a full calendar year to all Units only for Contract Years 2014 through 2016 or for Unit 4 in Contract Year 2017 only by mutual agreement. For years following Contract Year 2017, designation of the Units as Reliability Must-Run Units may occur only by mutual agreement.

2.2 Termination

- (a) Subject to any necessary authorization from FERC, this Agreement may be terminated as to all Units only for Contract Years 2013 through 2016, or for Unit 4 in Contract Year 2017, in accordance with this Section 2.2; provided, however, that if this Agreement applies to a Facility having hydroelectric Unit, this Agreement may be terminated only as to all hydroelectric Units at the Facility. If this Agreement terminates as to fewer than all Units, the Agreement shall remain in effect as to the remaining Units. If this Agreement terminates as to all Units, the Agreement shall terminate.

- (b) This Agreement may be terminated as to all Units only for Contract Years 2013 through 2016 or for Unit 4 in Contract Year 2017:
- (i) by CAISO pursuant to Section 11.4 in the event of default by Owner;
 - (ii) by Owner pursuant to Section 11.4 in the event of default by CAISO;
 - (iii) by Owner pursuant to Section 7.4 (f), 7.5 (i) or 7.6 (h);
 - (iv) by Owner or CAISO, if the Unit is condemned by a Governmental Authority; or
 - (v) by Owner or CAISO, if Owner's authorization from a Governmental Authority (including, where applicable, licenses under Part I of the Federal Power Act) that is necessary to site, operate or obtain access to such Unit is terminated or expires or is reissued or modified so that it becomes illegal, uneconomical or otherwise impractical for the Owner to continue operating the Facility. Owner shall be obligated to use its best efforts to renew and keep effective its licenses and authorizations and to oppose conditions or modifications which would make continued operation illegal, uneconomical or otherwise impractical.
- (c) To the extent that Owner transfers the right to control the dispatch of the Facility or Unit which right is necessary to satisfy its obligations under this Agreement, Owner shall assign this Agreement to the transferee in accordance with Section 13.1.
- (d) If CAISO terminates the Agreement or does not extend the term of the Agreement, CAISO shall not redesignate the same Units, or designate another non-reliability must-run unit at the same Facility, as a Reliability Must-Run Unit during the one year period following termination or expiration of the Agreement unless (i) CAISO demonstrates that the unit is required to maintain the reliability of the CAISO Controlled Grid or any portion thereof and the need to designate the unit as a Reliability Must-Run Unit is caused by an extended outage of a generation or transmission facility not known to CAISO at the time of the termination or expiration or (ii) the unit is selected through an CAISO competitive process in which Owner participated. For purposes of the foregoing, CAISO's need for spinning reserves, nonspinning reserves, replacement reserves or regulation as defined in the CAISO Tariff shall not be grounds for redesignating the Unit or designating another unit at the Facility as a Reliability Must-Run Unit.
- (e) Subject to any necessary authorization from FERC, this Agreement shall terminate as to any Unit leased by Owner in the event that, for any reason, the lease expires or is terminated unless Owner acquires ownership of such Unit upon such expiration or termination. Any termination under this Section 2.2 (e) shall not affect any right CAISO may have thereafter to designate such Unit as a Reliability Must-Run Unit and the conditions in Section 2.2 (d) shall not apply to such redesignation.

2.3 Effective Date of Expiration or Termination

If FERC authorization is required to give effect to expiration or termination of this Agreement as to one or more Units, the effective date of the expiration or termination shall be the date FERC permits the expiration or termination to become effective. Owner shall promptly file for the requisite FERC authorizations to terminate service under this Agreement as of the proposed effective date of expiration or termination; provided, that nothing in this Agreement shall prejudice the right of either Party to contest the other Party's claim that a termination or expiration has occurred. If FERC authorization is not required to terminate service under this Agreement, the effective date of expiration or termination shall be the later of (i) the date specified in CAISO or Owner's notice of termination or (ii) the date that all conditions to the termination or expiration have been satisfied.

2.4 Effect of Expiration or Termination

Expiration or termination of this Agreement shall not affect the accrued rights and obligations of either Party, including either Party's obligations to make all payments to the other Party pursuant to this Agreement or post-termination audit rights under Section 12.2.

2.5 Termination Fee

(a) CAISO shall pay Owner a Termination Fee calculated pursuant to Section 2.5 (b) if the Units are Closed within six months after the Unit ceases to be subject to this Agreement as a result of termination pursuant to Sections 2.2 (b) (ii), (iii), (iv) or (v) or because CAISO does not extend the term under Section 2.1 (b). Prior to the date that the Units are Closed or prior to the expiration of the term if not extended under Section 2.1(b), Owner will send CAISO a notice stating (i) the date the Unit Closed and (ii) the amount of the Termination Fee due Owner for the applicable Contract Year as set forth in Section 2.5(b). For purposes of this Section, "Closed" shall mean that the Unit is not providing Ancillary Services and there are no Direct Contracts obligating any entity to deliver Ancillary Services from the Unit during the 12 month period beginning at the date the Unit Closed. A Unit shall cease to be Closed if, during the 12 month period beginning at the date the Unit Closed, any entity: (i) sells Ancillary Services; (ii) executes a Direct Contract for service or (iii) obtains a new permit from any Governmental Authority for operations, in each case that would involve use of the Capital Item for which a Termination Fee is being paid.

AES Huntington Beach, L.L.C
Rate Schedule FERC No. 2

Must-Run Service Agreement

(b) The Termination Fee shall be as set forth below:

Huntington Beach Unit 3

END OF CONTRACT YEAR	2013	2014	2015	2016
Undepreciated CapAdd Items ("NCI")	\$5,360,983	\$3,573,989	\$1,786,994	N/A
("CWIP")	0	0	0	N/A
Salvage ("S")	0	0	0	N/A
Termination Fee	\$5,360,983	\$3,573,989	\$1,786,994	N/A

Huntington Beach Unit 4

END OF CONTRACT YEAR	2013	2014	2015	2016
Undepreciated CapAdd Items ("NCI")	\$5,718,382	\$4,288,786	\$2,859,191	\$1,429,595
("CWIP")	0	0	0	0
Salvage ("S")	0	0	0	0
Termination Fee	\$5,718,382	\$4,288,786	\$2,859,191	\$1,429,595

(c) The Termination Fee shall be payable in 12 equal monthly installments calculated using the following formula:

$$M = T \left[\frac{r}{1 - (1+r)^{-12}} \right]$$

Where

M = the monthly payment,
T = Termination Fee under Section 2.5(b), and
r = an annual discount rate equal to the interest rate used by FERC for the calculation of refunds (as set forth in 18 C.F.R. § 35.19a) in effect on the date that Owner provides notice to the CAISO pursuant to Section 2.5(a) of this Agreement, divided by 12.

(d) If the Unit ceases to be Closed at any time within 12 months following the date the Unit Closed, CAISO shall cease payment of Termination Fee installments as of the Month in which the Unit ceased to be Closed, but

Owner shall not be obligated to refund installments for any Month in which the Unit was Closed. Once a Unit has ceased to be Closed, CAISO shall not be required to pay any remaining Termination Fee installments even if the Unit again Closes.

- (e) Any dispute regarding an element of the Termination Fee (e.g. salvage value) not resolved at the time the Capital Item was approved shall be subject to ADR. If the amount of the Termination Fees associated with a single termination or expiration is \$5 million or more as billed by Owner, the Responsible Utility shall have the same rights as CAISO to receive notice that the Unit(s) Closed and to initiate or participate in ADR.

ARTICLE 3 CONDITIONS OF MUST-RUN AGREEMENT

3.1 Conditions Under Which Units Will Operate

This Agreement includes two conditions of service under which Owner may provide service from its Unit(s). By way of general description and subject to the specific provisions set forth in this Agreement:

- (i) A Unit under Condition 1 may participate in Market Transactions and Owner will retain all revenues from participation in Market Transactions;
- (ii) A Unit under Condition 2 shall provide Ancillary Services when CAISO has issued a Dispatch Notice for the Unit. A Unit under Condition 2 shall not participate in a Market Transaction.

3.2 Transfer Between Conditions

- (a) Except for a hydroelectric Unit, Owner may, from time to time, transfer a Unit from one Condition to the other Condition, provided that it may not do so without CAISO's consent unless, as of the transfer date, the Unit will have been subject to its existing Condition for at least twelve months. If a transfer is to become effective at the beginning of a Contract Year, Owner shall provide CAISO at least 30 days prior notice of the transfer. For a transfer to become effective at any other time, Owner shall give CAISO notice at least 90 days prior to the transfer. If a Unit is transferred from Condition 1 to Condition 2 during a Contract Year, Owner shall credit to CAISO on the first invoice after the transfer is effective an amount computed by multiplying (i) the positive difference, if any, of the Prepaid Start-ups minus the Counted Start-ups by (ii) the Prepaid Start-up Cost. If a Unit is transferred from Condition 2 to Condition 1, CAISO shall not be required to pay a Condition 1 Prepaid Start-up Charge for the remainder of the Contract Year in which the transfer occurred, but shall pay, for each Start-up, the Condition 1 Start-up Payment calculated pursuant to Equation D-1 in Schedule D.
- (b) A hydroelectric Unit may only operate under Condition 1.
- (c) CAISO may not transfer a Unit from one Condition to the other Condition.

- (d) Any transfer of a Unit from one Condition to the other Condition shall be effective on the first day of the Month following expiration of the applicable notice.
- (e) If a Unit is transferred from Condition 1 to Condition 2, Surcharge Payments for Capital Items shall be changed prospectively from the effective date of the transfer to reflect a Surcharge Payment Factor of 1.0. If a Unit is transferred from Condition 2 to Condition 1, Surcharge Payments for Capital Items shall be changed prospectively from the effective date of the transfer to reflect the Condition 1 Surcharge Payment Factor previously determined for the Capital Item, or if the factor was not previously determined, the Surcharge Payment Factor agreed to by CAISO and Owner. If Owner and CAISO do not agree on the Surcharge Payment Factor, the Surcharge Payment Factor shall be determined through ADR in accordance with Schedule B.

ARTICLE 4 DISPATCH OF UNITS

4.1 CAISO's Right to Dispatch

- (a) Subject to the limitations set forth in this Agreement, CAISO shall direct dispatch of a Unit by delivering a Dispatch Notice to Owner's Scheduling Coordinator in accordance with the CAISO Tariff.
- (b) Dispatch Notices for Ancillary Services, shall be issued solely for purposes of meeting local reliability needs or managing congestion on non-competitive paths. CAISO shall issue Dispatch Notices to meet local reliability needs or manage congestion on non-competitive paths, whenever market bids cannot be used to meet those needs or manage such congestion or such market bids cannot be used to meet those needs or manage such congestion without taking a bid out of merit order or requiring CAISO to decrement another supplier's schedule to accommodate the unit which provided the bid. CAISO may not issue a Dispatch Notice to fill a need for imbalance energy.
- (c) Except as needed for black start or voltage support required to meet local reliability needs, to meet operating criteria associated with the Potrero power plant, or as outlined below, CAISO may issue Dispatch Notices for Ancillary Services only if the available bids in Ancillary Service markets do not provide sufficient capacity to meet CAISO's requirements.
 - (i) If the CAISO determines on a Trading Day that it needs additional Ancillary Service on that Trading Day, CAISO shall use the following procedures:
 - (A) CAISO shall communicate such needs to all Scheduling Coordinators as quickly as possible after such needs are identified.
 - (B) After completing (A), CAISO shall attempt to procure those additional Ancillary Services from the CAISO's Real-Time

- market (in the appropriate region if CAISO is procuring Ancillary Services on a regional basis) that have not closed, subject to the Bid Sufficiency Test described below.
- (C) CAISO shall not issue a Dispatch Notice for Ancillary Services for any hour of the Trading Day before the earlier of (a) the time at which the real-time market for that hour closes or (b) if a Start-up would be required to provide the Ancillary Service, such earlier time as is necessary to comply with the applicable Start-up Lead Time and Ramping Constraints on Schedule A.
- (ii) CAISO shall not be required to accept any bid for an Ancillary Service above applicable bid caps then in effect under the CAISO Tariff before issuing a Dispatch Notice for Ancillary Services.
- (iii) Bid Sufficiency Test
- (A) The Bid Sufficiency Test may only be applied:
- (1) To purchases from the real-time market;
 - (2) If CAISO has fully complied with its obligation to promptly notify Scheduling Coordinators of its need to acquire additional ancillary services from the real-time market; and
 - (3) To the extent that the approved CAISO Tariff does not preclude such a test.
- (B) The Bid Sufficiency Test shall be applied on an individual hourly basis and for an individual Ancillary Service type. The test result shall be considered "insufficient" in real-time market if, and only if - (1) bids in the real-time market for the particular Ancillary Service (including any bids that can be used to satisfy that particular Ancillary Services requirement under Section 8.2.3.5 of the CAISO Tariff) represent less than two times such remaining Ancillary Service requirement; or (2) there are fewer than two unaffiliated bidders to provide such remaining Ancillary Service requirement. If the application of the Bid Sufficiency Test results in a determination of "insufficiency", the CAISO may issue a Dispatch Notice to satisfy its needs for that hour and that individual Ancillary Service.
- (C) If the result of the Bid Sufficiency Test is a finding that available bids are "insufficient", CAISO may nonetheless accept available market bids if it determines in its sole discretion that the prices bid and the supply curve created by the bids indicate that the bidders were not attempting to exercise market power.

4.2 Timing of Dispatch Notices

Subject to the terms and conditions of this Agreement, CAISO shall issue Manual RMR Dispatch Notices promptly after it makes a determination that it will require Ancillary Services under this Agreement.

4.3 Form and Content of Dispatch Notices

- (a) All Dispatch Notices shall be in writing if circumstances permit. If circumstances require that a Dispatch Notice be given or changed orally, the Dispatch Notice shall be confirmed in writing within 24 hours after the oral notice or change was given.
- (b) Each Dispatch Notice shall specify the Unit from which CAISO requests Owner to Deliver Ancillary Services, the time of commencement and termination of the Requested Operation Period and, for each hour of the Requested Operation Period, the Requested Ancillary Services. A Dispatch Notice for a hydroelectric Facility must request that Owner Deliver Energy from the entire Facility rather than from a specific Unit. However, CAISO may request that Owner Deliver Ancillary Services from specific Units in a hydroelectric Facility; provided that Energy associated with such Ancillary Services shall be Delivered from the Facility and not the specified Units. CAISO may issue Dispatch Notices in real time without specifying the time the Requested Operation Period is to terminate and may adjust the Requested Ancillary Services in real time if CAISO provides all such information in writing as provided in Section 4.3(a).

4.4. Non-complying Dispatch Notices

Owner shall not be obligated to comply with a Dispatch Notice that does not comply with Section 4.3 or 4.6 and Owner shall not be liable, suffer any penalties or suffer any reduction in payments for failure to comply with a Dispatch Notice which is not in compliance with those Sections, provided that Owner promptly notifies CAISO that the notice does not comply with Section 4.3 or 4.6 and provides the reasons the Dispatch Notice does not comply. Owner may provide such notice after the Requested Operation Period if the notice concerns a Dispatch Notice given during, or less than one-half hour prior to, the Requested Operation Period. Compliance with a Dispatch Notice shall not be deemed a waiver of objections to the Dispatch Notice.

4.5 Intentionally left blank.**4.6 Limitations on CAISO's Right to Dispatch**

CAISO's Dispatch Notice may not request Owner to, and Owner shall not be obligated to:

- (i) Provide service from a Unit at less than the Minimum Load for the Unit;
- (ii) Provide service from a Unit for less than the Minimum Run Time;

- (iii) Start-up a Unit after less than the Minimum Off Time;
- (iv) Start-up a Unit unless the time between the delivery of the Dispatch Notice requesting such Start-up and the commencement of the applicable Requested Operation Period equals at least the Start-up Lead Time for the Unit and the Dispatch Notice provides sufficient time to satisfy the Ramping Constraint of the Unit;
- (v) Provide service from a Unit in excess of its Unit Availability Limit;
- (vi) Provide service from a Unit when to do so would violate environmental limitations applicable to the Unit as set forth in Section 3 of Schedule A;
- (vii) Start-up or provide service from a Unit in violation of any applicable law, regulation, license or permit; or
- (viii) Start-up or provide service from a Unit to the extent that doing so would cause a breach of an Existing Contractual Limitation; or
- (ix) Deliver Ancillary Services to the extent such Delivery would cause a breach of a contract for Ancillary Services made available through an Upgrade or a Capital Item or Repair for which CAISO is not obligated to make a Surcharge Payment or pay CAISO's Repair Share.

4.7 Dispatch in Excess of Contract Service Limits

- (a) CAISO shall use its best efforts in accordance with Good Industry Practice not to issue a Dispatch Notice that would cause a Unit's Counted Start-ups or Counted Service Hours to exceed any of the Unit's Contract Service Limits.
- (b) CAISO may issue a Dispatch Notice requiring a Unit to Deliver Ancillary Services after the Unit has exceeded a Contract Service Limit only if the Requested Ancillary Services cannot be obtained by CAISO either (i) by accepting market bids in accordance with Section 4.1 or (ii) from Comparable RMR Unit(s) without exceeding the contract service limits or violating other operational limitations under CAISO's agreement with the Comparable RMR Unit(s). Owner shall use its best efforts, in accordance with Good Industry Practice, to comply with such Dispatch Notice.
- (c) If Owner of a hydroelectric Facility complies with a request to exceed the Maximum Monthly MWh, Owner may reduce the Maximum Monthly MWh for remaining Months of the Contract Year to reflect the accelerated use of available water. Not later than 15 days after any delivery in excess of Maximum Monthly MWh, Owner shall provide CAISO a notice showing revised Maximum Monthly MWh for remaining Months of the Contract Year.
- (d) If the Owner does not comply with a Dispatch Notice under Section 4.7(b), Owner at CAISO's request shall provide a written explanation.
- (e) If Owner, in compliance with a Dispatch Notice, Starts up a Unit and the Counted Start-ups for the Contract Year exceed the Maximum Annual Start-ups for the Unit, CAISO shall pay for such excess Start-ups as set

out in Schedule G. If Owner, in compliance with a Dispatch Notice, Delivers Ancillary Services and the Counted Service Hours for the Unit for the Contract Year exceeds the Maximum Annual Service Hours, or if applicable, the Counted Service Hours for the Month exceed the Maximum Monthly Service Hours, CAISO shall make the payments for the Deliveries in response to such Dispatch Notice and exceeding the Contract Service Limit as set forth in Schedule G.

- (f) For purposes of this Section 4.7:
- (i) “Best efforts” does not require Owner to provide service inconsistent with the limitations set forth in Section 4.6 or if Owner reasonably believes providing the service might cause significant physical harm to the Unit.
 - (ii) The term “Good Industry Practice” shall not be applied to permit CAISO to consider the relative costs of Comparable RMR Units when determining whether to request dispatch of a Unit in excess of the Contract Service Limits.
 - (iii) “Comparable RMR Unit” means a unit which has been designated a Reliability Must-Run Unit and which, in CAISO’s reasonable judgment, is capable of providing system reliability benefits to CAISO equivalent to the system reliability benefits provided by the Unit which otherwise would be subject to the Dispatch Notice. In the case of Units providing Ancillary Services, a Comparable RMR Unit must: (A) be certified to provide the Requested type of Ancillary Service, (B) provide the same or higher MVAR capability and (C) is located in the same Local Capacity Area as the Unit which otherwise would be subject to the Dispatch Notice.
- (g) CAISO and Owner shall have the right to dispute the other Party’s actions or inactions under this Section 4.7 and any dispute shall be subject to resolution through ADR.

4.8 Air Emissions

If CAISO determines that it is necessary to reserve MWh to satisfy potential dispatches under this Agreement without violating present or future limitations on the discharge of air pollutants or contaminants into the atmosphere specified by any federal, state, regional or local law by any regulation, air quality implementation plan, or permit condition promulgated or imposed by any Governmental Authority, the terms and conditions of such reservation shall be set out on Schedule P.

4.9 Test Dispatch Notices

(a) Availability Tests

- (i) CAISO may from time to time test the Availability of a Unit by requiring the Unit to Deliver Ancillary Services pursuant to a Test Dispatch Notice provided to Owner's Scheduling Coordinator using the procedures described in Section 4.2 and 4.3. CAISO, without cause, may request one Availability Test each Contract Year. CAISO may request additional Availability Tests if the Unit fails to comply fully with a Dispatch Notice. CAISO shall not request an Availability Test for a hydroelectric Unit during periods of constrained water availability. Lack of available water shall not be deemed to result in a failed test and reduction of the Unit Availability Limit for a hydroelectric Unit.
- (ii) Owner may request an Availability Test at any time. CAISO shall issue a Test Dispatch Notice within three days after receipt of Owner's request, but for good cause, CAISO may reschedule the test to a date acceptable to Owner. Owner's request shall state the amount of Ancillary Services to be produced. The effect of operations pursuant to such a request is set out in Section 5.3.
- (iii) The Test Dispatch Notice shall be marked "Availability Test Dispatch Notice." The Test Dispatch Notice shall specify a Requested Operation Period of four hours of continuous operations at the requested output plus any applicable Start-up Lead Time, time to satisfy Ramping Constraints and time for Shutdown (or for hydroelectric Units the time sufficient water is available, if that is less).
- (iv) Subject to the other conditions or restrictions expressed in this Agreement, Owner shall provide service from the Unit and Deliver the Requested Ancillary Services in accordance with the Availability Test Dispatch Notice.
- (v) An Availability Test shall be treated as having been successfully completed if the average MVAR Delivered at the Delivery Point during the Availability Test was not less than 99% of the Requested MVAR for the Requested Operation Period. The average MVAR Delivered during the Availability Test shall be computed by dividing (i) the total MVAR produced during the four-hour period immediately following completion of the ramp up, multiplied by the appropriate ambient temperature correction factors for the Unit as set out in Section 3 of Schedule A, by (ii) four hours.
- (vi) If a Unit fails an Availability Test, CAISO may issue a CAISO Availability Notice restating the Availability of the Unit to a level not less than the average MVAR Delivered during the Availability Test. Following the notice, Owner shall not issue an Owner's Availability Notice increasing the Availability of the Unit above the level determined through such failed Availability Test until (A) the Unit

- has successfully completed a subsequent Availability Test, (B) the Unit has delivered in Market Transactions, pursuant to a Dispatch Notice or in a combination of the two, during a continuous four hour operating period, average MVAR in excess of those determined in the Availability Test or (C) Owner has otherwise demonstrated to CAISO's reasonable satisfaction that the Availability of the Unit has been restored.
- (vii) If the average MVAR Delivered during the Availability Test exceed 101% of the Unit Availability Limit in effect prior to the Availability Test, Owner may issue an Owner's Availability Notice setting Availability retroactive to the time the request was received by CAISO to the lesser of (A) the average MVAR Delivered during the Availability Test or (B) the Maximum Net MVAR Capability.
- (b) **Emissions Test**
If it is necessary for Owner to operate a Unit to fulfill regulatory requirements for emissions testing, Owner may request CAISO to issue a Dispatch Notice for such operation. Owner shall provide a request specifying the test date at least seven days in advance of the emissions test. CAISO shall issue a Dispatch Notice to schedule the requested operation on the date specified in Owner's request, or for good cause, CAISO may cause the test to be rescheduled to a date acceptable to Owner, provided that CAISO shall not delay the test by more than seven days without Owner's consent. The Test Dispatch Notice shall be marked "Emissions Test Dispatch Notice".
- (c) **Black Start Test**
CAISO may from time to time test Unit(s) designated to provide Black Start service by requiring the Unit to deliver Black Start service pursuant to a Test Dispatch Notice provided to Owner's Scheduling Coordinator using the procedures described in Sections 4.2 and 4.3. Such Test Dispatch Notice shall be marked "Black Start Test Notice." The Black Start Test shall be performed in accordance with the Ancillary Services Requirements Protocol in the CAISO Tariff. CAISO shall not request a Black Start Test for a hydroelectric Unit during periods of constrained water availability.
- (d) **Heat Input Test**
Not more frequently than once each Contract Year, Owner may, by giving at least seven days' prior notice to CAISO, request CAISO to issue a Test Dispatch Notice in order for Owner to determine the heat input of a Unit. CAISO shall not unreasonably refuse to issue a Test Dispatch Notice for a heat input test. The Test Dispatch Notice shall be marked "Heat Input Test Notice." The heat input test shall be conducted in accordance with testing standards and procedures agreed to by CAISO and Owner. In the absence of such agreement, the standards and procedures shall be determined through ADR before such test may be conducted. The arbitrator shall specify procedures for testing which are consistent with

Good Industry Practice. Following such a heat input test, Owner shall be permitted to make a filing under Section 205 of the Federal Power Act limited to modifying the heat inputs used in the Variable Cost Payment, Start-up Payment, Preempted Dispatch Payment and Mandatory Energy Bid in Schedules C, D, E and M, respectively, to reflect the results of such test.

4.10 Forecasts Of CAISO's Requirements

Not later than November 15 of each year, CAISO shall provide Owner and the Responsible Utility with a non-binding forecast representing CAISO's then current best estimate of the monthly Service Hours that CAISO will require each Unit to provide each month during the ensuing Contract Year ("Annual Forecast"). In addition, not later than June 15 of each year, CAISO shall provide Owner and with a non-binding forecast ("Update") representing CAISO's then current best estimate of the monthly Service Hours that CAISO will require each Unit to provide each month from June through the end of the Contract Year. Each Annual Forecast and Update will take into account the Long-term Planned Outages. The Annual Forecasts and Updates shall be treated as confidential pursuant to Section 12.5 and shall not be binding.

4.11 Determination of Contract Service Limits

- (a) If CAISO has extended the term of this Agreement pursuant to Section 2.1 (b), then not later than October 31 of the expiring Contract Year Owner shall make a filing under Section 205 of the Federal Power Act consistent with Schedule A and Schedule B to reflect the Contract Service Limits and payments for all Units other than hydroelectric Units for the ensuing Contract Year. The Contract Service Limits for each year after the initial Contract Year shall be as set forth in Schedule A.
- (b) If CAISO has extended the term of this Agreement pursuant to Section 2.1 (b), then not later than 15 days prior to the beginning of the ensuing Contract Year, Owner of a hydroelectric Facility shall make a filing under Section 205 of the Federal Power Act to reflect the revised Contract Service Limits to be in effect during the ensuing Contract Year for the hydroelectric Facility. Such filing shall be based on Owner's current water management forecast and shall reflect the water expected to be available for electric generation above the Hydroelectric Dependable Capacity. Such filing, if accepted or approved, shall set the Maximum Monthly MWh in Schedule A for the ensuing Contract Year, subject to adjustment in accordance with the notice described below giving revised Monthly Maximum MWh. The Maximum Monthly MWh in Schedule A of this Agreement on the Effective Date reflects the Hydroelectric Dependable Capacity. Not later than April 15 of each Contract Year, Owner shall provide notice to CAISO giving revised Maximum Monthly MWh for each remaining Month of the Contract Year based on its then current water management forecast. If, during any Contract Year, Owner

determines that drought conditions jeopardize its ability to supply Hydroelectric Dependable Capacity, Owner shall promptly give notice to the CAISO of this determination, including revised Maximum Monthly MWh for each remaining Month of the Contract Year. Following such a determination, Owner shall provide CAISO with weekly updated water management forecasts until the earlier of the end of the Contract Year or Owner's determination that its ability to supply the Hydroelectric Dependable Capacity is no longer jeopardized by such conditions. CAISO acknowledges that the accuracy of a water management forecast may be substantially affected by a Force Majeure Event at any time after the Owner provides the forecast and consequently Owner shall not be liable for the accuracy of the water management forecast or any reliance on it other than a Monthly Maximum MWh amount.

ARTICLE 5 DELIVERY OF ANCILLARY SERVICES BY OWNER

5.1 Owner's Delivery of Ancillary Services

- (a) Subject to the limits in this Agreement, and subject to the CAISO's Real-Time Dispatch instructions whether flagged as an RMR Dispatch or not, Owner shall provide service from the Units and Deliver the Requested Ancillary Services in accordance with each Dispatch Notice. To the maximum extent practical, and except for regulation, Owner shall Deliver at each moment of each hour during the Requested Operation Period not less than the Requested Ancillary Services. If Owner has disputed a Dispatch Notice under Section 4.6 (i) (Minimum Load) (ii) (Minimum Run Time) (iii) (Minimum Off Time) (iv) (Start-up Lead Time and Ramping Constraint), or (v) (Unit Availability Limit) and such dispute is not resolved prior to the time for delivery, Owner will use reasonable efforts to comply with the Dispatch Notice, but shall not be liable to CAISO if it is unable to do so and Owner prevails in the dispute.
- (b) If Owner has disputed a Dispatch Notice under Section 4.6 (vi) (environmental), (vii) (violation of law), (viii) (Existing Contractual Limitations) or (ix) (Upgrade Contract), Owner shall not be required to Deliver Ancillary Services pending resolution of the dispute as to whether the Dispatch Notice violated such Section; provided, however, that Owner shall not be relieved from any liability that it would otherwise have for failure to comply with the disputed Dispatch Notice if it subsequently is determined that the Dispatch Notice did not violate Section 4.6 (vi), (vii), (viii) or (ix).
- (c) Subject to CAISO approval, if Owner cannot Deliver the Requested Ancillary Services by providing service from the Unit identified in a Dispatch Notice, Owner may Deliver the requested services by providing service from a Substitute Unit. Owner shall provide oral or written notice to CAISO as soon as possible in advance of the

first Real-Time Dispatch of the Requested Operation Period stating why it cannot provide the requested service from the Unit identified in the Dispatch Notice, identifying the Substitute Unit, describing the services it will provide from the Substitute Unit and specifying the charges applicable to service from the Substitute Unit. CAISO may deny approval only if the proposed unit does not qualify as a Substitute Unit or if there is insufficient time to accommodate the request prior to the running of the MPM-RRD process and the operator determines that the substitution would affect the MPM-RRD results, in which case the substitution request will be accommodated for any remaining portion of the Requested Operation Period, if the unit is otherwise acceptable. The total cost to CAISO for service from the Substitute Unit shall be at the rate specified by the Owner, provided that the total cost will not exceed the total costs for the same amount of service from the Unit specified in the Dispatch Notice.

- (d) If Owner can Deliver the Requested Ancillary Services by providing service from the Unit identified in the Dispatch Notice, Owner may Deliver the requested services by providing service from (i) the Unit identified in CAISO's Dispatch Notice or (ii) with CAISO's consent, a Substitute Unit. Owner of a hydroelectric Unit will Deliver the Requested MWh from the Facility and will Deliver the Voltage Support and Black Start requested in a Dispatch Notice from the specified Unit or a Substitute Unit. If Owner proposes to satisfy its delivery obligations by providing service from a Substitute Unit, Owner shall provide oral or written notice to CAISO prior to the Requested Operation Period identifying the Substitute Unit, describing the services it will provide from Substitute Unit and specifying the charges applicable to service from the Substitute Unit. Owner may Deliver the agreed services from the Substitute Unit and will be paid at the agreed rates if CAISO accepts Owner's proposal, or CAISO and Owner otherwise agree on the services and applicable rates for service from a Substitute Unit. CAISO's decision shall not be subject to ADR.
- (e) Owner shall Deliver the Requested Ancillary Services at the Delivery Point or such other point(s) reasonably acceptable to CAISO and shall comply with the metering and related arrangements set forth in Section 5 of Schedule A to this Agreement or as otherwise specified in Owner's applicable Meter Service Agreement.
- (f) If Owner would have been able to Deliver the Requested Ancillary Services but for an outage in the CAISO Controlled Grid or Distribution Grid beyond Owner's reasonable control, Owner shall be deemed to have complied with the Dispatch Notice for purposes of Sections 5.4 and 8.5.

5.2 Substitution of Market Transactions for Dispatch Notices - Not Applicable

- (a) Owner may satisfy, in whole or in part, its obligation to Deliver Energy, but not Ancillary Services, during a Requested Operation Period by delivering Energy under a Market Transaction from the Unit identified in a Dispatch

Notice if Owner complies with the requirements and procedures of this Section 5.2.

- (b) Owner shall give notice of its intent to substitute a Market Transaction through the submission of bids in the CAISO's Markets. Any dispatch level that clears the Competitive Constraint Run of the MPM-RRD process through the submission of Economic Bids or Self-Schedules, and is reflected in the Day-Ahead Schedule or Real-Time Dispatch, shall be deemed a Market Transaction.
- (c) Owner may substitute a Market Transaction only if the deadline for bids into the market selected by Owner has not passed.
- (d) Intentionally left blank.

5.3 Rules for Calculating Counted Start-ups and Counted Service Hours

- (a) The following rules shall govern calculation of Counted Start-ups:
 - (i) Except as limited below, all Start-ups successfully completed in compliance with a Dispatch Notice shall be included in Counted Start-ups for the Unit for which the Dispatch Notice was issued.
 - (ii) If a Start-up required by a Dispatch Notice is canceled by CAISO after the Start-up is initiated, Counted Start-ups shall include a fractional Start-up computed by dividing (i) the lesser of (a) the time elapsed between initiation of the Start-up and cancellation or (b) the Start-up Lead Time by (ii) the applicable Start-up Lead Time for the Unit.
 - (iii) For Units under Condition 1, if a Dispatch Notice is issued pursuant to Section 4.5 for a period in which the Unit is scheduled to operate or is operating in a Market Transaction for which a Start-up was required, or Owner substitutes a Market Transaction under Section 5.2 for a Requested Operation Period for which a Start-up was required, Counted Start-ups shall include one-half of the Start-up for the Unit for which the Dispatch Notice was issued. No Start-up shall be counted more than once.
 - (iv) For Units under Condition 2, Counted Start-ups shall include each Start-up.
 - (v) If Owner complies with a Dispatch Notice by Delivering the Requested Ancillary Services from a Substitute Unit, any Start-ups of the Substitute Unit will not be included in Counted Start-ups for the Unit specified in the Dispatch Notice or the Substitute Unit.
 - (vi) Except as provided in Section 5.3(a)(iii), any Start-up not required to comply with a Dispatch Notice will not be included in Counted Start-ups.
- (b) Reserved.
- (c) The following rules shall govern calculation of Counted Service Hours:
 - (i) Except as limited below, all Service Hours expended in compliance with a Dispatch Notice other than Service Hours expended for Ancillary Services during which the Unit is not Synchronized shall

- be included in Counted Service Hours for the Unit for which the Dispatch Notice was issued.
- (ii) For Units under Condition 1, if a Dispatch Notice is issued pursuant to Section 4.5 for a period in which a Unit is scheduled to operate or is operating in a Market Transaction or if Owner, in response to a Dispatch Notice, substitutes a Market Transaction under Section 5.2 for all or part of the Requested MWh, one-half of the Requested Operation Period will be included in Counted Service Hours for the Unit for which the Dispatch Notice was issued.
 - (iii) If a Unit operating under Condition 2 sells Energy pursuant to bids made under Section 6.1 (b), each Service Hour expended by the Unit to produce the Energy shall be included in Counted Service Hours.
 - (iv) If Owner Delivers Requested Ancillary Services from a Substitute Unit, the Service Hours expended by the Substitute Unit will not be included in Counted Service Hours for the Unit specified in the Dispatch Notice or the Substitute Unit.

5.4 Owner's Failure To Deliver Requested Ancillary Services

- (a) Owner shall promptly notify CAISO if Owner will not be able to Deliver all or part of the Requested Ancillary Services from the Unit identified in the Dispatch Notice or from the Substitute Unit previously accepted by CAISO.
- (b) If a Unit fails to Deliver the full amount of Requested Ancillary Services, CAISO may issue an CAISO Availability Notice restating the Availability to a level not less than the Availability indicated by the actual deliveries. If CAISO has issued an CAISO Availability Notice under this Section 5.4(b), Owner shall not issue an Owner's Availability Notice increasing the Availability of the Unit until (i) the Unit has successfully completed an Availability Test, (ii) the Unit has delivered pursuant to a Dispatch Notice during a continuous four hour operating period, average MVAR in excess of those shown in the CAISO Availability Notice, or (iii) Owner has otherwise demonstrated to the CAISO's reasonable satisfaction that the Availability of the Unit has been restored. CAISO's only other remedies for Owner's failure to Deliver Requested Ancillary Services are as set out in Sections 8.5, 11.3 and 12.6.

5.5 Reports

Not less than two days prior to the beginning of every Month during the Contract Year, Owner or Owner's Scheduling Coordinator shall provide CAISO and the Responsible Utility a report for each Unit setting forth as of the day before the date of the report the Counted Service Hours and Counted Start-ups for the current Contract Year. All reports shall be treated as confidential pursuant to Section 12.5.

ARTICLE 6
MARKET TRANSACTIONS - Not Applicable

6.1 Right To Engage In Market Transactions

- (a) In addition to the right to substitute a Market Transaction pursuant to Section 5.2, if a Unit is operating under Condition 1, Owner may enter into Market Transactions for Energy or Ancillary Services at any level outside of a Requested Operation Period. If CAISO has issued a Dispatch Notice for Energy to a Unit under Condition 1, Owner may enter into Market Transactions for Energy at any level during the Requested Operation Period, and may enter into a Market Transaction for Ancillary Services at any level that does not preclude compliance with the Dispatch Notice. If CAISO has issued a Dispatch Notice for Ancillary Services to a Unit under Condition 1, Owner may enter into Market Transactions for Energy or Ancillary Services at any level that does not preclude compliance with the Dispatch Notice.
- (b) If CAISO issues a Dispatch Notice for a Unit operating under Condition 2, Owner shall submit bids in succeeding available Energy and Ancillary Services markets for the Requested Operation Period in accordance with the following requirements:
- (i) If the next available market is an Energy market, Owner shall bid all Energy the Unit can produce, up to the Unit Availability Limit, in excess of the higher of (A) Energy or Ancillary Services capacity cleared in a prior market; or (B) capacity required to Deliver Requested Ancillary Services. Owner shall bid all Energy at the bid price calculated using the formula in Part I of Schedule M.
 - (ii) If the next available market is an Ancillary Services market, Owner shall bid all available capacity, up to the Unit Availability Limit, in excess of the higher of the capacity needed to (A) deliver Energy and Ancillary Services cleared in a prior market or (B) Deliver the Requested MWh or Ancillary Services different from the Requested Ancillary Service.
 - (iii) If the markets are concurrent, Owner shall bid in the Ancillary Services market all available capacity, up to the Unit Availability Limit, in excess of the higher of the capacity needed to (A) deliver Energy and Ancillary Services cleared in a prior market or (B)

- Deliver the Requested MWh or Ancillary Services different from the Requested Ancillary Service.
- (iv) Owner shall bid all Ancillary Service capacity at the bid price calculated using the formula in Part II of Schedule M.
 - (v) Owner shall not bid Energy or Ancillary Services in excess of the quantities the Unit can provide during the Requested Operation Period given the Unit's ramp rates, Ramping Constraints and any other applicable operating limitations, with due allowance for a Unit's ability to change output during the Requested Operation Period.
 - (vi) Neither Owner nor Owner's Scheduling Coordinator shall bid Energy or Ancillary Services to the extent that participating in a Market Transaction would conflict with a contract entered into prior to the Effective Date. Owner shall include in Section 14 of Schedule A a description of all contract restrictions affecting Owner's ability to participate in Market Transactions.

CAISO may order Owner not to bid to participate in a Market Transaction if CAISO determines that participation in Market Transactions would cause a Unit to exceed Contract Service Limits or impair CAISO's ability to dispatch the Unit to meet reliability needs at other times during the Contract Year. A Unit operating under Condition 2 shall not otherwise engage in Market Transactions.

ARTICLE 7 OPERATION AND MAINTENANCE

7.1 Owner's Obligation

Owner shall fuel, operate and maintain each Unit, or cause the Unit to be fueled, operated and maintained, in accordance with applicable law and Good Industry Practice and with due regard for the reliability purpose of this Agreement. Owner is not required to have or maintain fuel oil burning capability, fuel oil inventories, or permits to burn fuel oil and shall not be required to burn fuel oil to respond to a Dispatch Notice unless, and then only to the extent that, the Unit's primary fuel is distillate fuel oil or Schedule H requires Owner to maintain fuel oil capability.

7.2 Outages and Overhauls

- (a) Owner shall be entitled to take a Unit out of operation or reduce the Availability of the Unit to repair and maintain the Unit in accordance with Good Industry Practice and the requirements of the CAISO Tariff. The dates and times of the outages and any changes to those dates and times shall be determined in accordance with the CAISO Tariff. For purposes of complying with the requirements of the CAISO Tariff, Other Outage shall be separated between "maintenance outage" and "forced outage," as defined in the CAISO Tariff.

- (b) Owner shall have the right to curtail or discontinue, in whole or in part, Deliveries of Ancillary Services from a Unit for so long as, and to the extent that, a Forced Outage affecting the Unit continues or when, in Owner's judgment in accordance with Good Industry Practice, operating conditions at the Unit so require. Curtailment or discontinuance under this Section shall give rise to applicable remedies under Article 8.

7.3 Reports and Notices

- (a) As soon as practical after commencement of a Forced Outage, Owner shall give CAISO notice of the Forced Outage, the expected duration of the outage, and the expected time when the Unit will be available to provide Ancillary Services and the expected Availability during and following the Forced Outage. Owner shall keep CAISO informed of any developments that will affect either the duration of the Forced Outage or the Availability of the Unit during or after the end of the Forced Outage.
- (b) Owner shall keep CAISO advised of the Availability of each Unit by promptly issuing Owner's Availability Notices any time Owner becomes aware that the Unit's Availability changed in accordance with Section 9 of the CAISO Tariff. Owner may not reduce a Unit's Availability due to the cost of fuel. An Owner's Availability Notice shall become effective when issued, provided, however, that if Owner becomes subject to a Non-Performance Penalty under Section 8.5, any Owner's Availability Notice given during the Penalty Period shall not become effective until 72 hours after the Owner's Availability Notice is given. An Owner's Availability Notice or CAISO's Availability Notice shall continue in effect until it is superseded by a subsequent Owner's Availability Notice or CAISO's Availability Notice.

7.4 Planned Capital Items

- (a) On or before March 1 of each year following the initial Contract Year, Owner shall provide CAISO a preliminary report in the form required by this Section 7.4 showing Owner's proposed Capital Items for the next Contract Year and a five-year forecast of anticipated Capital Items in the Form attached as Schedule L-1, assuming the Agreement will be extended. Owner shall submit a final report in the form required by this Section 7.4 reflecting updated information by August 1 of each year. Owner may, but shall not be obligated to, include an Upgrade as a proposed Capital Item in either the preliminary or final report.
- (b) The final report for proposed Capital Items for the initial Contract Year is being submitted on the form attached as Schedule L-1. Owner shall provide additional information requested by the CAISO necessary to evaluate the proposal. Each preliminary and final report shall separately list individual projects expected to cost more than \$500,000 and shall include two "Small Project Estimates." One Small Project Estimate shall identify Capital Items (projected to cost less than \$500,000 each) required

- to maintain or enhance reliability. The second Small Project Estimate shall identify all other Capital Items projected to cost less than \$500,000 each. Individual Capital Items projected to cost more than \$50,000 shall be identified separately in one of the two Small Project Estimates. All Capital Items covered by the Small Project Estimate will be depreciated over 10 years.
- (c) Within 60 days after submission of the final report, CAISO will notify Owner of the proposed Capital Items CAISO has approved and the Capital Items it has not approved. If CAISO fails to provide notice within such 60 day period, all Capital Items included in the final report shall be deemed approved as proposed by Owner. Approval constitutes CAISO agreement that the CAISO's share of the estimated cost of the Capital Item will be recovered through Surcharge Payment under Article 8 and will be eligible for recovery through a Termination Fee pursuant to Section 2.5. If the actual cost of the Capital Item exceeds the estimated cost, CAISO may initiate ADR to determine whether the additional costs were reasonable and shall not be obligated to pay through Surcharge Payments or as a Termination Fee any portion of the overrun found to be unreasonable in such ADR proceeding. If CAISO contests the additional costs, Owner shall have the burden of proving that the additional costs were reasonable. If CAISO does not initiate ADR or makes a separate agreement with Owner, the additional costs shall be deemed reasonable and CAISO shall be obligated to pay CAISO's share of the actual costs through Surcharge Payments or as a Termination Fee. For the avoidance of doubt, the attached Schedule L-1 for the Capital Items for the 2013 Contract Year has been approved by CAISO.
- (d) If a proposed Capital Item is not approved, CAISO shall provide Owner a detailed statement of the reasons for the disapproval and, if the proposal would be acceptable with modifications, a detailed list of the proposed modifications. Owner may accept the modifications proposed by CAISO, or CAISO or Owner may initiate an ADR proceeding to review CAISO's rejection or proposed modification if the Capital Item is necessary for Owner to meet its obligations under this Agreement. In such proceeding, CAISO may not support its disapproval on any basis not shown in its detailed statement of the reasons for disapproval. Any Capital Items approved through such ADR proceeding shall be recovered by Owner through Surcharge Payments under Article 8 and will be eligible for recovery through a Termination Fee pursuant to Section 2.5. Owner shall not be obligated to install any Capital Item unless CAISO is obligated to pay a Surcharge Payment for the Capital Item. For the avoidance of doubt, the attached Schedule L-1 for the Capital Items for the 2013 Contract Year has been approved by CAISO.
- (e) The preliminary and final reports and all additional information about proposed Capital Items provided to CAISO shall be treated as Confidential Information in accordance with Section 12.5.

- (f) If CAISO rejects a proposed Capital Item, such rejection is not reversed by ADR and it would be uneconomical, impractical or illegal to continue operation without the Capital Item, then Owner, subject to obtaining authorization from FERC (if required by law to do so), may terminate this Agreement with respect to the affected Unit without cost or liability therefore, except as provided in Section 2.4.

7.5 Unplanned Repairs and Unrecovered Upfront Costs

- (a) In the event of any loss or damage to the Facility that impairs the capability of one or more Units to Deliver Ancillary Services, Owner shall, without additional charge, make necessary Repairs, to the extent that:
- (i) the total cost (net of proceeds received by Owner from Insurers and other third parties pursuant to applicable insurance, warranties and other contracts in connection with all Repairs and excluding costs covered by clause (ii)) of all Repairs for all Units ("Net Repair Costs") during the Contract Year does not exceed Owner's Repair Cost Obligation for the Facility; or
 - (ii) the loss or damage impairing the Unit's capability to produce Ancillary Services was caused by Owner's failure to comply with Good Industry Practice or by any wrongful act or omission by Owner. The reference to "Units" in clause (i) includes all Reliability Must-Run Units located at the Facility, but no other Reliability Must-Run Units. Except as provided above, Owner shall not be obligated to make any Repairs unless CAISO is obligated to pay CAISO's Repair Share for the Repairs.
- (b) If the Net Repair Costs incurred by Owner for all Repairs since the beginning of the Contract Year exceed Owner's Repair Cost Obligation, then Owner shall provide a notice thereof ("Unplanned Repair Notice") in the form attached as Schedule L-1 to CAISO. Owner shall provide such additional information as CAISO may reasonably require to evaluate such proposed Repairs.
- (c) CAISO shall submit a written acceptance or objection to Owner's proposal within 21 days of receipt of an Unplanned Repair Notice. CAISO shall be deemed to have accepted Owner's proposal in the Unplanned Repair Notice if CAISO does not submit a written objection within 21 days after receipt of the Unplanned Repair Notice, as provided above. Any objection shall be based on one or more of the following grounds:
- (i) the loss or damage was caused by Owner's failure to comply with Good Industry Practice;
 - (ii) the loss or damage was caused by a wrongful act or omission by Owner;
 - (iii) the Repairs are not required or are more extensive than required in order to make good the loss or damage concerned or to comply with applicable law;

- (iv) the Net Repair Costs for the Contract Year will not exceed or has not exceeded the Owner's Repair Cost Obligation;
 - (v) the estimated cost of Repairs exceeds that which is reasonably necessary to effect such Repairs;
 - (vi) the Repair will not result in benefits to CAISO as compared to alternatives available to CAISO;
 - (vii) Owner's proposals for carrying out the Repairs or the proposed CAISO's Repair Share are unreasonable;
 - (viii) Owner's proposal includes estimated costs which are not properly treated as an expense under FERC's Uniform System of Accounts;
or
 - (ix) Owner has not provided sufficient information to evaluate Owner's proposal. In addition to providing the basis of the objection, any objection of CAISO shall include a list of all changes CAISO contends should be made to Owner's proposal and justification of all such changes.
- (d) If CAISO submits an objection to an Unplanned Repair Notice, the Parties shall attempt to reach agreement on changes to Owner's proposal. If the Parties have not reached agreement within 30 days after CAISO's receipt of the Unplanned Repair Notice, Owner or CAISO may refer the matter to ADR under a schedule (specified by the arbitrator if the participants cannot agree) requiring a decision within 30 days following appointment of the arbitrator. The ADR decision will be effective without delay.
- (e) Owner shall proceed with the Repairs if it is agreed or determined pursuant to ADR that CAISO will pay CAISO's Repair Share or that Owner is otherwise obligated to make the Repairs. Owner shall keep full and detailed records of the cost of the Repairs and shall make them available to CAISO for inspection upon reasonable request.
- (f) If the actual cost of the Repairs exceeds the estimated cost, CAISO may initiate ADR to determine whether the additional costs were reasonable and shall not be obligated to pay any portion of the additional cost found to be unreasonable in such ADR proceeding. Owner shall have the burden of proving that the additional costs were reasonable.
- (g) If it is agreed or determined pursuant to ADR that CAISO will pay for a Repair, CAISO shall pay CAISO's Repair Share of the actual cost as a lump sum within 60 days after the later of (i) the completion of the Repair and (ii) the effective date of authorization by FERC, if any is necessary, for Owner to charge such cost to CAISO. "CAISO's Repair Share" means the Repair Payment Factor for the Repair at issue multiplied by the amount by which (i) the agreed or determined cost of Repairs at issue plus the Net Repair Costs of all prior Repairs for the Contract Year minus the cost of all prior Repairs for which CAISO is obligated to pay CAISO's Repair Share during the Contract Year exceeds (ii) Owner's Repair Cost Obligation. The Repair Payment Factor shall be as agreed to by Owner and CAISO. If Owner and CAISO do not agree on the Repair Payment Factor, the

- Repair Payment Factor shall equal the Fixed Option Payment Factor, unless the Owner demonstrates in ADR that it would not have made the proposed Repair in accordance with Good Industry Practice but for its obligations under this Agreement, in which case the Repair Payment Factor shall be as determined in ADR.
- (h) Owner shall use commercially reasonable efforts to recover its full entitlements under applicable insurance policies, warranties and other contracts even after CAISO has paid CAISO's Repair Share. Owner shall keep CAISO informed of the status of such recovery efforts and will refund to CAISO any portions of CAISO's Repair Share payment that is later recovered from any other party as a credit to CAISO on the next invoice with interest at the Interest Rate from the date such proceeds are received by Owner to the Due Date of such next invoice, or if this Agreement is terminated, as a payment upon submission of the Final Invoice.
 - (i) If Owner is not obligated to make a Repair and does not do so, and if it would be uneconomical, impractical or illegal to continue operation without the Repair, then Owner, subject to obtaining authorization from FERC (if required by law to do so), may terminate this Agreement with respect to the affected Unit without cost or liability therefor, except as provided in Section 2.4.
 - (j) If Owner makes a Repair notwithstanding that CAISO is not obligated to pay for the Repair, Owner shall not be entitled to recover the costs of the Repair from CAISO unless FERC approves recovery of the costs.
 - (k) Owner's Repair Cost Obligation shall be an amount computed as follows:
 - (i) Intentionally left blank
 - (ii) The Owner's Repair Cost Obligation shall be equal to 3% of the fixed operation and maintenance costs for all Units at the Facility, underlying the rates in effect at the beginning of the Contract Year.
 - (l) CAISO shall reimburse Owner for all of its unrecovered upfront costs incurred by Owner and its affiliates in connection with the implementation of the Synchronous Condenser Transaction, up to an aggregate maximum of \$875,000. Immediately following the Effective Date, Owner shall submit to CAISO a Schedule L-1 for such actually incurred costs in accordance with Article 9.

7.6 Unplanned Capital Items

- (a) To the extent a Capital Item is required to remedy or prevent impairment of the Unit's capability to Deliver Ancillary Services and the impairment was caused by Owner's failure to comply with Good Industry Practice or by any wrongful act or omission by Owner, Owner shall install such Capital Item at Owner's expense. Otherwise, Owner shall not be obligated to install any Capital Item unless CAISO is obligated to pay a Surcharge Payment for the Capital Item. The issue of whether Owner is obligated to install a Capital Item is subject to ADR.

- (b) If, during the Contract Year, Owner determines it is necessary to install Capital Items not approved under Section 7.4 and Owner has expended all amounts covered by the approved Small Project Estimates under Section 7.4, Owner shall provide a notice thereof (“Unplanned Capital Item Notice”) on the form attached as Schedule L-1 to CAISO. Owner shall provide such information as CAISO may reasonably require in order to evaluate the proposed Capital Items.
- (c) CAISO shall submit a written acceptance or objection to Owner’s proposal within 21 days after receipt of a complete Unplanned Capital Item Notice provided that if the proposal does not involve either loss or damage to the Facility or a Capital Item required by law or regulation, CAISO shall respond within 60 days. If CAISO fails to provide notice within such period, Owner’s proposal in the Unplanned Capital Item Notice shall be deemed approved. Any objection shall be based on one or more of the following grounds:
- (i) the impairment being remedied or prevented was caused by Owner’s failure to comply with Good Industry Practice;
 - (ii) the impairment being remedied or prevented was caused by a wrongful act or omission by Owner;
 - (iii) the Capital Item is not required or is more extensive than required in order to remedy or prevent impairment to the Facility or to comply with applicable law;
 - (iv) the estimated cost of the Capital Item exceeds that which is reasonably necessary;
 - (v) installation of the Capital Item will not result in benefits to CAISO as compared to alternatives available to CAISO;
 - (vi) Owner’s proposals for installing or testing the Capital Item are unreasonable;
 - (vii) Owner’s proposals for depreciation of the cost of the Capital Item or calculation of the Annual Capital Item Cost and Surcharge Payment Factor are unreasonable; or
 - (viii) Owner has not provided sufficient information to evaluate Owner’s proposal. In addition to providing the basis of the objection, any objection of CAISO shall include a list of all changes CAISO contends should be made to Owner’s proposal and justification of all such changes.
- (d) If CAISO submits an objection to an Unplanned Capital Item Notice, the Parties shall attempt to reach agreement on changes to Owner’s proposal. If Owner’s proposal involves either loss or damage to the Facility or the Capital Item is required by law and the Parties have not reached agreement 30 days after CAISO’s receipt of the Unplanned Capital Item Notice, either Owner or CAISO may refer the matter to ADR under a schedule (specified by the arbitrator if the participants cannot agree) requiring a decision within 30 days following appointment of the arbitrator. The ADR decision will be effective without delay. Failure to agree on

- other proposed Capital Items may also be referred to ADR but without an expedited schedule.
- (e) Owner shall proceed to install the Capital Item if it is agreed or determined pursuant to ADR that CAISO will pay a Surcharge Payment for the Capital Item or that Owner is otherwise required to install the Capital Item. Owner shall keep full and detailed records of the cost of the Capital Item and shall make them available to CAISO for inspection upon reasonable request.
 - (f) If the actual cost of the Capital Item exceeds the estimated cost, CAISO may initiate ADR to determine whether the additional costs were reasonable and shall not be obligated to pay any portion of the additional cost found to be unreasonable in such ADR proceeding. Owner shall have the burden of proving that the additional costs were reasonable.
 - (g) If it is agreed or determined pursuant to ADR that CAISO will pay for the Capital Item, CAISO shall be deemed to have agreed that the cost of the Capital Item will be recovered through a Surcharge Payment under Article 8 and will be eligible for recovery through a Termination Fee pursuant to Section 2.5. The costs included in Surcharge Payments and Termination Fees to be paid by CAISO shall be net of all proceeds received by Owner from insurers and other third parties pursuant to applicable insurance, warranties and other contracts after deducting all costs Owner incurred to collect the proceeds. Owner shall use commercially reasonable efforts to recover its full entitlements under applicable insurance policies, warranties and other contracts. Owner shall keep CAISO informed of the status of such recovery efforts and will adjust future Surcharge Payments to reflect proceeds later recovered from any other party.
 - (h) If the capability or performance of a Unit is impaired, if Owner is not obligated to install a Capital Item to remedy such impairment under Section 7.6(a) and does not do so, and if it would be uneconomical, impractical or illegal to continue operation without the Capital Item, then Owner, subject to obtaining authorization from FERC (if required by law to do so), may terminate this Agreement with respect to the affected Unit without cost or liability therefor except as provided in Section 2.4.
 - (i) If Owner installs a Capital Item notwithstanding that CAISO is not obligated to pay for the Capital Item, Owner shall not be entitled to recover the costs of the Capital Item from CAISO unless FERC approves recovery of the costs.
 - (j) Notwithstanding any other provision of this Agreement, if a Capital Item is required to remedy impairment of the Facility, the Unit's Monthly Option Payment shall not be decreased for any of the period of time during which Owner is waiting for CAISO's response to an Unplanned Capital Item Notice or during which ADR concerning an Unplanned Capital Item Notice is pending unless it is determined that Owner is required to install the Capital Item pursuant to Section 7.6 (a).

7.7 Adjustments to Performance Characteristics

- (a) If Owner installs any Capital Item or makes any Repairs the costs of which are paid by CAISO under this Agreement, Owner shall modify the Maximum Net Dependable MVA_r Capability, Unit Availability Limit, and performance characteristics of the affected Unit to reflect the resulting changes in operating costs effective as of the date CAISO's payment of CAISO's Repair Share of the Repairs is made, or in the case of a Capital Item, the date the cost of the Capital Item is included in a Surcharge Payment or the rates paid by CAISO.
- (b) If FERC authorization is required to permit Owner to recover the CAISO's Repair Share from CAISO or to include the costs of a Capital Item in a Surcharge Payment or the rates paid by CAISO hereunder, Owner shall make a Section 205 filing limited to recovery of the costs and implementation of related changes to performance characteristics, shall request that the filing become effective as of the date the Capital Item or Repair was placed in service and request expedited consideration of the filing. If CAISO has approved the Capital Item or Repair, CAISO shall intervene in support of such filing including support of requests to place the change in effect without suspension or hearing.
- (c) If Owner makes Repairs or installs a Capital Item when not required to do so and CAISO has not agreed or is not required by ADR to pay for such Repair or Capital Item, Owner may either:
 - (i) make an appropriate adjustment to the Maximum Net Dependable MVA_r Capability, Unit Availability Limit and performance characteristics of the affected Unit to reflect the capability the Unit would have had if the Capital Item had not been installed or the Repairs had not been made; or
 - (ii) make appropriate adjustment to the Maximum Net Dependable MVA_r Capability, Unit Availability Limit and performance characteristics of the affected Unit to reflect the Repairs or installation of the Capital Item.
- (d) Any adjustment to the Heat Input characteristics of the Unit shall be made in accordance with Section 4.9(d).

7.8 Upgrades of Generating Units

Owner may Upgrade any Unit at the Facility, provided that no Upgrade shall release Owner from Owner's performance obligations under this Agreement. CAISO shall secure no rights under this Agreement to any capacity or services increased or enhanced by any Upgrade unless the Parties agree as to the terms of CAISO's rights and the amount of CAISO's payment for such Upgrade. If the Parties so agree, the Maximum Net Dependable MVA_r Capability, Unit Availability Limit and performance characteristics of the affected Unit shall be adjusted to reflect CAISO's agreed upon rights to the Upgrade provided that any adjustment in heat input shall be made in accordance with Section 4.9(d). If

FERC authorization is required to permit Owner to recover the portion of the Upgrade cost CAISO has agreed to pay for the agreed revisions to the Unit characteristics, Owner shall make a Section 205 filing limited to recovery of the costs and implementation of related changes to the Maximum Net Dependable MVA Capability, Unit Availability Limit and performance characteristics, shall request that the filing become effective as of the date CAISO begins paying its agreed portion of the cost of the Upgrade and request expedited consideration of the filing. CAISO shall intervene in support of such filing including support of requests to place the change in effect without suspension or hearing.

7.9 Third-Party Participation in CAISO Review Process

- (a) Subject to fulfillment of the requirements of Section 7.9 (b), CAISO shall consult with the Responsible Utility and the California Agencies prior to approving Capital Items or Repairs. CAISO may approve Capital Items or Repairs aggregating less than \$5,000,000 for the Facility in a Contract Year without approval of the Responsible Utility or the California Agencies. After Capital Items and Repairs aggregating \$5,000,000 for the Facility in a Contract Year have been approved by CAISO, CAISO's approval of all other Capital Items and Repairs for that Contract Year shall not be effective unless the Responsible Utility has consented to such Capital Item or Repair. For the avoidance of doubt, the Responsible Utility has approved recovery of the costs shown in the attached Schedule L-1 for the Capital Items for the 2013 Contract Year and the unrecovered upfront costs as Capital Items Repairs for the 2013 Contract Year up to an aggregate maximum of \$875,000.
- (b) The requirements of Section 7.9 (a) relating to Responsible Utilities shall apply only if and to the extent that the Responsible Utility agrees to waive its right to challenge before the FERC Owner's recovery of approved costs of Repairs or Capital Items. The requirement of Section 7.9 (a) relating to the California Agency shall apply only if and to the extent that each California Agency agrees to waive its right to challenge Owner's recovery of costs associated with the proposed Repairs or Capital Item on any grounds not set out in written objections provided by the California Agencies to CAISO and Owner within 30 days of the California Agencies' receipt of the preliminary and final reports under Section 7.5 or Section 7.6.
- (c) Provided that the California Agencies and Responsible Utility are bound by the provisions of the Confidentiality and Non-disclosure Agreement attached as Schedule N and make the waivers required in Section 7.9 (b), Owner will provide copies of the required reports and notices under Section 7.4, Section 7.5 or Section 7.6, and any additional information provided to the CAISO pursuant to Sections 7.4, 7.5 and 7.6, as the case may be, to the California Agencies and Responsible Utility at the same time as the reports, notices and information are provided to CAISO, and

CAISO will provide copies of all information provided to Owner pursuant to such Sections to the California Agencies and Responsible Utility.

ARTICLE 8 RATES AND CHARGES

8.1 Condition 1 - Not Applicable

When a Unit is under Condition 1, CAISO shall pay Owner each Month for each Unit the sum of:

- (a) the Monthly Option Payment which shall be equal to the Monthly Availability Payment plus the Monthly Surcharge Payment, minus the sum of all Non-Performance Penalties for the Month. In no event shall (i) the Monthly Option Payment for any month be less than zero, (ii) the sum of the Monthly Availability Payments for a Contract Year exceed the Annual Fixed Revenue Requirement for the Contract Year, or (iii) the sum of the Monthly Surcharge Payments for the Contract Year exceed the Annual Capital Item Cost (as defined in Schedule B) for the Contract Year. The Monthly Availability Payment and the Monthly Surcharge Payment shall each be computed in accordance with Schedule B. The Non-Performance Penalties for the Month shall be calculated in accordance with Section 8.5;
- (b) the Variable Cost Payment computed in accordance with Schedule C;
- (c) one-twelfth of the Prepaid Start-up Charge as set out on Schedule D;
- (d) the sum of the Start-up Adjustments calculated in accordance with Schedule D for each Start-up during the Month which was a Prepaid Start-up;
- (e) the sum for all Settlement Periods in the Month of the Pre-empted Dispatch Payments and Motoring Charges calculated in accordance with Schedule E;
- (f) once the Counted MWh for the Contract Year equals the Maximum Annual MWh, the Counted Service Hours for the Contract Year equals the Maximum Annual Service Hours, or the Counted MWh for hydroelectric units for the Month equals the Maximum Monthly MWh, a payment for each subsequent Billable MWh at the rate set out on Schedule G;
- (g) once the Counted Start-ups for the Contract Year equals the Maximum Annual Start-ups, a payment for each additional Start-up calculated in accordance with Schedule G; and
- (h) charges for services Delivered from Substitute Units pursuant to Sections 5.1(c) and (d).

8.2 Condition 2

When a Unit is operating under Condition 2, CAISO shall pay Owner the sum of:

- (a) the Monthly Option Payment, which shall be equal to the Monthly Availability Payment plus the Monthly Surcharge Payment, minus the sum of all Non-Performance Penalties for the Month. In no event shall (i) the Monthly Option Payment for any month be less than zero, (ii) the sum of

- the Monthly Availability Payments for a Contract Year exceed the Annual Fixed Revenue Requirement for the Contract Year or (iii) the sum of the Monthly Surcharge Payments for the Contract Year exceed the Annual Capital Item Cost (as defined in Schedule B) for the Contract Year. The Monthly Availability Payment and the Monthly Surcharge Payment shall each be computed in accordance with Schedule B. The Non-Performance Penalties for the Month shall be calculated in accordance with Section 8.5.
- (b) the Variable Cost Payment computed in accordance with Schedule C;
 - (c) the sum of all Start-up Payments for the Month until Counted Start-ups equal Maximum Annual Start-ups computed in accordance with Schedule D;
 - (d) the sum for all Settlement Periods in the Month of Motoring Charges calculated in accordance with Schedule E;
 - (e) once the Counted Service Hours for the Contract Year exceed the Maximum Annual Service Hours, a payment shall be made as set out on Schedule G;
 - (f) once the Counted Start-ups for the Contract Year equals the Maximum Annual Start-ups, a payment for each additional Start-up calculated in accordance with Schedule G; and
 - (g) charges for services Delivered from Substitute Units pursuant to Section 5.1(c) and (d).

8.3 Determination of Billable MWh and Hybrid MWh - Not Applicable

- (a) "Billable MWh" shall be determined by application of the following rules:
 - (i) If a Unit under Condition 1 or Condition 2 Delivers MWh only in Nonmarket Transactions during a Settlement Period, the Billable MWh shall be the lesser of (A) the Hourly Metered Total Net Generation or (B) the Requested MWh.
 - (ii) If a Unit under Condition 1 delivers MWh in both Market and Nonmarket Transactions during a Settlement Period:
 - (A) If the Hourly Metered Total Net Generation during the Settlement Period is equal to or greater than the Requested MWh applicable to the Settlement Period, the Billable MWh shall be (1) the Requested MWh minus (2) the Hybrid MWh, but shall never be less than zero.
 - (B) If the Hourly Metered Total Net Generation during the Settlement Period is less than the Requested MWh applicable to the Settlement Period, the Billable MWh shall be (1) Hourly Metered Total Net Generation minus (2) the Hybrid MWh, but shall never be less than zero.
 - (iii) If a Unit is under Condition 2, the Billable MWh shall be the lesser of (A) the Hourly Metered Total Net Generation or (B) the sum of (1) Requested MWh and (2) the amount, if any, by which the total MWh for which Owner's bids pursuant to Section 6.1 (b) cleared the market exceeds the Requested MWh.

- (b) “Hybrid MWh” shall be the sum of the MWh scheduled in Market Transactions which were substituted for Requested MWh under Section 5.2 and the MWh scheduled in Market Transactions for which CAISO issued a Dispatch Notice pursuant to Section 4.5 provided that Hybrid MWh shall never exceed the Hourly Metered Total Net Generation.

8.4 Determination of Prepaid Start-ups

Prepaid Start-ups for Condition 1 shall be the Maximum Annual Start-ups. There shall be no Prepaid Start-ups for Condition 2.

8.5 Non-Performance Penalty

- (a) If a Unit fails to comply fully with a Dispatch Notice and such failure is not due to a Force Majeure Event under this Agreement, the Unit shall be subject to a Non-Performance Penalty computed in accordance with this Section 8.5.
- (b) The Non-Performance Penalty shall be calculated for each hour of the Penalty Period in which Owner is not deemed to be in full compliance with a Dispatch Notice and is not excused from performance. The Non-Performance Penalty shall be the sum of the amounts calculated for each Settlement Period in the Month by multiplying (i) the Availability Deficiency Factor for the Settlement Period by (ii) the sum of the Hourly Penalty Rate and the Hourly Surcharge Penalty Rate for the Unit as set forth on Schedule B; provided that the Non-Performance Penalty for any Month shall not exceed the sum of the Condition 1 Availability Payment and Condition 1 Surcharge Payment (for Units on Condition 1), or the sum of the Condition 2 Availability Payment and Condition 2 Surcharge Payment (for Units on Condition 2) for the Month. For purposes of this calculation:
 - (i) an Availability Deficiency Factor shall be calculated for each hour of the Penalty Period as one minus the number determined by dividing (a) the Delivered MVA_{rh} for the hour in question by (b) the product of the Unit Availability Limit and the percentage of the hour (up to 100%) that the Unit was subject to a Dispatch Notice;
 - (ii) the Penalty Period shall be the 72 hour period beginning at the time Owner fails to comply fully with a Dispatch Notice, provided that if Owner in accordance with Section 7.2(a) had scheduled an outage to begin during the 72 hour period, the Penalty Period will terminate at the time the outage was scheduled to begin.
 - (iii) the Unit Availability Limit shall be the Unit Availability Limit as it existed at the time CAISO issued the Dispatch Notice with which Owner failed to comply but reduced to eliminate the effect of any Force Majeure Event affecting deliveries during the Penalty Period.
- (c) For purposes of this Section 8.5 and Section 4.9(a)(i), a Unit shall be deemed to be in full compliance with a Dispatch Notice if the Unit Delivers (i) at least 97 percent of the Requested MVA_{rh}.

8.6 Long-term Planned Outage Adjustment

Not later than 60 days after the end of each Contract Year, Owner shall submit to CAISO a statement showing the Long-term Planned Outage Adjustment for the Contract Year. The Long-term Planned Outage Adjustment shall equal (a) the Hourly Availability Charge plus each Hourly Capital Item Charge, as shown in Schedule B, multiplied by (b) the difference, if positive, of (i) the hours scheduled for performance of Long-term Planned Outages minus (ii) the actual hours spent performing Long-term Planned Outages during the Contract Year. Owner shall credit any Long-term Planned Outage Adjustment on the next invoice or, if this Agreement has terminated, shall pay any Long-term Planned Outage Adjustment to the CAISO upon submission of the Final Invoice. This Section 8.6 shall not apply to 2013 Contract Year.

**ARTICLE 9
STATEMENTS AND PAYMENTS**

9.1 Invoicing

- (a) The billing, invoicing and payment of charges under this Agreement shall be as specified in this Article 9, Schedule O to this Agreement and Section 11.13 of the CAISO Tariff. CAISO shall not modify any provision of Section 41 of the CAISO Tariff or Section 11.13 as they apply to this Agreement without Owner's consent, provided that Owner's consent shall not be required for a change of allocations of RMR costs among market participants under the CAISO Tariff. Notwithstanding anything in this Agreement to the contrary, invoices either due or from the RMR Owner or Responsible Utility for an amount less than \$10.00 will be adjusted to \$0.00 and no amounts will be due to or from that RMR Owner or Responsible Utility for that invoice.
- (b) Owner will submit to CAISO RMR Invoices for each Month during the term of this Agreement, which are defined in this Section 9.1(b) as follows: (i) Estimated RMR Invoice; (ii) Revised Estimated RMR Invoice; (iii) Adjusted RMR Invoice; and (iv) Revised Adjusted RMR Invoice. In the event there are no revisions to the Estimated RMR Invoice or the Adjusted RMR Invoice, Owner shall submit an e-mail to CAISO with a copy to the Responsible Utility indicating that the Estimated RMR Invoice or the Adjusted RMR Invoice shall be deemed to be the Revised Estimated RMR Invoice or the Revised Adjusted RMR Invoice.
- (i) Within 14 days after the end of each Month during the term of this Agreement (and, if this Agreement does not expire or terminate at the end of a Month, within 14 days after the end of the Month in which the Agreement expires or terminates), Owner shall submit an estimated invoice ("Estimated RMR Invoice") to CAISO for all charges and credits due under this Agreement for the Month ("Billing Month"). Each Estimated RMR Invoice shall reflect actual

- data for the Billing Month to the extent actual data is available and shall otherwise reflect estimated data.
- (ii) By the date specified on the RMR Payments Calendar, Owner shall submit a revised estimated invoice (“Revised Estimated RMR Invoice”) to CAISO, which will include appropriate revisions based on the CAISO’s validation of the Estimated RMR Invoice. The Due Date of the Revised Estimated RMR Invoice shall be the 30th day after the date on which Owner submitted the Estimated RMR Invoice to CAISO, or if such date is not a Business Day, the Due Date shall be the next Business Day.
 - (iii) By the date specified on the RMR Payments Calendar, CAISO shall submit an invoice (“CAISO Invoice”) to the Responsible Utility, with an e-mail notification to Owner and the Responsible Utility, which specifies the payment due from the Responsible Utility to CAISO and from CAISO to Owner on the basis of the Revised Estimated RMR Invoice. However, in the event the payment is due from Owner to CAISO and from CAISO to the Responsible Utility, then CAISO shall submit the CAISO Invoice to Owner with an e-mail notification to Owner and the Responsible Utility.
 - (iv) Within 7 days of receipt by Owner of the Recalculation Settlement Statement for the last day of the Billing Month, Owner shall submit an adjusted invoice (“Adjusted RMR Invoice”) to CAISO, reflecting actual data for the Billing Month.
 - (v) By the date specified on the RMR Payments Calendar, Owner shall submit to CAISO an invoice reflecting actual data for the Billing Month and including appropriate revisions based on the CAISO’s validation of the Adjusted RMR Invoice (“Revised Adjusted RMR Invoice”). The Due Date of the Revised Adjusted RMR Invoice shall be the 30th day after the date on which Owner submitted the Adjusted RMR Invoice to CAISO, or if such date is not a Business Day, the Due Date shall be the next Business Day.
 - (vi) By the date specified on the RMR Payments Calendar, CAISO shall submit an CAISO Invoice to the Responsible Utility, with an e-mail notification to Owner and the Responsible Utility, which specifies the payment due from the Responsible Utility to CAISO and from CAISO to Owner on the basis of the Revised Adjusted RMR Invoice. However, in the event the payment is due from Owner to CAISO and from CAISO to the Responsible Utility, then CAISO shall submit the CAISO Invoice to Owner with an e-mail notification to Owner and the Responsible Utility.
- (c) If the day on which any RMR Invoice is due to be issued is not a Business Day, such RMR Invoice shall be issued on the next succeeding Business Day.
 - (d) Each RMR Invoice shall use the template posted on the CAISO Website in accordance with Schedule O (“RMR Invoice Template”). Each RMR

- Invoice shall set out detailed calculations and breakdowns of the amounts due, shall identify the source of each input used in the calculations, and shall identify all relationships among data in different invoice levels.
- (e) This section 9.1(e) applies to all Condition 1 Units. Any amounts received by or due to Owner's Scheduling Coordinator for Billable MWh and Ancillary Services Delivered in Nonmarket Transactions during the Billing Month shall be subtracted from the amount otherwise due under each RMR Invoice. If subtraction of the Energy and any Ancillary Service amounts for a Unit under Condition 1 results in a credit to CAISO on an RMR Invoice, the credit shall be carried forward ("Credit Carryforward") to the RMR Invoices for each succeeding Billing Month in that Contract Year until extinguished; provided that Owner shall not be required to carry any such credit into a later Contract Year or to pay any part of such credit to CAISO.
- (f) This section 9.1(f) applies to all Condition 2 Units. All amounts received by or due to Owner's Scheduling Coordinator in connection with Market Transactions and Nonmarket Transactions during the Billing Month ("Scheduling Coordinator Revenues") shall be subtracted from the amount otherwise due under each RMR Invoice. If subtracting the Scheduling Coordinator Revenues results in a credit to CAISO on an RMR Invoice, the credit shall be carried forward ("Credit Carryforward") to the appropriate RMR Invoices for each succeeding Billing Month in that Contract Year until extinguished. If there is an unextinguished credit balance remaining at the end of the Contract Year, Owner shall refund to CAISO an amount equal to the lesser of (i) the remaining balance of Scheduling Coordinator Revenues or (ii) the total amounts due Owner pursuant to Section 8.2 for the Contract Year minus all Scheduling Coordinator Revenues previously credited to Owner during such Contract Year. Such refund amount will be included on December's Adjusted RMR Invoice, or the Final Invoice if the Agreement is terminated.
- (g) In the event any corrections, surcharges, credits, refunds or other adjustments pertaining to a Billing Month are discovered after the Revised Adjusted RMR Invoice for such Billing Month has been issued ("Prior Period Changes"), then such Prior Period Changes shall be included in a worksheet for the prior period ("Prior Period Change Worksheet") and submitted for payment in the next allowed Billing Month for Prior Period Changes. The allowed Billing Months for Prior Period Changes are as follows. Any Prior Period Changes pertaining to the months of January through June of a Contract Year which are discovered prior to the submission of the December Estimated RMR Invoice for such Contract Year shall be included in a Prior Period Change Worksheet submitted with the December Estimated RMR Invoice. Any Prior Period Changes pertaining to the months of July through December of a Contract year which are discovered prior to the submission of the May Estimated RMR Invoice for the subsequent Contract year shall be included, subject to

Section 9.8, in a Prior Period Change Worksheet submitted with the May Estimated RMR Invoice for the subsequent Contract Year. Any Prior Period Changes pertaining to a Billing Month for a prior Contract Year which are discovered after the first opportunity to submit a Prior Period Change Worksheet has passed, shall be included in a Prior Period Change Worksheet submitted with the Estimated RMR Invoice for the next December or May Billing Month, whichever comes first. Any Prior Period Changes pertaining to the time when the Facilities were under a superseded rate schedule using Conditions of Must Run Agreement A, B, and C, shall be calculated through a separate process and not included on RMR Invoices issued under this Agreement unless the Prior Period Changes result from the Revenue Requirements Settlements outlined in the Stipulation and Agreement approved on May 28, 1999, in FERC Docket No. ER98-441-000, et al.

- (h) Owner shall send a copy of each RMR Invoice and any Prior Period Change Worksheet(s) to the Responsible Utility at the time it sends such invoices to CAISO.
- (i) Owner shall provide supporting detail with the Prior Period Change Worksheets to identify the relevant Contract Year and provide clear calculations by Facility, by Billing Month, and such other detail as necessary to support the Prior Period Change(s). This level of detail shall be consistent with the level of detail originally required to perform the computation(s) that are being corrected in the Prior Period Change Worksheet. Prior Period Change Worksheets, when required, shall include all identified Prior Period Changes for each applicable prior Contract Year, and shall be computed as specified in section 9.1(j).
- (j) A Prior Period Change Worksheet shall contain the following information and calculations for each Billing Month in the relevant Contract Year(s), commencing with the Billing Month pertaining to the Prior Period Change(s):
 - (i) The Revised Adjusted RMR Invoice for the Billing Month or, if such Billing Month has previously been submitted on a Prior Period Change Worksheet, the most recent revision of such RMR Invoice.
 - (ii) A revision of the RMR Invoice specified in paragraph (1) above which shows the RMR Invoice revised to incorporate the Prior Period Change(s) as if such Prior Period Change(s) had been invoiced in the Billing Month which gave rise to the Prior Period Change(s). Such revision shall incorporate the impact of the Prior Period Change(s) on RMR payments, including any impact resulting from the Credit Carryforward calculation for the current or previous Billing Months in the Contract Year. For Condition 2 Units, such calculation shall include a recalculation of the refund described in Section 9.1(f).
 - (iii) The difference between the amounts calculated under paragraph (2) above and paragraph (1) above. The amount due to or from

Owner as a result of this calculation shall be clearly specified, with interest shown separately from any other amount due. Interest shall be calculated at the Interest Rate from the Due Date of the Revised Estimated RMR Invoice for the Billing Month to the date payment of the amount due is made.

Owner shall total for all Billing Months which are included on the Prior Period Change Worksheet, the amount due as a result of the calculation in paragraph (3) above for each Billing Month. Owner shall also total for all Billing Months which are included on the Prior Period Change Worksheet, the interest due as a result of the calculation in paragraph (3) above for each Billing Month. The total amount due and interest due shall be transferred from the Prior Period Change Worksheet to the appropriate Estimated RMR Invoice, and such amounts shall be due as specified on the Estimated RMR Invoice.

- (k) Any time a Unit switches from Condition 1 to Condition 2 or Condition 2 to Condition 1 during a Contract Year, the provisions of Section 9.1(e) shall apply to the months when the unit was on Condition 1 and the provisions of Section 9.1(g) shall apply to the months when the unit was on Condition 2.
- (l) CAISO shall separately post on the CAISO Website examples (“Prior Period Change Examples”) developed and agreed to by the RMR Invoice Task Force created under Schedule O of the calculations described in Sections 9.1(e), 9.1(f), 9.1(g) and 9.1(j) to provide guidance on the correct treatment of Prior Period Changes and to show the correct preparation of the Prior Period Change Worksheet and transfer of amount due to the appropriate Estimated RMR Invoice. Additionally, the RMR Invoice Task Force shall develop and agree to, and CAISO shall post on the CAISO Website, guidelines (“Prior Period Change Guidelines”) underlying the calculations described in Sections 9.1(e), 9.1(f), 9.1(g) and 9.1(j). The Prior Period Change Worksheet shall be prepared, and the amount due shall be calculated and transferred to the Estimated RMR Invoice, in accordance with the RMR Invoice Template, the Prior Period Change Examples, and the Prior Period Change Guidelines posted on the CAISO Website. In the event of a dispute regarding the treatment of Prior Period Changes, all Parties to such dispute shall refer to the Prior Period Change Examples and Prior Period Change Guidelines posted on the CAISO Website for guidance.

9.2 Facility Trust Accounts

CAISO shall establish two segregated commercial bank accounts under the “Facility Trust Account” referred to in Sections 11.13 and 41 of the CAISO Tariff for each Responsible Utility. One commercial bank account, the “RMR Owner Facility Trust Account”, shall be held in trust by CAISO for Owner. The other commercial bank account, the “Responsible Utility Facility Trust Account”, shall be held in trust by CAISO for the Responsible Utility. Payments received by

CAISO from a Responsible Utility in connection with this Agreement, including payments following termination of this Agreement, will be deposited into the RMR Owner Facility Trust Account and payments from CAISO to Owner will be withdrawn from such Account, all in accordance with Sections 11.13 and 41 of the CAISO Tariff and this Article 9. Any payments received by CAISO from Owner in connection with this Agreement, including payments following termination of this Agreement, will be deposited into the Responsible Utility Facility Trust Account. Any payments to a Responsible Utility of funds received from Owner under this Agreement will be withdrawn from the Responsible Utility Facility Trust Account, all in accordance with Section 11.13 and 41 of the CAISO Tariff, and this Agreement. Neither the RMR Owner Facility Trust Account nor the Responsible Utility Facility Trust Account shall have other funds commingled in it at any time.

9.3 Payment

- (a) CAISO shall pay Owner all invoiced amounts due on Revised Estimated RMR Invoices, Revised Adjusted RMR Invoices, and Final Invoices whether or not disputed by CAISO or the Responsible Utility except to the extent that CAISO (i) is entitled to a refund on a Revised Estimated or Revised Adjusted RMR Invoice or Final Invoice against such payment under this Agreement or (ii) is entitled to deduct an amount under Section 9.6. All payments shall be made from the RMR Owner Facility Trust Account on or before the Due Date by wire transfer in accordance with instructions from Owner. If Owner is also the Responsible Utility, at the discretion of Owner payments to it may be made by memorandum account instead of wire transfer. Owner shall establish and maintain a settlement account at a commercial bank located in the United States and reasonably acceptable to CAISO which can effect money transfers via Fed-Wire where payments to and from the Facility Trust Accounts shall be made in accordance with Section 9.2 and Section 11.13 of the CAISO Tariff. Owner shall notify CAISO of its settlement account details prior to the Effective Date. Owner may from time to time change its settlement account details, provided that, Owner shall give CAISO 15 days notice before making changes. In the event there is a refund amount due to CAISO, Owner shall refund the amount due CAISO in accordance with Section 9.2 and Section 11.13 of the CAISO Tariff.
- (b) If a Revised Adjusted RMR Invoice is less than the amount paid by CAISO on the Revised Estimated RMR Invoice, the difference shall be paid by Owner to CAISO with interest at the Interest Rate from the Due Date of the Revised Estimated RMR Invoice to the Due Date of the Revised Adjusted RMR Invoice, or, if the Agreement is terminated, shall be paid to CAISO on submission of the Final Invoice. If a Revised Adjusted RMR Invoice is greater than the amount paid by CAISO under the Revised Estimated RMR Invoice, CAISO shall pay Owner the difference with interest at the Interest Rate from the Due Date of the Revised Estimated

RMR Invoice to the Due Date of the Revised Adjusted RMR Invoice by CAISO.

9.4 Payment Default

- (a) Except as provided in Section 9.4 (b), Owner, in addition to any other remedy it may have, may pursue all claims against CAISO and the Collateral, as defined in Section 9.7 below, if CAISO fails to pay any invoice in full by the Due Date as required under Section 9.3. CAISO, in addition to any other remedy it may have, may pursue all claims against Owner if Owner fails to pay any invoice in full by the Due Date as required under Section 9.3. The parties' remedies shall be subject to the limitations set forth in Article 11.
- (b) If the amounts CAISO has not paid have been invoiced by CAISO to the Responsible Utility and the Responsible Utility has not paid such amounts to CAISO, Owner shall cause execution to issue against, and shall collect solely from the Collateral or the Responsible Utility, and not CAISO, if all of the following conditions have been satisfied:
- (i) The Responsible Utility is Southern California Edison Company ("SCE") and San Diego Gas & Electric Company ("SDG&E"), with SCE responsible for 80% and SDG&E responsible for 20% of all costs under this Agreement, with each severally liable for that percentage.
 - (ii) CAISO has invoiced via the CAISO Invoice SCE and SDG&E for costs (net of any applicable credits, all as shown on the Revised Estimated or Revised Adjusted RMR Invoice) after deducting only amounts permitted to be deducted under Section 9.6.
 - (iii) The CAISO Tariff expressly requires SCE & SDG&E to pay all amounts shown on the CAISO Invoices without offset, recoupment or deduction (except to the extent that Section 41 of the CAISO Tariff permits deduction of amounts that are due the Responsible Utility after resolution of a dispute) and, to the extent that SCE or SDG&E disputes any amounts due under the CAISO Invoices, to pay the disputed amounts under protest and subject to refund with interest; and
 - (iv) SCE or SDG&E fails to pay all or a portion of the amounts due under the CAISO Invoices and did not have the right to have such amount deducted under Section 41 of the CAISO Tariff.
- (c) Notwithstanding the provisions of Section 9.4 (b), Owner may cause execution to issue against, and collect from, CAISO, the Responsible Utility, the Collateral or insurance maintained by CAISO pursuant to Section 12.1(a), if notwithstanding the requirement to pay CAISO Invoices without offset, recoupment or deduction (except to the extent that Section 41 of the CAISO Tariff permits deduction of amounts that are due the Responsible Utility after resolution of a dispute), a Responsible Utility nonetheless offsets amounts unrelated to this Agreement or withholds

- amounts based on a breach or default by CAISO of any of its obligations to the Responsible Utility.
- (d) The CAISO Invoices shall separately show the amounts due for services from each Facility. If the Responsible Utility withholds any portion of the amount due under the CAISO Invoices, CAISO shall inform Owner of the specific Facility and time periods for which the Responsible Utility withheld payments.
- (e) As a condition for Owner's agreement not to seek to recover amounts from CAISO under Section 9.4(b), CAISO agrees to include and retain in the CAISO Tariff provisions expressly recognizing that Owner is a third party beneficiary of, and has all rights that CAISO has under the CAISO Tariff, at law, in equity or otherwise, to enforce the Responsible Utility's obligation to pay all sums invoiced to it in the CAISO Invoices but not paid by the Responsible Utility, to the extent that, as a result of the Responsible Utility's failure to pay, CAISO does not pay Owner on a timely basis amounts due under this Agreement. Owner recognizes that its rights as a third party beneficiary are (i) no greater than CAISO's rights against the Responsible Utility, and (ii) subject to Section 13 of the CAISO Tariff regarding dispute resolution. Either CAISO or Owner (but not both) will be entitled to enforce any claim arising from unpaid CAISO Invoices, and only one party will be a "disputing party" under Section 13 of the CAISO Tariff with respect to such claim so that the Responsible Utility will not be subject to duplicate claims or recoveries. Owner shall have the right to control the disposition of claims against the Responsible Utility for non-payments which result in payment defaults by CAISO under this Agreement. To that end, CAISO agrees that in the event of nonpayment by the Responsible Utility of amounts due under the CAISO Invoices, CAISO will not take any action to enforce its rights against the Responsible Utility unless CAISO is requested to do so by Owner. CAISO shall cooperate with Owner in a timely manner as necessary or appropriate to most fully effectuate Owner's rights related to such enforcement, including using its best efforts to enforce the Responsible Utility's payment obligations if, as, to the extent, and within the time frame, requested by Owner. CAISO shall intervene and participate where procedurally necessary to the assertion of a claim by Owner.
- (f) If a Responsibility Utility was not the Responsible Utility on April 1, 1998 (a "New Responsible Utility") and if:
- (i) The senior unsecured debt of the New Responsible Utility is rated or becomes rated at less than A- from Standard & Poors ("S&P") or A3 from Moody's Investment Services ("Moody's), and
 - (ii) Such ratings do not improve to A- or better from S&P or A3 or better from Moody's within 60 days,
- CAISO shall then require the New Responsible Utility to issue and confirm to CAISO an irrevocable and unconditional letter of credit in an amount equal to three times the highest monthly payment invoiced by CAISO to

the New Responsible Utility (or the prior Responsible Utility) in connection with services provided under this Agreement during the last 3 months for which invoices have been issued. The letter of credit must be issued by a bank or other financial institution whose senior unsecured debt rating is not less than A from S&P and A2 from Moody's. The letter of credit shall authorize CAISO or Owner to draw on the letter of credit for deposit solely into the RMR Owner Facility Trust Account in an amount equal to any amount due and not paid by the Responsible Utility under the CAISO Invoices.

9.5 Interest

If CAISO or Owner fails to make any payment by the Due Date, the amount due but not paid shall accrue interest at the Interest Rate from the Due Date until the amount is paid.

9.6 Disputed Amounts

(a) If CAISO or the Responsible Utility disputes a Revised Estimated or Revised Adjusted RMR Invoice or Final Invoice or part thereof submitted by Owner under this Agreement, or if the Responsible Utility disputes an CAISO Invoice or part thereof that relates to an RMR Invoice or Final Invoice submitted by Owner to CAISO under this Agreement, and if such dispute is based in whole or part on an alleged error or breach or default of Owner's obligations to CAISO under this Agreement, then CAISO promptly shall give written notice to Owner of the reasons for the dispute and the amount in dispute. CAISO shall pay Owner the disputed amount without offset, recoupment or reduction of any kind or nature. Such payment may, however, be made by CAISO under protest with reservation of the right to seek a refund with interest at the Interest Rate from the date of the disputed payment to the date of repayment. If CAISO notifies Owner that CAISO or the Responsible Utility disputes any amount of Owner's RMR Invoice or Final Invoice, Owner shall at its own cost provide CAISO with all information and assistance CAISO reasonably requires to resolve the dispute and shall join with CAISO in any discussions and negotiations with the Responsible Utility to resolve the dispute. The dispute shall be subject to ADR provided that in such ADR proceeding only one entity (CAISO or Responsible Utility) will be the disputing party with respect to such claim. Owner shall be obligated to refund to CAISO as a result of resolution of such dispute only if, and to the extent, the resolution determines the amount invoiced by Owner exceeded the amounts due Owner under this Agreement for the period covered by the RMR Invoices(s) and/or Final Invoice. Any amount agreed or determined to be owed by Owner to CAISO under this Section 9.6 (a) shall be refunded by Owner to CAISO with interest, by Owner's inclusion of such refund (including interest) in a Prior Period Change Worksheet included with the next appropriate May or December Estimated RMR Invoice as

specified in Sections 9.1(g) through 9.1(l) of this Agreement. If Owner does not include such refund (including interest) in the appropriate RMR Invoice, then such refund shall be made by CAISO's deduction of such amount from the next Revised Estimated and Revised Adjusted RMR Invoice(s) and Final Invoice submitted by Owner to CAISO under this Agreement until such amount is extinguished, or, if this Agreement has terminated, by paying such amount to CAISO. Interest shall be at the Interest Rate unless it is determined through ADR that the amount invoiced by Owner was submitted without a good faith basis in fact or law, in which case interest shall be at twice the Interest Rate.

- (b) It is expressly understood that the Responsible Utility shall, to the extent set forth herein, be a third party beneficiary of, and shall have all rights that CAISO has under this Agreement, at law, in equity and otherwise, to dispute an RMR Invoice or Final Invoice submitted to CAISO by Owner under this Agreement and to enforce Owner's obligation to make any required payment to CAISO under this Agreement to the extent CAISO does not make a related deposit into the Responsible Utility Facility Trust Account as a result of Owner's failure to make the required payment. The rights of the Responsible Utility as third party beneficiary shall be no greater than CAISO's rights against Owner and shall be subject to the ADR provisions of this Agreement. Either CAISO or the Responsible Utility, but not both, will be entitled to enforce any claim arising from a related set of facts, and only one such entity will be a disputing party under Article 11 of this Agreement with respect to any such claim so that Owner shall not be subject to duplicate claims or recoveries. If the Responsible Utility is not the Owner, the Responsible Utility shall control the disposition of all claims against Owner for non-payment described in this Section 9.6, including the choice of disputing party. The CAISO shall have the right to intervene for the purpose of participating in the proceeding even if it is not the disputing party. CAISO shall cooperate with the Responsible Utility in a timely manner as necessary or appropriate to most fully effectuate the Responsible Utility rights related to such enforcement, including using its best efforts to enforce Owner's payment obligations if, as, to the extent, and within the time frame, requested by Responsible Utility. Subject to the foregoing, CAISO shall intervene and participate where procedurally necessary to the assertion of a claim by the Responsible Utility.

9.7 Payment Security

To secure all of CAISO's payment obligations to Owner under this Agreement, CAISO agrees to grant Owner a security interest and lien in the following collateral (collectively, the "Collateral"): (a) all past, present and future accounts and other amounts Responsible Utility owes CAISO at any time pursuant to Section 41 of the CAISO Tariff attributable to invoices submitted by Owner under this Agreement (collectively, the

“Accounts”), (b) the RMR Owner Facility Trust Account, all funds in the RMR Owner Facility Trust Account at any time, and all funds paid on account of any Accounts, (c) all proceeds of the Collateral, if any, and (d) all of CAISO’s right, title and interest in the Collateral. CAISO represents and warrants to Owner that (a) CAISO has the authority to grant such security interest, (b) CAISO will have good, marketable and exclusive title to all of the Collateral, (c) such security interest and lien will at all times be a valid, enforceable and first-priority lien on the Collateral, and (d) such security interest will be duly perfected by the filing of a financing statement under the California Uniform Commercial Code describing the Collateral in the office of the Secretary of State of California and the delivery of a written notice of Owner’s security interest to the bank with which the RMR Owner Facility Trust Account is maintained. If CAISO defaults on its obligation to pay under this Agreement, Owner shall be entitled to enforce such security interest, to exercise its rights in the Collateral, to collect the Accounts from Responsible Utility, to collect all funds in the RMR Owner Facility Trust Account, and to exercise all other rights and remedies under the California Uniform Commercial Code. CAISO agrees to promptly execute and deliver all financing statements and other documents Owner reasonably requests, including but not limited to a written notice of Owner’s security interest in the Collateral to the bank with which the RMR Owner Facility Trust Account is maintained, in order to maintain, perfect and enforce such security interest.

9.8 Errors

If a Party discovers an error in the amount of an invoice or payment under this Agreement and notifies the other Party within 60 days after discovering the error, the error shall be corrected as specified in Sections 9.1(g) through 9.1(l) of this Agreement; provided that a Party shall not be entitled to have an error corrected unless the Party notifies the other Party within 12 months after the date of the applicable Revised Adjusted RMR Invoice or Final Invoice, or within 60 days after issuance of the final report with respect to an audit pursuant to Section 12.2(g), whichever is later.

9.9 Payment of Termination Fee

- (a) Within 14 days after the end of each Month during the period in which any Termination Fee is payable under Section 2.5, Owner shall submit an invoice (“Termination Fee Invoice”) to CAISO and a copy to the Responsible Utility for all Termination Fee amounts due for the Month. Each Termination Fee Invoice shall: (i) be broken down by Unit and (ii) clearly identify the source of each input used.
- (b) CAISO shall pay Owner amounts invoiced under this Section 9.9 in accordance with Sections 9.3 through 9.8. If CAISO or, if applicable, the Responsible Utility, has disputed the amount of a Termination Fee stated in a Termination Fee Invoice, then neither CAISO nor the Responsible

Utility shall be required to give notice of the same disputed amount as to subsequent Termination Fee Invoices.

9.10 Payment of Final Invoice

- (a) Within 7 days of receipt by Owner of the Recalculation Settlement Statement for market transactions for the effective date of termination of this Agreement, Owner shall submit an invoice ("Final Invoice") to CAISO and a copy to the Responsible Utility for all charges and other amounts then due under this Agreement. Amounts then due shall include: (i) charges for all Ancillary Services provided under this Agreement and not previously invoiced; (ii) the Long-term Planned Outage Adjustment under Section 8.6. and (iii) refunds described in section 9.1(f) for Condition 2 Units. Calculation of the Long-term Planned Outage Adjustment shall be made by deeming the effective date of termination to be the end of the Contract Year, and by assuming that all Long-term Planned Outages scheduled to occur after the termination date occur as scheduled. The Final Invoice shall not include remaining Monthly payments of a Termination Fee under Section 2.5, which shall continue to be paid monthly until the obligation is extinguished.
- (b) CAISO shall pay Owner the amount stated in the Final Invoice in accordance with Section 9.3 through 9.8.

ARTICLE 10 FORCE MAJEURE EVENTS

10.1 Notice of Force Majeure Events

If either Party is unable to perform its obligations under this Agreement due to a Force Majeure Event, the Party unable to perform shall notify the other Party of the Force Majeure Event promptly after the occurrence thereof. The Party's notice may be given orally but shall promptly be confirmed in writing or electronically.

10.2 Effect of Force Majeure Event

- (a) If a Force Majeure Event prevents a Party from performing, in whole or in part, its obligations under this Agreement, such Party's obligations, other than obligations to pay money (unless the means of transferring funds is affected), shall be suspended and such Party shall have no liability with respect to such obligations; provided, that the suspension of the Party's obligations is of no greater scope and of no longer duration than is required by the Force Majeure Event.
- (b) If a Force Majeure Event (other than a flood, storm or drought affecting a hydroelectric Unit) reduces the Availability of a Unit, the Availability shall be determined as if the Unit were available up to the Unit Availability Limit in effect prior to the Force Majeure Event through the earlier of the 120th day following the Force Majeure Event or until the Unit's Availability is

restored, whichever occurs first. If a flood or storm Force Majeure Event reduces the Availability of a hydroelectric Unit, the Availability shall be determined as if the Unit were available up to its Unit Availability Limit in effect prior to the Force Majeure Event through the earlier of the 120th day following the Force Majeure Event or until the Unit's Availability is restored, and as if the Unit were available up to one-half of such Unit Availability Limit from the 120th day through the earlier of the 240th day or the date on which the Unit's Availability is restored. If a drought Force Majeure Event reduces the Availability of a hydroelectric Unit, the Availability shall be determined as if the Unit were available up to its Unit Availability Limit in effect prior to the Force Majeure Event until the Unit's Availability is restored following the end of the drought Force Majeure Event.

10.3 Remedial Efforts

The Party that is unable to perform by reason of a Force Majeure Event shall use commercially reasonable efforts to remedy its inability to perform and to mitigate the consequences of the Force Majeure Event as soon as reasonably practicable; provided, that no Party shall be required to obtain replacement power or to settle any strike or other labor dispute on terms which, in the Party's sole discretion, are contrary to its interest and, except to the extent that the Unit's primary fuel is distillate fuel oil or Schedule H expressly requires Owner to maintain fuel oil capability for the Unit, Owner shall not be required to obtain or use fuel oil to operate a Unit. The Party unable to perform shall advise the other Party of its efforts to remedy its inability to perform and to mitigate the consequences of the Force Majeure Event, and shall advise the other Party of when it believes it will be able to resume performance of its obligations under this Agreement.

ARTICLE 11 REMEDIES

11.1 Dispute Resolution

The Parties shall make reasonable efforts to settle all disputes arising out of or in connection with this Agreement. Unless this Agreement expressly provides that a particular type of dispute is not subject to ADR, the Parties shall use ADR procedures to resolve all disputes which are not otherwise settled. Owner and CAISO will promptly join with all other owners of Reliability Must-Run Units and all Responsible Utilities to jointly develop ADR procedures to be used in connection with such disputes. Following unanimous agreement of Owner, CAISO and Responsible Utilities to the ADR procedures, such procedures shall be posted on CAISO Website. Until there is unanimous agreement on such procedures, the Parties shall use the ADR procedures contained in Schedule K.

11.2 Waiver of Damages

- (a) Except for the obligations set forth in Section 11.4 (Termination for Default) and Section 12.6 (Indemnity), neither Party shall be liable to the other Party for any claim, loss or damage of any nature arising out of or relating to the performance or breach of this Agreement including replacement power costs, loss of revenue, loss of anticipated profits or loss of use of, or damage to, plant or other property, personal injury, or death; provided, however, that this waiver of liability shall not include or cover any claim, damage or loss arising out of the willful misconduct of either Party. Amounts that are specifically payable or reimbursable by the other Party under the terms of this Agreement shall not be considered "claims, losses or damages" for purposes of this Section.
- (b) Neither Party shall be liable to the other for any special, indirect, incidental or consequential damages suffered by the other Party or by third parties arising out of, or relating to, this Agreement or the performance of, or breach of any obligation under, this Agreement, or the negligence of any Party. This limitation shall apply even if the Party is advised of the possibility of these damages.
- (c) Except for the obligations to make or adjust payments or pay penalties expressly provided in Section 2.5 (Termination Fee), Section 7.4 (Planned Capital Items), Section 7.5 (Unplanned Repairs), Section 7.6 (Unplanned Capital Items), Section 7.8 (Upgrades of Generating Units), Article 8 (Rates and Charges) and Article 9 (Statements and Payments), of this Agreement, either Party's maximum aggregate liability for any and all claims arising out of or relating to performance or breach of this Agreement during the Contract Year, whether based upon contract, tort (regardless of degree of fault or negligence), strict liability, warranty, or otherwise, including any liability for Owner's failure to Deliver Requested Ancillary Services shall not exceed \$20 million.

11.3 Injunctive Relief

In addition to any other remedy to which a Party may be entitled by reason of the other Party's breach of this Agreement, the Party not in default shall be entitled to seek temporary, preliminary and permanent injunctive relief from any court of competent jurisdiction restraining the other Party from committing or continuing any breach of this Agreement.

11.4 Termination For Default

- (a) If either Party shall fail to perform any material obligation imposed on it by this Agreement and that obligation has not been suspended pursuant to Section 10, the other Party, at its option, may terminate this Agreement by giving the Party in default notice setting out specifically the circumstances constituting the default and declaring its intention to terminate this Agreement. If the Party receiving the notice disputes the notice, it shall

notify the other Party within 14 days after receipt of the notice setting out specifically the grounds of such disputes. Time is of the essence in remedying a default. If the Party receiving the notice does not, within 30 days after receiving the notice, remedy the default or refer the dispute to ADR, the Party not in default shall be entitled by a further notice to terminate this Agreement. The Party not in default shall have a duty to mitigate damages.

- (b) Termination of this Agreement pursuant to this Section 11.4 shall be without prejudice to the right of Owner or CAISO to collect any amounts due to it prior to the time of termination.

11.5 Cumulative and Nonexclusive

Except as provided in Section 5.4(b), each remedy provided for in this Agreement shall be cumulative and not exclusive.

11.6 Beneficiaries

Except as is specifically set forth in this Agreement, nothing in this Agreement, whether express or implied, confers any rights or remedies under, or by reason of, this Agreement on any persons other than the Parties and their respective successors and assigns, nor is anything in this Agreement intended to relieve or discharge the obligations or liability of any third party, nor give any third person any rights of subrogation or action against any Party. The owner of title to a Unit that is leased to Owner is an intended beneficiary of Section 2.2(e).

ARTICLE 12 COVENANTS OF THE PARTIES

12.1 Insurance

- (a) The CAISO shall maintain (i) an errors and omissions insurance policy and (ii) director and officer insurance, with combined aggregate coverage of at least \$150 million under the two policies and an operating reserve of at least \$15 million. The CAISO may reduce the level of insurance coverage, but may not do so unless it provides Owner at least 90 days notice of its intent to reduce the insurance coverage. At Owner's request, CAISO shall provide Owner with evidence of the insurance coverage it has in place. This Section 12.1 shall not be construed to require CAISO to maintain any level of coverage for any period after termination of the Agreement.
- (b) Owner and CAISO will secure and maintain in effect during the term of this Agreement the insurance required by Schedule I. Self-insurance may be utilized by mutual agreement. Owner shall name CAISO as an additional insured on its general commercial liability insurance policies. CAISO shall name Owner as an additional insured on its errors and omissions insurance policies. Owner and CAISO will each certify or cause its respective insurance agent to certify that it is insured under a major risk

management program, including self-insured retentions, and except for policies covered by Section 12.1 (a), such insurance will remain in effect in amounts meeting the requirements of Schedule I.

12.2 Books And Records

- (a) For a period of 36 months from creation of the records, Owner shall maintain and make available for audit by CAISO complete operations records for each Unit. Such records shall include:
- (i) information for each Settlement Period on the Availability of the Units, Delivered Ancillary Services,
 - (ii) outages,
 - (iii) Facility licenses and permits,
 - (iv) copies of operating and maintenance agreements for the Unit,
 - (v) a list of citations filed against the Unit by any environmental, air quality, health and safety, or other regulatory agency in the last 36 months,
 - (vi) a list of any resolved and unresolved WSCC log items from the last 36 months pertaining to the Unit,
 - (vii) maintenance, overhauls and inspections performed, and
 - (viii) books, accounts and all documents required to support Owner's statements, invoices, charges and computations made pursuant to this Agreement.

CAISO may audit Owner's books, accounts and documents relating to invoices, statements, charges and computations no more frequently than once each Contract Year, and only one time following expiration or termination of this Agreement.

- (b) The Responsible Utility shall have the right to participate jointly with CAISO in auditing books, accounts, documents and operating records of the Facilities to the extent required to verify the accuracy and correctness of all Owner's statements, invoices, and computations underlying all Owner charges passed through by CAISO to the Responsible Utility in connection with services rendered by Owner under this Agreement.
- (c) For a period of 36 months from the creation of the records, CAISO shall maintain and make available for audit by Owner all operations records required to permit Owner to verify that CAISO has complied with its obligations to Owner under this Agreement.
- (d) In addition to the audit rights under Section 12.2 (a) and (b), if Owner's rates are determined pursuant to the formula contained in Schedule F, representatives of CAISO and the Responsible Utility shall have the right jointly to audit the records, accounts and supporting documents of Owner to verify (i) the accuracy of any arithmetic calculation and (ii) application of the formula.
- (e) If Owner's rates are determined pursuant to the formula contained in Schedule F, the California Agency shall have the right to audit the records, accounts and supporting documents of Owner or CAISO to verify the

- accuracy of any arithmetic calculation and application of the formula, including the accuracy of allocation to accounts under the FERC Uniform System of Accounts, 18 C.F.R. Part 101. If there is more than one California Agency, only one audit shall be conducted by the California Agencies and such audit shall be binding on all the California Agencies.
- (f) Any entity exercising its right to audit under this Section 12.2 shall give the audited entity not less than 30 days prior written notice of the audit. Books or records requested in any audit shall be available for inspection by the auditing entity at the offices of the entity being audited between 9:00 A.M. and 5:00 P.M. on Business Days. Any audit under this Section 12.2 shall be completed not more than 36 months after the records were created. Any audit right herein shall be limited to the books and accounts of Owner or CAISO and shall not extend to the books and accounts of the parent or any other affiliate of Owner or CAISO. The expense of any audit shall be borne solely by the auditing Party or entity.
- (g) No adjustments to payments shall be required as a result of an audit unless, and then only to the extent that, CAISO, Owner, or another entity making such an audit under this Section 12.2 takes written exception to the books and accounts and makes a claim upon Owner or CAISO for any discrepancies disclosed by such audit within 60 days following issuance of the final audit report.
- (h) All information provided during the course of an audit shall be treated as Confidential Information in accordance with Section 12.5.
- (i) Nothing in this Agreement shall override any obligation Owner or CAISO may have under applicable law to maintain books and records for periods longer than 36 months nor shall this Agreement override any obligation Owner or CAISO may have to make books and records available for audit by FERC or any other entity. Nothing in this Agreement is intended to limit in any manner (i) the authority of FERC to audit the books and records of Owner or CAISO or the manner in which such audit is noticed or conducted or (ii) CAISO's right to audit market participants (including Owner) under the CAISO Tariff.

12.3 Representations And Warranties

- (a) CAISO represents and warrants to Owner as follows:
- (i) CAISO is a validly existing corporation with full authority to enter into this Agreement.
 - (ii) CAISO has taken all necessary measures to have the execution and delivery of this Agreement authorized, and upon the execution and delivery of this Agreement shall be a legally binding obligation of CAISO.
- (b) Owner represents and warrants to CAISO as follows:
- (i) Owner is a validly existing limited liability company with full authority to enter into this Agreement.

- (ii) Owner has taken all necessary measures to have the execution and delivery of this Agreement authorized, and upon the execution and delivery this Agreement shall be a legally binding obligation of Owner.

12.4 Responsibilities

Each Party shall be responsible for protecting its facilities from possible damage by reason of electrical disturbances or faults caused by the operation, faulty operation, or non-operation of the other Party's facilities. The other Party shall not be liable for any damages so caused.

12.5 Confidentiality

- (a) Except as may otherwise be required by applicable law, all information and data provided by the Parties to one another pursuant to this Agreement and marked "Confidential" or otherwise identified with specificity in writing as confidential at the time of disclosure ("Confidential Information") shall be treated as confidential and proprietary material of the providing Party and will be kept confidential by the receiving Party and used solely for purposes of this Agreement. Confidential Information will not include information that is or becomes available to the public through no breach of this Agreement, information that was previously known by the receiving Party without any obligation to hold it in confidence, information that the receiving Party receives from a third party who may disclose that information without breach of law or agreement, information that the receiving Party develops independently without using the Confidential Information, and information that the disclosing Party approves for release in writing. The receiving Party shall keep such information confidential and shall limit the disclosure of any such Confidential Information to only those personnel within its organization with responsibility for using such information in connection with this Agreement. The receiving Party shall assure that personnel within its organization read and comply with the provisions of this Section 12.5 and any Confidentiality Agreement implementing this Section 12.5. The Parties shall use all reasonable efforts to maintain the confidentiality of the Confidential Information in any litigation, shall promptly notify the providing Party of any attempt by a third party to obtain the Confidential Information through legal process or otherwise. A Party or third party beneficiary under Article 9 which has received Confidential Information may use that information in litigation or regulatory proceedings related to this Agreement but only after notice to the other Party and affording the other Party an opportunity to obtain a protective order or other relief to prevent or limit disclosure of the Confidential Information.
- (b) The Parties may provide any Confidential Information (i) to the Responsible Utility pursuant to provisions of this Agreement under which information is to be provided to that Responsible Utility and as required for

settlement and billing; (ii) to any entity with audit rights under Section 12.2 or review rights specified in other provisions of this Agreement, (iii) on a need-to-know basis, to Owner's Scheduling Coordinator, financial institutions, agents, lessors of the Unit and potential purchasers of interests in a Unit; and, (iv) as required for settlement and billing, to Scheduling Coordinators responsible for paying for services provided under this Agreement. As a condition to receiving any Confidential Information under this Section 12.5, the recipient shall execute a Confidentiality Agreement in the applicable form contained in Schedule N and thereby agree to be subject to the non-disclosure and other obligations contained in this Section 12.5.

- (c) The obligation to provide confidential treatment to Confidential Information shall not be affected by the inadvertent disclosure of Confidential Information by either Party.

12.6 Indemnity

Subject to the limitations in Section 11.2 (b), each Party shall indemnify, defend and hold harmless the other Party and its officers, directors, employees, agents, contractors and sub-contractors, from and against all third party claims, judgments, losses, liabilities, costs, expenses (including reasonable attorneys' fees) and damages for personal injury, death or property damage, caused by the negligence or willful misconduct related to this Agreement or breach of this Agreement of the indemnifying Party, its officers, directors, agents, employees, contractors or sub-contractors, provided that this indemnification shall be only to the extent such personal injury, death or property damage is not attributable to the negligence or willful misconduct related to this Agreement or breach of this Agreement of the Party seeking indemnification, its officers, directors, agents, employees, contractors or sub-contractors. This indemnification shall not include or cover any claim covered by any workers' compensation law. This indemnification shall be for an amount not exceeding the deductible of the indemnifying Party's commercial general liability insurance in the case of Owner and errors and omission insurance in the case of CAISO. The indemnified Party shall give the other Party prompt notice of any such claim. The indemnifying Party shall have the right to choose competent counsel, control the conduct of any litigation or other proceeding, and settle any claim. The indemnified Party shall provide all documents and assistance reasonably requested by the indemnifying Party. Section 14 of the CAISO Tariff shall not apply to this Agreement.

12.7 Owner Financial Requirements

- (a) Through the term of the Agreement, Owner shall maintain an investment grade rating by Moody's or Standard and Poor's or provide documentation from a financial institution or corporate owner acceptable to the CAISO that there is an equity position described below. The CAISO shall not unreasonably withhold acceptance of the documentation.

- (i) An equity to debt ratio of at least 30%, or
 - (ii) An equity to total asset ratio of at least 30% or
 - (iii) Demonstrate to the CAISO's reasonable satisfaction that other factors, including, without limitations, commercial financing arrangements, and working capital positions, mitigate the risk of Owner failing to meet the performance requirements under this Agreement.
- (b) If the Owner does not possess and maintain an investment grade rating, an equity position or make other arrangements as described in Section 12.7 (a), then it must provide one of the following:
- (i) Proof of insurance to cover the financial exposure to the CAISO for one year of Capital Items, Repairs, fuel and any other operating expenses; or
 - (ii) Security to cover the financial exposure to the CAISO for one year of Capital Items, Repairs, fuel and any other operating expenses in one of the following forms:
 - (A) standby letter of credit;
 - (B) corporate guarantee;
 - (C) cash deposit; or
 - (D) security bond.

ARTICLE 13 ASSIGNMENT

13.1 Assignment Rights and Procedures

Neither Party shall assign its rights or delegate its duties under this Agreement without the prior written consent of the other Party, which shall not be unreasonably withheld. CAISO shall be entitled to deny consent to a proposed assignment by Owner only if the assignee does not meet the financial criteria set out in Section 13.2 (a) or the technical criteria set out in Section 13.2 (b). Notwithstanding the foregoing, if FERC approves an assignment, then the non-assigning Party shall be deemed to have consented to the assignment, subject to the non-assigning Party's right to seek judicial review of a FERC decision. Each Party shall give the other Party prompt notice of any proposed assignment or delegation, together with such information as the other Party may reasonably request with respect to the proposed assignment or assignee. Each Party shall be deemed to consent to the assignment or delegation unless it submits a written objection to the assignment or delegation within 14 days of receiving the notice and all financial and technical information as required in Sections 13.2(a) and 13.2(b). In the event of an assignment of this Agreement pursuant to a Financing Agreement, CAISO will execute for the benefit of the bank, financial institution or other entity with an interest in the Financing Agreement, a consent to such assignment reasonably acceptable to CAISO and Owner. An assignment of this Agreement by Owner in connection with the sale of a Unit shall terminate

Owner's rights and obligations under this Agreement prospectively from the effective date of the assignment.

13.2 Limitation on Right to Withhold Consent

- (a) CAISO shall not withhold consent to assignment of this Agreement on financial grounds if the assignee meets the financial requirements in Section 12.7(a) or provides financial security pursuant to Section 12.7(b).
- (b) CAISO shall not withhold consent to an assignment on grounds that the assignee is not technically qualified if the assignee was an Owner of a Reliability Must-Run Unit as of May 1, 1999 or the assignee submits appropriate documentation to the CAISO to establish that it has sufficient resources and expertise to be able to:
 - (i) Secure the necessary fuel and transportation for the fuel for the Facility;
 - (ii) Secure all necessary support services, including water supply, communications, waste disposal, etc. for the Facility;
 - (iii) Provide service from the Facility in compliance with the terms of this Agreement;
 - (iv) Provide the engineering and other technical services required to support operation and maintenance of the Facility;
 - (v) Obtain as necessary, and comply with all permits or licenses required to operate or maintain the Facility; and
 - (vi) Provide environmental services required for the operation and maintenance of the Facility.
- (c) The proposed assignee shall provide the last two years' annual audited financial statements and quarterly financial statements (unaudited) prior to the proposed date of purchase. If the proposed assignee is a new company and there are no historical financial statements, then a financial institution or corporate owner must provide pro forma financial statements in a form acceptable to the CAISO.

13.3 Transfer of Conditions Following Assignment

If this Agreement is assigned to a new Owner pursuant to Section 13.1, the new Owner may transfer one or more Units to a different Condition by giving CAISO at least seven days prior notice provided that such notice is given not later than 30 days after the effective date of the assignment. The transfer shall become effective on the first day of month following the later of (i) seven days after the effective date of the assignment or (ii) seven days after the date CAISO receives the new Owner's transfer notice. This section shall not apply to assignment to a new Owner which is an affiliate of Owner as defined in 18 C.F.R. Section 161.2.

ARTICLE 14 MISCELLANEOUS PROVISIONS

14.1 Notices

Except as otherwise expressly provided in this Agreement or required by law, all notices, consents, requests, demands, approvals, authorizations and other communications provided for in this Agreement shall be in writing and shall be sent by personal delivery, certified mail, return receipt requested, facsimile transmission or by recognized overnight courier service, to the intended Party at such Party's address set forth in Schedule J. Any notices which may be given orally and are given orally shall be confirmed in writing. All such notices shall be deemed to have been duly given and to have become effective: (a) upon receipt if delivered in person or by facsimile; (b) two days after having been delivered to an air courier for overnight delivery; or (c) seven days after having been deposited in the United States mail as certified or registered mail, return receipt requested, all fees pre-paid, addressed to the applicable address(es) set forth in Schedule J.

14.2 Effect of Invalidation

Each covenant, condition, restriction and other term of this Agreement is intended to be, and shall be construed as, independent and severable from each other covenant, condition, restriction and other term. If any covenant, condition, restriction or other term of this Agreement is held to be invalid by any court or regulatory body having jurisdiction, the invalidity of such covenant, condition, restriction or other term shall not affect the validity of the remaining covenants, conditions, restrictions or other terms hereof unless the invalidity has a material impact upon the rights and obligations of the Parties. If an invalidity has a material impact on the rights and obligations of the Parties, the Parties shall make a good faith effort to renegotiate and restore the benefits and burdens of this Agreement as they existed prior to the determination of an invalidity.

14.3 Amendments

- (a) Any amendments or modifications of this Agreement shall be made only in writing and, except for changes authorized by the FERC under Sections 205 or 206 of the Federal Power Act, shall be duly executed by both Parties. To the extent that any amendments or modifications are subject to FERC approval, such amendments or modifications shall become effective when permitted to be effective by FERC. For purposes of this Agreement, transfer of any Unit from one condition to the other condition or termination of the Agreement as to less than all Units shall not constitute a modification or amendment to this Agreement.
- (b) Where Owner's rates are not subject to FERC jurisdiction, either CAISO or Owner may, not later than 90 days prior to the end of each Contract Year, serve a notice on the other Party and the Responsible Utility stating that it

- requires a review of the terms of this Agreement, including any rates, prices and charges contained therein ("Review Notice").
- (i) The Review Notice shall, as a minimum requirement, set forth the following:
 - (A) the precise nature of the proposed revisions (indicating, where possible, the relevant Article, Section and Schedule); and
 - (B) justification for each proposed revision.
 - (ii) The Party in receipt of the Review Notice shall respond to such notice within 30 days of its receipt by issuing a notice in response ("Response Notice"). The Response Notice shall, as a minimum requirement, set forth the following:
 - (A) those revisions set forth in the Review Notice that are accepted as proposed;
 - (B) those revisions set out in the Review Notice that are not accepted;
 - (C) alternative proposals (if any) to the proposed revisions set out in the Review Notice;
 - (D) any revisions required by the responding party not covered by (A) through (C) above; and
 - (E) its justification for any of the matters raised under Sections 14.3 (b) (ii) (B) (C) or (D).
 - (iii) Any Party failing to respond to a Review Notice shall be deemed to have accepted the revisions set out in the Review Notice.
 - (iv) Following receipt of the Response Notice the duly authorized representatives of the Parties shall meet to negotiate in good faith any revisions to this Agreement.
 - (v) In the event that the Parties are unable to reach agreement on the revisions to be made to this Agreement within 60 days of the date of the Review Notice, either Party may refer the matter for resolution through ADR. The arbitrator shall determine the revisions, if any, to the Agreement on the basis that:
 - (A) the purpose of the Agreement is to maintain the reliability of CAISO Controlled Grid; and
 - (B) costs and charges payable by CAISO should reflect the costs of providing services to the CAISO.
 - (vi) In the event that the Parties agree to the revisions, or such matters are determined through ADR, or a Party fails to respond to a Review Notice, the agreed, determined or deemed accepted revisions shall take effect and the rights and obligations of the Parties shall be amended as from the beginning of the ensuing Contract Year or from such other date and time agreed between the Parties or determined through ADR, and following such time the Parties shall act in accordance with the terms and conditions of this Agreement as amended.

14.4 Filings Under Sections 205 or 206 of the Federal Power Act

Except as otherwise provided in this Agreement, nothing contained in this Agreement shall be construed as affecting the right of Owner unilaterally to make application to FERC for a change in rates, terms and conditions under Section 205 of the Federal Power Act and pursuant to FERC rules and regulations promulgated thereunder. CAISO may challenge such application or may submit complaints concerning Owner's rates, terms and conditions under Section 206 of the Federal Power Act and pursuant to FERC rules and regulations promulgated thereunder.

14.5 Construction

The language in all parts of this Agreement shall in all cases be construed as a whole and in accordance with its fair meaning, and shall not be construed strictly for or against either of the Parties.

14.6 Governing Law

This Agreement shall be interpreted and construed under and pursuant to the laws of the State of California, without regard to conflicts of laws principles.

14.7 Parties' Representatives

Both Parties shall ensure that throughout the term of this Agreement, a duly appointed Representative is available for communications between the Parties. The Representatives shall have full authority to deal with all day-to-day matters arising under this Agreement. If a Party's Representative becomes unavailable, the Party shall promptly appoint another Representative. Acts and omissions of Representatives shall be deemed to be acts and omissions of the Party. Owner and CAISO shall be entitled to assume that the Representative of the other Party is at all times acting within the limits of the authority given by the Representative's Party. Owner's Representatives and CAISO's Representatives shall be identified on Schedule J.

14.8 Merger

This Agreement and the Stipulation and Agreements filed April 2, 1999 and August 14, 2000 in Docket Nos. ER98-441-000 et al. constitute the full agreement of the Parties with respect to the subject matter hereto and supersede all prior agreements, whether written or oral, with respect to such subject matter.

14.9 Independent Contractors

Nothing contained in this Agreement shall create any joint venture, partnership or principal/agent relationship between the Parties. Neither Party shall have any right, power or authority to enter into any agreement or commitment, act on behalf of, or otherwise bind the other Party in any way.

14.10 Conflict with CAISO Tariff

The CAISO Tariff shall govern matters relating to the subject matter of this Agreement which are not set forth in this Agreement. In all other circumstances, this Agreement shall govern. In the event of a conflict between the terms and conditions of this Agreement and any terms and conditions set forth in the CAISO Tariff the terms and conditions of this Agreement shall prevail. For the avoidance of doubt, the provisions of the CAISO Tariff applicable to Generating Units shall apply to the Units except where the context makes them clearly inapplicable to synchronous condensers.

14.11 Waiver

The failure to exercise any remedy or to enforce any right provided in this Agreement shall not constitute a waiver of such remedy or right or of any other remedy or right provided herein. A Party shall be considered to have waived any remedies or rights hereunder only if such waiver is in writing.

14.12 Assistance

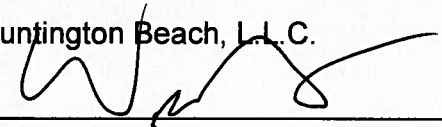
During the term of this Agreement, each Party shall provide such reasonable assistance and cooperation as the other Party may require in connection with performance of the duties and obligations of each Party under this Agreement, including, but not limited to, assistance in securing any necessary regulatory approvals and in facilitating necessary financing.

14.13 Headings

Article and section headings used in this Agreement are inserted for convenience only and are not intended to be a part hereof or in any way to define, limit, describe or to otherwise be used in interpreting the scope and intent of the particular provisions to which they refer.

IN WITNESS WHEREOF, this Agreement has been executed as of the date first above written.

AES Huntington Beach, L.L.C.

By:  _____

Name: WEIKKO WIRTA

Title: CHIEF EXECUTIVE MANAGER

The California Independent System Operator Corporation

By: _____

Name:

Title:

IN WITNESS WHEREOF, this Agreement has been executed as of the date first above written.

AES Huntington Beach, L.L.C.

By: _____

Name:

Title:

The California Independent System Operator Corporation

By: *SBRL*

Name: **Steve Berberich**

President &

Title: **Chief Executive Officer**

**FERC
RELIABILITY MUST-RUN SCHEDULES**

- Schedule A Unit Characteristics, Limitations and Owner Commitments
- Schedule B Monthly Option Payment
- Schedule C Variable Cost Payment – **Not Applicable**
 - Part 1 for Thermal Units
 - Part 2 for Geothermal Units
 - Part 3 for Conventional Hydro Units
 - Part 4 for Pumped Storage Hydro Units
 - Part 5 for Biomass Generation Units
- Schedule D Start-up Payment
 - Part 1 for Condition 1 Units – **Not Applicable**
 - Part 2 for Condition 2 Units
- Schedule E Ancillary Services Payment
 - Part 1 for Condition 1 – **Not Applicable**
 - Part 2 for Condition 2
 - Part 3 for Black Start Services – **Not Applicable**
- Schedule F Determination of Annual Revenue Requirements of Must-Run Generating Units – **Not Applicable**
- Schedule G Charges for Service in Excess of Contract Service Limits
- Schedule H Fuel Oil Service – **Not Applicable**
- Schedule I Insurance Requirements
- Schedule J Notices
- Schedule K Dispute Resolution
- Schedule L-1 Request for Approval of Capital Items or Repairs
- Schedule L-2 Capital Item and Repair Progress Reports

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Schedule M Mandatory Market Bid for Condition 2 Units
When Dispatched by the CAISO – **Not Applicable**

Schedule N-1 Non-Disclosure and Confidentiality Agreement for Responsible
Utilities

Schedule N-2 Non-Disclosure and Confidentiality Agreement for Entities
Other than Responsible Utilities

Schedule O Owner's Invoice Process

Schedule P Reserved Energy for Air Emissions Limitations – **Not Applicable**

Schedule A**Unit Characteristics, Limitations and Owner Commitments****1. Description of Facility**

Provide the following information for all units at the Facility, regardless of their RMR designation status. Information regarding units not designated as Reliability Must-Run Units is required only if and to the extent that the information is used to allocate Facility costs between Reliability Must-Run Units and other units.

Unit	RMR (Y/N)	Maximum Net Dependable MVar Capability (includes CAISO-paid Upgrade capacity)*	Fuel Type
Huntington Beach Unit 3	Y	145 MVar	N/A
Huntington Beach Unit 4	Y	145 MVar	N/A

* Maximum Net Dependable MVar Capability shall reflect any transformer or line loss to the Delivery Point.

2. Description of RMR Units

Provide the address(es) of the Units at the Facility and the following tabular information:

	Huntington Beach Unit 3	Huntington Beach Unit 4
Type (fossil, combustion turbine, etc.)	Synchronous Condenser	Synchronous Condenser
Synchronous Condenser Capability (Y/N)	Y	Y
Power Factor Range (lead to lag)	N/A	N/A
Maximum Reactive Power Leading, MVar	145	145
Maximum Reactive Power Lagging, MVar	145	145
Load at Maximum MVar Lagging, MW	N/A	N/A
Load at Maximum MVar Leading, MW	N/A	N/A
Black Start Capable (Y/N)	N	N
Automatic Start or Ramp (Y/N)*	N	N
Upgrade Capacity Paid by CAISO, MW	N/A	N/A

* If "Y", describe the conditions under which the Unit will start or ramp automatically.

3. Operational and Regulatory Limitations of RMR Units: N/A

Air Emissions Limitations - N/A

List applicable NO_x, CO, SO₂, particulate, and other appropriate emissions limits; note the name and address of the lead agency; the agency's applicable rule number(s); and note those pollutants for which an emissions cap applies.

Monthly Reserved MWh for Air Emission Limitations - N/A

Operating Limits related to Ambient Temperatures

Ambient Temperature Correction Factors for Availability Test

Provide a curve or table showing the Ambient Temperature Correction Factors for each Unit (the relationship between Ambient Temperature and Maximum Net Dependable Capability).

FERC License Conditions (hydroelectric Units)

Other Limits (e.g., cooling water discharge)

4. Delivery Point

Unit	Transmission Node (Station Name)	Voltage
Huntington Beach Unit 3	SCE Ellis 230 kV Bus	230kV
Huntington Beach Unit 4	SCE Ellis 230 kV Bus	230kV

5. Metering and Related Arrangements

Unit	Meter Location	Meter (Manufacturer & Model No.)
Huntington Beach Unit 3	Huntington Beach Units 3&4 Control Room	Landis + Gyr; MaxSYS 2510
Huntington Beach Unit 4	Huntington Beach Units 3&4 Control Room	Landis + Gyr; MaxSYS 2510

6. Start-up Lead Times

Non-hydroelectric Units

Unit	Start-up Segment Number	Generating Unit Down Time (Minutes)	Generating Unit Start-up Time (Minutes)
Huntington Beach Unit 3	N/A	N/A	60
Huntington Beach Unit 4	N/A	N/A	60

Hydroelectric Start-up Lead Times

Unit	Time from notification to Minimum Load - Normal work hours	Time from notification to Minimum Load - Outside Normal Work hours
N/A	N/A	N/A

7. Ramping Constraint

Describe any constraints the Unit incurs between Minimum Load and PMax.

N/A

8. Ramp Rate

Unit	Ramp Rate Segment Number	Output of Point Range (MW)	Minimum Ramp Rate (MW/Minute)	Maximum Ramp Rate (MW/Minute)
Huntington Beach Unit 3	N/A	N/A	N/A	N/A
Huntington Beach Unit 4	N/A	N/A	N/A	N/A

Separate Ramp Rates will be shown for each load range and will describe any special restrictions affecting Ramp Rates at various load points, e.g., feed pump operation, heat soaks, etc.

The Ramp Rate shall be the Operational Ramp Rate submitted by the Owner through the process described in the CAISO Tariff. On the Effective Date, the values in the CAISO Master File shall be set equal to the values shown in the table above.

9. Minimum Load

Unit	Manual (MW)	AGC (MW)
Huntington Beach Unit 3	N/A	N/A
Huntington Beach Unit 4	N/A	N/A

10. Minimum Run Time

Unit	Hours
Huntington Beach Unit 3	0
Huntington Beach Unit 4	0

11. Minimum Off Time

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Unit	Hours
Huntington Beach Unit 3	0.5
Huntington Beach Unit 4	0.5

12. Contract Service Limits

Unit	Contract Year	Maximum Annual MWh	Maximum Annual Service Hrs	Maximum Annual Start-ups
Huntington Beach Unit 3	2013	N/A	2086	145
	2014-2016	N/A	2636	200
Huntington Beach Unit 4	2013	N/A	2086	145
	2014-2017	N/A	2636	200

Maximum Monthly MWh (Hydroelectric Units only)

N/A

13. Owner's Repair Cost Obligation

Owner's Repair Cost Obligation is as follows:

	2013	2014	2015	2016	2017
Owner's Repair Cost Obligation	\$131,845	\$153,284	\$157,205	\$161,865	\$87,411

14. Existing Contractual Limitations and Other Contract Restrictions on Market Transactions

N/A

15. Applicable UDC Tariff(s)

Schedule S – Standby

Schedule TOU-8 – Time of Use General Service - Large

Schedule B
Monthly Option Payment

In the event that the required consents and confirmations specified in Section 2.1 of the Agreement have not been received by January 7, 2013 (with respect to all such required consents and confirmations other than the consent of Owner's lenders) or the required consent from Owner's lenders has not been received by February 1, 2013, as the case may be, and Owner or its affiliate, as the case may be, (at the request of the CAISO and the Responsible Utilities) agrees to suspend the Synchronous Condenser Transaction, the terms of Schedule B hereto will be revised in such a manner as to keep Owner whole for any additional costs or foregone 2013 revenues that it reasonably incurs or suffers as a result of such delayed execution or such suspension and associated delay in achieving the Commercial Operations Date pursuant to the Synchronous Condenser Transaction.

The formulas and values used to compute the Monthly Option Payment in accordance with Section 8.1 and Section 8.2 for each Unit for each Month are set forth in Equation B-1 below:

Equation B-1

$$\text{Monthly Option Payment} = \text{Monthly Availability Payment} + \text{Monthly Surcharge Payment} - \text{Monthly Nonperformance Penalty}$$

The Monthly Option Payment can never be less than zero.

1. The Monthly Availability Payment is calculated in accordance with Equation B-2 below:

Equation B-2

$$\text{Monthly Availability Payment (\$)} = \text{lesser of } \left[\begin{array}{l} \text{Current Monthly Availability Payment (\$)} \\ \text{or} \\ 100\% \text{ of AFRR minus Cumulative Monthly Availability Payments Excluding Current Monthly Availability Payment (\$)} \end{array} \right]$$

2. The Current Monthly Availability Payment is calculated in accordance with Equation B-3 below:

Equation B-3

$$\text{Current Monthly Availability Payment (\$)} = \text{Sum for all hours} \left[\begin{array}{l} \text{Hourly Availability Charge (\$/hr)} * \\ \frac{\text{Unit Availability Limit (MVAr)}}{\text{Maximum Net Dependable MVAr Capability (MVAr)}} \end{array} \right]$$

Where:

- A. Hourly Availability Charge is calculated in accordance with Equation B-4 below:

Equation B-4

$$\text{Hourly Availability Charge} = \text{Hourly Availability Rate} * \text{Fixed Option Payment Factor}$$

Where:

- Hourly Availability Rate is calculated in accordance with Equation B-5 below.

Equation B-5

$$\text{Hourly Availability Rate} = \frac{\text{Annual Fixed Revenue Requirement}}{\text{Target Available Hours}}$$

Annual Fixed Revenue Requirement is set forth in Section 7 below.

Target Available Hours are set forth in Section 6 below.

- For Units under Condition 1, the Fixed Option Payment Factor is set forth in Table B-0 below:

Unit	Fixed Option Payment Factor
Huntington Beach Unit 3	N/A
Huntington Beach Unit 4	N/A

For Units under Condition 2, the Fixed Option Payment Factor is 1.

The Hourly Availability Charges for the applicable Summer Month or Non-Summer Month of the Contract Year are set forth in Table B-1 below. Payment of the Hourly Availability Charges will be effective upon the Commercial Operations Date.

Unit	Contract Year	Contract Month	Condition 1	Condition 2 (AFRR/TAH)
Huntington Beach Unit 3	2013	Summer Months	N/A	\$2,020.87
		Non-Summer Months	N/A	\$237.07
	2014	Summer Months	N/A	\$1,368.32
		Non-Summer Months	N/A	\$336.29
	2015	Summer Months	N/A	\$1,339.58
		Non-Summer Months	N/A	\$329.74
	2016	Summer Months	N/A	\$1,313.53
		Non-Summer Months	N/A	\$322.47
2017	Summer Months	N/A	N/A	
	Non-Summer Months	N/A	N/A	
Huntington Beach Unit 4	2013	Summer Months	N/A	\$2,020.87
		Non-Summer Months	N/A	\$237.07
	2014	Summer Months	N/A	\$1,368.32

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	2015	Non-Summer Months	N/A	\$336.29
		Summer Months	N/A	\$1,339.58
	2016	Non-Summer Months	N/A	\$329.74
		Summer Months	N/A	\$1,313.53
	2017	Non-Summer Months	N/A	\$322.47
		Summer Months	N/A	\$1,357.45
		Non-Summer Months	N/A	\$335.75

- B. Unit Availability Limit is defined in Article 1 of the Agreement.
- C. Maximum Net Dependable MVar Capability is shown in Section 1 of Schedule A.

3. The Monthly Surcharge Payment is calculated in accordance with Equation B-6 below:

Equation B-6

$$\text{Monthly Surcharge Payment (\$)} = \text{lesser of } \left[\begin{array}{l} \text{Current Monthly Surcharge Payment (\$)} \\ \text{100\% of Sum of all Annual Capital Item Costs minus Cumulative Monthly Surcharge Payments Excluding Current Monthly Surcharge Payment (\$)} \end{array} \right]$$

4. The Current Monthly Surcharge Payment is calculated in accordance with Equation B-7 below:

Equation B-7

$$\text{Current Monthly Surcharge Payment (\$)} = \text{Sum for all hours} \left[\begin{array}{l} \text{Sum of all Hourly Capital Item Charges (\$/hr)} \\ \text{Unit Availability Limit (MVar) / Maximum Net Dependable MVar Capability (MVar)} \end{array} \right]$$

Where:

- A. The Hourly Capital Item Charge for each Capital Item approved pursuant to Sections 7.4 or 7.6 is calculated in accordance with Equation B-8 below:

Equation B-8

$$\text{Hourly Capital Item Charge} = \text{Hourly Capital Item Rate} * \text{Surcharge Payment Factor}$$

Where:

- Hourly Capital Item Rate is calculated in accordance with Equation B-9 below:

Equation B-9

$$\text{Hourly Capital Item Rate} = \frac{\text{Annual Capital Item Cost}}{\text{Target Available Hours}}$$

- Annual Capital Item Cost is the amount recoverable by Owner under this Agreement in a Contract Year for each Capital Item approved pursuant to Section 7.4 or Section 7.6
- Target Available Hours are shown in Section 6 below.
- For Units under Condition 1, the Surcharge Payment Factor for all Capital Items covered by the Small Project Budget shall be the Fixed Option Payment Factor. For all other Capital Items, the Surcharge Payment Factor shall be as agreed to by Owner and CAISO. If the Owner and CAISO do not agree on the Surcharge Payment Factor, the Surcharge Payment Factor shall equal the Fixed Option Payment Factor, unless the Owner demonstrates in ADR that it would not have installed the proposed Capital Item in accordance with Good Industry Practice but for its obligations to the CAISO under this Agreement, in which case the Surcharge Payment Factor shall be as determined in ADR.
- For Units under Condition 2, the Surcharge Payment Factor is 1.

The Hourly Capital Item Charges for the applicable Summer Month or Non-Summer Month of the Contract Year are set forth in Table B-2 below. Payment of the Hourly Capital Item Charges will be effective upon the Commercial Operations Date.

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Table B-2 - Hourly Capital Item Charges				
Unit	Contract Year	Contract Month	Annual Capital Item Cost	Condition 2 Hourly Capital Item Charge
Huntington Beach Unit 3	2013	Summer Months	\$2,886,519	\$1,316.24
		Non-Summer Months	\$481,087	\$165.44
		Full Year	\$3,367,606	\$660.19
	2014	Summer Months	\$2,068,443	\$711.29
		Non-Summer Months	\$1,034,221	\$186.28
		Full Year	\$3,102,664	\$366.75
	2015	Summer Months	\$1,871,150	\$643.45
		Non-Summer Months	\$935,575	\$168.51
		Full Year	\$2,806,725	\$331.76
	2016	Summer Months	\$1,675,509	\$576.17
		Non-Summer Months	\$837,754	\$150.24
		Full Year	\$2,513,263	\$296.24
	2017	Summer Months	N/A	N/A
		Non-Summer Months		
		Full Year		
Huntington Beach Unit 4	2013	Summer Months	\$2,574,686	\$1,174.05
		Non-Summer Months	\$429,114	\$147.56
		Full Year	\$3,003,801	\$588.87
	2014	Summer Months	\$1,853,135	\$637.25
		Non-Summer Months	\$926,567	\$166.89
		Full Year	\$2,779,702	\$328.57
	2015	Summer Months	\$1,690,922	\$581.47
		Non-Summer Months	\$845,461	\$152.28
		Full Year	\$2,536,382	\$299.81
	2016	Summer Months	\$1,530,359	\$526.26
		Non-Summer Months	\$765,180	\$137.23
		Full Year	\$2,295,539	\$270.57
2017	Summer Months	\$1,371,323	\$471.57	

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		Non-Summer Months	\$685,662	\$123.50
		Full Year	\$2,056,985	\$243.14

- B. Unit Availability Limit is defined in Article 1 of the Agreement.
- C. Maximum Net Dependable MVA_r Capability is shown in Section 1 of Schedule A.
5. The Monthly Nonperformance Penalty is calculated pursuant to Section 8.5 using the following variables:

A. Hourly Penalty Rate

A Unit's Hourly Penalty Rate for the applicable Summer Month or Non-Summer Month of each Contract Year is the lesser of (a) the Unit's Hourly Availability Rate for the applicable Summer Month or Non-Summer Month of the Contract Year (calculated pursuant to Item 2.A above), or (b) three times the Unit's Hourly Availability Charge for the applicable Summer Month or Non-Summer Month of the Contract Year (as shown in Table B-1 above). The Hourly Penalty Rates for the applicable Summer Month or Non-Summer Month of the Contract Year are set forth in Table B-3 below. Payment of the Hourly Penalty Rate will be effective upon the Commercial Operations Date.

Unit	Contract Year	Contract Month	Condition 1	Condition 2
Huntington Beach Unit 3	2013	Summer Months	N/A	\$2,020.87
		Non-Summer Months	N/A	\$237.07
	2014	Summer Months	N/A	\$1,368.32
		Non-Summer Months	N/A	\$336.29
	2015	Summer Months	N/A	\$1,339.58
		Non-Summer Months	N/A	\$329.74
	2016	Summer Months	N/A	\$1,313.53
		Non-Summer Months	N/A	\$322.47
	2017	Summer Months	N/A	N/A
		Non-Summer Months	N/A	N/A
Huntington Beach Unit 4	2013	Summer Months	N/A	\$2,020.87
		Non-Summer Months	N/A	\$237.07
	2014	Summer Months	N/A	\$1,368.32
		Non-Summer Months	N/A	\$336.29
	2015	Summer Months	N/A	\$1,339.58
		Non-Summer Months	N/A	\$329.74
	2016	Summer Months	N/A	\$1,313.53

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		Non-Summer Months	N/A	\$322.47
	2017	Summer Months	N/A	\$1,357.45
		Non-Summer Months	N/A	\$335.75

B. Hourly Surcharge Penalty Rate

A Unit's Hourly Surcharge Penalty Rate for each Capital Item for the applicable Summer Month or Non-Summer Month of each Contract Year is the lesser of (a) the corresponding Hourly Capital Item Rate for the applicable Summer Month or Non-Summer Month of the Contract Year (calculated pursuant to Item 4.A above), or (b) three times the applicable Hourly Capital Item Charge for the applicable Summer Month or Non-Summer Month of the Contract Year (as shown in Table B-2 above). The Hourly Surcharge Penalty Rates for the applicable Summer Month or Non-Summer Month of the Contract Year are set forth in Table B-4 below. Payment of the Hourly Surcharge Penalty Rate will be effective upon the Commercial Operations Date.

Unit	Contract Year	Contract Month	Hourly Capital Item Rate	Condition 1 Hourly Surcharge Penalty Rate	Condition 2 Hourly Surcharge Penalty Rate
Huntington Beach Unit 3	2013	Summer Months	\$1,316.24	N/A	\$1,316.24
		Non-Summer Months	\$165.44	N/A	\$165.44
	2014	Summer Months	\$711.29	N/A	\$711.29
		Non-Summer Months	\$186.28	N/A	\$186.28
	2015	Summer Months	\$643.45	N/A	\$643.45
		Non-Summer Months	\$168.51	N/A	\$168.51
	2016	Summer Months	\$576.17	N/A	\$576.17
		Non-Summer Months	\$150.24	N/A	\$150.24
	2017	Summer Months	N/A	N/A	N/A
		Non-Summer Months	N/A	N/A	N/A

Unit	Contract Year	Contract Month	Hourly Capital Item Rate	Condition 1 Hourly Surcharge Penalty Rate	Condition 2 Hourly Surcharge Penalty Rate
Huntington Beach Unit 4	2013	Summer Months	\$1,174.05	N/A	\$1,174.05

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		Non-Summer Months	\$147.56	N/A	\$147.56
	2014	Summer Months	\$637.25	N/A	\$637.25
		Non-Summer Months	\$166.89	N/A	\$166.89
	2015	Summer Months	\$581.47	N/A	\$581.47
		Non-Summer Months	\$152.28	N/A	\$152.28
	2016	Summer Months	\$526.26	N/A	\$526.26
		Non-Summer Months	\$137.23	N/A	\$137.23
	2017	Summer Months	\$471.57	N/A	\$471.57
		Non-Summer Months	\$123.50	N/A	\$123.50

6. Target Available Hours

A Unit's Target Available Hours for each Contract Year are calculated in accordance with the Equation B-10 below:

Equation B-10

$$\text{Target Available Hours (TAH)} = \text{Hours in the Calendar Year} - (\text{Average Other Outage Hours} + \text{Long-Term Planned Outage Hours})$$

Average Other Outage Hours means the average annual Other Outage Hours as set forth in Table B-5 below.

Long-term Planned Outage Hours means the Long-term Planned Outage Hours for the Contract Year scheduled with CAISO pursuant to Section 7.2(a). For periods prior to December 31, 1998, Other Outage Hours shall exclude a planned interruption, in whole or in part, in the electrical output of a Unit to permit Owner to perform a major equipment overhaul or inspection or for new construction work, but only if the outage lasted 21 or more consecutive days.

Long-term Planned Outage Hours scheduled for a Contract Year shall be subject to the Long-term Scheduled Outage Adjustment pursuant to Section 8.6 of the Agreement, except for 2013 Contract Year.

The Average Other Outage Hours, Long-term Planned Outage Hours and Target Available Hours for each Unit for the Contract Year are shown in Table B-5 below:

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Table B-5 - Target Available Hours					
Unit	Contract Year	Contract Month	Average Other Outage Hours	Long-term Planned Outage Hours	TAH
Huntington Beach Unit 3	2013	Summer Months	15	0	2,193
		Non-Summer Months	20	3,624	2,908
		Full Year	35	3,624	5,101
	2014	Summer Months	20	0	2,908
		Non-Summer Months	280	0	5,552
		Full Year	300	0	8,460
	2015	Summer Months	20	0	2,908
		Non-Summer Months	280	0	5,552
		Full Year	300	0	8,460
	2016	Summer Months	20	0	2,908
		Non-Summer Months	280	0	5,576
		Full Year	300	0	8,484
	2017	Summer Months	N/A	N/A	N/A
		Non-Summer Months	N/A	N/A	N/A
		Full Year	N/A	N/A	N/A

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Table B-5 (cont'd) - Target Available Hours					
Unit	Contract Year	Contract Month	Average Other Outage Hours	Long-term Planned Outage Hours	TAH
Huntington Beach Unit 4	2013	Summer Months	15	0	2,193
		Non-Summer Months	20	3,624	2,908
		Full Year	35	3,624	5,101
	2014	Summer Months	20	0	2,908
		Non-Summer Months	280	0	5,552
		Full Year	300	0	8,460
	2015	Summer Months	20	0	2,908
		Non-Summer Months	280	0	5,552
		Full Year	300	0	8,460
	2016	Summer Months	20	0	2,908
		Non-Summer Months	280	0	5,576
		Full Year	300	0	8,484
	2017	Summer Months	20	0	2,908
		Non-Summer Months	280	0	5,552
		Full Year	300	0	8,460

7. Annual Fixed Revenue Requirement (AFRR)

The Annual Fixed Revenue Requirement for each Unit is set forth in Table B-6 below.

Table B-6 - Annual Fixed Revenue Requirement (AFRR)			
Unit	Contract Year	Contract Month	Annual Fixed Revenue Requirement
Huntington Beach Unit 3	2013	Summer Months	\$4,431,758
		Non-Summer Months	\$689,412
		Full Year	\$5,121,171
	2014	Summer Months	\$3,979,089
		Non-Summer Months	\$1,867,102

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		Full Year	\$5,846,191
	2015	Summer Months	\$3,895,490
		Non-Summer Months	\$1,830,731
		Full Year	\$5,726,221
	2016	Summer Months	\$3,819,742
		Non-Summer Months	\$1,798,090
		Full Year	\$5,617,832
	2017	Summer Months	N/A
		Non-Summer Months	N/A
		Full Year	N/A
Huntington Beach Unit 4	2013	Summer Months	\$4,431,758
		Non-Summer Months	\$689,412
		Full Year	\$5,121,171
	2014	Summer Months	\$3,979,089
		Non-Summer Months	\$1,867,102
		Full Year	\$5,846,191
	2015	Summer Months	\$3,895,490
		Non-Summer Months	\$1,830,731
		Full Year	\$5,726,221
	2016	Summer Months	\$3,819,742
		Non-Summer Months	\$1,798,090
		Full Year	\$5,617,832
	2017	Summer Months	\$3,947,477
		Non-Summer Months	\$1,864,099
		Full Year	\$5,811,576

8. Limited Section 205 Filing for an Extension of Contract Term

If CAISO has extended the term of this Agreement pursuant to Section 2.1(b), then not later than October 31 of the expiring Contract Year, Owner shall make a filing with FERC under Section 205 of the Federal Power Act containing the values in Tables B-1 through B-6 for the applicable Contract Year.

In the event that a Long-term Planned Outage that is scheduled for the last quarter of the expiring Contract Year is postponed or rescheduled after October 31 of such year to the ensuing Contract Year, Owner shall make an additional Section 205 filing to revise the values in Tables B-1 through B-5 to reflect such rescheduled Long-term Planned Outage Hours.

SCHEDULE C – N/A

**Variable Cost Payment
 Part 1 for Thermal Units**

The Variable Cost Payment for each Unit for the Billing Month shall be the amount calculated in accordance with the following formula:

$$\begin{aligned} \text{Variable Cost Payment} &= \text{A. CAISO Unit Monthly Billed Fuel} \\ &+ \text{B. Cost} \\ &+ \text{C. CAISO Unit Monthly Fuel Imbalance} \\ &+ \text{D. Charge} \\ &+ \text{E. CAISO Monthly Other Fuel Related} \\ &+ \text{F. Cost} \\ &+ \text{G. CAISO Monthly Emissions Cost} \\ &+ \text{CAISO Monthly Variable O\&M Cost} \\ &+ \text{CAISO Scheduling Coordinator} \\ &+ \text{Charge} \\ &+ \text{CAISO ACA Charge} \end{aligned}$$

Each component of the Variable Cost Payment for thermal Units will be calculated as described below:

A. CAISO Unit Monthly Billed Fuel Cost

The CAISO Unit Monthly Billed Fuel Cost is calculated in accordance with Equation C1-0.

Equation C1-0

$$\left(\begin{array}{l} \text{CAISO} \\ \text{Unit} \\ \text{Monthly} \\ \text{Billed} \\ \text{Fuel Cost} \\ (\$) \end{array} \right) = \frac{\left(\begin{array}{l} \text{Monthly sum of the} \\ \text{CAISO Unit Hourly Cap Heat} \\ \text{Input} \\ \text{for this Unit} \\ \text{(MMBtu)} \end{array} \right)}{\left(\begin{array}{l} \text{Monthly sum of the CAISO} \\ \text{Unit Hourly Cap Heat Input} \\ \text{for all Units at the Facility} \\ \text{(MMBtu)} \end{array} \right)} * \left(\begin{array}{l} \text{CAISO} \\ \text{Facility} \\ \text{Monthly} \\ \text{Billed} \\ \text{Fuel Cost} \end{array} \right)$$

Where:

- CAISO Unit Hourly Cap Heat Input for each Unit is calculated in accordance with Equation C1-6;
- The CAISO Facility Monthly Billed Fuel Cost is calculated in accordance with Equation C1-1.

1. The CAISO Facility Monthly Billed Fuel Cost

The CAISO Facility Monthly Billed Fuel Cost is calculated in accordance with Equation C1-1.

Equation C1-1

$$\left(\begin{array}{l} \text{CAISO} \\ \text{Facility} \\ \text{Monthly} \\ \text{Billed} \\ \text{Fuel Cost} \\ (\$) \end{array} \right) = \text{Lesser of } \left(\begin{array}{l} \text{CAISO} \\ \text{Facility} \\ \text{Cumulative} \\ \text{Actual} \\ \text{Fuel Cost} \\ (\$) \end{array} \right) \text{ or } \left(\begin{array}{l} \text{CAISO} \\ \text{Facility} \\ \text{Cumulative} \\ \text{Cap} \\ \text{Fuel Cost} \\ (\$) \end{array} \right) - \left(\begin{array}{l} \text{CAISO Facility} \\ \text{Cumulative} \\ \text{Billed} \\ \text{Fuel Cost} \\ (\$) \end{array} \right)$$

Where:

- The CAISO Facility Cumulative Actual Fuel Cost is the sum of all CAISO Unit Monthly Actual Fuel Costs for all Units at the Facility since the start of the Contract Year, including the current Month. CAISO Unit Monthly Actual Fuel Costs for each Unit is calculated in accordance with Equation C1-2.
- The CAISO Facility Cumulative Cap Fuel Cost is the sum of all CAISO Unit Monthly Cap Fuel Costs for all Units at the Facility since the start of the Contract Year, including the current Month. CAISO Unit Monthly Cap Fuel Costs is the sum of the CAISO Unit Hourly Cap Fuel Cost (calculated pursuant to Equation C1-5) for each hour of the Month for each Unit.
- The CAISO Facility Cumulative Billed Fuel Cost is the sum of all CAISO Unit Monthly Billed Fuel Costs for all Units at the Facility since the start of the Contract Year, excluding the current Month. CAISO Unit Monthly Billed Fuel Cost for each Unit is calculated in accordance with Equation C1-0.

2. CAISO Unit Monthly Actual Fuel Cost

The CAISO Unit Monthly Actual Fuel Cost is calculated in accordance with Equation C1-2.

Equation C1-2

$$\left[\begin{array}{l} \text{CAISO} \\ \text{Unit} \\ \text{Monthly} \\ \text{Actual} \\ \text{Fuel Cost} \\ (\$) \end{array} \right] = \frac{\text{Monthly sum of the CAISO Unit Hourly Cap Heat Input for the Unit (MMBtu)}}{\text{Monthly sum of the Unit Hourly Cap Heat Inputs for all units at the Facility metered by the Fuel Meter (MMBtu)}} * \left[\begin{array}{l} \text{Monthly} \\ \text{Metered} \\ \text{Fuel} \\ \text{MMBtu} \end{array} \right] * \left[\begin{array}{l} \text{CAISO} \\ \text{Monthly} \\ \text{Fuel} \\ \text{Price} \\ (\$/\text{MMBtu}) \end{array} \right] - \left[\begin{array}{l} \text{Monthly} \\ \text{Start-up} \\ \text{Fuel Cost} \\ (\$) \end{array} \right]$$

Where:

- CAISO Unit Hourly Cap Heat Input is calculated in accordance with Equation C1-6.
- Unit Hourly Cap Heat Input is calculated in accordance with either Equation C1-7a or C1-7b.
- Monthly Metered Fuel is the non-duplicative sum of the quantities of fuel for the Month as measured by all gas metering systems or fuel oil measuring systems, as applicable (“Fuel Meters”), for the Unit.
 - (a) If the fuel is natural gas, the Owner may select from one of three options for the Fuel Meter:
 - (i) the revenue meter used by the entity providing natural gas to measure gas delivered to one or more Units (“Fuel Custody Meter”);
 - (ii) a gas metering system installed at the Facility to measure gas used in one or more Units that meets the measurement accuracy standard in the tariff of the local gas distribution company in whose service area the Facility is located and the measurement accuracy standards set forth below, and is subject to an annual accuracy test performed under the CAISO’s direction, as described below; or
 - (iii) a gas metering system installed at the Facility by the local gas distribution company in whose service area the Facility is located and maintained by the local gas distribution company to the same standards as revenue meters of the local gas distribution company.

For the selected Fuel Meter option, the Owner shall provide the required information for all Units, both RMR and non-RMR, connected to the specific Fuel Custody Meter.

If the Owner selects option (ii), the Owner shall assure the overall accuracy of the gas metering systems¹ in use for the Units are within acceptable industry and regulatory

¹ The gas metering system includes the primary measurement element (orifice, turbine meter, etc.); secondary elements such as pressure, temperature and heating-value measurement devices; the gas chromatograph, the flow computer or other data-collection and storage device; and the communication or output system.

standards.² Gas metering systems shall be designed, installed, calibrated and maintained according to standards set forth by the American Gas Association (AGA), the American National Standards Institute (ANSI) and the California Public Utilities Commission (CPUC). An audit trail of all calibration records and measurement parameters used in volume and heating-value calculations as recorded electronically by the flow computer shall be maintained and all data shall be in no-longer-than-hourly intervals. All equations and calculations performed by the flow computer may be reviewed for accuracy and completeness, including compressibility, volumetric flow and energy flow, by the CAISO or its agent. A consistent base pressure (14.73 psi) and base temperature (60°F) shall be used at all times. If the Facility has multiple sources of fuel gas, a gas chromatograph (“GC”) shall be installed which analyzes all constituents of the blended gas, with the sampling point downstream of the individual supplies such that proper mixing occurs prior to sampling. The GC speed loop shall permit analysis of the gas in “real time”.

In order to ensure the accuracy of a gas metering system selected under option (ii), an initial acceptance test shall be conducted by Owner and shall be witnessed by the CAISO or its agent to assure the installation meets applicable industry standards. Such a test shall be conducted at five load points (maximum load, minimum load, and three evenly spaced load points), under steady state conditions (i.e., off Automatic Generation Control), and for a minimum of one hour at each load point. Analysis of the test results shall consist of a side-by-side comparison of volumetric flow, energy flow, gas-specific gravity and mole percents, and other factors mutually agreed to by the CAISO and Owner for the Fuel Custody Meter and the meter installed at the Facility under option (ii). The gas metering system installed under option (ii) shall be deemed acceptable if the side-by-side energy flow comparison for the period shall be within +1 percent to –2 percent. The gas-metering system shall meet the required accuracy throughout the entire operating range of the RMR Unit. Following CAISO acceptance, an annual routine test shall be conducted at a time chosen by the CAISO to verify and confirm the performance of Owner’s gas-metering system. With the exception that the test shall be conducted at one load point specified by the CAISO, such a test shall be conducted in a similar fashion to the initial acceptance test and shall include inspection of the primary flow element; instrument end-to-end calibration; confirmation of integrity of sensing lines (meaning there shall be no leaks); confirmation of proper GC operation; and proper flow-computer operation and data handling. All systems and sub-systems utilized during the initial acceptance test, including, but not limited to, (a) all primary devices, including the differential producing device of the gas metering system, the GC, and differential pressure (“dP”) and temperature instruments; (b) all secondary devices and

² The American Gas Association (AGA) and the American National Standards Institute (ANSI) publish industry standards that gas utilities and gas transportation companies use for gas metering. Applicable standards include: AGA Report No. 3, Orifice Metering of Natural Gas; AGA Report No. 7, Measurement of Gas by Turbine Meters, AGA Report No. 8, Compressibility Factors of Natural Gas; AGA Report No. 9, Measurement of Gas by Multipath Ultrasonic Meters; ANSI B109.2, Diaphragm Type Gas Displacement Meters; and ANSI B109.3 Rotary Type Gas Displacement Meters. Also, CPUC General Order 58-A requires customer meters to register accurately to within – 2% to 1%.

circuits, including dP and temperature transmitters and circuits, sensing lines, GC sampling line and secondary circuits; and (c) all electronic devices, flow computers and devices, shall be sealed with an CAISO-certified seal and no maintenance work or modifications and changes, including making any changes to flow computer programming, shall be permitted without prior approval by the CAISO.

If any part of the option (ii) gas-metering system requires either routine or emergency maintenance, the Owner shall notify the CAISO immediately by telephone or other means specified by the CAISO. The Owner shall inform the CAISO of the time period during which such maintenance is expected to occur. The CAISO may, at its discretion, require gas-metering systems which are changed or modified during maintenance or repair to undergo re-certification, including acceptance testing. If the maintenance activity is necessary due to concerns that the gas-metering system is not operating in accordance with the required accuracy standards, such maintenance work shall be completed within 2 business days from the time when the concern was first noted.

A V-cone meter may not be used under option (ii), unless the meter was installed prior to January 1, 1997.

If, as a result of a change in the use of fuel gas from a supplier other than the local distribution company, the properties of the fuel gas change materially (Higher Heating Value (HHV) or Specific Gravity (SG) varies more than -3 percent to +3 percent due to the addition of new gas constituents) following the installation of a gas metering system under option (ii) or option (iii), Owner shall notify the CAISO within twenty-four (24) hours. Acceptance testing shall be conducted to verify the metering accuracy due to the change in fuel gas supply and to test whether Owner's gas metering system meets the technical requirements of this specification. Owner shall be obligated to install any equipment necessary to bring its gas metering system into compliance. Owner shall not enter into any third-party agreements for non-pipeline grade fuel gas without the prior approval of the CAISO. Such approval shall not be granted until the CAISO has evaluated Owner's gas metering system, including the effect of the non-pipeline grade fuel gas on metering accuracy.

If an Owner selects option (iii) and the Facility has multiple sources of fuel gas, the local gas distribution company shall install a GC which analyzes all constituents of the blended gas, with the sampling point downstream of the individual supplies such that proper mixing occurs prior to sampling. The GC speed loop should permit analysis of the gas in "real time".

(b) If the fuel is other than natural gas, the Fuel Meter value shall be determined monthly by measuring the fuel oil consumed during the month using, at Owner's one-time election, either (i) a metering process which is acceptable to the Owner and CAISO or (ii) a calculation acceptable to the Owner and CAISO based on a tank-volume measurement process performed on the day immediately prior to the beginning of the Month and the last day of the Month and fuel oil deliveries during the Month. The

metering or measurement process adopted shall comply with, or be comparable to, one or more applicable American Petroleum Institute ("API") Manual of Petroleum Measurement Standards.³ If Owner and CAISO cannot agree on an acceptable process, it shall be determined through ADR pursuant to Schedule K to this Agreement. Owner shall be permitted to change its election between metering as described in (i) above or tank volume measurement described in (ii) above only to reflect changes in the physical circumstances of the Unit or a change in the type of fuel burned at the Unit.

During any period in which the Fuel Meter fails to accurately measure gas flow, the Owner shall provide information to the CAISO sufficient to estimate the gas flow during such failure. This information may include unit electric-generating history, accurate recorded gas flow based on another meter and heat input characteristics of all Units served by the failed meter. This information will be used to estimate the gas flow during the failure period to the mutual satisfaction of the CAISO, the Responsible Utility and the Owner.

If a Fuel Meter serves RMR Units as well as other units, the heat input characteristics of the other units will be included in Table C1-7a or C1-7b, as applicable, and the Monthly sum of the Unit Hourly Cap Heat Inputs for all units at the Facility metered by the Fuel Meter used in Equation C1-2 will include Hourly Cap Heat Inputs for such other units calculated using Equation C1-7a or C1-7b, whichever is applicable.

- CAISO Monthly Fuel Price is calculated in accordance with Equation C1-3.
- Monthly Start-Up Fuel Cost is the sum of the Start-Up Fuel Costs for all Start-ups (for Market and Nonmarket Transactions) in the Month for all units metered by the Fuel Meter with the Start-up Fuel Costs for each Unit calculated in accordance with Equations D-1a or D-1b in Schedule D, as applicable. If a Start-up is initiated but is not successfully completed, the Start-up Fuel Costs shall be adjusted in accordance with Equation C1-2a:

³ The applicable API Manual of Petroleum Measurement Standards are: Chapter 2.2A (Measurement and Calibration of Upright Cylindrical Tanks by the Manual Strapping Method); Chapter 3.1B (Standard Practice for Level Measurement of Liquid Hydrocarbons in Stationary Tanks by Automatic Tank Gauging); Chapter 3.3 (Level Measurement of Liquid Hydrocarbons in Stationary Pressurized Storage Tanks by Automatic Tank Gauging); Chapter 5.2 (Measurement of Liquid Hydrocarbons by Displacement Meters); and Chapter 5.3 (Measurement of Liquid Hydrocarbons by Turbine Meters).

Equation C1-2a

$$\begin{array}{l} \text{Adjusted} \\ \text{Start-up} \\ \text{Fuel Cost} \\ \text{for Canceled} \\ \text{Starts} \\ \text{(\$)} \end{array} = \frac{\begin{array}{l} \text{Number of hours} \\ \text{committed to the} \\ \text{Start-up} \\ \text{Applicable} \\ \text{Start-up Lead Time} \\ \text{in hours shown in} \\ \text{Section 6 of} \\ \text{Schedule A} \end{array}}{\text{Start-up}} \times \begin{array}{l} \text{Start-up} \\ \text{Fuel Costs} \\ \text{(\$)} \end{array}$$

Where:

- The “number of hours committed to the Start-up” is the lesser of (a) time elapsed between the initiation of the Start-up and the cancellation or (b) the Applicable Start-up Lead Time as shown in Section 6 of Schedule A.

3. CAISO Monthly Fuel Price

The CAISO Monthly Fuel Price is calculated in accordance with Equation C1-3.

Equation C1-3

$$\begin{array}{l} \text{CAISO Monthly Fuel Price} \\ \text{(\$/MMBtu)} \end{array} = \frac{\begin{array}{l} \text{Monthly sum of CAISO Unit Hourly Cap Fuel} \\ \text{Cost (\$)} \end{array}}{\begin{array}{l} \text{Monthly sum of CAISO Unit Hourly Cap Heat} \\ \text{Input (MMBtu)} \end{array}}$$

Where:

- CAISO Unit Hourly Cap Fuel Cost (\$) is calculated in accordance with Equation C1-5;
- CAISO Unit Hourly Cap Heat Input (MMBtu) is calculated in accordance with Equation C1-6.

4. Intentionally Omitted (There is no Equation C1-4.)**5. CAISO Unit Hourly Cap Fuel Cost**

For each hour, the CAISO Unit Hourly Cap Fuel Cost is calculated in accordance with Equation C1-5.

Equation C1-5

CAISO Unit Hourly Cap Fuel Cost (\$) = CAISO Unit Hourly Cap Heat Input (MMBtu) × Hourly Fuel Price (\$/MMBtu)

Where:

- The Hourly Fuel Price is calculated in accordance with Equation C1-8;
- The CAISO Unit Hourly Cap Heat Input (MMBtu) is calculated in accordance with Equation C1-6.

6. CAISO Unit Hourly Cap Heat Input

For each hour, the CAISO Unit Hourly Cap Heat Input is calculated in accordance with Equation C1-6.

Equation C1-6

$$\text{CAISO Unit Hourly Cap Heat Input} = \text{Unit Hourly Cap Heat Input (MMBtu)} \star \frac{\text{Billable MWh}}{\text{Hourly Metered Total Net Generation (MWh)}}$$

Where:

- Unit Hourly Cap Heat Input is calculated in accordance with either Equation C1-7a or C1-7b.

7. Unit Hourly Cap Heat Input (MMBtu)

The Unit Hourly Cap Heat Input to a Unit for any load is given by the following equations and shall be determined either by a polynomial equation (C1-7a) or exponential equation (C1-7b):

Equation C1-7a

$$\text{Unit Hourly Cap Heat Input} = \frac{1.0}{2} \star (AX^3 + BX^2 + CX + D) \star E$$

Equation C1-7b

$$\text{Unit Hourly Cap Heat Input} = \frac{1.0}{2} * (A * (B + CX + De^{FX})) * E$$

Where:

- X is Unit's Hourly Metered Total Net Generation, MWh;
- e is the base of natural logarithms;
- A, B, C, D are coefficients given for Equation C1-7a in Table C1-7a and given for Equation C1-7b in Table C1-7b;
- The coefficient E is applicable only when burning fuel oil. At all other times, it shall be set to 1.0.
- F is a coefficient given in Table C1-7b.

Table C1-7a					
	A	B	C	D	E
N/A	N/A	N/A	N/A	N/A	N/A

Table C1-7b						
	A	B	C	D	E	F
N/A	N/A	N/A	N/A	N/A	N/A	N/A

8. Hourly Fuel Price

The Hourly Fuel Price for Units shall be the same for each hour of a given day and is calculated in accordance with Equation C1-8.

Equation C1-8 (Gas)

Hourly Fuel Price (\$/MMBtu) = Commodity Price (\$/MMBtu) + Intrastate Transportation Rate (\$/MMBtu)

Equation C1-8 (Oil)

Hourly Fuel Price (\$/MMBtu) = Commodity Price (\$/MMBtu) + Transportation Rate (\$/MMBtu)

Commodity Price for Natural Gas

For the Facilities within the service area of SCE or SDG&E, the Commodity Price shall be the product of 1.02 and the simple average of the following indices:

Gas Daily, SoCal Gas, Large Packages index (midpoint)
BTU Daily Gas Wire, SoCal Border index, Topock
NGI Daily Gas Price Index, Southern California Border (average)

For the Facilities within the service territory of PG&E, the Commodity Price shall be the product of 1.02 and the simple average of the following indices:

Gas Daily, PG&E Citygate index (midpoint)
NGI Daily Gas Price Index, PG&E Citygate (average)

The indices to be used for each Settlement Period in a given day are shown in Table C1-8. Where more than one day's index is shown for a Trading Day, the average of the two daily indices should be used. If an applicable index for a day, which is used to compute the index's average for a Trading Day, is not published, then that index will not be used to compute the Commodity Price for that trading day. If no index for a day is published, then the average of applicable indices on the Index Publication Date preceding and the Index Publication Date following such day will be substituted for the Index Publication Date index for that day in Table C1-8. In the event that an index ceases to be published, Parties shall agree on a replacement index.

Table C1-8
Natural Gas Price Indices

	Index Publication Date*		
Trading Day	<u>Gas Daily</u> **	<u>Btu Daily</u> ** <u>Gas Wire</u>	<u>NGI Daily</u> ** <u>Price Index</u>

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Tuesday	Tuesday/ Wednesday	Monday/ Tuesday	Tuesday/ Wednesday
Wednesday	Wednesday/ Thursday	Tuesday/ Wednesday	Wednesday/ Thursday
Thursday	Thursday/ Friday	Wednesday/ Thursday	Thursday/ Friday
Friday	Friday/ Monday	Thursday/ Friday	Friday/ Monday
Saturday	Monday/ Tuesday	Friday/ Monday	Monday/ Tuesday
Sunday	Monday/ Tuesday	Friday/ Monday	Monday/ Tuesday
Monday	Monday/ Tuesday	Friday/ Monday	Monday/ Tuesday

* *The Index Publication Date is the date of the publication which contains the prices for the applicable Trading Day.*

** *Where more than one day's index is shown for a Trading Day, the average of the two daily indices should be used.*

Gas Daily: The "Flow Date(s)" column should match the Trading Day.

Btu Daily: The Index Publication Date should be the day prior to the Trading Date in the Table above, except for Sunday and Monday, where Friday should be used as the Index Publication Date.

NGI Daily: The Index Publication Date should be the same as the Trading Date in the tables above, except for Saturday and Sunday, where Monday should be used as the Index Publication Date.

Commodity Price for Distillate Fuel Oil

The Commodity Price for Distillate Fuel Oil shall be the simple average of the midpoint of the ranges for CARB No. 2 Diesel and for Jet as published in Platt's Oilgram United States West Coast Product Assessments (page 22). If the Unit can burn only Jet, the Commodity Price shall be the midpoint of the range for Jet.

In an event the index ceases to be published, the Parties shall agree on a replacement index.

For distillate fuel, the index will be for the last day prior to the RMR Transaction Day.

Commodity Price for No. 6 Residual Fuel Oil

The fuel price shall be the prudent actual replacement cost of the fuel consumed, or, if the fuel is consumed and not replaced, then the fuel price will be “last-in-first-out” (LIFO) inventory price of the fuel consumed.

Where conversion from barrels of Fuel to MMBtu is required, the following conversion coefficients shall be used:

- No. 1 Distillate Fuel Oil - 5.754 MMBtu per barrel;
- No. 2 Distillate Fuel Oil - 5.796 MMBtu per barrel;
- Jet Fuel - 5.650 MMBtu per barrel;
- No. 6 Residual Fuel Oil - 6.258 MMBtu per barrel.

Intrastate Transportation Rate for Gas

The Intrastate Transportation Rate for Gas shall be the applicable intrastate transportation rate determined as follows:

Units served by SDG&E: The Southern California Gas Company intrastate transportation rate (currently GT-SD) plus the volumetric component of the SDG&E gas transportation rate for electric generation service, including the ITCS⁴ (currently GTUEG - SD), or any successor rate for electric generation service applicable to deliveries to the Facility, divided by one minus the applicable in-kind shrinkage allowance, if any.

Units served by Southern California Gas: The Southern California Gas Company intrastate transportation rate for firm electric generation service, including the ITCS (GT-F) plus the G-ITC Wheeler Ridge Interconnection Access fee, if applicable, or any successor rate for firm electric generation service applicable to deliveries to the Facility, divided by one minus the applicable in-kind shrinkage allowance, if any.

Units served by PG&E: The PG&E intrastate transportation charge stated in Rate Schedule G-EG, or any successor rate for electric generation service applicable to deliveries to the Facility, divided by one minus the applicable in-kind shrinkage allowance, if any.⁵

Transportation Rate for Distillate Fuel Oil

⁴ ITCS means Interstate Transition Cost Surcharges.

⁵ If the Facility does not qualify for service under Rate Schedule G-EG, the applicable rate shall be given by Rate Schedule G-NT.

The Transportation Rate for Distillate Fuel Oil shall be N/A. There shall be no Transportation Rate for No. 6 Residual Fuel Oil.

B. CAISO Monthly Fuel Imbalance Charge

Levels of Responsibility

Each month, the Owner is responsible for all Nonmarket fuel imbalance charges incurred up to and including 2.25 percent of the CAISO Facility Monthly Billed Fuel Cost.

The Monthly Fuel Imbalance Charge is equal to 75% of 1st Tier Imbalance plus 100% of 2nd Tier Imbalances;

Where:

The **1st Tier Imbalances** is that portion of the Monthly Sum of Daily Imbalance Charges which exceeds 2.25 percent of the CAISO Facility Monthly Billed Fuel Cost for the Month and is less than or equal to 10.0 percent of the CAISO Facility Monthly Billed Fuel Cost for the Month.

The **2nd Tier Imbalances** is that portion of the Monthly Sum of Daily Imbalance Charges which is greater than 10.0 percent of the CAISO Facility Monthly Billed Fuel Cost for the Month.

The Monthly Sum of Daily Imbalance Charges is the sum for all days in the month of imbalance charges and similar fees and penalties imposed on Owner (or its fuel supplier and paid by Owner) by transportation providers delivering gas to the Units because deliveries were in excess of or less than scheduled for a given day, but only to the extent that (i) the imbalance was caused by Owner compliance with a Dispatch Notice issued after (or less than 30 minutes prior) to the Transporter's deadline for scheduling transportation, and (ii) Owner issued a notice to the CAISO as soon as possible after the Owner became aware it might incur imbalance charges advising CAISO of such possible charges.

In any month in which Owner incurs a 1st Tier or 2nd Tier Imbalance charge, Owner will provide the CAISO with a report showing the allocation of the imbalance charges between Market Transactions and Nonmarket Transactions. If CAISO or the Responsible Utility disagree on allocation, the dispute will be resolved through ADR.

To receive payment for a 2nd Tier Imbalance, Owner must document in an informational filing with FERC that the charges were appropriately allocated to

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Nonmarket Transactions and it was commercially reasonable to incur them. As used in this context and for purposes of calculating imbalance charges, “commercially reasonable” does not mean that Owner is required to acquire storage to avoid imbalances. If either the CAISO or Responsible Utility disagree with the imbalance charges, desires a formal review and gives such notice to the Owner within 30 days of the informational filing, the Owner must file under Section 205 of the Federal Power Act to collect any 2nd Tier Imbalance charges.

Pursuant to the above, the Monthly Fuel Imbalance Charge is calculated in accordance with Equation C1-9.

Equation C1-9

$$\text{Monthly Fuel Imbalance Charge} = 0.75 * \left(\text{Monthly Sum of Daily Imbalance Charges} - 0.0225 * \text{CAISO Facility Monthly Billed Fuel Cost} \right) + 0.25 * \left(\text{Monthly Sum of Daily Imbalance Charges} - 0.10 * \text{CAISO Facility Monthly Billed Fuel Cost} \right)$$

Note that if either of the two bracketed portions of the equation yields a value less than or equal to zero, then that portion of the equation is set to zero.

C. CAISO Monthly Other Fuel Related Cost

The CAISO Monthly Other Fuel Related Cost is calculated in accordance with Equation C1-10.

Equation C1-10

$$\text{CAISO Monthly Other Fuel Related Cost} = \frac{\text{Monthly sum of Billable MWh}}{\text{Monthly sum of Total Hourly Metered Net Generation}} * \left(\text{Other Gas Tariff Charges} + \text{Applicable Taxes} \right)$$

Where:

- Other Gas Tariff Charges are those intrastate gas transportation tariff charges not included in Transportation Rate Charges set forth in Section A.8 of this Schedule listed below:

[Insert applicable charges]

- Applicable taxes and fees are:

1. [Insert applicable local utility user taxes]

2. [Insert applicable G-SUR fee]

All other fuel related taxes and fees are intended to be covered by the two percent adder in Hourly Fuel Cost and are the Owner's responsibility.

D. CAISO Monthly Emissions Cost**Part 1 for SCAQMD-Jurisdictional Thermal Units**

The CAISO Monthly Emissions Cost for each Unit shall be the sum, for all hours in the month, of the CAISO Hourly Emissions Cost. These costs apply to a Facility within the South Coast Air Quality Management District (SCAQMD).

The CAISO Hourly Emissions Cost shall be calculated in accordance with Equation C1-11.

Equation C1-11

$$\begin{aligned} \text{CAISO Hourly Emissions} \\ \text{Cost (\$/hr)} = & \text{a. CAISO Hourly RECLAIM Trading Credit Cost} \\ & \text{b. (\$/hr) +} \\ & \text{c. CAISO Hourly NO}_x \text{ Emissions Cost (\$/hr) +} \\ & \text{d. CAISO Hourly Organic Gases Emissions} \\ & \text{e. Cost (\$/hr) +} \\ & \text{f. CAISO Hourly Sulfur Oxides Emissions Cost} \\ & \text{g. (\$/hr) +} \\ & \text{CAISO Hourly Particulate Matter Emissions} \\ & \text{Cost (\$/hr) +} \\ & \text{CAISO Hourly Carbon Monoxide Emissions} \\ & \text{Cost (\$/hr) +} \\ & \text{CAISO Hourly Sulfur Dioxides Trading Credit} \\ & \text{Costs (\$/hr)} \end{aligned}$$

a. CAISO Hourly RECLAIM Trading Credit Cost

For each hour, the CAISO Hourly RECLAIM Trading Credit ("RTC") Cost for NO_x emissions required for the Unit to generate the Billable MWh is calculated in accordance with Equation C1-12.

Equation C1-12

$$\begin{aligned} \text{CAISO Hourly RECLAIM} \\ \text{Trading Credit Cost (\$/hr)} = & \text{Hourly NO}_x \\ & \text{Emissions (lbs/hr)} * \text{RECLAIM NO}_x \\ & \text{Trading Credit Rate (\$/lb)} * \frac{\text{Billable MWh}}{\text{Hourly Metered} \\ & \text{Total Net} \\ & \text{Generation}} \end{aligned}$$

Where:

- Hourly NOx Emissions is calculated in accordance with Equation C1-13.

Equation C-13

$$\text{Hourly NOx Emissions (lbs/hr)} = \frac{AX}{2} + \frac{B}{X} + C$$

Where:

- X is the Hourly Metered Total Net Generation for the hour.
- Coefficients A, B, and C are given in Table C1-13 for each Unit.

Table C1-13			
Description of Unit	A	B	C
N/A	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

The RECLAIM NOx Trading Credit Rate (\$/lb) will be equal to the 13-week sales-weighted average sales price for RTCs calculated as of the last day of the Month from sales records available from the SCAQMD for all actual sales in the SCAQMD during the thirteen preceding weeks, including the Settlement Period.

b. CAISO Hourly NOx Emissions Cost

For each hour, the CAISO Hourly NOx Emissions Cost for the Billable MWh is calculated in accordance with Equation C1-14.

Equation C1-14

$$\text{CAISO Hourly Nox Emissions Cost (\$/hr)} = (5 * 10^{-4}) * \text{Hourly Nox Emissions (lbs/hr)} * \text{NOx Emissions Fee (\$/ton)} * \frac{\text{Billable MWh}}{\text{Hourly Metered Total Net Generation}}$$

Where:

- (5 × 10⁻⁴) is the conversion factor from lbs to tons.
- Hourly NOx Emissions is calculated in accordance with Equation C1-13.
- NOx Emissions Fee is obtained from Table III of SCAQMD Rule 301(e). The fee is dependent upon the Cumulative Tons of Pollutant (NOx), which

is calculated in accordance with Equation C1-15. The Cumulative Tons of Pollutant is reset to zero each July 1st.

Equation C1-15

$$\text{Cumulative Tons of Pollutant (tons/hr)} = \text{Tons of Pollutant From the prior July 1st to the Previous Hour} + \text{Tons of Pollutant For Current Hour}$$

Where:

- Tons of Pollutant for Current Hour is in accordance with Equation C1-16.

Equation C1-16

$$\text{Tons of Pollutant for Current Hour (tons/hr)} = (4.76 * 10^{-7}) * (AX^3 + BX^2 + CX + D) * \text{Pollutant Emissions Amount for Natural Gas}$$

Where:

- $(4.76 * 10^{-7})$ is the conversion factor from lbs. to tons (1 ton/2000 lbs.) and from mmcf to MMBtu (1 mmcf/1050 MMBtu).
- X is the Hourly Metered Total Net Generation, MWh.
- Coefficients A, B, C, and D are the coefficients of the hourly heat rate curve given in Table C1-16 for each Unit.

Table C1-16			
Description of Unit	A	B	C
N/A	N/A	N/A	N/A

Pollutant Emissions Amount For Natural Gas is the applicable pollutant from SCAQMD General Instruction Book (for the latest year), Annual Emissions Reporting Program, Appendix A - Common Emission Factors For Combustion Equipment, Table 1 - Common Emission Factors For Combustion Equipment for Forms B1 and B1U.

c. CAISO Hourly Organic Gases Emissions Cost, CAISO Hourly Sulfur Oxides Emissions Cost, CAISO Hourly Particulate Matter Emissions Cost, and CAISO Hourly Carbon Monoxide Emissions Cost

The CAISO Hourly Organic Gases (OG) Emissions Cost, CAISO Hourly Sulfur Oxides (SOx) Emissions Cost, CAISO Hourly Particulate Matter

(PM) Emissions Cost, and CAISO Hourly Carbon Monoxide (CO) Emissions Cost are each calculated in accordance with Equation C1-17.

Equation C1-17

$$\begin{array}{l} \text{CAISO Hourly} \\ \text{Applicable} \\ \text{Emissions Cost} \\ \text{($/hr)} \end{array} = (4.76 * 10^{-7}) * \begin{array}{l} \text{CAISO Unit Hourly} \\ \text{Cap Heat Input} \\ \text{(MMBtu/hr)} \end{array} * \begin{array}{l} \text{Associated} \\ \text{Emissions Factor} \\ \text{(lbs/mmcf)} \end{array} * \begin{array}{l} \text{Associated} \\ \text{Emissions Fee} \\ \text{($/ton)} \end{array}$$

Where:

- CAISO Hourly Applicable Emissions Cost is the CAISO Hourly OG Emissions Cost, CAISO Hourly SO_x Emissions Cost, CAISO Hourly PM Emissions Cost, or CAISO Hourly CO Emissions Cost.
- $(4.76 * 10^{-7})$ is the conversion factor from lbs. to tons (1 ton/2000 lbs.) and from mmcf to MMBtu (1 mmcf/1050 MMBtu).
- Associated Emissions Factor is the associated OG Emissions Factor, SO_x Emissions Factor, PM Emissions Factor or CO Emissions Factor from Table 1 from General Instruction Book for the SCAQMD (for the latest year) Annual Emissions Reporting Program.
- Associated Emissions Fee is the associated OG Emissions Fee, SO_x Emissions Fee, PM Emissions Fee, or CO Emissions Fee from Table III of SCAQMD Rule 301(e), and is dependent upon the Cumulative Tons of Pollutant pursuant to Equation C1-15.

d. CAISO Hourly Sulfur Dioxides Trading Credit Costs

Beginning in the year 2000, certain Units will be subject to Title IV of the Federal Clean Air Act for providing SO₂ Allowances to cover related trading costs. Prior to 2000, the CAISO Hourly Sulfur Dioxides Trading Credit Cost will be zero. The Owner may make a filing under Section 205 of the Federal Power Act limited to recovering applicable CAISO Hourly Sulfur Dioxides Trading Credit Costs when such costs are incurred.

Part 2 for Ventura County Air Pollution Control District⁶

Beginning in the year 2000, certain Units will be subject to Title IV of the Federal Clean Air Act for providing SO₂ Allowances to cover related trading costs. Prior to 2000, the CAISO Hourly Sulfur Dioxides Trading Credit Cost will be zero. The Owner may make a filing under Section 205 of the Federal Power Act limited to

⁶ Ventura County APCD, where Mandalay Generating Station is located, does not require payment of emissions fees, but rather permit renewal fees. The permit renewal fees are included in the fixed O&M costs.

recovering applicable CAISO Hourly Sulfur Dioxides Trading Credit Costs when such costs are incurred.

E. CAISO Monthly Variable O&M Cost

The CAISO Monthly Variable O&M Cost for each Unit shall be the product of the Unit's Billable MWh for the Billing Month and the Unit's Variable O&M Rate. Variable O&M Rate for each Unit shall be:

Table C1-18	
Unit	Variable O&M Rate (\$/MWh)
N/A	N/A

F. CAISO Scheduling Coordinator Charge

The CAISO Scheduling Coordinator Charge for each Unit shall be the product of \$0.31 and the Unit's Billable MWh for the Billing Month.

G. CAISO ACA Charge

The CAISO ACA Charge is the product of the Unit's Billable MWh for the Billing Month and the applicable annual charge for short-term sales under 18 CFR Section 382.201 of the FERC Regulations.

SCHEDULE C – N/A**Variable Cost Payment for All Conditions
Part 2 for Geothermal Units**

For each Unit each Month, the Variable Cost Payment for Billable MWh from the Unit pursuant to Nonmarket Transactions during that Month shall be the amount calculated in accordance with the following formula:

$$\begin{array}{l} \text{Variable Cost Payment} \\ = \\ \text{A. CAISO Monthly Billed Fuel Cost +} \\ \text{B. CAISO Monthly Variable O\&M Cost +} \\ \text{C. CAISO Scheduling Coordinator Charge} \\ \text{D. +} \\ \text{CAISO ACA Charge} \end{array}$$

Each component of the Variable Cost Payment for geothermal Units is calculated as described below:

A. CAISO Monthly Billed Fuel Cost [for Geysers Main only]

The CAISO Monthly Billed Fuel Cost is given by Equation C2-1.

Equation C2-1

$$\text{CAISO Monthly Billed Fuel Cost} = \text{Billable MWh} * \text{Steam Price (\$/MWh)}$$

Where:

- Steam Price is \$16.34/MWh.
- For purposes of Equation C2-1, Billable MWh is all Billable MWh Delivered after cumulative Hourly Metered Total Net Generation during the Contract Year from all Units exceeds the Minimum Annual Generation given by Equation C2-2.

Equation C2-2

$$\text{Minimum Annual Generation} = \frac{\text{Annual Average Field Capacity}}{8760 \text{ hours} * 0.4} - (A+B+C)$$

Where:

- Annual Average Field Capacity is the arithmetic average of the two Field Capacities in MW for each Contract Year, determined as described below.

Field Capacity shall be determined for each six-month period from July 1 through December 31 of the preceding calendar year and January 1 through June 30 of the Contract Year. Field Capacity shall be the average of the five highest amounts of net generation (in MWh) simultaneously achieved by all Units during eight-hour periods within the six-month period. The capacity simultaneously achieved by all Units during each eight-hour period shall be the sum of Hourly Metered Total Net Generation for all Units during such eight-hour period, divided by eight hours. Such eight-hour periods shall not overlap or be counted more than once but may be consecutive.

Within 30 days after the end of each six-month period, Owner shall provide CAISO and the Responsible Utility with its determination of Field Capacity, including all information necessary to validate that determination.

- A is the amount of Energy that cannot be produced (as defined below) due to the curtailment of a Unit during a test of the Facility, a Unit or the steam field agreed to by CAISO and Owner.
- B is the amount of Energy that cannot be produced (as defined below) due to the retirement of a Unit or due to a Unit's Availability remaining at zero after a period of ten Months during which the Unit's Availability has been zero.
- C is the amount of Energy that cannot be produced (as defined below) because a Force Majeure Event reduces a Unit's Availability to zero for at least thirty (30) days or because a Force Majeure Event reduces a Unit's Availability for at least one hundred eighty (180) days to a level below the Unit Availability Limit immediately prior to the Force Majeure Event.
- The amount of Energy that cannot be produced is the sum, for each Settlement Period during which the condition applicable to A, B or C above exists, of the difference between the Unit Availability Limit immediately prior to the condition and the Unit Availability Limit during the condition.

B. CAISO Monthly Billed Fuel Cost [for Geysers Units 13 & 16 only]

The CAISO Monthly Billed Fuel Cost is given by Equation C2-1.

Equation C2-1

$$\text{CAISO Monthly Billed Fuel Cost} = \text{Billable MWh} * \text{Steam Price (\$/MWh)}$$

Where:

- Steam Price is \$11.25/MWh, which includes the cost of steam condensate re-injection.

C. CAISO Monthly Variable O&M Cost

The CAISO Monthly Variable O&M Cost for each Unit is given by Equation C2-3 and is the product of the sum of Billable MWh for the Billing Month and the Unit's Variable O&M Rate. Variable O&M Rate for each Unit is shown in Table C2-1:

Equation C2-3

$$\text{CAISO Monthly Variable O\&M Cost} = \text{Monthly sum of Billable MWh} * \text{Variable O\&M Rate}$$

Table C2-1	
Unit	Variable O&M Rate (\$/MWh)

D. CAISO Scheduling Coordinator Charge

The CAISO Scheduling Coordinator Charge for each Unit shall be the product of \$0.31 and the Unit's of Billable MWh for the Billing Month.

E. CAISO ACA Charge

The CAISO ACA Charge is the product of the Unit's Billable MWh for the Billing Month and the applicable annual charge for short-term sales under 18 CFR Section 382.201 of the FERC Regulations, to the extent payable by Owner for Billable MWh.

SCHEDULE C - N/A**Variable Cost Payment for All Conditions
Part 3 for Conventional Hydro Units**

For each month and each Unit, the Variable Cost Payment for Billable MWh from the Unit pursuant to Nonmarket Transactions during that Month shall be the amount calculated in accordance with the following formula:

$$\begin{array}{l} \text{Variable Cost Payment} \\ = \end{array} \quad \begin{array}{l} \text{A. CAISO Scheduling Coordinator} \\ \text{Charge +} \\ \text{CAISO ACA Charge} \end{array}$$

A. CAISO Scheduling Coordinator Charge

The CAISO Scheduling Coordinator Charge for each Unit shall be the product of \$0.31 and the Unit's Billable MWh for the Billing Month.

B. CAISO ACA Charge

The CAISO ACA Charge is the product of the Unit's Billable MWh for the Billing Month and the applicable annual charge for short-term sales under 18 CFR Section 382.201 of the FERC Regulations.

SCHEDULE C – N/A**Variable Cost Payment for All Conditions
Part 4 for Pumped Storage Hydro Units**

For each month and each Unit, the Variable Cost Payment for Billable MWh from the Unit pursuant to Nonmarket Transactions during that Month shall be the amount calculated in accordance with the following formula:

$$\text{Variable Cost Payment} = \begin{array}{l} \text{A. CAISO Monthly Billed Fuel Cost +} \\ \text{B. CAISO Scheduling Coordinator} \\ \text{C. Charge +} \\ \text{CAISO ACA Charge} \end{array}$$

A. CAISO Monthly Billed Fuel Cost

The CAISO Monthly Billed Fuel Cost is given by Equation C4-1:

Equation C4-1

CAISO Monthly Billed Fuel Cost = Year-to-Date CAISO Fuel Cost – Sum of Previous Months' CAISO Monthly Billed Fuel Cost in the Contract Year

Where:

- Year-to-Date CAISO Fuel Cost is given by Equation C4-2.
- Sum of Previous Months' CAISO Monthly Billed Fuel Cost in the Contract Year shall be the sum of the CAISO Monthly billed Fuel Cost for each Month from January 1 of the Contract Year⁷ through the end of the Month in the Contract Year before the Billing Month.

Equation C4-2

$$\text{Year-to-Date CAISO Fuel Cost} = (\text{YTD Pumping Cost/YTD Energy Produced}) \times \text{Variable O\&M Rate}$$

Where:

- YTD Pumping Cost = Total cost of Energy purchased by Owner for pumping, including transmission charges, from January 1 of the Contract Year through the end of the Billing Month.

⁷ For purposes of Equations C4-1 and C4-2 as applied in 1999, Contract Year includes those months in the year, beginning in January 1999, when the same services as under this Agreement were provided to ISO under a predecessor rate schedule, as well as months when such services are provided under this Agreement.

- YTD Energy Produced = Total Energy produced by the Facility for Market and Nonmarket Transactions from January 1 of the Contract Year through the end of the Billing Month.
- YTD Billable MWh = Total Billable MWh from January 1 of the Contract Year through the end of the Billing Month.

B. CAISO Scheduling Coordinator Charge

The CAISO Scheduling Coordinator Charge for each Unit shall be the product of \$0.31 and the Unit's Billable MWh for the Billing Month.

C. CAISO ACA Charge

The CAISO ACA Charge is the product of the Unit's Billable MWh for the Billing Month and the applicable annual charge for short-term sales under 18 CFR Section 382.201 of the FERC Regulations.

Schedule C – N/A

**Variable Cost Payment for All Conditions
 Part 5 for Biomass Generation Units**

For each month and each Unit, the Variable Cost Payment for Billable MWh from the Unit pursuant to Nonmarket Transaction during that Month shall be the amount calculated in accordance with the following formula:

$$\text{Variable Cost Payment} = \begin{matrix} \text{A. CAISO Monthly Billed Fuel Cost +} \\ \text{B. CAISO Variable O\&M Cost +} \\ \text{C. CAISO Scheduling Coordinator} \\ \text{Charge} \end{matrix}$$

A. CAISO Monthly Billed Fuel Cost

The CAISO Monthly Billed Fuel Cost is given by Equation C5-1:

Equation C4-1

$$\text{CAISO Monthly Billed Fuel Cost} = \text{Billable MWh} * \text{Monthly Average Fuel Cost} (\$/\text{MWh})$$

Where:

- Monthly Average Fuel Cost (\$ / MWh) = Negotiated Cost Based Amount.

B. CAISO Monthly Variable O&M Cost

The CAISO ACA Charge is the product of the Unit’s Billable MWh for the Billing Month and the applicable annual charge for short-term sales under 18 CFR Section 382.201 of the FERC Regulations.

Equation C5-2

$$\text{CAISO Monthly Variable O\&M Cost} = \text{Monthly Sum of billable MWh} * \text{Variable O\&M Rate}$$

Table C5-1	
Unit	Variable O&M Rate (\$/MWh)

C. CAISO Scheduling Coordinator Charge

The CAISO Scheduling Coordinator Charge for each Unit shall be the product of \$0.31 and the Unit's Billable MWh for the Billing Month.

SCHEDULE D**Part 1—N/A****Start-up Payment for Condition 1 Units****1. Prepaid Start-up Charge**

Prepaid Start-up Charge for each Unit operating under Condition 1 for each Contract Year will be calculated as the Prepaid Start-up Cost times the number of Prepaid Start-ups. The number of Prepaid Start-up equals the Maximum Annual Start-ups per Unit. The Prepaid Start-up Cost will be calculated in accordance with Equation D-1 for Start-up Cost with the following assumptions:

- a. Hourly Fuel Price: For the initial Contract Year the Hourly Fuel Price shall be the simple average of the applicable index prices from Table C1-8 of Schedule C for the period beginning on the later of the initial publication date of such indices or January 1, 1998 and ending December 31, 1998, plus the applicable Transportation Rate under Equation C1-8 as in effect on April 1, 1999. For each subsequent Contract Year, the Hourly Fuel Price shall be agreed upon by CAISO and Owner; if there is no agreement, the Hourly Fuel Price shall be the simple average of the Hourly Fuel Prices for the twelve months ending the prior June 30 as calculated in accordance with Equation C1-8 of Schedule C;
- b. Energy Price shall be based on the [insert Applicable UDC Tariff rate], including applicable demand charges, provided that the Applicable UDC Tariff rate shall only be the energy charge rate at those Facilities where Units have the capability to use Energy from other units at the same Facility to effect Start-ups or where generation from other units is otherwise permitted under the CAISO Tariff to be netted against auxiliary power needed to effect Start-up of the Unit. For the initial Contract Year, the Energy Price shall be calculated as the total auxiliary power (including Energy for Start-ups) costs charged to the Facility by its supplier of end-use Energy for the six-month period ending December 31, 1998 divided by the auxiliary power (including Energy for Start-ups) consumed at the Facility for that same time period. For Facilities that have not been charged for auxiliary power for the six-month period ending December 31, 1998, the Energy Price for the Initial Contract Year shall be the simple average of the prices for Energy for varying times of day shown in the Applicable UDC Tariff. For each subsequent Contract Year, the Energy Price shall be calculated as the total auxiliary power (including Energy for Start-ups) costs charged to the Facility by its supplier of end-use Energy for the twelve months ending the prior June 30 divided by the auxiliary power (including Energy for Start-ups) consumed at the Facility for that same twelve-month period;

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- c) All Start-ups are assumed to be from maximum time off line as shown by value XMax in Table D-1, and
- d) Other Start-up Costs shall be zero (\$0) for non-hydroelectric Units; for hydroelectric Units, other Start-up costs shall be the cost shown in Table D-2 for Normal Work Hours.

The Prepaid Start-up Cost and Prepaid Start-up Charge for the current Contract Year are set forth in Table D-0:

Unit	Number of Prepaid Start-ups	Prepaid Start-up Cost	Prepaid Start-up Charge
Huntington Beach Unit 3	N/A	N/A	N/A
Huntington Beach Unit 4	N/A	N/A	N/A

2. Start-up Cost

The cost for a Start-up shall be calculated in accordance with Equation D-1:

Equation D-1

$$\begin{array}{r} \text{Start-up} \\ \text{Cost} \\ (\$) \end{array} = \begin{array}{r} \text{Start-up} \\ \text{Fuel Cost} \\ (\$) \end{array} + \begin{array}{r} \text{Start-up} \\ \text{Power Cost} \\ (\$) \end{array} + \begin{array}{r} \text{Other} \\ \text{Start-up Costs} \\ (\$) \end{array} + \begin{array}{r} \text{Shutdown} \\ \text{Power Cost} \\ (\$) \end{array}$$

Each component of the Start-up Cost in Equation D-1 is set forth below.

a. Start-up Fuel Costs

The Start-up Fuel Cost shall be calculated in accordance with Equation D-1a:

Equation D-1a

$$\begin{array}{r} \text{Start-up} \\ \text{Fuel Cost} \\ (\$) \end{array} = \left[\begin{array}{r} \text{A} \\ (\text{MMBtu/hr}) \end{array} * \begin{array}{r} \text{x} \\ (\text{hrs}) \end{array} + \begin{array}{r} \text{B} \\ (\text{MMBtu}) \end{array} \right] * \begin{array}{r} \text{Hourly} \\ \text{Fuel Price} \\ (\$/\text{MMBtu}) \end{array}$$

Where:

- “x” equals the number of hours since the Unit ceased operation and cannot exceed “XMax”.

- The Hourly Fuel Price is calculated pursuant to Schedule C Equation C1-8 for the hour in which the Start-up began.
- The values A, B and x_{Max} for each Unit are given in Table D-1 below.

b. Start-up Power Costs

The Start-up Power Cost shall be calculated in accordance with Equation D-1b:

Equation D-1b

$$\text{Start-up Power Cost (\$)} = \left(\left[\begin{array}{c} \text{C} \\ \text{(MWh/hr)} \end{array} * \begin{array}{c} \text{x} \\ \text{(hrs)} \end{array} \right] + \begin{array}{c} \text{D} \\ \text{(MWh)} \end{array} \right) * \begin{array}{c} \text{Energy Price} \\ \text{(\$ / MWh)} \end{array}$$

Where:

- “x” is equal to the hours since the Unit ceased operation and cannot exceed “xMax”.
- The Energy Price shall be equal to the total auxiliary power (including Energy for Start-ups) costs charged to the Facility by its supplier of end-use Energy for the billing cycle in which the Start-up was initiated divided by the total auxiliary power (including Energy for Start-ups) consumed at the Facility during such billing cycle.
- The values C, D and xMax are given in Table D-1 below.

c. Shutdown Power Costs

The Shutdown Power Cost shall be calculated in accordance with Equation D-1c:

Equation D-1c

$$\text{Shutdown Power Cost (\$)} = \begin{array}{c} \text{Shutdown Power Requirement} \\ \text{(MWh)} \end{array} * \begin{array}{c} \text{Energy Price} \\ \text{(\$ / MWh)} \end{array}$$

The Energy Price shall be equal to the total auxiliary power (including Energy for Shutdowns) costs charged to the Facility by its supplier of end-use Energy for the billing cycle in which the Shutdown was initiated divided by the total auxiliary power (including Energy for Shutdowns) consumed at the Facility during such billing cycle. The Shutdown Power Requirement is given in Table D-1 below.

d. Other Start-up Costs for Hydroelectric Only

Other Start-up Costs are the cost of labor to start hydroelectric Units that require an operator to manually parallel, and reflect the labor costs to travel to the site. If the Start-up of a hydroelectric Unit occurs outside normal work hours, the Start-up Costs include the minimum work hours and labor rates as set by the applicable collective bargaining agreement(s).

The Other Start-up Costs shall be calculated in accordance with Equation D1-d. The values for E are provided in Table D-2 for normal work hour and outside of normal work hour situations.

Equation D-1d

$$\text{Other Start-up Costs (\$)} = E$$

Once a Unit has been given a Dispatch Notice to Start-up, other Start-up Costs are incurred.

	X _{Max}	A	B ⁸	C	D	Shutdown Power Requirement
Unit	(Hrs)	(mmBtu)/ hr	(mmBtu)	(MWh)/hr	(MWh)	(MWh)
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A

Unit	E (Normal Work Hours) (\$)	E (Outside Normal Work Hours) (\$)
N/A	N/A	N/A
N/A	N/A	N/A

⁸ Includes fuel consumed from the time Unit reaches Synchronization to the time Unit reaches Minimum Load.

3. Monthly Start-up Adjustment

For each Start-up successfully completed in compliance with a Dispatch Notice during the Billing Month, and each Start-up initiated in compliance with a Dispatch Notice but not successfully completed because it is canceled or rescinded by CAISO, until the total Counted Start-ups for the Contract Year equals the number of Prepaid Start-ups for the Contract Year, the Monthly Start-up Adjustment, which shall be a credit or payment, is the sum of Prepaid Start-up Adjustments, and Prepaid Start-up Adjustments for Canceled Start-ups calculated in accordance with Equations D-2 and D-3:

Equation D2

Prepaid Start-up Adjustment = Prepaid Start-up Cost calculated in accordance with Section 1 minus the actual Start-up Cost calculated in accordance with Equation D-1.

Equation D-3

Prepaid Start-up Adjustment for Canceled Start-up = $\frac{\text{Number of hours committed to the Start-up}}{\text{applicable Start-up Lead Time (hrs) as shown in Schedule A, Section 6}} * \text{Prepaid Start-up Adjustment calculated in accordance with Equation D-2}$

Where:

- The “number of hours committed to the Start-up” is the lesser of (a) time elapsed between the initiation of the Start-up and the cancellation and (b) the applicable Start-up Lead Time.

SCHEDULE D**Part 2
Start-up Payment for Condition 2 Units****1. Start-up Payment**

The Start-up Payment for each Start-up successfully completed for each Unit operating under Condition 2 equals the Start-up Cost calculated using Equation D-1.

Table D-1, Start-Up Costs						
	X _{Max}	A	B ⁹	C	D	Shutdown Power Requirement
Unit	(Hrs)	(mmBtu)/ hr	(mmBtu)	(MWh)/hr	(MWh)	(MWh)
Huntington Beach Unit 3	N/A	N/A	N/A	N/A	3.0	0.2
Huntington Beach Unit 4	N/A	N/A	N/A	N/A	3.0	0.2

2. Payment for Canceled Start-up

If Start-up is initiated under a Dispatch Notice but is not successfully completed because it is canceled or rescinded by the CAISO, the Start-up Payment is calculated in accordance with Equation D-4:

Equation D-4

$$\text{Start-up Payment for Canceled Start-up (\$)} = \frac{\text{Number of hours committed to the Start-up applicable Start-up Lead Time (hrs) as shown in Schedule A, Section 6}}{\text{Start-up Cost calculated in accordance with Equation D-1 (\$)}} *$$

⁹ Includes fuel consumed from the time Unit reaches Synchronization to the time Unit reaches Minimum Load.

The “number of hours committed to the Start-up” is the lesser of (a) time elapsed between the initiation of the Start-up and the cancellation or (b) the applicable Start-up Lead Time.

SCHEDULE E**Ancillary Services
Part 1 for Condition 1 – N/A**

The CAISO may call upon the Unit to provide the following Ancillary Services as defined in the CAISO Tariff:

- Regulation
- Spinning Reserve
- Nonspinning Reserve
- Replacement Reserve
- Voltage Support (including synchronous condenser operation)
- Black Start

If the Unit is otherwise generating, the Owner shall be required to operate the Unit within the Power Factor range of the Unit specified in Schedule A to provide Ancillary Services without additional compensation.

Certain Units (hydroelectric and synchronous condensers) can provide Ancillary Services without generating Energy. Under this Condition, Owner will be compensated for Motoring Charges if the Unit is providing Ancillary Services while synchronized without generating Energy.

Motoring Charge

When Units are operated as synchronous condensers (i.e., motored using electric power) to provide Ancillary Services, if applicable, the payment for that service is given by the following formula:

$$\text{Motoring Charge} = (\text{Power consumption rate (MWh/hr)}) * (\text{hours operated}) * (\text{Energy Price})$$

Where the Power consumption rate is given by the following table:

Unit	Power consumption rate (MWh/hour)
------	-----------------------------------

The Energy Price shall be equal to the total power costs charged to the Facility by its supplier of end-use Energy under the Applicable UDC Tariff for the billing cycle in which

the Motoring Charge was incurred divided by the total power consumed at the Facility under such tariff during such billing cycle.

Pre-empted Dispatch Payment

If the CAISO issues a Dispatch Notice to:

- (i) decrease a Unit's scheduled output of Energy in a Market Transaction to provide Ancillary Services;
- (ii) decrease a Unit's scheduled provision of Ancillary Services capacity in a Market Transaction in order to provide Regulation, Spinning Reserve, Nonspinning Reserve, or Replacement Reserve pursuant to a Dispatch Notice,
- (iii) decrease a Unit's scheduled provision of Ancillary Service capacity in a Market Transaction in order to provide Energy pursuant to a Dispatch Notice, the CAISO shall pay the appropriate Pre-empted Dispatch Payment described below. The Pre-empted Dispatch Payments are intended to make an Owner whole with respect to the original Market Transaction.

A. For Pre-empted Energy Market Transactions:

Pre-empted Dispatch Payment = Imbalance Energy Charge – Cost Savings

- Imbalance Energy Charge = $(X_o - X_n) \times$ Penalty Price
- Penalty Price = Unrestricted Imbalance Energy Price + additional penalties (per MWh) imposed by the CAISO for failure to comply with Market Schedules due to compliance with Dispatch Notice.
- Cost Savings = Fuel Cost Savings + Emissions Savings + Other Savings

Where:

- X_o = Original Total Schedule in Market and Nonmarket Transactions;
- X_n = New Total Schedule in Market and Nonmarket Transactions;

For fossil fuel Units, the Fuel Cost Savings is calculated as follows:

- Fuel Cost Savings = Fuel Savings x Hourly Fuel Price
- Fuel Savings = $((AX_o^3 + BX_o^2 + CX_o + D) - (AX_n^3 + BX_n^2 + CX_n + D)) \times E$

or

- Fuel Savings = $[(A * (B + CX_o + De^{FX_o})) - (A * (B + CX_n + De^{FX_n}))] * E$
- A, B, C, D, E and F are the coefficients from Table C1-7a or C1-7b, as applicable;
- Hourly Fuel Price is calculated in Equation C1-8.

For geothermal Units, the Fuel Cost Savings is calculated by the following formula:

$$\text{Fuel Cost Savings} = (X_o - X_n) * \text{Hourly Fuel Price}$$

Where:

- Hourly Fuel Price is the Steam Price identified in Equation C2-1 in Schedule C. However, for purposes of this Pre-empted Dispatch Payment calculation, the value for the Steam Price will be set to zero for Geysers Main Units until the cumulative Hourly Metered Total Net Generation for the Contract Year from all Units exceeds the Minimum Annual Generation given in Equation C2-2.

For pumped storage hydroelectric Units, the Fuel Cost Savings is calculated by the following formula:

$$\text{Fuel Cost Savings} = (X_o - X_n) * \text{Hourly Fuel Price}$$

Where:

- Hourly Fuel Price is YTD Pumping Cost / YTD Energy Produced; and YTD Pumping Cost and YTD Energy Produced are as defined in Equation C4-2.

For conventional hydroelectric Units, the Fuel Cost Savings is zero.

Other Savings = $((X_o - X_n) * (\text{Variable O\&M Rate} + \text{applicable annual charge for short-term sales under 18 CFR 382.201 of the FERC Regulations}))$

Emissions Savings = RECLAIM Savings + NOx Emissions Fee Savings + Organic Gases Fee Savings + Sulfur Oxides Fee Savings + Particulate Matter Savings + Carbon Monoxide Fee Savings

$$\text{RECLAIM Savings} = ((AX_o^2 + BX_o + C) - (AX_n^2 + BX_n + C)) * \text{RECLAIM NO}_x \text{ Trading Credit Rate}$$

Where:

- A, B and C are the coefficients from Table C1-13;
- X_o = Original Total Schedule in Market and Nonmarket Transactions;
- X_n = New Total Schedule in Market and Nonmarket Transactions;

$$\text{NO}_x \text{ Emissions Fee Savings} = \frac{((AX_o^2 + BX_o + C) - (AX_n^2 + BX_n + C))}{2000} * \text{NO}_x \text{ Emissions Fee;}$$

Where:

- A, B and C are the coefficients from Table C1-13;
- X_o = Original Total Schedule in Market and Nonmarket Transactions;
- X_n = New Total Schedule in Market and Nonmarket Transactions;

Organic Gases Fee Savings =

$$4.76 * 10^{-7} * \text{Gas Fuel Savings} * \text{Associated Emission Factor for Organic Gases} * \text{Associated Emissions Fee for Organic Gases}$$

Sulfur Oxides Fee Savings =

$$4.76 * 10^{-7} * \text{Gas Fuel Savings} * \text{Associated Emission Factor for Sulfur Oxides} * \text{Associated Emissions Fee for Sulfur Oxides}$$

Particulate Matter Oxides Fee Savings =

$$4.76 * 10^{-7} * \text{Gas Fuel Savings} * \text{Associated Emission Factor for Particulate Matter} * \text{Associated Emission Fee for Particulate Matter}$$

Carbon Monoxide Fee Savings =

$$4.76 * 10^{-7} * \text{Gas Fuel Savings} * \text{Associated Emission Factor for Carbon Monoxide} * \text{Associated Emission Fee for Carbon Monoxide}$$

All Emissions Fees and Emission Factors are determined in accordance with Schedule C.

[If applicable, insert emission cost savings formula for fuel other than natural gas.]

The Owner will be entitled to retain all payments received from the Owner's Scheduling Coordinator for the Unit's scheduled output.

B. For Pre-empted Ancillary Services Market Transactions:

CAISO shall pay Owner the product of (i) the difference between the MW of the Ancillary Service Owner had scheduled to provide in a Market Transaction and the MW of Ancillary Services Owner is able to provide after complying with the Dispatch Notice and (ii) the Market Clearing Price the Owner pays to buy back its commitment to deliver the preempted MW of Ancillary Services (if the Owner actually incurs such a cost), or the penalty the Owner pays for failure to deliver the preempted MW of Ancillary Services (if the Owner actually incurs such a cost) for the applicable Ancillary Service, market, and hour. In addition, if compliance with the Dispatch Notice causes reduction of a market regulation transaction, the CAISO shall also pay the Owner the product of the Regulation Energy Payment Adjustment (REPA) amount, if applicable, and the MW of Regulation which Owner had scheduled but is unable to provide because of its compliance with the Dispatch Notice.

Schedule E**Ancillary Services
Part 2 for Condition 2**

The CAISO may call upon the Unit to provide the following Ancillary Services as defined in the CAISO Tariff:

Voltage Support (including synchronous condenser operation)

The Owner shall be required to operate the Unit within the Power Factor range of the Unit specified in Schedule A to provide Voltage Support without additional compensation.

The Owner shall receive no payment for any Ancillary Services Capacity provided. However, operation of a Unit in synchronous condenser mode will be compensated as shown below.

Motoring Charge

When Units are operated as synchronous condensers (i.e., motored using electric power) to provide Ancillary Services, if applicable, the payment for that service is given by the following formula:

Motoring Charge = (Power consumption rate (MWh/hr)) * (hours operated) * (Energy Price)

Where the Power consumption rate is given by the following table:

Unit	Power consumption rate (MWh/hour)	
	With Both Units Dispatched Simultaneously	With Only One Unit Dispatched
Huntington Beach Unit 3	2.661	3.106
Huntington Beach Unit 4	2.608	3.053

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Rate Schedule FERC No. 2

Must-Run Service Agreement

The Energy Price shall be equal to the total power costs charged to the Facility by its supplier of end-use Energy under the Applicable UDC Tariff for the billing cycle in which the Motoring Charge was incurred divided by the total power consumed at the Facility under such tariff during such billing cycle.

Schedule E
Ancillary Services
Part 3 for Black Start Services – N/A

For those Units with Black Start capability, the cost of maintaining such capability is included in this Agreement and no additional costs shall be charged to the CAISO for maintaining such capability. The CAISO will pay for Black Start service, including for a Black Start Test Dispatch Notice, at the rates and prices in this Agreement for Start-Ups and Delivery of Energy in connection with the Black Start service. Owner shall maintain the Black Start capability of the Unit and the Facility and provide Black Starts in accordance with the CAISO Ancillary Services Requirements Protocol and the CAISO Dispatch Protocol, which shall be deemed incorporated by reference into this Agreement.

When the CAISO first gives written notice to the Owner that it has obtained adequate Black Start service through an auction or a separate agreement with Owner or other Generators and Black Start service under this Agreement is no longer required, the CAISO shall not be entitled to call upon this Unit to provide Black Start service. Once the CAISO has given this notice, the Owner may remove Black Start service from this Agreement by filing unilaterally a change in rate schedule with FERC. Such filing shall not be required to include any reduction in rate or revenue solely because Black Start service is removed. The CAISO shall not oppose the absence of any rate or revenue reduction that results solely from removing such service.

Schedule F – N/A**Determination of Annual Revenue Requirements
of Must-Run Generating Units**

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Article I. Purpose and General Procedures**Part A. Determination of Rates and Charges**

This Schedule F establishes the procedures and methodology for determining the Annual Fixed Revenue Requirements (in dollars) and Variable O&M Rates (in \$/MWh) for facilities designated for must-run service for purposes of calculating certain charges for such service under the RMR Contract.

The Annual Fixed Revenue Requirements and the Variable O&M Rate for each designated must-run generating facility shall be determined annually. The Annual Fixed Revenue Requirements and the Variable O&M Rate for each such facility that shall be used for calculating charges to the CAISO during each calendar year shall be determined by application of the Formula set forth in Article II hereof to the Owner's costs incurred during the twelve-month period ended on June 30 of the prior calendar year. Each twelve-month period ending on June 30 of each year is hereinafter referred to as the "Cost Year" relating to the rates and charges that are effective during the succeeding calendar year.

Part B. Informational Filings

In connection with the determination of rates and charges for each calendar year, reflecting costs incurred during the June 30 Cost Year as described in the foregoing Part A of this Article I, the Owner shall provide to the CAISO an Information Package detailing and supporting all calculations involved in such determination. A single Information Package may contain all such informational materials pertaining to all of the Owner's designated must-run facilities. On or before October 1, 2001, the Owner shall provide to the CAISO the Information Package relating to the rates and charges to become effective on January 1, 2002. Thereafter, on November 1 of each year, the Owner shall provide to the CAISO the Information Package relating to the rates and charges to be effective during the calendar year beginning on the following January 1.

Each such Information Package shall be in a clear and readable format and shall contain:

1. detailed workpapers showing the derivation of costs under the Formula for the relevant Cost Year along with supporting schedules showing the data used in applying the formula, presented in a format consistent with the presentation of information in the FERC Form No. 1;
2. a clear identification of the depreciation rates reflected in claimed costs for the Cost Year and the rate of return and every other stated item (i.e., any item which appears as a numerical value in the Formula and which only may be changed by a filing with the FERC);

3. a comparison of the major components of the resulting revenue requirements for the relevant Cost Year with the corresponding components of the revenue requirements that result from the application of the Formula using costs from the Owner's FERC Form No. 1 relating to the preceding calendar year;
4. such additional documentation as to specific items of costs required by the Formula.

The Owner shall provide each Information Package to the CAISO in printed form and a suitable electronic format. The CAISO shall post the Information Package on its website. A suitable electronic format shall be any format that the FERC permits for electronic filings.

Coincident with providing each such Information Package to the CAISO, the Owner shall also submit the Information Package to the FERC in an informational filing so as to allow for review of the related rates and charges by the FERC staff and affected parties. As to the informational filing relating to rates and charges to be effective during calendar year 2002, (i) discovery requests by the FERC staff and affected parties shall be made within 45 days of the filing, with responses by the Owner due within 60 days of the filing, and (ii) protests, if any, by affected parties shall be filed with the FERC within 75 days of the filing. As to each subsequent informational filing, (i) discovery requests by the FERC staff and affected parties shall be made within 20 days of the filing, with responses by the Owner due within 35 days of the filing, and (ii) protests, if any, by affected parties shall be filed with the FERC within 45 days of the filing. In the event that the need arises during the discovery process for the nondisclosure or confidentiality of information, the Owner and affected parties, other than FERC Staff and state regulatory agencies, shall utilize the procedures contained in Schedules N-1 and N-2 of the RMR Contract. If the Owner seeks the confidentiality or nondisclosure of information provided to FERC or state regulatory agencies, it shall follow the applicable rules, regulations and statutory provisions of those agencies.

Protests to the Information Package challenging arithmetic calculations or conformity to the Rate Formula, not resolved by summary disposition of the FERC, shall be resolved by the use of the Alternative Dispute Resolution procedures in Schedule K of the RMR contract. In such a proceeding, the Owner will bear the burden of proof as in a proceeding under Section 205 of the Federal Power Act (FPA). If it is found that an erroneous calculation or non-conforming formula element has been used, refunds shall be ordered. The amount of refunds shall restore the parties to the positions they would have occupied had the erroneous calculations or non-conforming formula elements not been used, with interest calculated pursuant to Section 35.19a of the Commission's regulations, 18 C.F.R. Section 35.19a.

If a matter is set for hearing, additional discovery shall be permitted in accordance with the Commission's Rules of Practice and Procedure. Under hearings established

pursuant to this provision, refund rights will be as in a proceeding under Section 205 of the FPA. Any refunds due as the result of a final Commission order will be credited or paid to the CAISO with interest in accordance with 18 C.F.R. 35.19a.

In addition to the discovery provided above, affected parties shall have the ability to audit the Owner's books and records as provided in Section 12.2 of the RMR Contract. To the extent that an audit discloses that the formula was not correctly applied for a particular year, the affected prior billings shall be corrected, and appropriate refunds or credits shall be provided to the CAISO, with interest determined in accordance with 18 C.F.R. 35.19a.

Notwithstanding the above procedures, all parties retain full rights to make filings at any time under Sections 205 and 206 of the FPA, as appropriate.

Article II. Formula for Determination of Annual Revenue Requirements

Part A. Purpose and Overview

The purpose of this Formula For Determination of Annual Revenue Requirements ("Formula") is to specify the method for determining the Annual Revenue Requirements, and certain components thereof, of particular must-run generating units for each Cost Year.

Part B of this Formula contains the specifications for the components of costs that may be included in the Annual Revenue Requirements of individual designated must-run generating units (*i.e.*, for each "Subject Resource").

Part C of this Formula sets forth (i) general instructions for the use and application of the Formula, and (ii) certain general definitions of terms used herein.

Part B. Determination of Annual Revenue Requirements

Section 1. Annual Fixed Revenue Requirements and Variable O&M Rate

Annual Fixed Revenue Requirements

The "Annual Fixed Revenue Requirements" for the Subject Resource is the amount determined as the following difference:

1. Total Annual Revenue Requirements, as defined below; less
2. Total Annual Variable Costs, as defined below.

Variable O&M Rate

The "Variable O&M Rate" for the Subject Resource is the rate (in \$/MWh) determined as the follows:

$$\text{Variable O\&M Rate} = \frac{[\text{Annual Variable O\&M Expenses}]}{[\text{Annual Net Generation}]}$$

where "Annual Variable O&M Expenses" is defined hereinbelow, and "Annual Net Generation" is the net generation (in MWh) of the Subject Resource during the Cost Year.

Notwithstanding the foregoing, whenever the Annual Net Generation of the Subject Resource is zero or negative, the Variable O&M Rate shall be deemed to be zero.

Total Annual Revenue Requirements

The "Total Annual Revenue Requirements" for the Subject Resource is the amount that is the sum of the following amounts:

1. Operating Expenses, determined pursuant to Section 2 below; and
2. Return and Income Tax Allowance, determined pursuant to Section 3 below.

Section 2. Operating Expenses

"**Operating Expenses**" for the Subject Resource is the quantity that is the sum of the following amounts:

0. Total O&M Expenses, as defined below;
1. Depreciation Expenses, as defined below;
2. Taxes Other Than Income Taxes, as defined below; and
3. Revenue Credits, as defined below.

Total O&M Expenses

"Total O&M Expenses" is the amount of expenses arising from the operation and maintenance of the Subject Resource, including Production O&M Expenses, Transmission O&M Expenses, Distribution O&M Expenses, and Administrative & General Expenses, all as defined below.

- (1) **Production O&M Expenses:** Expenses incurred directly in

operating and maintaining the Subject Resource:

- (a) **Steam Production O&M:** For steam units only, amounts properly recorded in Accounts 500-515.
 - (b) **Hydro Production O&M:** For hydro units only, amounts properly recorded in Accounts 535-545.
 - (c) **Other Power Generation O&M:** For other types of units, amounts properly recorded in Accounts 546-554.
 - (d) **Other Power Supply Expenses:** Amounts properly recorded in Accounts 555-557, if any, that are reasonably assignable or allocable to the Subject Resource.
- (2) **Transmission O&M Expenses:** Expenses incurred directly in operating and maintaining the transmission facilities associated with the Subject Resource, as properly recorded in Accounts 560-573 and reasonably assignable or allocable to the Subject Resource.
 - (3) **Distribution O&M Expenses:** Expenses incurred directly in operating and maintaining the distribution facilities associated with the Subject Resource, as properly recorded in Accounts 580-598 and reasonably assignable or allocable to the Subject Resource.
 - (4) **Administrative and General (A&G) Expenses:** Those portions, if any, of administrative and general expenses, as properly recorded in Accounts 920-935, that are reasonably related to the operation of the Subject Resource, determined from appropriate direct assignment or reasonable allocation. Such expenses shall exclude (i) franchise fees related solely to the Owner's retail sales, (ii) retail regulatory expenses, (iii) assessments under 18 CFR Section 382.201 of the FERC Regulations, (iv) association dues, and (v) general advertising expenses.

Notwithstanding the foregoing, O&M Expenses hereunder shall exclude all Scheduling Coordinator Charges as charged under the CAISO Tariff, irrespective of in which Account or Accounts such charges are included.

Depreciation Expenses

"Depreciation Expenses" are provisions for depreciation and amortization for the Subject Resource, as properly recorded in Accounts 403, 404, 405, 406, and 407, including only:

- (1) **Production Plant Depreciation:** Depreciation and amortization, if any, of investment in the Subject Resource;
- (2) **Transmission Plant Depreciation:** Depreciation and amortization, if any, of investment in the transmission facilities associated with the Subject Resource, as reasonably assignable or allocable to the Subject Resource;
- (3) **Distribution Plant Depreciation:** Depreciation and amortization, if any, of investment in the distribution facilities associated with the Subject Resource, as reasonably assignable or allocable to the Subject Resource;
- (4) **General and Intangible Plant Depreciation:** Depreciation and amortization, if any, of general and intangible plant investments that are reasonably assignable or allocable to the Subject Resource.

Notwithstanding the foregoing, costs recorded in Accounts 405, 406 and 407 shall be included hereunder only if, and to the extent that, FERC shall have permitted the inclusion of such costs for ratemaking purposes for the Owner under the RMR Contract.

Taxes Other Than Income Taxes

"Taxes Other Than Income Taxes" are taxes other than income and revenue taxes, as properly recorded in Account 408.1, that are reasonably assignable and allocable to the Subject Resource, including for example:

1. Property and Property-Related Taxes;
2. Payroll and Labor-Related Taxes;
3. Other Taxes, if any, identifiable as reasonably assignable or allocable to the Subject Resource.

Taxes Other Than Income Taxes assignable and allocable to the Subject Resource shall not include any taxes related solely to, or arising solely from, the Owner's retail sales.

Revenue Credits

"Revenue Credits" are those revenues, if any, that are (i) properly recorded in Account 451 (Miscellaneous Service Revenues), Account 453 (Sales of Water and Water Power), Account 454 (Rent From Electric Property), Account 455 (Interdepartmental Sales), and Account 456 (Other

Electric Revenues), and (ii) directly related to, or reasonably allocable to, the Subject Resource. Such Revenue Credits shall be treated as negative values hereunder.

Treatment of Capital Leases

The foregoing components of Operating Expenses may include expenses associated with capital leases as approved by the Commission, as set forth more fully under Article II, Part B, Section 4(A) of this Formula.

Section 3. Return and Income Tax Allowance

"Return and Income Tax Allowance" is the quantity that is the sum of:

1. the product of:
 - a. Allowable Pre-Tax Rate of Return, and
 - b. Net Investment,
 as both such quantities are hereinafter defined; and
2. the quantity equal to:

$$[ITC Amortization]/(1-t)$$

where:

- a. "t" is the effective, combined state and federal income tax rate.
- b. "ITC Amortization," is amortization, if any, of investment tax credits, as properly recorded in Account 411.4, that are reasonably assignable or allocable to the Subject Resource and to those portions of general and intangible plant investments that are reasonably assignable or allocable to the Subject Resource. Notwithstanding the foregoing, this term shall include only those amounts of amortization of investment tax credits which the Owner shall have elected to receive under Section 46(f)(1) of the Internal Revenue Code. ITC Amortization amounts that reduce net income shall be treated as negative values hereunder, while ITC Amortization amounts, if any, that increase net income shall be treated as positive values hereunder.

Section 4. Net Investment

"Net Investment" is the quantity that is determined as follows:

$$\text{Net Investment} = \text{Gross Plant Investment} - \text{Depreciation Reserve} + \text{CWIP} + \text{PHFU} - \text{ADIT} + \text{Working Capital}$$

where the quantities appearing in the foregoing equation are defined hereinafter below.

In determining Net Investment hereunder, each component thereof, other than Cash Allowance, shall be determined as the end-of-year balances in the Accounts specified for the relevant Cost Year.

(A) Gross Plant Investment

"Gross Plant Investment" is gross original cost plant investment as properly recorded in Accounts 101, 102, 106, and 114, including only the following amounts:

- (1) **Production Plant Investment:** investment in the generating unit itself and in common facilities associated with the unit, as recorded in Accounts 310-316, 330-336, or 340-346, 106 and 114;
- (2) **Transmission Plant Investment:** investment in transmission facilities associated with the Subject Resource, as properly recorded in Accounts 350-359, 106, and 114, and reasonably assignable or allocable to the Subject Resource;
- (3) **Distribution Plant Investment:** investment in distribution facilities associated with the Subject Resource, as properly recorded in Accounts 360-373, 106, and 114, and reasonably assignable or allocable to the Subject Resource; and
- (4) **General and Intangible Plant Investment:** reasonably assignable and allocable portions, if any, of general and intangible plant investment, recorded in Accounts 389-399 and 301-303, 106 and 114.

Subject to the limitations detailed in this paragraph, when the Owner has a capital lease in lieu of gross plant investment, it may include Account 101.1 hereunder. A lease may be capitalized and the costs included for ratemaking purposes if the Owner demonstrates that the lease qualifies as a capital lease under 18 C.F.R. Part 101, General Instruction No. 19 (1998), and the Owner has obtained, prior to the informational filing, approval to include such costs for ratemaking purposes from the FERC under the FPA. Capital leases shall be accounted for in accordance with 18 C.F.R. Part 101, General Instruction No. 20 (1998).

(B) Depreciation Reserve

"Depreciation Reserve" is accumulated provision for depreciation and amortization, as properly recorded in Accounts 108, 111, and 115, related to the Subject Resource, including the following amounts:

- (1) **Production Plant Depreciation Reserve:** amounts of Depreciation Reserve for the investment in the unit itself and in common facilities associated with the unit;
- (2) **Transmission Plant Depreciation Reserve:** amounts of Depreciation Reserve for the investment in transmission facilities associated with the Subject Resource, as reasonably assignable or allocable to the Subject Resource;
- (3) **Distribution Plant Depreciation Reserve:** amounts of Depreciation Reserve for the investment in distribution facilities associated with the Subject Resource, as reasonably assignable or allocable to the Subject Resource;
- (4) **General and Intangible Plant Reserve:** amounts of Depreciation Reserve for the portions, if any, of general and intangible plant investments reasonably assignable and allocable to the Subject Resource.

Credit balances in the aforementioned accounts shall be treated as positive values hereunder, and debit balances in such accounts shall be treated as negative values.

(C) CWIP

"CWIP" is the amount of construction work in progress, as properly recorded in Account 107 for construction projects associated with the Subject Resource related solely and directly to pollution control for the Subject Resource.

(D) PHFU

"PHFU" is the cost of plant held for future use, as properly recorded in Account 105 that is reasonably assignable or allocable to the Subject Resource.

(E) ADIT

"ADIT" is accumulated provision for deferred income taxes, as properly recorded in Accounts 190, 281, 282, 283, and 255, that are reasonably assignable or allocable to the investment in, or operation of, the Subject Resource, including the following amounts:

- (1) **Production Plant ADIT:** amounts of ADIT arising directly from the investment in, or operation of, the Subject Resource itself and common facilities associated with the Subject Resource;
- (2) **Transmission Plant ADIT:** amounts of ADIT arising directly from the investment in, or operation of, the transmission facilities, if any, associated with the Subject Resource;
- (3) **Distribution Plant ADIT:** amounts of ADIT arising directly from the investment in, or operation of, distribution facilities, if any, associated with the Subject Resource; and
- (4) **General and Intangible Plant ADIT:** amounts of ADIT arising from the portions, if any, of general and intangible plant investments reasonably assignable and allocable to the Subject Resource.

For purposes of this Formula, ADIT means accumulated provision for deferred income taxes, as properly recorded in the aforementioned Accounts, *including* amounts previously recorded in such accounts and reclassified as a result of the adoption of SFAS No. 109, but *excluding* amounts recorded in such accounts as a result of the adoption of SFAS No. 109, such that the required adoption of SFAS No. 109 will have no effect on the costs determined hereunder.

Notwithstanding the foregoing, as to Account 255, ADIT hereunder shall include only those amounts, if any, related to investment tax credits which the Owner shall have elected to receive under Section 46(f)(2) of the Internal Revenue Code.

ADIT balances that are credit balances shall be treated as positive values hereunder, while ADIT balances that are debit balances shall be treated as negative values hereunder.

Owner shall support all amounts of ADIT included and not included hereunder in the manner described in sections 35.13(h)(6) and (7) of the Commission's regulations (Statements AF and AG, respectively), except that the time period for the relevant data for the informational package will be consistent with the requirements of this formula, rather than the "Periods" referenced in those regulations.

Working Capital

"Working Capital" is the sum of the portions, if any, of the following items that are reasonably assignable or allocable to the Subject Resource:

- (1) **Fuel Stocks**, which is the amount of fossil fuel stock, if any, maintained for the Subject Resource, as properly recorded in Account 151;
- (2) **Plant Materials and Supplies**, consisting of the value of plant materials and supplies reasonably assignable or allocable to the Subject Resource, as properly recorded in Accounts 154 and 163;
- (3) **Prepayments**, consisting of the amount, if any, of prepayments reasonably assignable or allocable to the Subject Resource, as properly recorded in Account 165;
- (4) **Working Cash Allowance**, which is one-eighth of O&M Expenses (as defined herein), less (a) Total Annual Fuel Costs (as defined hereinbelow), and (b) all amounts or portions, if any, of Account 555 (Purchased Power) that may be included in such O&M Expenses; and

Unamortized Deferred Costs, which shall be that portion, if any, of Account 186 directly related to, or reasonably allocable to, the Subject Resource.

Section 5. Allowable Pre-Tax Rate of Return

The Allowable Pre-Tax Rate of Return shall be the sum of:

- (a) 12.25%, and
- (b) 30% of the amount, if any, by which (a) the latest available 6-month average of yields on 10-year U.S. Treasury Bonds, as of the date of the first Informational Filing, exceeds (b) the latest available 6-month average of yields on 10-year U.S. Treasury Bonds as of *[the effective date of the settlement]*.

Notwithstanding the foregoing, the Owner may make application to the FERC, prior to or in conjunction with the first Informational Filing, in a limited proceeding to seek to establish a different Allowable Pre-Tax Rate of Return under Section 205 of the Federal Power Act.

Section 6. Additional Quantities**(A) Annual Variable O&M Expenses**

"Annual Variable O&M Expenses" is the sum of the following quantities:

- (1) **Variable Production O&M Expenses:** those portions of Production O&M Expenses, as defined above, other than fuel expenses, that are reasonably determined to be variable expenses, in the sense that they are incurred as a result of, or otherwise are reasonably associated with, the production of energy by the Subject Resource.
- (2) **Variable A&G Expenses:** that portion of A&G Expenses that is related or allocable to the foregoing Variable Production O&M Expenses.

Notwithstanding the foregoing, starting with the first information filing hereunder and continuing until the Owner elects to use a different method to determine its Annual Variable O&M Expenses, the Owner may compute Annual Variable O&M Expenses as the amount equal to the product of (a) the Initial Variable O&M Rate, in \$/MWh, for the Subject Resource, as set forth in Exhibit A hereto (Exhibit A can be found in Appendix B to the Stipulation and Agreement), times (b) the Net Generation of the Subject Resource (as defined hereinabove). Whenever the Owner does not compute Annual Variable O&M Expenses based on the Initial Variable O&M Rate in the foregoing manner, the Owner shall include in each of Informational Package a detailed explanation of the method or methods used to classify O&M expenses as between fixed (*i.e.*, capacity-related) expenses and variable (*i.e.*, energy-related) expenses and the reason(s) such method results in just and reasonable rates.

(B) Annual Fixed O&M Expenses

"Annual Fixed O&M Expenses" is the quantity that is equal to the following:

- (1) Total O&M Expenses, as defined hereinabove, less
- (2) the sum of:
 - a. Annual Variable O&M Expenses, as defined hereinabove, and
 - b. Annual Variable Fuel Costs, as defined hereinbelow,

- c. Annual Emissions Costs, as defined hereinbelow, and
- d. Annual Non-Fuel Start-Up Costs, as defined hereinbelow.

(C) Fuel Expenses

(1) Total Annual Fuel Costs

"Total Annual Fuel Costs" is the total fuel expense for the Subject Resource for the Cost Year properly recorded in Account 501 or Account 547, as appropriate depending on the nature of the Subject Resource.

(2) Annual Fixed Fuel Costs

"Annual Fixed Fuel Costs" is that portion, if any, of Total Annual Fuel Costs related to fuel handling and administration of fuel planning, procurement and transportation which do not vary with the amount of fuel purchased.

(3) Annual Variable Fuel Costs

"Annual Variable Fuel Costs" is the quantity that is the following difference:

- 1. Total Annual Fuel Costs, less
- 2. Annual Fixed Fuel Costs.

(D) Annual Emissions Costs

"Annual Emissions Costs" is the total emissions costs that are related to the operation of the Subject Resource during the Cost Year.

(E) Annual Non-Fuel Start-Up Costs

"Annual Non-Fuel Start-Up Costs" is the aggregate sum of costs, other than fuel costs, attributable to start-ups of the Subject Resource during the Cost Year, consisting of start-up power costs, shut-down power costs, and other non-fuel start-up costs, all as determined pursuant to the applicable sections of Schedule D of the RMR Contract, as applied to all start-ups of the Subject Resource during the Cost Year.

(F) Total Annual Variable Costs

"Total Annual Variable Costs" is the sum of:

1. Annual Variable O&M Expenses,
2. Annual Variable Fuel Costs, and
3. Annual Emissions Costs.

Part C. General Instructions and Explanatory Notes

Section 1. General Instructions

In applying this Formula to a Subject Resource, the following instructions and explanations shall be followed:

(A) No Duplicative Charges

The costs determined and referenced by this Formula shall exclude costs that are recoverable, or that are actually recovered, elsewhere under the applicable contract or agreement between the Owner and the CAISO. There shall be no double counting of costs hereunder.

(B) Determination of Depreciation Expenses

Depreciation Expenses, Depreciation Reserve, and Deferred Income Taxes reflected in the revenue requirements determined pursuant to this Formula shall be computed using either fixed depreciation rates or depreciation rates determined annually from fixed mortality characteristics (i.e., service lives, net salvage ratios, etc.). Such depreciation rates and/or mortality characteristics, which may differ for particular assets or groups of assets comprising, or related to, the Subject Resource, are set forth on Exhibit B, which is attached hereto and made a part hereof. Such depreciation rates and/or mortality characteristics may not be changed except pursuant to Section 205 or Section 206 of the FPA. Nothing herein shall be construed as affecting any requirements of the FERC regarding the use by the Owner of depreciation rates for financial reporting purposes.

(C) Costs in Excess of Original Cost

The components of rate base and the costs reflected under the Formula shall not include an acquisition adjustment or costs associated with an acquisition adjustment unless the Owner shall have obtained approval from the FERC to include under the Formula such an adjustment or such

costs for ratemaking purposes under the FPA. The effective date for the inclusion of such costs shall be as set forth in the FERC order.

(D) Use of FERC Accounting

The costs determined and referenced by this Formula shall reflect only FERC-basis accounting, and shall not reflect any accounting for costs approved by any state regulatory commission or other body if not approved or accepted by the FERC for use in connection with the RMR Contract. Except as otherwise provided herein, the accounting for costs for purposes of applying this Formula shall be consistent with the requirements of the Uniform System of Accounts.

(E) Accounting Methods

The costs determined and referenced by this Formula shall reflect only such accounting methods prescribed by such authorities as AICPA and FASB that shall have been approved or accepted by the FERC for use in connection with the RMR Contract. The Owner shall be required to seek and gain such approval or acceptance from the FERC prior to reflecting any changed accounting methods in the determination of costs in connection with this Formula.

The Owner shall carry the burden of demonstrating that its accounting methods and entries reflected in the costs determined and referenced by this Formula produce just, reasonable, and nondiscriminatory rates for its customers.

(F) Out-of-Period Adjustments

The costs determined and referenced by this Formula shall not reflect any accounting entries the purpose of which is to adjust or correct for accounting entries in years other than the Cost Year if such adjusting or correcting entries would have an unjust, unreasonable, or discriminatory effect on the CAISO.

(G) Extraordinary Costs

Extraordinary costs included in the costs determined and referenced by this Formula shall be subject to amortization over a reasonable period of time. In determining how costs should be amortized, the parties shall also determine how the costs being amortized should be recovered in the event that the plant closes and does not reopen.

As used herein, "extraordinary costs" mean costs arising from events and transactions that are of an unusual nature and infrequent occurrence, the effects of which are abnormal and significantly different from the ordinary and typical activities of the Owner, and would not reasonably be expected to recur in the foreseeable future. In determining significance, items should be considered individually and not in the aggregate. However, the effects of a series of related transactions arising from a single specific and identifiable event or plan of action should be considered in the aggregate. An item can be extraordinary even if it is less than five (5) percent of income computed before the extraordinary item. In its annual Information Package, the Owner shall identify and provide explanations for all extraordinary costs which it seeks to include in the rates and charges determined pursuant to this Formula, and the Owner shall bear the burden of proof, as in a proceeding under Section 205 of the FPA, that its proposed treatment of extraordinary costs is just and reasonable.

(H) Imprudently Incurred Costs

The costs determined and referenced by this Formula shall not include any costs which have been determined by the FERC in a proceeding under Section 206 of the FPA to have been imprudently incurred by the Owner.

(I) Transmission Cost Assignments and Allocations

Costs of transmission facilities assigned and/or allocated to the Subject Resource hereunder are intended to include only those costs, if any, related to the step-up substation facilities and other transmission facilities directly connected to the Subject Resource and used to deliver the output of the Subject Resource to the transmission grid. In each annual Informational Package, the Owner shall clearly identify and fully describe all transmission facilities which it claims satisfy the foregoing criteria.

(J) Distribution Cost Assignments and Allocations

Costs of distribution facilities assigned and/or allocated to the Subject Resource hereunder are intended to include only those costs, if any, related to the step-up substation facilities and other distribution facilities directly connected to the Subject Resource and used to deliver the output of the Subject Resource to the transmission or distribution system. In each annual Informational Package, the Owner shall clearly identify and fully describe all distribution facilities which it claims satisfy the foregoing criteria.

(K) Inclusion of Certain Costs

The Owner shall include in its annual Informational Package detailed workpapers and explanations supporting the reasonableness of including in the revenue requirements determined pursuant to this formula any amounts recorded in Accounts 501, 547, 555, 561, 927, 105, and 186. The Owner shall bear the burden of proof, as in a proceeding under Section 205 of the FPA, to affirmatively demonstrate that all such included amounts are directly related to the provisions of service under the RMR Contract and are reasonably assignable or allocable to the Subject Resource. As to Account 105, the requirement for a definitive plan required by the description of Account 105 in the Uniform System of Accounts, and the affirmative demonstration required by this paragraph, shall be deemed to be met upon a showing that the CAISO has approved, in accordance with the provisions of Section 7.4 of the RMR Contract, a plan for the future use of the property.

(L) Direct Assignments and Allocations

Where Part B of this Formula provides for the identification and/or assignment of costs incurred directly in connection with a particular facility or facilities (including a Subject Resource), or directly related to such a facility or facilities, the Owner shall bear the burden of demonstrating the reasonableness of each such identification and/or assignment, and each failure to make such an identification and/or assignment. Notwithstanding the foregoing, where this Formula provides for such a direct identification or assignment of costs, the Owner may use an allocation method to apportion such costs among particular facilities; provided, however, that (i) the Owner shall in its Informational Package clearly identify and describe such allocation method and the basis for it, and (ii) the Owner shall bear the burden of demonstrating the reasonableness of the method. It is recognized that such allocation methods may, for example, be appropriate for apportioning certain types of costs between individual generating units at a multi-unit generating station. Such allocations of costs between individual generating units at a plant site shall be consistent with the requirements for such allocations, if any, provided in the RMR Contract.

(M) No Adverse Distinction

In applying this Formula and in maintaining its books and records insofar as they affect the results of applying this Formula, the Owner shall not make an adverse distinction between the Subject Resource and any other facility or facilities owned or operated by the Owner; e.g., the Owner shall assign certain costs directly to the Subject Resource only if, and to the extent that, the Owner directly assigns such costs to other, similar facilities.

Section 2. General Definitions

Except as may be expressly stated otherwise, the following terms have the followings meanings as used herein:

(A) Account

"Account" refers to a particular account for "major" utilities as prescribed by the Uniform System of Accounts.

(B) FERC

"FERC" means the Federal Energy Regulatory Commission or its successor.

(C) Uniform System of Accounts

"Uniform System of Accounts" means the FERC's "Uniform System of Accounts Prescribed For Public Utilities and Licensees Subject to the Provisions of the Federal Power Act," as such uniform system of accounts was in effect as of the first effective date of the RMR Contract.

(D) RMR Contract

"RMR Contract" means the contract to which this Formula is attached and made a part thereof.

(E) Subject Resource

"Subject Resource" means any particular generating unit to which this Formula is applied for purposes of determining the annual costs thereof.

(F) Cost Year

"Cost Year" means the twelve-month period ended June 30 to which this Formula is applied to determine the Annual Fixed Revenue Requirements and Variable O&M Rate for a Subject Resource to be applicable during the next succeeding calendar year.

(G) Owner

"Owner" means the entity, other than the CAISO, that is a party to the RMR Contract.

(H) CAISO

The "CAISO" means the California Independent System Operator Corporation.

Exhibit A - Initial Variable O&M Rates¹⁰

Line	RMR Facility	Unit	Initial Variable O&M Rate (\$/MWh)

Exhibit B - Depreciation Rate and Mortality Characteristics^{11 12}

Line	RMR Facility	Unit	Plant Account	Depreciation Rate (%)	Mortality Characteristics			
					Retirement Date	Average Service Life	Salvage Value or Rate	Interim Retirements Rate

¹⁰ Exhibit A for each owner is filed in Appendix to the Stipulation and Agreement.
¹¹ Exhibit B for each owner is filed in Appendix B to the Stipulation and Agreement.
¹² Effective as of the effective date of the Settlement.

Exhibit C - 1998 Cost Information

Pursuant to Article IV.E of the Stipulation and Agreement filed with the FERC on April 2, 1999, the Owner shall file with the FERC in Docket No. ER98-441-000, et. al., a superceding Exhibit C, setting forth the following information for each unit for the period ending December 31, 1998:

- (1) Name of the facility and unit;
- (2) Gross Plant In Service, *i.e.* the original cost plus plant additions minus retirements, by major plant function (*i.e.* production, transmission, distribution and general);
- (3) Net Plant In Service Gross Plant, *i.e.* gross plant minus depreciation reserve, by major plant function;
- (4) Rate Base, *i.e.* net plant and other components of Net Investment as defined in the Formula, such as working capital, Accumulated Deferred Income Taxes (ADIT), etc.

This Exhibit C shall be for informational purposes only and shall be initially filed with FERC by June 1, 1999.

Schedule G**Charge for Service in Excess of
Contract Service Limits**

Payment for service in excess of the Maximum Annual Service Hours or Maximum Annual Start-ups shall be determined in accordance with Option A or Option B. Payment for service from hydroelectric Units in excess of the Maximum Monthly MWh shall be determined in accordance with Option A only. Owner shall make a one-time election between Option A or Option B. Owner must choose Option A for both Billable MWh and Start-ups or Option B for both Billable MWh and Start-ups. This election shall be applicable to all of the Owner's Units under this Agreement and all other Reliability Must-Run Units subject to a "reliability must-run contract" as defined in the CAISO Tariff with Owner or any of its affiliates as defined in 18 C.F.R. Section 161.2.

1. Option A

- A. For all Billable MWh Delivered after the Counted MWh for the Contract Year equals the Maximum Annual MWh, the Counted Service Hours equals the Maximum Annual Service Hours or, for hydroelectric Units, the Counted MWh for the Month equals the Maximum Monthly MWh ("Schedule G Billable MWh"):

Fossil Fuel Units

In addition to the Variable Cost Payment computed in accordance with Schedule C, the CAISO shall pay the Option A Variable Cost Payment, which shall be calculated in accordance with Equation G-1:

Equation G-1

$$\text{Option A Variable Cost Payment} = \frac{0.5 * (\text{Variable Cost Payment for the Billing Month})}{\text{Billable MWh for the Billing Month}} * \text{Schedule G Billable MWh}$$

Pumped Storage Hydroelectric Facilities

In addition to the Variable Cost Payment computed in accordance with Schedule C, CAISO shall pay the product of (a) the Schedule G Billable MWh, (b) 0.5, and (c) YTD Pumping Costs divided by YTD Energy Produced as computed in accordance with Equation C4-2 in Schedule C.

Conventional Hydroelectric Facilities

In addition to the Variable Cost Payment computed in accordance with Schedule C, CAISO shall pay the sum of the products for each hour in the Billing Month of (a) the Hourly Fuel Price for natural gas for the hour calculated in accordance with Equation C1-8 of Schedule C, (b) 12,000 Btu/kWh, (c) the Schedule G Billable MWh for that hour, and (d) 0.5.

- B. For all Service Hours provided after the Counted Service Hours for the Contract Year equals the Maximum Annual Service Hours.

Synchronous Condensers

In addition to the Motoring Charge computed in accordance with Schedule E, CAISO shall pay the product of (a) the Motoring Charges calculated in accordance with Schedule E, and (b) 0.5.

- C. For all Start-ups required to comply with a Dispatch Notice after the Counted Start-ups for the Unit equals the Maximum Annual Start-ups ("Schedule G Start-ups"), the CAISO shall pay:

Fossil Fuel Units and Geothermal Units

Two times (a) the Start-up Payment computed in accordance with Equation D-1 in Schedule D, or (b) if the Schedule G Start-up is initiated under a Dispatch Notice but is not successfully completed because it is canceled or rescinded by the CAISO, the Start-up Payment for Canceled Start-up is computed in accordance with Equation D-4 in Schedule D.

Conventional Hydroelectric Facilities and Units Capable Only of Synchronous Condenser Operation

The Start-up Payment computed in accordance with Schedule D, plus (a) (0.00338) * the Unit's Annual Fixed Revenue Requirement stated in Section 7 of Schedule B, divided by (b) the Unit's Maximum Annual Start-ups.

Pumped Storage Hydroelectric Facilities

The Start-up Payment computed in accordance with Equation D-1 in Schedule D, plus (a) 0.00167 * the Unit's Annual Fixed Revenue Requirement stated in Section 7 of Schedule B, divided by (b) the Unit's Maximum Annual Start-ups.

2. Option B

- A. For all Schedule G Billable MWh Delivered in the Billing Month, the CAISO shall pay the Variable Cost Payment computed in accordance with Schedule C. Since Schedule G Billable MWh are included in calculating the Variable Cost Payment for Billable MWh for the Billing Month under Schedule C, there is no additional payment for Schedule G Billable MWh under Option B.
- B. For all Service Hours provided after the Counted Service Hours for the Contract Year equals the Maximum Annual Service Hours:

Synchronous Condensers

In addition to the Motoring Charge computed in accordance with Schedule E, CAISO shall pay the product of (a) the Motoring Charges calculated in accordance with Schedule E, and (b) 0.5.

- C. For all Schedule G Start-ups in the Billing Month, the CAISO pay:

Units Capable Only of Synchronous Condenser Operation

The Start-up Payment computed in accordance with Schedule D, plus (a) (0.00338) * the Unit's Annual Fixed Revenue Requirement stated in Section 7 of Schedule B, divided by (b) the Unit's Maximum Annual Start-ups.

Fossil Fuel Units and Geothermal Units

Three times (a) the Start-up Payment computed in accordance with Equation D-1 in Schedule D, or (b) if the Schedule G Start-up is initiated under a Dispatch Notice but is not successfully completed because it is canceled or rescinded by the CAISO, the Start-up Payment for Canceled Start-up is computed in accordance with Equation D-4 in Schedule D.

3. Owner's Election

Option A ___ * ___

Option B ___ * ___

*Option A or Option B results in the same terms for Synchronous Condenser operation.

Schedule H – N/A

Fuel Oil Service

The following is a description of existing capability of the Facility to burn fuel oil in lieu of or addition to natural gas:

N/A

Schedule I

Insurance Requirements

Owner - Obtained Insurance

Commercial General Liability

Commercial general liability insurance covering personal injury and property damage to third parties in connection with the activities at the Facility. The coverage will have a limit of not less than \$20 million per occurrence, and will include coverage for sudden and accidental pollution losses. The CAISO will be added as an additional insured under the terms of this coverage to the per-occurrence limit above.

Property

Property Insurance for direct physical loss or damage to the Facility, in an amount not less than the probable maximum loss at the Facility.

CAISO – Obtained Insurance

Errors and Omissions Insurance and Directors & Officers Insurance

Errors and omissions insurance and directors and officers insurance coverage will have a combined limit of not less than \$150 million for the shorter of (i) until the termination of this Agreement or (ii) until January 1, 2002.

**Schedule J
Notices**

Owner

Name: Weikko Wirta
Title: Plant Manager
Address: 21730 Newland Street, Huntington Beach, CA 92646
Telephone: 714-374-1421
Facsimile:
E-mail: Weikko.wirta@aes.com

With a copy to: Owner's Representative:

Name: Yiyu Zhong
Title: Billing and Settlement
Address: 690 North Studebaker Road, Long Beach, CA 90803
Telephone: 562-493-7704
Facsimile: 562-493-7320
E-mail: yiyu.zhong@aes.com

CAISO:

Benik Der-Gevorgian
Director, Market Services
California ISO Corporation
250 Outcropping Way
Folsom, CA 95630
Telephone: (916) 351-2277
Email: BDGevorgian@caiso.com

With copies to:

Sidney Mannheim Davies
Assistant General Counsel
California ISO Corporation
250 Outcropping Way
Folsom, CA 95630
Telephone: (916) 608-7144
Facsimile: (916) 608-7222
Email: sdavies@caiso.com

Robert Kott
Manager, Model and Contract Implementation
California ISO Corporation
250 Outcropping Way
Folsom, CA 95630
Telephone: (916) 608-5804
Email: rkott@caiso.com

**SCHEDULE K
DISPUTE RESOLUTION****Applicability****1.1 General Applicability.**

Except as limited below or otherwise as limited by law (including the rights of any party to file a complaint with FERC under the relevant provisions of the Federal Power Act (FPA)), these ADR Procedures shall apply to (a) all disputes between parties which arise under this Agreement and (b) disputes between CAISO and a Responsible Utility relating to a Responsible Utility Invoice, "Final Estimated RMR Invoice, Final Adjusted RMR Invoice" as defined in the CAISO Tariff, or RMR Charge or RMR Refund as defined in Section 11.13 in the CAISO Tariff. The foregoing shall not impair the applicability of the CAISO Tariff ADR procedures to other disputes between the parties that do not arise under this Agreement. All alternative dispute resolution proceedings hereunder shall be administered by the American Arbitration Association ("AAA"). The Owner, Responsible Utility and the CAISO shall enter into such arrangements with the AAA as are necessary to provide for AAA administration of this Schedule K.

1.1.2 This Schedule K shall not apply to disputes as to whether rates and charges under the Agreement are just and reasonable under the Federal Power Act except as provided in Schedule F. Nothing herein shall limit the right of the FERC to initiate or adjudicate complaints or other proceedings in accordance with applicable statutes or regulations or to compel FERC to exceed its statutory authority as defined by any applicable federal statutes, regulations or orders lawfully promulgated thereunder.

1.2 Disputes Involving Government Agencies.

If a party to a dispute is a government agency the procedures herein which provide for the resolution of claims and arbitration of disputes are subject to any limitations imposed on the agency by law, including but not limited to the authority of the agency to effect a remedy. If the governmental agency is a federal entity, the procedures herein shall not apply to disputes involving issues arising under the United States Constitution.

1.3 Injunctive and Declaratory Relief.

Where the court having jurisdiction so determines, use of the ADR Procedures shall not be a condition precedent to a court action for injunctive relief nor shall

the provisions of California Code of Civil Procedure sections 1281 *et seq.* apply to such court actions.

1.4 Negotiation and Mediation.

1.4.1 Negotiation.

CAISO, Responsible Utility and Owner (“Parties”) shall make good-faith efforts to negotiate and resolve any dispute between them arising under this Agreement prior to invoking the ADR Procedures herein. Each Party shall designate an individual with authority to negotiate the matter in dispute to participate in such negotiations. The Responsible Utility may participate in the ADR proceedings arising under this Agreement to the extent the dispute involves billing or payment obligations, in which case CAISO or the Responsible Utility, but not both shall be the disputing party. In addition, to the extent Article 7 or other provisions of this Agreement provide the Responsible Utility third-party beneficiary rights, the Responsible Utility may also participate in the ADR as a Party.

The Owner may participate in the ADR proceedings relating to a Responsible Utility Invoice, “Final Estimated RMR Invoice, Final Adjusted RMR Invoice” as defined in the CAISO Tariff or RMR Charge or RMR Refund as defined in Section 11.13, in which case, CAISO or the Owner, but not both, shall be the disputing party. In addition, to the extent the CAISO Tariff provides the Owner third-party beneficiary rights, the Owner may also participate in the ADR as a Party.

1.4.2 Statement of Claim.

In the event a dispute is not resolved through such good-faith negotiations, any party may submit a statement of claim, in writing, to each other disputing party, which submission shall commence the ADR Procedures. The statement of claim shall set forth in reasonable detail (i) each claim, (ii) the relief sought, including the proposed award, if applicable, (iii) a summary of the grounds for such relief and the basis for each claim, (iv) the parties to the dispute, and (v) the individuals having knowledge of each claim. The other parties to the dispute shall similarly submit their respective statements of claim within 14 days of the date of the initial statement of claim or such longer period as the AAA may permit following an application by the responding party. If any responding party wishes to submit a counterclaim in response to the statement of claim, it shall be included in such party's responsive statement of claim. No party shall be considered as having received notice of a claim decided or relief granted by a decision made under these procedures unless the statement of claim includes such claim or relief.

1.4.3 Selection of Mediator.

After submission of the statements of claim, the parties may request mediation, if the disputing parties so agree. If the parties agree to mediate, the AAA shall distribute to the parties by facsimile or other electronic means a list containing the names of at least seven prospective mediators with mediation experience, or with technical or business experience in the electric power industry, or both, as he or she shall deem appropriate to the dispute. The parties shall either agree upon a mediator from the list provided or from any alternative source, or alternate in striking names from the list with the last name on the list becoming the mediator. The first party to strike off a name from the list shall be determined by lot. The parties shall have seven days from the date of receipt of the AAA's list of prospective mediators to complete the mediator selection process and appoint the mediator, unless the time is extended by mutual agreement. The mediator shall comply with the requirements of Section 1.5.2.

1.4.4 Mediation.

The mediator and representatives of the disputing parties, with authority to settle the dispute, shall within 14 days after the mediator's date of appointment schedule a date to mediate the dispute. Matters discussed during the mediation shall be confidential and shall not be referred to in any subsequent proceeding. With the consent of all disputing parties, a resolution may include referring the dispute directly to a technical body (such as a WSCC technical advisory panel) for resolution or an advisory opinion, or referring the dispute directly to FERC.

1.4.5 Demand for Arbitration.

If the disputing parties have not succeeded in negotiating a resolution of the dispute within 30 days of the initial statement of claim or, if within that period the parties agreed to mediate, within 30 days of the parties' first meeting with the mediator, such parties shall be deemed to be at impasse and any such disputing party may then commence the arbitration process, unless the parties by mutual agreement agree to extend the time. A party seeking arbitration shall provide notice of its demand for arbitration to the other disputing parties.

1.5 Arbitration.**1.5.1 Selection of Arbitrator.**

1.5.1.1 Disputes Under \$1,000,000. Where the total amount of claims and counterclaims in controversy is less than \$1,000,000 (exclusive of costs and interest), the disputing parties shall select an arbitrator from a list containing the names of at least 10 qualified individuals supplied by AAA, within 14 days following submission of the demand for arbitration. If the disputing parties cannot agree upon an arbitrator within the stated time, they shall take turns striking names from the list of proposed arbitrators. The first party to strike off a name shall be determined by lot. This process shall be repeated until one name remains on the list, and that individual shall be the designated arbitrator.

1.5.1.2 Disputes of \$1,000,000 or Over. Where the total amount of claims and counterclaims in controversy is \$1,000,000 or more (exclusive of interest and costs), the disputing parties may agree on any person to serve as a single arbitrator, or shall endeavor in good faith to agree on a single arbitrator from a list of ten qualified individuals provided by the AAA, 14 days following submission of the demand for arbitration. If the disputing parties are unable to agree on a single arbitrator within the stated time, the party or parties demanding arbitration, and the party or parties responding to the demand for arbitration, shall each designate an arbitrator. Each designation shall be from the AAA list of arbitrators, as applicable, no later than the tenth day thereafter. The two arbitrators so chosen shall then choose a third arbitrator.

1.5.2 Disclosures Required of Arbitrators.

The designated arbitrator(s) shall be required to disclose to the parties any circumstances that might preclude him or her from rendering an objective and impartial determination. Each designated arbitrator shall disclose:

1.5.2.1 Any direct financial or personal interest in the outcome of the arbitration;

1.5.2.2 Any information required to be disclosed by California Code of Civil Procedure Section 1281.9.; and

1.5.2.3 Any existing or past financial, business, professional, or personal interest that are likely to affect impartiality or might reasonably create an appearance of partiality or bias. The designated arbitrator shall disclose any such relationships that he or she personally has with any party or its counsel, or with any individual whom they have been told will be a witness. They should also disclose any such relationship involving members of their families or their current employers, partners, or business associates. All designated arbitrators shall make a reasonable effort to inform themselves of any interests or relationships described above. The

obligation to disclose interests, relationships, or circumstances that might preclude an arbitrator from rendering an objective and impartial determination is a continuing duty that requires the arbitrator to disclose, at any stage of the arbitration, any such interests, relationships, or circumstances that arise, or are recalled or discovered.

1.5.2.4 If, as a result of the continuing disclosure duty, an arbitrator makes a disclosure which is likely to affect his or her partiality, or might reasonably create an appearance of partiality or bias or if a party independently discovers the existence of such circumstances, a party wishing to object to the continuing use of the arbitrator must provide written notice of its objection to the other parties within ten days of receipt of the arbitrator's disclosure or the date of a party's discovery of the circumstances giving rise to that party's objection. Failure to provide such notice shall be deemed a waiver of such objection. If a party timely provides a notice of objection to the continuing use of the arbitrator the parties shall attempt to agree whether the arbitrator should be dismissed and replaced in the manner described in Section 1.5.1. If within ten days of a party's objection notice the parties have not agreed how to proceed the matter shall be referred to the AAA for resolution.

1.5.3 Arbitration Procedures.

The AAA shall compile and make available to the arbitrator and the parties standard procedures for the arbitration of disputes, which procedures (i) shall conform to the requirements specified herein, and (ii) may be modified or adopted for use in a particular proceeding as the arbitrator deems appropriate, in accordance with Section 1.5.4. The procedures shall be based on the latest edition of the American Arbitration Association Commercial Arbitration Rules, to the extent such rules are not inconsistent with this Schedule K. Except as provided herein, all parties shall be bound by such procedures.

1.5.4 Modification of Arbitration Procedures.

In determining whether to modify the standard procedures for use in the pending matter, the arbitrator shall consider (i) the complexity of the dispute, (ii) the extent to which facts are disputed, (iii) the extent to which the credibility of witnesses is relevant to a resolution, (iv) the amount in controversy, and (v) any representations made by the parties. Alternatively, the parties may, by mutual agreement, modify the standard procedures. In the event of a disagreement between the arbitrator and the agreement of the parties regarding arbitration procedures to be utilized, the parties' agreement shall prevail.

1.5.5 Remedies.

1.5.5.1 Arbitrator's Discretion. The arbitrator shall have the discretion to grant the relief sought by a party, or determine such other remedy as is appropriate, unless the parties agree to conduct the arbitration "baseball" style. Unless otherwise expressly limited herein, the arbitrator shall have the authority to award any remedy or relief available from FERC, or any court of competent jurisdiction. Where this Agreement leaves any matter to be agreed between the parties at some future time and provides that in default of agreement the matter shall be referred to the ADR, the arbitrator shall have authority to decide upon the terms of the agreement which, in the arbitrator's opinion, it is reasonable that the parties should reach, having regard to the other terms this Agreement concerned and the arbitrator's opinion as to what is fair and reasonable in all the circumstances.

1.5.5.2 "Baseball" Arbitration. If the parties agree to conduct the arbitration "baseball" style, the parties shall submit to the arbitrator and exchange with each other their last best offers in the form of the award they consider the arbitrator should make, not less than seven days in advance of the date fixed for the hearing, or such later date as the arbitrator may decide. If a party fails to submit its last best offer in accordance with this Section, that party shall be deemed to have accepted the offer proposed by the other party. The arbitrator shall be limited to awarding only one of the proposed offers, and may not determine an alternative or compromise remedy.

1.5.6 Summary Disposition.

The procedures for arbitration of a dispute shall provide a means for summary disposition of a demand for arbitration, or a response to a demand for arbitration, that in the reasoned opinion of the arbitrator does not have a good faith basis in either law or fact. If the arbitrator determines that a demand for arbitration or response to a demand for arbitration does not have a good faith basis in either law or fact, the arbitrator shall have discretion to award the costs of the time, expenses, and other charges of the arbitrator to the prevailing party. A determination made under this Section is subject to appeal pursuant to Section 1.6.

1.5.7 Discovery Procedures.

The procedures for the arbitration of a dispute shall include adequate provision for the discovery of relevant facts, including the taking of testimony under oath, production of documents and other things, the presentation of evidence, the taking of samples, conducting of tests, and

inspection of land and tangible items. The nature and extent of such discovery shall be determined as provided herein and shall take into account (i) the complexity of the dispute, (ii) the extent to which facts are disputed, (iii) the extent to which the credibility of witnesses is relevant to a resolution, and (iv) the amount in controversy. The forms and methods for taking such discovery shall be as described in the Federal Rules of Civil Procedure, except as modified pursuant to Section 1.5.4.

1.5.8 Evidentiary Hearing.

The arbitration procedures shall provide for an evidentiary hearing, with provision for the cross-examination of witnesses, unless all parties consent to the resolution of the matter on the basis of a written record. The forms and methods for taking evidence shall be determined by the arbitrator(s) and modified pursuant to Section 1.5.4. The arbitrator may require such written or other submissions from the parties as he or she may deem appropriate, including submission of direct and rebuttal testimony of witnesses in written form. The arbitrator may exclude any evidence that is irrelevant, immaterial, unduly repetitious or prejudicial, or privileged. The arbitrator shall compile a complete evidentiary record of the arbitration that shall be available to the parties on its completion upon request.

1.5.9 Confidentiality.

Subject to the other provisions of this Agreement, any party may claim that information contained in a document otherwise subject to discovery is "Confidential" if such information would be so characterized under the Federal Rules of Evidence or the provisions of the Agreement. The party making such claim shall provide to the arbitrator in writing the basis for its assertion. If the claim of confidentiality is confirmed by the arbitrator, he or she shall establish requirements for the protection of such documents or other information designated as "Confidential" as may be reasonable and necessary to protect the confidentiality and commercial value of such information. Any party disclosing information in violation of these provisions or requirements established by the arbitrator, unless such disclosure is required by federal or state law or by a court order, shall thereby waive any right to introduce or otherwise use such information in any judicial, regulatory, or other legal or dispute resolution proceeding, including the proceeding in which the information was obtained.

1.5.10 Timetable.

Promptly after the appointment of the arbitrator, the arbitrator shall set a date for the issuance of the arbitration decision, which shall be no later

than six months (or such earlier date as the parties and the arbitrator may agree) from the date of the appointment of the arbitrator, with other dates, including the dates for an evidentiary hearing or other final submissions of evidence, set in light of this date. The date for the evidentiary hearing or other final submission of evidence shall not be changed, absent extraordinary circumstances. The arbitrator shall have the power to impose sanctions, including dismissal of the proceeding, for dilatory tactics or undue delay in completing the arbitration proceedings.

1.5.11 Decision.

1.5.11.1 Except as provided below with respect to "baseball" style arbitration, the arbitrator shall issue a written decision granting the relief requested by one of the parties, or such other remedy as is appropriate, if any, and shall include findings of fact and law. The arbitration decision shall be based on (i) the evidence in the record, (ii) the terms of this Agreement and to the extent relevant, the CAISO Tariff and Protocols, (iii) applicable United States federal law, including the Federal Power Act and any applicable FERC regulations and decisions, and international treaties or agreements as applicable, and (iv) applicable state law. Additionally, the arbitrator may consider relevant decisions in previous arbitration proceedings involving this Agreement. To the extent it may do so without violating confidentiality requirements, a summary of the disputed matter and the arbitrator's decision may be published in an CAISO newsletter on CAISO Website.

1.5.11.2 In arbitration conducted "baseball" style, the arbitrator shall issue a written decision adopting one of the awards proposed by the parties, and shall include findings of fact and law. The arbitration decision shall be based on (i) the evidence in the record, (ii) the terms of this Agreement and to the extent relevant, the CAISO Tariff and Protocols, (iii) applicable United States federal law, including the Federal Power Act and any applicable FERC regulations and decisions, and international treaties or agreements as applicable, and (iv) applicable state law. If the arbitrator concludes that no proposed award is consistent with the factors enumerated in (i) through (iv) above, or addresses all of the issues in dispute, the arbitrator shall specify how each proposed award is deficient and direct that the parties submit new proposed awards that cure the identified deficiencies. To the extent it may do so without violating confidentiality requirements, a summary of the disputed matter and the arbitrator's decision may be published in an CAISO newsletter on CAISO Website.

1.5.11.3 Where a panel of arbitrators is appointed pursuant to Section 1.5.1.2, a majority of the arbitrators must agree on the decision. An award

shall not be deemed to be precedent except in so far as a future dispute between the parties involves the same issue.

1.5.12 Compliance.

Unless the arbitrator's decision is appealed under Section 1.6, the disputing parties shall, upon receipt of the decision, immediately take whatever action is required to comply with the award to the extent the award does not require regulatory action. An award that is not appealed shall be deemed to have the same force and effect as an order entered by FERC or any court of competent jurisdiction.

1.5.13 Enforcement.

Following the expiration of the time for appeal of an award pursuant to Section 1.6.3, any party may apply to FERC or any court of competent jurisdiction for entry and enforcement of judgment based on the award.

1.5.14 Costs.

The costs of the time, expenses, and other charges of the arbitrator shall be borne by the parties to the dispute, with each side on an arbitrated issue bearing its pro-rata share of such costs, and each party to an arbitration proceeding bearing its own costs and fees. If the arbitrator determines that a demand for arbitration or response to a demand for arbitration was made in bad faith, the arbitrator shall have discretion to award the costs of the time, expenses, and other charges of the arbitrator to the prevailing party.

1.6 Appeal of Award.

1.6.1 Basis for Appeal.

A party may apply to the FERC or any court of competent jurisdiction to hear an appeal of an arbitration decision only upon the grounds that the decision is contrary to or beyond the scope of this Agreement and to the extent relevant, the CAISO Tariff and Protocols, United States federal law, including, without limitation, the Federal Power Act, and any applicable FERC regulations and decisions, or state law. Appeals shall, unless otherwise ordered by FERC or the court of competent jurisdiction, conform to the procedural limitations set forth in this Section 1.6.

1.6.2 Appellate Record.

The parties intend that FERC or a court of competent jurisdiction should afford substantial deference to the factual findings of the arbitrator. No party shall seek to expand the record before FERC or a court of competent jurisdiction beyond that assembled by the arbitrator, except (i) by making reference to legal authority which did not exist at the time of the arbitrator's decision, or (ii) if such party contends the decision was based upon or affected by fraud, collusion, corruption, misconduct or misrepresentation.

1.6.3 Procedures for Appeals.

1.6.3.1 If a party to an arbitration desires to appeal a decision, it shall provide a notice of appeal to all parties and the arbitrator(s) within 14 days following the date of the decision. Within ten days of the filing of the notice of appeal, the appealing party must file an appropriate application, petition or motion with FERC for review under the Federal Power Act or with a court of competent jurisdiction. Such filing shall state that the subject matter has been the subject of an arbitration pursuant to this Agreement and, to the extent relevant, the CAISO Tariff and protocols.

1.6.3.2 Within 30 days of filing the notice of appeal (or such period as FERC or the court of competent jurisdiction may specify) the appellant shall file the complete evidentiary record of the arbitration and a copy of the decision with FERC or with the court. The appellant shall serve on all parties to the arbitration copies of a description of all materials included in the submitted evidentiary record.

1.6.4 Award Implementation.

Implementation of the decision shall be deemed stayed pending an appeal unless and until, at the request of a party, FERC or the court of competent jurisdiction with which an appeal has been filed, issues an order dissolving, shortening, or extending such stay.

A summary of each appeal shall be published in a CAISO newsletter on the CAISO Website.

1.6.5 Judicial Review of FERC Orders.

FERC orders resulting from appeals shall be subject to judicial review pursuant to the Federal Power Act.

AES Huntington Beach, L.L.C
Rate Schedule FERC No. 2

Must-Run Service Agreement

**SCHEDULE L-1
REQUEST FOR APPROVAL OF CAPITAL ITEMS OR REPAIRS**

This form should be used to request CAISO approval of Planned Capital Items, Unplanned Repairs or Unplanned Capital Items pursuant to Sections 7.4, 7.5 or 7.6 of the Agreement.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR
RELIABILITY MUST-RUN UNIT
CAPITAL ITEM AND REPAIR PROJECT REQUEST

Date:	TBD	CAISO Project Number:	TBD
Facility:	AES Huntington Beach Generating Station	Unit:	Unit 3 and Unit 4
Owner:	AES Huntington Beach, LLC	Location:	Huntington Beach, California

This request covers:

- () Capital Items for the next Contract Year (preliminary)
- () Capital Items for the next Contract Year (final)
- () Unplanned Repairs
- () Unplanned Capital Items
- (X) Capital Items for the 2013 Contract Year (final)

If this request covers Capital Items for the next Contract Year, provide:

Small Project Estimate (reliability)

Not applicable

Small Project Estimate (other)

Identify separately each Capital Item included in a small project estimate projected to cost more than \$50,000.

Not applicable

If this request covers Unplanned Repairs, or Capital Items projected to cost more than \$500,000, provide the information in the remainder of this form for each project.

Project Description: (describe the project and its major scope items – materials, new systems, modifications to existing systems, etc.)

Capital Item request is required for the conversion of Units 3 & 4 to Synchronous Condensers. Siemens proposal for this project is attached as Exhibit I of this Schedule L1. The proposed solution utilizes a Pony Motor arrangement and a variable frequency drive (VFD) to accelerate the units to synchronous speed. Expected in-operation date is June 1st, 2013.

- One (1) Pony Motor package will be utilized for the Unit 3 HP generator.
- One (1) Pony Motor package will be utilized for the Unit 4 IP/LP generator.
- One (1) Thrust Bearing package will be utilized for the Unit 3 LP generator.
- One (1) Thrust Bearing package will be utilized for the Unit 4 HP/LP generator.
- Spare Parts (For details, refer to Section 4.1)
- Integration of Units 3 & 4 Synchronous Condensers into existing DCS (ABB) for Units 1 & 2.

Base Scope of Supply includes the following:

- Conversion of Units 3 & 4 STG into SC (For details, refer to Section 4.1)
- Spare Parts (For details, refer to Section 4.1)
- Integration of Units 3 & 4 SC into DCS (ABB) for Units 1 & 2

If the project is required because of loss or damage to a Unit, describe the cause and nature of the loss or damage and all repairs performed or required for all Units during the year:

Not applicable

Project Budget:

Option: Siemens	Cost excluding sales tax \$	Sales Tax \$	AES Total Cost \$
Unit 3	5,496,000	325,152	5,821,152
Unit 4	5,496,000	325,152	5,821,152
Project Manager	228,605	-	228,605
Controls upgrade	700,000	34,557	734,557
Parts	1,568,900	121,590	1,690,490
Total Costs	13,489,505	806,450	14,295,955

Describe any work or repairs performed relating to this project in the last five years:

Not applicable

As applicable, state the proposed depreciation life, Annual Capital Item Cost, Surcharge Payment Factor or Repair Payment Factor (percentage owed by CAISO) of the Capital Item or Repair:

Unit 3

		CapAdd Amount	\$7,147,977
Fiscal year	Contract year	Annual Surcharge	Annual Depreciation
2013	1	3,367,606	25.00%
2014	2	3,102,664	25.00%
2015	3	2,806,725	25.00%
2016	4	2,513,263	25.00%
Total		\$11,790,258	100.00%

Unit 4

		CapAdd Amount	7,147,977
Fiscal year	Contract year	Annual Surcharge	Annual Depreciation
2013	1	3,003,801	20.00%
2014	2	2,779,702	20.00%
2015	3	2,536,382	20.00%
2016	4	2,295,539	20.00%
2017	5	2,056,985	20.00%
Total		\$12,672,408	100.00%

Describe why this project is required (justification):

With the unexpected outage of the San Onofre Nuclear Generating Station (“SONGS”), HB 3&4 are providing critical voltage support and local reliability services to the system. Given the uncertainty surrounding when SONGS will return to service, the CAISO has determined that the conversion of HB3&4 into synchronous condensers is a necessary project to provide the required voltage support in the absence of SONGS.

Is this project required to comply with any laws, regulations or permits? If so, please list them and explain requirement.

Yes. Modification to the existing CEC permit 2000 – AFC – 013 is in progress.

Provide a cost/benefit analysis summary for this project:

AES Huntington Beach, L.L.C
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Must-Run Service Agreement

Include all assumptions including changes to unit performance [efficiency, aux. power loads, etc.], impact on Maximum Net Dependable Capacity, grid interconnection/metering impacts, etc.

Information and details have been previously provided and accepted by the parties.

Describe the impacts on the Unit's ability to perform its obligations under this Agreement if this project is not approved:

If this CapAdd project is not approved, the Units will not be able to perform its obligations under the RMR Agreement.

Describe alternatives to this project that were evaluated and the projected costs of those alternatives:

Describe alternatives along with their major scope items. Also, compare the projected cost of these alternatives with the selected alternative, and compare the unit performance impacts (efficiency, auxiliary power demands, Maximum Net Dependable Capacity effects, etc.) of these alternatives against the chosen alternative.

Information and details have been previously provided and accepted by the parties.

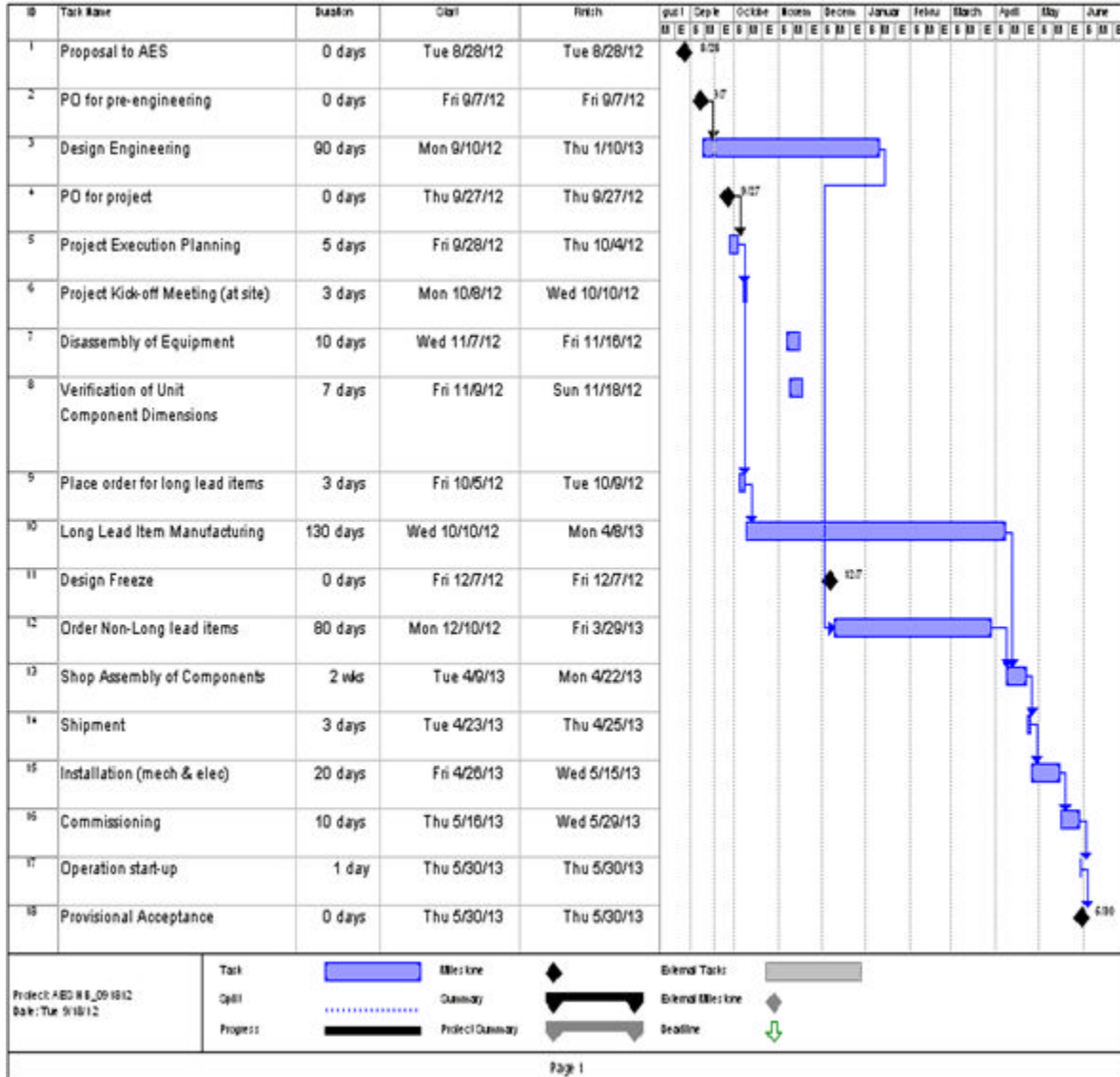
List any proceeds received or expected to be received by Owner from insurers or other third parties pursuant to applicable insurance, warranties and other contracts in connection with the project.

Performance warranty and liquidated damages provisions are included in Exhibit I – Siemens Proposal.

Provide the schedule for implementing this project:

AES Huntington Beach, L.L.C
Rate Schedule FERC No. 2

Must-Run Service Agreement



Describe any outages required to implement this project:

From RMR contract effective date through May 31, 2013.

Other comments:

None

SCHEDULE L-2

CAPITAL ITEM AND REPAIR PROGRESS REPORT

CALIFORNIA INDEPENDENT SYSTEM OPERATOR
RELIABILITY MUST-RUN UNIT
CAPITAL ITEM AND REPAIR PROGRESS REPORT

Date:	CAISO Project Number:
Facility:	Unit:
Owner:	Location:
Capital Item or Repair:	
Original In-Service Date:	Current In-Service Date:

If Current In-Service Date has changed, describe the reason why:

Describe any additional costs or savings resulting from the change in the Current In-Service Date:

Describe what portion of any additional costs Owner is requesting CAISO to pay, and why Owner believes that CAISO should be obligated to pay those additional costs:

SCHEDULE M – N/A
Mandatory Market Bid for Condition 2 Units
When Dispatched by the CAISO

Energy Bid

The bid the Owner of a Condition 2 Fossil Fuel Unit must submit into Energy markets when dispatched by the CAISO is given in Equation M-1a (for Units with input/output data in polynomial form) or Equation M-1b (for Units with input/output data in exponential form):

Equation M-1a

$$\text{Energy Bid (\$/MWh)} = \frac{(AX^3 + BX^2 + CX + D)}{X} * P * E$$

+ [Variable O&M Rate + Emissions Rates + Scheduling Coordinator Charge
+ ACA Charge]

Equation M-1b

$$\text{Energy Bid (\$/MWh)} = \frac{A * (B + CX + De^{FX})}{X} * P * E$$

+ [Variable O&M Rate + Emissions Rate + Scheduling Coordinator Charge + ACA Charge]

Where:

- for Equation M-1a, A, B, C, D and E are the coefficients given in Table C1-7a;
- for Equation M-1b, A, B, C, D, E and F are the coefficients given in Table C1-7b;
- X is the Unit Availability Limit, MW;
- P is the Hourly Fuel Price as calculated by Equation C1-8 in Schedule C using the Commodity Prices most recently published before the day the bid is submitted.
- Scheduling Coordinator Charge (\$/MWh): \$0.31.
- ACA Charge (\$/MWh): The applicable annual charge for short-term sales

under 18 CFR Section 382.201 of the FERC Regulations.

- Variable O&M Rate (\$/MWh): as shown on Table C1-18

For Units in the SCAQMD only

Emissions Rate (\$/MWh) = Emissions Cost / Unit Availability Limit

Emissions Cost = (a) RECLAIM Cost + (b) NOx Emissions Cost + (c) Organic Gases Cost + (d) Sulfur Oxides Cost + (e) Particulate Matter Cost + (f) Carbon Monoxide Cost

(a) RECLAIM Cost = $((AX^2+BX+C) * \text{RECLAIM NOx Trading Credit Rate})$

(b) NOx Emissions Cost = $\frac{(AX^2+BX+C) * \text{NOx Emissions Fee}}{2000}$

Where:

A, B and C are the coefficients from Table C1-13;

X = Unit Availability Limit;

(c) Organic Gases Cost =

$4.76 * 10^{-7} * (\text{Gas Fuel}) * \text{Associated Emission Factor for Organic Gases} * \text{Associated Emissions Fee for Organic Gases}$

(d) Sulfur Oxides Cost =

$4.76 * 10^{-7} * (\text{Gas Fuel}) * \text{Associated Emission Factor for Sulfur Oxides} * \text{Associated Emissions Fee for Sulfur Oxides}$

(e) Particulate Matter Oxides Cost =

$4.76 * 10^{-7} * (\text{Gas Fuel}) * \text{Associated Emission Factor for Particulate Matter} * \text{Associated Emission Fee for Particulate Matter}$

(f) Carbon Monoxide Cost =

$4.76 * 10^{-7} * (\text{Gas Fuel}) * \text{Associated Emission Factor for Carbon Monoxide} * \text{Associated Emission Fee for Carbon Monoxide}$

Where:

Gas Fuel = $AX^3 + BX^2 + CX + D$ or $A * (B + CX + De^{FX})$, depending on the form of heat input the Owner is using

- A, B, C, D are the coefficients from C1-7a or C1-7b;
- F is the coefficient from C1-7b;
- X = Unit Availability Limit;
- Factors and Associated Emission fees are determined in Schedule C, Section D.3.

The bid the Owner of a geothermal Condition 2 Unit must submit into Energy markets when dispatched by the CAISO is given in Equation M-2.

Equation M-2

Energy Bid (\$/MWh) = Fuel Cost + [Variable O&M Rate + Scheduling Coordinator Charge + ACA Charge]

Where:

- The Fuel Cost is the Steam Price identified in Equation C2-1 in Schedule C. However, for purposes of this mandatory market bid, the value for the Steam Price will be zero for Geysers Main Units until the cumulative Hourly Metered Total Net Generation during the Contract Year from all Units exceeds the Minimum Annual Generation given in Equation C2-2.
- Variable O&M Cost (\$/MWh): the cost shall be as shown on Table C2-1.
- Scheduling Coordinator Charge: \$0.31.
- ACA Charge (\$/MWh): The applicable annual charge for short-term sales under 18 C.F.R. Section 382.201 of the FERC Regulations.

Ancillary Services Bid

The bid the Owner of a Condition 2 Unit must submit into Ancillary Service markets when dispatched by CAISO is as follows:

AES Huntington Beach, L.L.C
 Rate Schedule FERC No. 2

Must-Run Service Agreement

$$\text{Ancillary Services Bid (\$/MW per hr)} = \frac{\left[\left(\begin{array}{l} \text{30 minutes x} \\ \text{Unit's} \\ \text{Highest Ramp} \\ \text{Rate} \\ \text{from Schedule} \\ \text{A,} \\ \text{MW/min} \end{array} \right) * \left(\begin{array}{l} \text{Target} \\ \text{Availabl} \\ \text{e} \\ \text{Hours} \end{array} \right) \right] + \left[\left(\begin{array}{l} \text{Maximum} \\ \text{Net} \\ \text{Dependa} \\ \text{ble} \\ \text{Capacity} \end{array} \right) * \left(\begin{array}{l} \text{Target} \\ \text{Availabl} \\ \text{e} \\ \text{Hours} \end{array} \right) \right]}{2}$$

Annual Fixed Revenue Requirement is shown in Schedule B.

Target Available Hours is shown in Schedule B.

The product of 30 minutes times the Unit's highest Ramp Rate in Schedule A shall not exceed the Unit's Maximum Net Dependable Capacity.

Schedule N-1 Utility Non-Disclosure & Confidentiality Agreement

**NON-DISCLOSURE and CONFIDENTIALITY AGREEMENT
for RESPONSIBLE UTILITY**

San Diego Gas & Electric and Southern California Edison (jointly, the "Responsible Utilities" and severally, the "Responsible Utility") acknowledge that AES Huntington Beach LLC ("AESHB" or "Owner") and the California Independent System Operator Corporation ("CAISO") (jointly, the "Providing Parties" and severally, the "Providing Party") have agreed to provide certain information to the Responsible Utilities pursuant to certain provisions of the Must-Run Service Agreement ("MRSA") between Owner and CAISO, in connection with discussions concerning the possible execution of such an MRSA, and as required for settlement and billing of charges under Article 9 of such Agreement. In order to permit the Responsible Utilities to receive such Confidential Information from Owner or CAISO, the Responsible Utilities and the Providing Parties hereby agree as follows:

For purposes of this Non-Disclosure and Confidentiality Agreement, the term "Confidential Information" shall have the same meaning it has in Section 12.5 of the pro forma MRSA, a copy of which is appended, except that the definition in Section 12.5 of the MRSA shall be deemed to also cover comparably designated information provided in connection with discussions concerning the possible execution of an MRSA;

The Providing Parties shall provide such Confidential Information pursuant to the terms of this Non-Disclosure and Confidentiality Agreement;

Each Responsible Utility shall keep such Confidential Information confidential, shall use it only for the purposes related to the MRSA under discussion, and shall limit the disclosure of any such Confidential Information to only those personnel within its organization with responsibility for using such information in connection with such MRSA. Such personnel may not include any person whose duties include (i) the marketing or sale of electric power or natural gas or gas transportation capacity at wholesale or retail, (ii) the purchase of electric power or natural gas or gas transportation capacity at wholesale or retail, (iii) the direct supervision of any employee with such responsibilities, or (iv) the provision of electricity or natural gas marketing consulting services to any employee with such responsibilities;

Each Responsible Utility shall assure that personnel within its organization read and comply with the provisions of this Non-Disclosure and Confidentiality Agreement;

Each Responsible Utility shall use all reasonable efforts to maintain the confidentiality of the Confidential Information in any litigation, and shall promptly notify the Providing Party of any attempt by a third party to obtain the Confidential Information through legal process or otherwise;

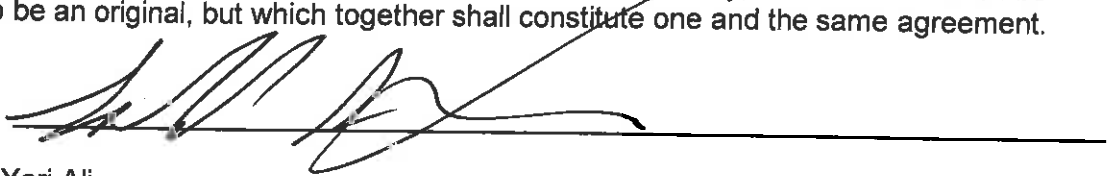
Each Responsible Utility may use Confidential Information in litigation or regulatory proceedings related to the MRSA under discussion but only after notice to the Providing Party and affording the Providing Party an opportunity to obtain a protective order or other relief to prevent or limit disclosure of the Confidential Information.

Each Responsible Utility agrees to be bound by the terms of Section 12.5 of the pro forma MRSA in the same manner and to the same extent as the Providing Parties. The person signing

on behalf of each Responsible Utility represents that he/she is authorized to bind that Responsible Utility to the terms of this Non-Disclosure and Confidentiality Agreement.

This agreement may be executed in counterparts by each signatory, each of which shall be deemed to be an original, but which together shall constitute one and the same agreement.

Signature: _____



Name: S. Yari Ali

Title: Director of Grid Operations

Responsible Utility: San Diego Gas & Electric

Address: Mail Code SD1160, PO Box 129831, San Diego, CA 92112-9831

Telephone: (619) 725-8639

Date: _____

Signature: _____

Name: Jill Horswell

Title: Director of Federal Energy Regulatory Commission Policy and Contracts

Responsible Utility: Southern California Edison

Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

Telephone: (626) 302-3286

Date: _____

on behalf of each Responsible Utility represents that he/she is authorized to bind that Responsible Utility to the terms of this Non-Disclosure and Confidentiality Agreement.

This agreement may be executed in counterparts by each signatory, each of which shall be deemed to be an original, but which together shall constitute one and the same agreement.

Signature: _____

Name: S. Yari Ali

Title: Director of Grid Operations

Responsible Utility: San Diego Gas & Electric

Address: Mail Code SD1160, PO Box 129831, San Diego, CA 92112-9831

Telephone: (619) 725-8639

Date: _____

Signature:  _____

Name: Jill Horswell

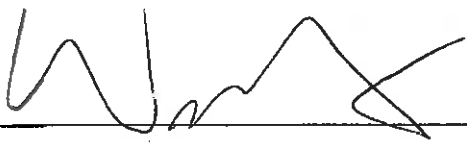
Title: Director of Federal Energy Regulatory Commission Policy and Contracts

Responsible Utility: Southern California Edison

Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

Telephone: (626) 302-3286

Date:  _____

Signature: 

Name: Weikko Wirta

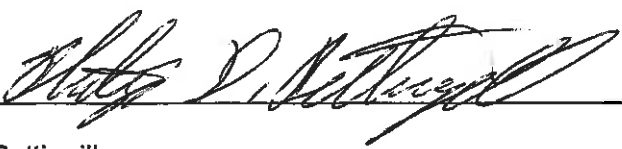
Title: Chief Executive Manager

Owner: AES Huntington Beach, LLC

Address: 21730 Newland Street, Huntington Beach, CA 92646

Telephone: (714) 374-1476

Date: 09/24/2012

Signature: 

Name: Phil Pettingill

Title: Director Regulatory Affairs

California Independent System Operator Corporation

Address: 250 Outcropping Way, Folsom, CA 95630

Telephone: (916) 608-7241

Date: September 24, 2012

Schedule N-2 Non-Utility Persons Disclosure & Confidentiality Agreement

NON-DISCLOSURE and CONFIDENTIALITY AGREEMENT for PERSONS OTHER THAN THE RESPONSIBLE UTILITY

The California Public Utility Commission (the "Receiving Party" or "California Agency") acknowledges (a) that AES Huntington Beach LLC ("AESHB" or "Owner") has agreed to provide Confidential Information to the California Agency pursuant to certain provisions of the Must-Run Service Agreement ("MRSA") between Owner and the California Independent System Operator Corporation ("CAISO") and in connections with discussions concerning the possible execution of such an MRSA, and (b) that Owner and CAISO (jointly, the "Providing Parties" and severally, the "Providing Party") may provide Confidential Information on a need-to-know basis to Owner's Scheduling Coordinator, financial institutions, agents and potential purchasers of interests in a Unit; and, as required for settlement and billing, to Scheduling Coordinators responsible for paying for services provided under the MRSA between Owner and CAISO. In order to permit the Receiving Party to receive such Confidential Information from Owner or CAISO, the Receiving Party and the Providing Parties hereby agree as follows:

- A. For purposes of this Non-Disclosure and Confidentiality Agreement, the term "Confidential Information" shall have the same meaning it has in Section 12.5 of the pro forma MRSA, a copy of which is appended, except that the definition in Section 12.5 of the MRSA shall be deemed to also cover comparably designated information provided in connection with discussions concerning the possible execution of an MRSA;
- B. The Providing Parties shall provide such Confidential Information pursuant to the terms of this Non-Disclosure and Confidentiality Agreement;
- C. The Receiving Party shall keep such Confidential Information confidential, shall use it only for the purposes related to the MRSA under discussion, and shall limit the disclosure of any such Confidential Information to only those personnel within its organization with responsibility for using such information in connection with the MRSA upon their execution of this Non-Disclosure and Confidentiality Agreement. Such personnel may not include any person whose duties include (i) the marketing or sale of electric power or natural gas or gas transportation capacity at wholesale or retail, (ii) the purchase of electric power or natural gas or gas transportation capacity at wholesale or retail, (iii) the direct supervision of any employee with such responsibilities, or (iv) the provision of electricity or natural gas marketing consulting services to any employee with such responsibilities;
- D. The Receiving Party shall assure that personnel within its organization authorized to receive Confidential Information read and comply with the provisions of this Non-Disclosure and Confidentiality Agreement;
- E. The Receiving Party shall use all reasonable efforts to maintain the confidentiality of the Confidential Information in any litigation, and shall promptly notify the providing Party of any attempt by a third party to obtain the Confidential Information through legal process or otherwise;

The Receiving Party agrees to be bound by the terms of Section 12.5 of the pro forma MRSA, as modified by paragraph A above, in the same manner and to the same extent as the Providing

Parties. The person signing on behalf of the Receiving Party represents that he/she is authorized to bind the Receiving Party to the terms of this Non-Disclosure and Confidentiality Agreement.

This agreement may be executed in counterparts by each signatory, each of which shall be deemed to be an original, but which together shall constitute one and the same agreement.

Signature:  _____

Name: Marion Peleo

Receiving Party: California Public Utilities Commission

Title: Staff Counsel

Address: 505 Van Ness Avenue, San Francisco, CA 94102

Telephone: (415) 703-2130

Date: 9/24/12 _____

Signature: _____

Name: Weikko Wirta

Owner: AES Huntington Beach LLC

Title: Chief Executive Manager

Address: 21730 Newland Street, Huntington Beach, CA 92646

Telephone: (714) 374-1476

Date: _____

Signature: _____

Name: Phil Pettingill

California Independent System Operator Corporation

Title: Director, Regulatory Affairs

Address: 250 Outcropping Way, Folsom, CA 95630

Telephone: (916) 608-7241

Date: _____

Parties. The person signing on behalf of the Receiving Party represents that he/she is authorized to bind the Receiving Party to the terms of this Non-Disclosure and Confidentiality Agreement.

This agreement may be executed in counterparts by each signatory, each of which shall be deemed to be an original, but which together shall constitute one and the same agreement.

Signature: _____

Name: _____

Receiving Party: California Public Utilities Commission

Title: _____

Address: _____

Telephone: _____

Date: _____

Signature:  _____

Name: Weikko Wirta

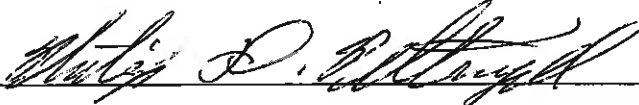
Owner: AES Huntington Beach LLC

Title: Chief Executive Manager

Address: 21730 Newland Street, Huntington Beach, CA 92646

Telephone: (714) 374-1476

Date: 09/24/2012

Signature:  _____

Name: Phil Pettingill

California Independent System Operator Corporation

Title: Director, Regulatory Affairs

Address: 250 Outcropping Way, Folsom, CA 95630

Telephone: (916) 608-7241

Date: September 24, 2012

SCHEDULE O**RMR Owner's Invoice Process**

The following principles and practices shall govern the submission of invoices to the CAISO for Ancillary Services provided under this Agreement ("RMR services"):

1. Invoices submitted by Owner to the CAISO for RMR services shall be clear, understandable and complete.
2. The CAISO, all RMR Owners and Responsible Utilities shall agree on the RMR invoice template, which agreement shall not be unreasonably withheld, prior to its implementation. The CAISO shall publish the current version of the RMR invoice template by including it on the CAISO Website. The CAISO will specifically tell each Owner and Responsible Utility where on the CAISO Website this RMR invoice template can be found. Each Owner shall use the then current RMR invoice template for invoicing RMR services for each Facility. The RMR invoice template may change from time to time. The CAISO shall notify the California Agency, all RMR Owners and Responsible Utilities when a new agreed upon RMR invoice template has been placed on the CAISO Website.
3. Subject to the provisions of paragraph 4 below, a Completed RMR invoice based on the version of the RMR invoice template posted on the CAISO Website seven days prior to submission of the invoice shall be deemed to satisfy the requirements of this Agreement. As used herein, the term "Completed RMR invoice" means that: (a) all of the raw data required to calculate debits and credits have been included; (b) all calculations have been performed in accordance with the formulae in the current RMR invoice template, or in the event that Owner believes a conflict exists between one or more formula(s) in the RMR Owner's invoice and the corresponding formula in the RMR invoice template, such conflict has been identified and substitute equations have been documented and used at the appropriate location(s) in the invoice; (c) linkages between invoice levels are identified; (d) all billing and service assumptions, data inputs and formulae reasonably necessary to understand the derivation of each charge on the invoice has been included; and (e) the invoice has been provided to the CAISO and the Responsible Utility.
4. The Estimated RMR invoice or the Adjusted RMR invoice timeline set forth in the CAISO's RMR Payments Calendar (for the appropriate invoice) shall not commence, payments shall not be made and interest shall not begin to accrue until a Completed RMR invoice has been submitted to the CAISO and Responsible Utility.
5. In the event of any conflict between the RMR invoice template and this Agreement, this Agreement shall govern. The Owner or Responsible Utility

detecting the conflict shall promptly give notice to the CAISO. The CAISO shall notify all RMR Owners and all Responsible Utilities as soon as practicable after a conflict has been identified.

6. If Owner identifies a conflict, Owner shall identify the conflict in its letter transmitting its completed Estimated or Adjusted RMR invoice to the CAISO and include therein Owner's revised formula, which will be effective until agreement has been reached among the CAISO, Owner, the other RMR Owners and the Responsible Utilities on the correct formula, or a decision has been rendered through ADR from which no further appeal is possible.
7. An RMR Invoice Task Force has been formed with representatives from each of the RMR Owners, the Responsible Utilities and the CAISO. When a conflict has been identified, the CAISO, Owner, the other RMR Owners and the Responsible Utility will participate in meetings of the RMR Invoice Task Force to reach agreement on a revised RMR invoice template. The RMR Invoice Task Force shall meet at least monthly until all conflicts are resolved. Once all conflicts have been resolved, the RMR Invoice Task Force will meet approximately every six months to address invoicing and payment issues.
8. The RMR Invoice Task Force also shall be responsible for simplifying the RMR invoices so that they are easier to process and less burdensome to prepare.
9. To the extent that the Owner, the CAISO and the Responsible Utility have agreed, certain columns in the Owner's RMR invoice template shall be standard for the Facility and shall not change. The Owner shall not be required to complete such columns each month on its invoice for it to be considered a Completed RMR invoice, unless the underlying information requirements change.
10. Owner shall supply monthly RMR Level 0-3 invoice information in accordance with the RMR invoice template for each Responsible Utility service territory as follows:
 1. Level 0: the summary invoice for Owner's total amount invoiced to the CAISO for all of Owner's Facilities;
 2. Level 1: the summary invoice for all RMR Units at a Facility;
 3. Level 2: the detailed calculated information for individual RMR Units at the Facility; and
 4. Level 3: the detailed hourly data for individual RMR Units at each Facility.

Each invoice shall contain such other information as is necessary to perform the calculations, including indicated netted meter reads, CAISO Dispatch Notice

information (both day-ahead, real time, and adjustments), Owner's Availability Notice information and final market schedule information. No quantities shall be left blank. Each assumption made by the Owner to perform a calculation shall be listed and explained either in the appropriate Level 0-3 template under Notes or in a transmittal letter accompanying the invoice.

The methods described shall be used to calculate quantities such as Hourly Fuel Price, Hourly Emissions Cost and Start-up calculations used as input data in the RMR invoice template.

Owner shall indicate any data appearing on the invoice which it considers confidential. Responsible Utility may use the data in accordance with Section 12.5 and Schedule N of this Agreement.

SCHEDULE P – N/A**Reserved Energy for Air Emissions Limitations**

This Schedule P applies only to Units located within the San Diego Air Quality Control Basin (“Basin”).

1. For purposes of this Schedule P, the term Emission Limitation means present or future limitations on the discharge of air pollutants or contaminants into the atmosphere specified by any federal, state, regional or local law (“Clean Air Law”), by any regulation, air quality implementation plan, or permit condition promulgated or imposed by any agency authorized under any such Clean Air Law or by the judgment of any court of competent jurisdiction.
2. (a) Except as set out in Sections 2 (b) and (c), if a Facility is located in the Basin and is subject to an Emission Limitation that would limit the MWh that can be produced from the Facility during the Contract Year or part thereof (such Contract Year or part being referred to as the “Limitation Period”), Owner shall, so long as some or all of the Units at the Facility are operating under Condition 1, reserve for the Facility for each Month of the Limitation Period for dispatch under this Agreement, a quantity of MWh equal to the average monthly Requested MWh for the Facility for that Month in the 36 Months preceding the next Contract Year (the “Monthly Reserved MWh”).
 - (b) If there are less than 36 Months of Requested MWh preceding the next Contract Year, the Monthly Reserved MWh for the Limitation Period shall be determined by agreement between CAISO and Owner. If Owner and CAISO are unable to reach agreement by October 31 preceding the next Contract Year, Owner or CAISO may refer the matter to ADR under a schedule (specified by the arbitrator if the participants cannot agree) requiring a decision within 30 days following appointment of the arbitrator.
 - (c) (i) If the Monthly Reserved MWh has been determined in accordance with Section 2(a) and this Agreement terminates as to a Unit at the Facility, the Monthly Reserved MWh shall be adjusted downward to the average of the Requested MWh for the Units that remain subject to this Agreement for the same 36 Month period previously used to calculate the Monthly Reserved MWh.
 - (ii) If the Monthly Reserved MWh has been determined in accordance with Section 2 (b) and the Agreement terminates as to a Unit at the Facility, the adjustment shall be determined by agreement of Owner and CAISO. If the Parties are unable to reach agreement at least 45 days before the Agreement terminates as to the Unit, Owner or

CAISO may refer the matter to ADR under a schedule (specified by the arbitrator if the participants cannot agree) requiring a decision within 30 days following appointment of the arbitrator

3. The Monthly Reserved MWh are set forth on Schedule A. No less than 15 days before the beginning of each Contract Year, Owner shall make a Section 205 filing limited to changing the terms of Schedule A to revise the Monthly Reserved MWh determined in accordance with Section 2. The revised Monthly Reserved MWh shall be effective from the first day of the Contract Year.
4. If the sum of the Billable MWh and Hybrid MWh during a Month is less than the Monthly Reserved MWh, CAISO may:
 - (a) carry forward into the following Months of the Limitation Period all unused Monthly Reserved MWh, provided the cumulative unused MWh that are carried forward into the following Months may not exceed 20% of the aggregate Monthly Reserved MWh for the remainder of the Limitation Period including the Monthly Reserved MWh for the Months into which unused Monthly Reserved MWh are to be carried forward, or
 - (b) carry forward less than all unused Monthly Reserved MWh and release to Owner the Monthly Unused Reserved MWh not carried forward.

CAISO shall notify Owner of the amount of unused Monthly Reserved MWh to be carried forward within 3 Business Days after the beginning of the next Month.
5. CAISO may elect to reduce the aggregate Monthly Reserved MWh for the remainder of the Limitation Period by notifying Owner not less than 5 days prior to the beginning of the Month in which the reduction is to be effective. Notwithstanding the foregoing, if CAISO or Owner forecasts that usage will approach the Emission Limitation in the last Month of the Limitation Period, CAISO and Owner shall closely coordinate to release any unused Monthly Reserved MWh as soon as possible.
6. If there are unused Monthly Reserved MWh for the Facility remaining at the end of the Limitation Period, CAISO shall pay the Unused Emission Reserve Payment. The Unused Emission Reserve Payment shall be the product of (a) the Unused Monthly Reserved MWh Payment Rate and (b) the lesser of (i) the unused Monthly Reserved MWh carried forward by the CAISO into the last Month of the Limitation Period and (ii) the unused Monthly Reserved MWh remaining at the end of the Limitation Period. The Unused Monthly Reserved MWh Payment Rate shall be \$10 per MWh. The Unused Emission Reserve Payment shall be included in the invoice for the last Billing Month of the Limitation Period.

7. If the CAISO determines that the Monthly Reserved MWh have become insufficient due to a Force Majeure Event at the Facility or at Reliability Must-Run Units at another facility or because of an outage on the CAISO Controlled Grid or the Distribution Grid due to a Force Majeure Event, CAISO may request Owner to undertake, and if so requested, Owner shall undertake all such necessary and commercially reasonable measures approved in advance by CAISO and the Responsible Utility to (a) obtain, where possible, a modification or variance from applicable Emission Limitations, or (b) procure necessary emission reduction credits or allowances sufficient to offset emissions in excess of Emission Limitations to enable Owner to provide additional MWh dispatched by the CAISO to meet reliability requirements arising by reason of such Force Majeure Event. CAISO shall reimburse Owner for all reasonable costs of procuring such emission reduction credits or allowances.
8. If the CAISO wishes to dispatch a Unit at a Facility that is within 5% of exceeding its Monthly Reserved MWh for the Limitation Period, the CAISO shall first dispatch Units at other Facilities that are not within 5% of the Monthly Reserved MWh during the Limitation Period if the other Unit(s), in the CAISO's sole judgment, provide equivalent reliability benefits.
9. If any Emission Limitation affecting the Facility materially changes, CAISO and Owner promptly shall renegotiate this Schedule P to reflect such change. If CAISO and Owner are unable to agree on revisions to this Schedule P, the Owner may file a revised Schedule P with FERC under Section 205 of the Federal Power Act for the limited purpose of taking such changes in the Emissions Limitation into account. Such filing may be with or without the concurrence of the CAISO, but CAISO reserves its right to protest any such filing.

ATTACHMENT B

**Redlined Comparison of the RMR Agreement with the
ISO *Pro Forma* RMR Agreement**

[AES Huntington Beach, L.L.C.](#)
[Rate Schedule FERC No. 2](#)

**CALIFORNIA INDEPENDENT SYSTEM
OPERATOR CORPORATION**

AND

AES HUNTINGTON BEACH, L.L.C.

~~[OWNER NAME]~~

MUST-RUN SERVICE AGREEMENT

MUST-RUN SERVICE AGREEMENT

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Must-Run Service Agreement

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MUST-RUN SERVICE AGREEMENT

THIS MUST-RUN SERVICE AGREEMENT is made as of the 8th day of November, 2012, between AES Huntington Beach, L.L.C., a ~~corporation~~ AES Huntington Beach, L.L.C., a limited liability company/~~municipal corporation~~ organized under the laws of the State of Delaware (the "Owner"), and the CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION, a nonprofit public benefit corporation incorporated under the laws of the State of California (the "CAISO").

RECITALS

- A. Owner is the owner or lessee of, or is otherwise entitled to dispatch ~~and market~~ the ~~Energy and~~ Ancillary Services produced from and provided by, the ~~electrical generating~~ Units located at the Facility described in Schedule A to this Agreement;
- B. Under Section 345 of the California Public Utilities Code, CAISO is responsible for the efficient use and reliable operation of the CAISO Controlled Grid;
- C. CAISO has determined that it needs the ability to dispatch Units under the terms and conditions of this Agreement to have Owner ~~deliver Energy into or~~ provide Ancillary Services to the CAISO Controlled Grid when required by CAISO to ensure the reliability of the CAISO Controlled Grid; and
- D. Each Unit covered by this Agreement has been designated as a Reliability Must-Run Unit.

In consideration of the covenants and agreements contained in this Agreement, the Parties agree as follows:

ARTICLE 1
DEFINITIONS

Terms, when used with initial capitalization in this Agreement and the attached schedules shall have the meanings set out below. The singular shall include the plural and vice versa. "Includes" or "including" shall mean "including without limitation." References to a section, article or schedule shall mean a section, article or schedule of this Agreement, unless another agreement or instrument is specified. Unless the context otherwise requires, references to any law shall be deemed references to such law as amended, replaced or restated from time to time. Unless the context otherwise requires, any reference to a "person" includes any individual, partnership, firm,

company, corporation, joint venture, trust, association, organization or other entity, in each case whether or not having separate legal identity. References to “Owner” or “CAISO” shall, unless the context otherwise requires, mean Owner and CAISO respectively and their permitted assigns and successors. References to sections or provisions of the CAISO Tariff include any succeeding sections or provisions of the CAISO Tariff.

“**Adjusted RMR Invoice**” is defined in Section 9.1(b).

“**ADR**” means alternative dispute resolution pursuant to Section 11.1 and Schedule K.

“**Agreement**” means this Must-Run Service Agreement, including schedules, as amended from time to time.

“**Ancillary Services**” means those ancillary services identified in Schedule E.

“**Applicable UDC Tariff**” means the applicable retail tariff(s), of the utility distribution company in whose service territory the Unit is located, under which the Unit is eligible to purchase power to meet its auxiliary power requirements, whether or not the Unit actually purchases auxiliary power under the tariff(s). The Applicable UDC Tariff for the Facility is set out on Schedule A.

“**Availability**” means, in relation to a Unit, the maximum quantity of ~~Energy or~~ Ancillary Services, measured at the Delivery Point, the Unit is capable of producing at any given time assuming adequate time to ramp the Unit to that maximum quantity. For hydroelectric Units, Availability measures the extent to which the Unit is capable of producing Energy or providing Ancillary Services, given sufficient usable water to produce Energy or provide Ancillary Services. The Availability of a Unit is measured ~~in MW~~ [by the capability of Delivering MVA](#).

“**Availability Deficiency Factor**” is calculated as set forth in Section 8.5.

“**Availability Payment**” means the payment to Owner described in Section 8.1 for Condition 1 and 8.2 for Condition 2.

“**Availability Test**” means a test of a Unit’s Availability requested by CAISO or Owner pursuant to Section 4.9(a).

“**Bid Sufficiency Test**” means the test described in Section 4.1(c).

“**Billable MWh**” is defined in Section 8.3(a).

“**Billing Month**” is defined in Section 9.1(b).

“**Black Start**” means the ability of a Unit to start without an external source of electricity or the process of doing so.

“**Business Day**” means any of Monday through Friday, excluding any day which is a Federal bank holiday.

“**CAISO Availability Notice**” means a notice given by CAISO to Owner modifying the Availability of the Unit under Section 4.9 (a)(vi) or Section 5.4 (b).

“**CAISO Controlled Grid**” is defined in Appendix A to the CAISO Tariff.

“**CAISO Invoice**” is defined in Section 9.1(b).

“**CAISO’s Repair Share**” is defined in Section 7.5 (g).

“**CAISO Settlements Calendar**” is defined in Section 9.1(b).

“**CAISO Tariff**” means the California Independent System Operator Tariff on file with FERC and in effect from time to time.

~~“**Calculation Hour**” is defined in Section 8.3(c)(i)(A).~~

“**California Agency**” means the agency or agencies responsible for representing the State of California in FERC proceedings involving the rates, terms and conditions of service under this Agreement.

“**Capital Item**” means an addition or modification to, change in or repair, replacement or renewal of plant, equipment or facilities used by Owner to fulfill Owner’s obligations under this Agreement. A Capital Item does not include Repairs to such plant, equipment or facilities. A Capital Item does not include an Upgrade, unless recovery of costs of the Upgrade has been approved by CAISO. For purposes of this Agreement, Capital Items are “retirement units” or other items the costs of which are properly capitalized in accordance with the FERC Uniform System of Accounts, 18 C.F.R. Part 101.

“**Closed**” is defined in Section 2.5.

“**Collateral**” is defined in Section 9.7.

“**Commercial Operations Date**” means the date on which the Owner has declared to CAISO that the Facility is available for continuous operation.

“**Comparable RMR Unit**” is defined in Section 4.7 (f).

“**Competitive Constraint Run**” is defined in Appendix A to the CAISO Tariff.

“**Condition 1**” means the terms of this Agreement applicable to a Unit providing service under Condition 1 as described in Section 3.1.

“**Condition 2**” means the terms of this Agreement applicable to a Unit providing service under Condition 2 as described in Section 3.1.

“**Confidential Information**” is defined in Section 12.5.

“**Contract Service Limits**” for a given Unit means the Maximum Annual MWh, Maximum Annual Service Hours, Maximum Annual Start-ups, and, if applicable, the Maximum Monthly MWh as stated in Section ~~43~~12 of Schedule A.

“**Contract Year**” means a calendar year; provided, however, that the initial Contract Year shall commence on the Effective Date and expire at the end of the calendar year in which the Effective Date occurred. If the Agreement terminates during a calendar year, the last Contract Year shall end on the termination date.

“**Counted MWh**” is defined in Section 5.3.

“**Counted Service Hours**” is defined in Section 5.3.

“**Counted Start-ups**” is defined in Section 5.3.

“**Credit Carryforward**” is defined in Section 9.1(e) and Section 9.1(f).

“**Day Ahead Schedule**” is defined in Appendix A to the CAISO Tariff.

“**Deliver**” means to ~~deliver Energy into the CAISO Controlled Grid or Distribution Grid (at the Delivery Point or such other point as the Parties may otherwise~~

~~agree) or to provide Ancillary Services (whether or not any Energy is Delivered as part of the Ancillary Service) pursuant to a Dispatch Notice (including deliveries for which a Dispatch Notice has been issued under Section 4.5 and deliveries in substitute Market Transactions under Section 5.2)~~ and the terms “Delivered” and “Delivering” shall be construed accordingly.

“**Delivered Ancillary Services**” means the type and, if applicable, the ~~MW~~[MVA](#)r of Ancillary Services Delivered by Owner.

“**Delivered MWh**” means the MWh of Energy Delivered by Owner and shall be equal to the sum of Billable MWh, Hybrid MWh, MWh deemed Delivered under Section 5.1 (f); and MWh Delivered from Substitute Units under Section 5.1 (c) or Section 5.1 (d).

“**Delivery Point**” means the point identified in Section 4 of Schedule A where ~~Energy and~~ Ancillary Services are to be Delivered.

“**Direct Contract**” means a contract between Owner and one or more identified persons for the sale of ~~Energy or~~ Ancillary Services other than under this Agreement, and shall in no event include a transaction in a market run by CAISO.

“**Dispatch Notice**” means a notice delivered by CAISO to Owner’s Scheduling Coordinator on a daily, hourly or real-time basis requesting dispatch of one or more Unit(s) to provide ~~Energy or~~ Ancillary Services under this Agreement. Dispatch Notices include: (a) Day-Ahead Schedules and Real-Time Dispatches where the RMR Unit or Units are flagged as RMR Dispatches as a result of the Market-Power Mitigation and Reliability Requirements Determination processes pursuant to the CAISO Tariff, (b) Manual RMR Dispatch Notices, ~~(c) notices deemed to have been given by CAISO for the Energy actually Delivered by a Unit that starts or increases Energy output as a result of a “system emergency” as defined in the CAISO Tariff whether the start or increase occurs automatically (for Units specified in Section 2 of Schedule A as having the ability to Start-up or ramp automatically) or pursuant to a standing written order of the CAISO,~~ and ~~(d)~~ (dc) Test Dispatch Notices given by CAISO under Section 4.9 other than Test Dispatch Notices issued at Owner’s request to test Availability or heat input of the Unit.

“**Distribution Grid**” means the radial lines, distribution lines and other facilities used to transmit or distribute ~~Energy~~ [Ancillary Services](#) from the Facility other than the CAISO Controlled Grid.

“Due Date” means the date which is the 30th day after the date on which a Party submits an invoice to the other Party. Notwithstanding the above, the Due Dates for the Revised Estimated RMR Invoice, the Revised Adjusted RMR Invoice, and the CAISO Invoice shall be as specified in Section 9.1(b). If the 30th day, or other Due Date as specified in Section 9.1(b), is not a Business Day, the Due Date shall be the next Business Day.

“Effective Date” means the date this Agreement becomes effective pursuant to Section 2.1 thereof.

“Energy” means electrical energy.

“Estimated RMR Invoice” is defined in Section 9.1(b).

“Existing Contractual Limitation” means a contractual limitation on the Start-up or operation of a Unit existing prior to the date the Unit was designated as a Reliability Must-Run Unit. All Existing Contractual Limitations are described in Section 14 of Schedule A.

“Facility” means the ~~electrical generating~~ facility described in Schedule A. A hydroelectric facility may include one or more electric generating facilities which are hydraulically linked by a common water system.

“Facility Trust Account” is defined in Section 9.2.

“FERC” means the Federal Energy Regulatory Commission, any successor agency, or any other agency to whom authority under the Federal Power Act affecting this Agreement has been delegated.

“Final Invoice” is defined in Section 9.10(a).

“Financing Agreement” means agreements for financing the Facility or any portion of the Facility.

“Fixed Option Payment Factor” is set forth in Section 2 of Schedule B.

“Force Majeure Event” means any occurrence beyond the reasonable control of a Party which causes the Party to be unable to perform an obligation under this Agreement in whole or in part and which could not have been avoided by the exercise of Good Industry Practice. Force Majeure Event includes an act of God, war, civil disturbance, riot, strike or other labor dispute, acts or failures to act of

Governmental Authority, fire, explosion, flood, earthquake, storm, drought, lightning and other natural catastrophes. A Force Majeure Event shall not include lack of finances or the price of fossil fuel.

“Forced Outage” means a reduction in Availability of a Unit for which sufficient notice is not given to allow the outage to be factored into CAISO’s day-ahead or hour-head scheduling process.

“Generating Unit” means [an individual generator and its associated plant and apparatus whose output is capable of being separately identified and metered or a Physical Scheduling Plant that, in either case, is: \(a\) located within the CAISO Balancing Authority Area \(which includes a Pseudo-Tie of a generating unit to the CAISO Balancing Authority Area\); \(b\) connected to the CAISO Controlled Grid, either directly or via interconnected transmission, or distribution facilities or via a Pseudo-Tie; and \(c\) capable of producing and delivering Ancillary Services.](#)

“Good Industry Practice” means any of the practices, methods, and acts engaged in or approved by a significant portion of the electric power industry during the relevant time period, or any of the practices, methods, and acts which, in the exercise of reasonable judgment in the light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Industry Practice does not require use of the optimum practice, method, or act, but only requires use of practices, methods, or acts generally accepted in the region covered by the Western Systems Coordinating Council.

“Governmental Authority” means the government of any nation, any state or other political subdivision thereof, including any entity exercising executive, legislative, judicial, regulatory or administrative functions of or pertaining to a government.

“Hourly Metered Total Net Generation” means the electric generation in MWh for the Unit in any Settlement Period as measured by the Unit’s electrical meter described in Schedule A, Section 5, “Metering and Related Arrangements”, minus any auxiliary loads metered on the load side of such electrical meter for that Settlement Period in accordance with the CAISO Tariff.

“Hybrid MWh” is defined in Section 8.3(b).

“Hydroelectric Dependable Capacity” is the amount of MWh forecast to be produced by a hydroelectric Facility in an adverse hydrologic year.

“Interest Rate” means the lesser of the rate of interest per annum calculated in accordance with 18 C.F.R. 35.19a of the FERC’s Regulations or the maximum rate permitted by law.

“Local Capacity Area” is defined in Appendix A to the CAISO Tariff.

“Long-term Planned Outage” means a planned interruption, in whole or in part, in the ~~electrical~~ output of a Unit to permit Owner to perform a major equipment overhaul and inspection or for new construction work but only if the outage is scheduled to last 21 consecutive days or more (which may span more than one Contract Year) and either (a) is scheduled in accordance with the CAISO’s outage coordination protocol prior to the beginning of the Contract Year or (b) was scheduled as a Long-term Planned Outage for the last quarter of the expiring Contract Year but, with approval of the CAISO Outage Coordination Office, was postponed and rescheduled into the new Contract Year.

“Manual RMR Dispatch Notice” is a Dispatch Notice issued other than as a result of the Market Power Mitigation and Reliability Requirements Determination process as described in the CAISO Tariff.

“Market Power Mitigation and Reliability Requirements Determination” or **“MPM-RRD”** is as defined in the CAISO Tariff.

“Market Schedule” is defined in Section 8.3(c)(i)(C).

“Market Transaction” means a delivery of Energy or provision of Ancillary Services from a Unit pursuant to a Direct Contract or bids into markets run by the, CAISO or any similar entity.

“Maximum Annual MWh” means, for each Unit, the maximum MWh of Energy that Owner may be obligated to Deliver from the Unit in each Contract Year without becoming entitled to charges for excess service under Schedule G. The Maximum Annual MWh for each Unit is set out in Section 12 of Schedule A. The rules for counting MWh are set out in Section 5.3.

“Maximum Annual Service Hours” means, for each Unit, the maximum Service Hours that Owner may be obligated to provide service from the Unit in each Contract Year without becoming entitled to charges for excess service under Schedule G. The Maximum Annual Service Hours for each Unit is set out in Section 12 of Schedule A. The rules for counting Service Hours are set out in Section 5.3.

“Maximum Annual Start-ups” means, for each Unit, the maximum number of times Owner may be obligated to Start-up the Unit in each Contract Year without becoming entitled to charges for Start-ups under Schedule G. The Maximum Annual Start-ups for each Unit is set out in Section 12 of Schedule A. The rules for counting Start-ups are set out in Section 5.3.

“Maximum Monthly MWh” means, for each hydroelectric Unit, the maximum MWh of Energy that Owner may be obligated to Deliver from the Unit without becoming entitled to charges for excess service under Schedule G. The Maximum Monthly MWh for each hydroelectric Unit is set out in Section 12 of Schedule A. The rules for counting MWh are set out in Section 5.3.

“Maximum Net Dependable CapacityMVar Capability” means the amount shown in Section 1 of Schedule A as the Maximum Net Dependable CapacityMVar Capability of a Unit.

“Minimum Load” means, for each Unit, the higher of (1) the lowest level in MW at which the Unit can maintain stable continuous operations, or (2) the Minimum Load for the Unit as shown in Section 9 of Schedule A.

“Minimum Off Time” means, for each Unit, the minimum time following Shutdown that the Unit must remain off line before initiation of the next Start-up. The Minimum Off Time for each Unit is shown in Section 11 of Schedule A.

“Minimum Run Time” means, for each Unit, the minimum time the Unit must remain Synchronized following Start-up. The Minimum Run Time for each Unit is shown in Section 10 of Schedule A.

“Month” means a calendar month.

“Monthly Option Payment” is defined in Section 8.1(a) for Condition 1 and Section 8.2(a) for Condition 2.

“Motoring Charge” means the payment in accordance with Schedule E for the Energy required to spin a generator or condenser that is electrically connected to the CAISO Controlled Grid or Distribution Grid to provide Ancillary Services in circumstances where the generator is not producing Energy.

“MVar” means one megavar.

“MVarh” means one megavar hour.

“MW” means one megawatt.

“MWh” means one megawatt hour.

“**Net Repair Costs**” is defined in Section 7.5(a).

“**New Responsible Utility**” is defined in Section 9.4 (f).

“**Nonmarket Transaction**” means a Delivery of ~~Energy or~~ Ancillary Services ~~other than Hybrid MWh~~ from a Unit pursuant to a Dispatch Notice.

“**Non-Performance Penalty**” means a penalty computed pursuant to Section 8.5.

“**Non-Summer Months**” means other months in the Contract Year not defined as Summer Months.

“**Not Applicable**” or “**N/A**” means that the relevant provision to which the term “Not Applicable” or “N/A” is mentioned is not applicable to this Agreement.

“**Other Outage**” means any reduction in the Availability of a Unit as reflected in an CAISO Availability Notice or Owner’s Availability Notice (whether characterized by the North American Electric Reliability Council (“NERC”) as a “forced outage”, “planned outage” or “maintenance outage”) other than a Long-term Planned Outage.

“**Owner’s Availability Notice**” means a notice given under Section 4.9(a)(vii) or Section 7.3(b) by Owner to CAISO notifying CAISO of the Availability of a Unit.

“**Owner’s Repair Cost Obligation**” is an allowance for Repairs to be made during the Contract Year calculated pursuant to Section 7.5 (k). Owner’s Repair Cost Obligation is set out in Section 13 of Schedule A.

“**Party**” means either CAISO or Owner, and “Parties” means CAISO and Owner.

“**Penalty Period**” is defined in Section 8.5 (a).

“**Pre-empted Dispatch Payment**” is defined in Schedule E.

“**Prepaid Start-ups**” is defined in Section 8.4.

“**Prepaid Start-up Charge**” means the payment to Owner for Prepaid Start-ups described in Section 8.1.

“**Prepaid Start-up Cost**” is defined in Schedule D.

“**Prior Period Change(s)**” is defined in Section 9.1(g).

“**Prior Period Change Examples**” is defined in Section 9.1(l).

“**Prior Period Change Guidelines**” is defined in Section 9.1(l).

“**Prior Period Change Worksheet**” is defined in Section 9.1(g).

“**Ramp Rate**” is the applicable Ramp Rate as stated in Section 8 of Schedule A.

“**Ramping Constraint**” means the limits on ramping a Unit to higher or lower output as set out in Section 7 of Schedule A.

“**Real-Time Dispatch**” is defined in Appendix A of the CAISO Tariff.

“**Recalculation Settlement Statement**” is defined in Appendix A of the CAISO Tariff.

“**Reliability Must-Run Unit**” means a “reliability must-run unit” as defined in Appendix A of the CAISO Tariff, [as modified by the definition of Generating Unit in Article 1 of this Agreement](#).

“**Repair**” means repairs or replacement required to remedy or prevent any loss or damage that impairs the capability of the Unit to Deliver ~~Energy or~~ Ancillary Services, the cost of which is properly treated as an expense in accordance with the FERC Uniform System of Accounts, 18 C.F.R. Part 101.

“**Repair Payment Factor**” is determined pursuant to Section 7.5(g).

“**Requested Ancillary Services**” means the ~~type and, if applicable, the MW of~~ Ancillary Services CAISO requests Owner to Deliver from a Unit pursuant to a Dispatch Notice.

“**Requested MW**” means the MW of Energy CAISO requests Owner to Deliver pursuant to a Dispatch Notice.

“**Requested MWh**” means the product of the Requested MW of Energy and the time in hours (or fraction thereof) during which the Dispatch Notice requested Delivery of the Requested MW. This includes ramping energy calculated pursuant to the CAISO Tariff.

“**Requested MVar**” means the MVar of Ancillary Services CAISO requests [Owner to Deliver pursuant to a Dispatch Notice](#).

“**Requested Operation Period**” means the time during which CAISO requests that a Unit Deliver ~~Energy or~~ Ancillary Services pursuant to a Dispatch Notice.

“**Response Notice**” is defined in Section 14.3(b)(ii).

“**Responsible Utility**” is an entity which, under the CAISO Tariff, is responsible

for paying all or part of the costs incurred by CAISO under this Agreement.

“Responsible Utility Facility Trust Account” is defined in Section 9.2.

“Revised Adjusted RMR Invoice” is defined in Section 9.1(b).

“Revised Estimated RMR Invoice” is defined in Section 9.1(b).

“RMR Dispatch” is as defined in Appendix A of the CAISO Tariff.

“RMR Invoices” means the four invoices issued each Billing Month by Owner to CAISO pursuant to Section 9.1 for payment of charges under this Agreement. The four invoices are the Estimated RMR Invoice, Revised Estimated RMR Invoice, Adjusted RMR Invoice, and Revised Adjusted RMR Invoice.

“RMR Invoice Template” is defined in Section 9.1(d).

“RMR Owner Facility Trust Account” is defined in Section 9.2.

“RMR Payments Calendar” means the calendar issued by CAISO pursuant to Section 11.13 of the CAISO Tariff.

“Scheduling Coordinator” means an entity certified by CAISO for the purposes of undertaking the functions specified in Section 4.5 of the CAISO Tariff with respect to a unit.

“Scheduling Coordinator Revenues” is defined in Section 9.1(f).

“Service Hours” means the amount of time (measured in hours or fractions thereof) a Unit is Delivering ~~Energy or~~ Ancillary Services pursuant to a Dispatch Notice.

“Settlement Period” means the period beginning at the start of the hour and ending at the end of the hour.

“Shutdown” means the condition of a Unit when it is not Synchronized and not in Start-up.

“Small Project Estimate” is defined in Section 7.4 (b).

“Start-up” means the action of bringing a Unit from Shutdown to Minimum Load and the terms “Starts-up”, “Started-up” and “Starting-up” shall be construed accordingly.

“Start-up Lead Time” means, for each Unit, the amount of time required to Start-up the Unit, as shown in Section 6 of Schedule A.

“Start-up Payment” is defined in Schedule D.

“Substitute Unit” means a ~~generating unit~~ [Generating Unit](#) or combination of units, other than the Unit identified in the Dispatch Notice (whether or not located at the Facility, whether or not designated as a Reliability Must-Run Unit and whether or not owned by Owner), which, under the circumstances existing at the time, is capable of providing system reliability benefits equivalent to the system reliability benefits provided by the Unit identified in the Dispatch Notice. In the case of Units providing Ancillary Services, a Substitute Unit must (i) be certified to provide the requested type of Ancillary Service, (ii) provide the same or higher ~~ramp rate and MW of capacity~~ [MVar of Ancillary Services](#) and, (iii) is located in the same Local Capacity Area as the Unit identified in the Dispatch Notice.

“Summer Months” means [July, August, and September for the Contract Year 2013, while for the remaining Contract Years means June, July, August, and September.](#)

“Surcharge Payment” means the payment to Owner for Capital Items described in Section 8.1 for Condition 1 and Section 8.2 for Condition 2.

“Surcharge Payment Factor” means the percentage of the cost of a Capital Item that CAISO is obligated to pay.

“Synchronized” means the condition where a Unit is electrically connected to and capable of delivering ~~Energy~~ [Ancillary Services](#) to the CAISO Controlled Grid or Distribution Grid.

“Synchronous Condenser Transaction” means [the conversion of Huntington Beach Units #3 & 4 to synchronous condensers, including the development, procurement, construction, and operation under this Agreement of such synchronous condensers.](#)

“Termination Fee” means amounts determined pursuant to the termination fee formula contained in Section 2.5(b).

“Termination Fee Invoice” is defined in Section 9.9(a).

“Test Dispatch Notice” means a notice issued to test a Unit pursuant to Section 4.9.

“Trading Day” means the day on which ~~Energy or~~ Ancillary Services are to be Delivered.

“Unit” means an individual ~~electricity generating unit~~ Generating Unit which has been designated a Reliability Must-Run Unit and is part of the Facility identified in Schedule A.

“Unit Availability Limit” means for any hour the maximum ~~MW~~ MVAr which Owner is obligated to make available to CAISO from a Unit. The Unit Availability Limit shall be the lower of (a) the Maximum Net Dependable ~~Capacity~~ MVAr Capability of the Unit or (b) the Availability of the Unit as stated in the currently effective Owner’s Availability Notice or CAISO Availability Notice.

“Unplanned Capital Item Notice” is defined in Section 7.6(b).

“Unplanned Repair Notice” is defined in Section 7.5(b).

“Upgrade” means any change or modification to the Facility that increases the nameplate capacity rating of an existing Unit or adds a new unit.

“Variable Cost Payment” means the payment to Owner for Billable MWh described in Schedule C.

ARTICLE 2 TERM

2.1 Term

- (a) This Agreement shall become effective on the ~~later~~ latest to occur of ~~March 31~~ (1) January 1, 2008 ~~2013, or~~ (2) the date it is permitted to become effective by FERC, and shall or (3) the satisfaction of the following conditions precedent as set forth in this Section 2.1(a) on or before the applicable date set forth in each such condition precedent, as such dates may be extended as provided in Schedule B, in each case on terms and conditions acceptable to Owner in its reasonable discretion:
- (i) Receipt, on or before June 1, 2013, of approval of this Agreement by FERC in a final and non-appealable order on the same terms and conditions contained in this Agreement as filed with FERC;
 - (ii) Receipt, on or before January 7, 2013, of approval of such amendments to California Energy Commission license relating to Huntington Beach Units #3&4 as are required for the proposed Synchronous Condenser Transaction to be constructed by Owner;
 - (iii) Receipt, on or before January 7, 2013, of such consent, confirmation or other acknowledgment as may be required from BE CA LLC ("BE CA") under the existing agreements between Owner and BE CA, to the effect that:
 - (x) while reserving on any determination as to whether Owner’s participation in the Synchronous Condenser Transaction requires any consent or waiver by BE CA under such

- contractual agreements between BE CA and Owner, BE CA agrees that it will not claim that any such participation constitutes a breach or violation of any such contractual arrangement, or
- (y) BE CA confirms that its consent or waiver is not required under such contractual agreements between BE CA and Owner in connection with or as a result of Owner's participation in the Synchronous Condenser Transaction, or
- (z) BE CA consents to Owner's participation in the Synchronous Condenser Transaction for all purposes of such contractual agreements between BE CA and Owner;
- (iv) Receipt, on or before February 1, 2013, of consent to this Agreement by the lenders under that certain Credit Agreement dated as of May 15, 1998 (as amended, the "Credit Agreement"), among AES Southland, L.L.C., AES Alamitos, L.L.C., AES Huntington Beach, L.L.C. and AES Redondo Beach, L.L.C. (collectively, the "AES Parties"), certain lenders and issuing banks named therein, Credit Suisse, New York Branch, as Agent and Collateral Agent, and Credit Suisse, New York Branch, as Securities Intermediary and Depositary Bank;
- (v) Receipt, on or before January 7, 2013, of consent to the Synchronous Condenser Transaction by Edison Mission Huntington Beach, LLC in respect of its existing lease arrangements in respect of certain components of Huntington Beach Units #3&4, and any amendment to such lease agreement as may be required to implement the same; and
- (vi) Receipt, on or before February 1, 2013, of confirmation from Owner to CAISO that each of the conditions precedent set forth in clauses (iii), (iv) and (v) of this Section 2.1(a) have been satisfied on terms and conditions that provide Owner with assurances that Owner's participation in this Synchronous Condenser Transaction will not subject such Owner or its affiliates to an unacceptable risk of claims under any existing contractual arrangements;

provided, however, that for the avoidance of doubt, if any of the above-specified conditions precedent shall not have been satisfied to the satisfaction of Owner in its reasonable discretion on or before the applicable date for such condition precedent as set forth therein, as such dates may be extended as provided in Schedule B, this Agreement shall terminate and be of no further force and effect.

(b) Once effective, this Agreement shall continue in effect for one Contract Year.

(bc) CAISO may extend the term of this Agreement for an additional calendar year as to ~~one or more~~ all Units only for Contract Years 2014 through 2016, or for Unit 4 in Contract Year 2017, by notice given not later than October 1 of the expiring Contract Year, subject to the terms set forth in the attached Schedules for those future Contract Years for each Unit.

CAISO may extend the term for less than a full calendar year ~~as to one or~~

~~more Unit but only if CAISO gives notice not less than 12 months prior to the date to which it proposes to extend the term to all Units only for~~
Contract Years 2014 through 2016 or for Unit 4 in Contract Year 2017 only by mutual agreement. For years following Contract Year 2017, designation of the Units as Reliability Must-Run Units may occur only by mutual agreement.

2.2 Termination

- (a) Subject to any necessary authorization from FERC, this Agreement may be terminated as to ~~one or more~~all Units only for Contract Years 2013 through 2016, or for Unit 4 in Contract Year 2017, in accordance with this Section 2.2; provided, however, that if this Agreement applies to a Facility having hydroelectric Unit, this Agreement may be terminated only as to all hydroelectric Units at the Facility. If this Agreement terminates as to fewer than all Units, the Agreement shall remain in effect as to the remaining Units. If this Agreement terminates as to all Units, the Agreement shall terminate.
- (b) This Agreement may be terminated as to ~~one or more~~all Units only for Contract Years 2013 through 2016 or for Unit 4 in Contract Year 2017:
- (i) by CAISO pursuant to Section 11.4 in the event of default by Owner;
 - (ii) by Owner pursuant to Section 11.4 in the event of default by CAISO;
 - (iii) by Owner pursuant to Section 7.4 (f), 7.5 (i) or 7.6 (h);
 - (iv) by Owner or CAISO, if the Unit is condemned by a Governmental Authority; or
 - (v) by Owner or CAISO, if Owner's authorization from a Governmental Authority (including, where applicable, licenses under Part I of the Federal Power Act) that is necessary to site, operate or obtain access to such Unit is terminated or expires or is reissued or modified so that it becomes illegal, uneconomical or otherwise impractical for the Owner to continue operating the Facility. Owner shall be obligated to use its best efforts to renew and keep effective its licenses and authorizations and to oppose conditions or modifications which would make continued operation illegal, uneconomical or otherwise impractical.
- (c) To the extent that Owner transfers the right to control the dispatch of the Facility or Unit which right is necessary to satisfy its obligations under this Agreement, Owner shall assign this Agreement to the transferee in accordance with Section 13.1.
- (d) If CAISO terminates the Agreement or does not extend the term of the Agreement ~~as to a Unit~~, CAISO shall not redesignate the same ~~Unit~~Units, or designate another non-reliability must-run unit at the same Facility, as a Reliability Must-Run Unit during the one year period following termination or expiration of the Agreement ~~as to that Unit~~ unless (i) CAISO demonstrates that the unit is required to maintain the reliability of the

CAISO Controlled Grid or any portion thereof and the need to designate the unit as a Reliability Must-Run Unit is caused by an extended outage of a generation or transmission facility not known to CAISO at the time of the termination or expiration or (ii) the unit is selected through an CAISO competitive process in which Owner participated. For purposes of the foregoing, CAISO's need for spinning reserves, nonspinning reserves, replacement reserves or regulation as defined in the CAISO Tariff shall not be grounds for redesignating the Unit or designating another unit at the Facility as a Reliability Must-Run Unit.

- (e) Subject to any necessary authorization from FERC, this Agreement shall terminate as to any Unit leased by Owner in the event that, for any reason, the lease expires or is terminated unless Owner acquires ownership of such Unit upon such expiration or termination. Any termination under this Section 2.2 (e) shall not affect any right CAISO may have thereafter to designate such Unit as a Reliability Must-Run Unit and the conditions in Section 2.2 (d) shall not apply to such redesignation.

2.3 Effective Date of Expiration or Termination

If FERC authorization is required to give effect to expiration or termination of this Agreement as to one or more Units, the effective date of the expiration or termination shall be the date FERC permits the expiration or termination to become effective. Owner shall promptly file for the requisite FERC authorizations to terminate service under this Agreement as of the proposed effective date of expiration or termination; provided, that nothing in this Agreement shall prejudice the right of either Party to contest the other Party's claim that a termination or expiration has occurred. If FERC authorization is not required to terminate service under this Agreement, the effective date of expiration or termination shall be the later of (i) the date specified in CAISO or Owner's notice of termination or (ii) the date that all conditions to the termination or expiration have been satisfied.

2.4 Effect of Expiration or Termination

Expiration or termination of this Agreement shall not affect the accrued rights and obligations of either Party, including either Party's obligations to make all payments to the other Party pursuant to this Agreement or post-termination audit rights under Section 12.2.

2.5 Termination Fee

- (a) CAISO shall pay Owner a Termination Fee calculated pursuant to Section 2.5 (b) if the ~~Unit is~~Units are Closed within six months after the Unit ceases to be subject to this Agreement as a result of termination pursuant to Sections 2.2 (b) (ii), (iii), (iv) or (v) or because CAISO does not extend the term under Section 2.1 (b). ~~Within 60 days after the Unit is Closed~~Prior to the date that the Units are Closed or prior to the expiration of the term if not extended under Section 2.1(b), Owner will send CAISO a notice stating (i) the date the Unit Closed and (ii) the amount of the

AES Huntington Beach, L.L.C
Rate Schedule FERC No. 2

Must-Run Service Agreement

Termination Fee due Owner ~~pursuant to this Section 2.5 including detailed calculations of each component of the formula~~ for the applicable Contract Year as set forth in Section 2.5(b) ~~identifying the source of each input used~~. For purposes of this Section, "Closed" shall mean that the Unit is not ~~producing Energy or~~ providing capacityAncillary Services and there are no Direct Contracts obligating any entity to deliver ~~Energy or provide capacityAncillary Services~~ from the Unit during the 3612 month period beginning at the date the Unit Closed. A Unit shall cease to be Closed if, during the 3612 month period beginning at the date the Unit Closed, any entity: (i) sells ~~Energy or capacityAncillary Services~~; (ii) executes a Direct Contract for service or (iii) obtains a new permit from any Governmental Authority for operations, in each case that would involve use of the Capital Item for which a Termination Fee is being paid.

(b) The Termination Fee shall be ~~determined using the following formula~~ as set forth below:

Huntington Beach Unit 3

<u>END OF CONTRACT YEAR</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
<u>Undepreciated CapAdd Items ("NCI")</u>	<u>\$5,360,983</u>	<u>\$3,573,989</u>	<u>\$1,786,994</u>	<u>N/A</u>
<u>("CWIP")</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>N/A</u>
<u>Salvage ("S")</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>N/A</u>
<u>Termination Fee</u>	<u>\$5,360,983</u>	<u>\$3,573,989</u>	<u>\$1,786,994</u>	<u>N/A</u>

Huntington Beach Unit 4

<u>END OF CONTRACT YEAR</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
<u>Undepreciated CapAdd Items ("NCI")</u>	<u>\$5,718,382</u>	<u>\$4,288,786</u>	<u>\$2,859,191</u>	<u>\$1,429,595</u>
<u>("CWIP")</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>Salvage ("S")</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<u>Termination Fee</u>	<u>\$5,718,382</u>	<u>\$4,288,786</u>	<u>\$2,859,191</u>	<u>\$1,429,595</u>

$$T = NCI + CWIP - S$$
Where:

~~T = Termination Fee (\$)~~
~~NCI = Undepreciated portion of the cost of Capital Items which constitute part of the Closed Unit which were approved in accordance with Section 7.4 or 7.6 and were in service at the date the Unit Closed with the cost and depreciation rates determined under Section 7.4 or 7.6, as applicable. In calculating NCI, the undepreciated cost of each Capital Item shall be multiplied by the Surcharge Payment Factor applicable to that Capital Item.~~
~~CWIP = The actual cost, at the date the Unit Closed, of Capital Items for the Closed Unit which were approved in accordance with Section 7.4 or 7.6, as applicable, but were not in service at the date the Unit Closed, plus the cost to pay or terminate any remaining obligations incurred in connection with installation of the Capital Items. In calculating CWIP, the cost of each Capital Item shall be multiplied by the Surcharge Payment Factor applicable to that Capital Item.~~

~~S = The salvage value, if any, of the Capital Items included in the calculation of either NCI or CWIP.~~

~~The cost for each Capital Item shall be determined by agreement or ADR pursuant to Section 7.4 or 7.6. Except for those items for which a ten-year depreciation life is specified in Section 7.4 of this Agreement, the depreciation rate for each Capital Item shall be determined by agreement or ADR in connection with the applicable Capital Item approval process under Section 7.4 or 7.6.~~

- (c) The Termination Fee shall be payable in 3612 equal monthly installments calculated using the following formula:

$$M = T \left[\frac{r}{1 - (1 + r)^{-12}} \right]$$

Where

M = the monthly payment,
T = Termination Fee under Section 2.5(b), and
r = an annual discount rate equal to the interest rate used by FERC for the calculation of refunds (as set forth in 18 C.F.R. § 35.19a) in effect on the date that Owner provides notice to the CAISO pursuant to Section 2.5(a) of this Agreement, divided by 12.

- (d) If the Unit ceases to be Closed at any time within 3612 months following the date the Unit Closed, CAISO shall cease payment of Termination Fee installments as of the Month in which the Unit ceased to be Closed, but Owner shall not be obligated to refund installments for any Month in which the Unit was Closed. Once a Unit has ceased to be Closed, CAISO shall

not be required to pay any remaining Termination Fee installments even if the Unit again Closes.

- (e) Any dispute regarding an element of the Termination Fee (e.g. salvage value) not resolved at the time the Capital Item was approved shall be subject to ADR. If the amount of the Termination Fees associated with a single termination or expiration is \$5 million or more as billed by Owner, the Responsible Utility shall have the same rights as CAISO to receive notice that the Unit(s) Closed and to initiate or participate in ADR.

ARTICLE 3 CONDITIONS OF MUST-RUN AGREEMENT

3.1 Conditions Under Which Units Will Operate

This Agreement includes two conditions of service under which Owner may provide service from its Unit(s). By way of general description and subject to the specific provisions set forth in this Agreement:

- (i) A Unit under Condition 1 may participate in Market Transactions and Owner will retain all revenues from participation in Market Transactions;
- (ii) A Unit under Condition 2 shall ~~bid in accordance with Section 6.1 (b) to participate in Market Transactions~~ provide Ancillary Services when CAISO has issued a Dispatch Notice for the Unit ~~and Owner will not retain revenues from participation in Market Transactions~~. A Unit under Condition 2 shall not participate in a Market Transaction ~~when CAISO has not issued a Dispatch Notice for the Unit~~.

~~Owner shall begin operating each Unit under the Condition designated by Owner prior to the Effective Date and thereafter may transfer the Unit to a different Condition pursuant to Section 3.2.~~

3.2 Transfer Between Conditions

- (a) Except for a hydroelectric Unit, Owner may, from time to time, transfer a Unit from one Condition to the other Condition, provided that it may not do so without CAISO's consent unless, as of the transfer date, the Unit will have been subject to its existing Condition for at least twelve months. If a transfer is to become effective at the beginning of a Contract Year, Owner shall provide CAISO at least 30 days prior notice of the transfer. For a transfer to become effective at any other time, Owner shall give CAISO notice at least 90 days prior to the transfer. If a Unit is transferred from Condition 1 to Condition 2 during a Contract Year, Owner shall credit to CAISO on the first invoice after the transfer is effective an amount computed by multiplying (i) the positive difference, if any, of the Prepaid Start-ups minus the Counted Start-ups by (ii) the Prepaid Start-up Cost. If a Unit is transferred from Condition 2 to Condition 1, CAISO shall not be required to pay a Condition 1 Prepaid Start-up Charge for the remainder of the Contract Year in which the transfer occurred, but shall pay, for each Start-up, the Condition 1 Start-up Payment calculated pursuant to Equation D-1 in Schedule D.

- (b) A hydroelectric Unit may only operate under Condition 1.
- (c) CAISO may not transfer a Unit from one Condition to the other Condition.
- (d) Any transfer of a Unit from one Condition to the other Condition shall be effective on the first day of the Month following expiration of the applicable notice.
- (e) If a Unit is transferred from Condition 1 to Condition 2, Surcharge Payments for Capital Items shall be changed prospectively from the effective date of the transfer to reflect a Surcharge Payment Factor of 1.0. If a Unit is transferred from Condition 2 to Condition 1, Surcharge Payments for Capital Items shall be changed prospectively from the effective date of the transfer to reflect the Condition 1 Surcharge Payment Factor previously determined for the Capital Item, or if the factor was not previously determined, the Surcharge Payment Factor agreed to by CAISO and Owner. If Owner and CAISO do not agree on the Surcharge Payment Factor, the Surcharge Payment Factor shall be determined through ADR in accordance with Schedule B.

ARTICLE 4

DISPATCH OF UNITS

4.1 CAISO's Right to Dispatch

- (a) Subject to the limitations set forth in this Agreement, CAISO shall direct dispatch of a Unit by delivering a Dispatch Notice to Owner's Scheduling Coordinator in accordance with the CAISO Tariff.
- (b) Dispatch Notices for ~~Energy, other than Energy associated with~~ Ancillary Services, shall be issued solely for purposes of meeting local reliability needs or managing congestion on non-competitive paths. ~~For purposes of dispatching Energy, local reliability needs do not include Energy required to manage congestion on competitive paths.~~ CAISO shall issue Dispatch Notices to meet local reliability needs or manage congestion on non-competitive paths, whenever market bids cannot be used to meet those needs or manage such congestion or such market bids cannot be used to meet those needs or manage such congestion without taking a bid out of merit order or requiring CAISO to decrement another supplier's schedule to accommodate the unit which provided the bid. CAISO may not issue a Dispatch Notice to fill a need for imbalance energy.
- (c) Except as needed for black start or voltage support required to meet local reliability needs, to meet operating criteria associated with the Potrero power plant, or as outlined below, CAISO may issue Dispatch Notices for Ancillary Services only if the available bids in Ancillary Service ~~capacity~~ markets do not provide sufficient capacity to meet CAISO's requirements.
 - (i) If the CAISO determines on a Trading Day that it needs additional Ancillary Service on that Trading Day, CAISO shall use the following procedures:

- (A) CAISO shall communicate such needs to all Scheduling Coordinators as quickly as possible after such needs are identified.
 - (B) After completing (A), CAISO shall attempt to procure those additional Ancillary Services from the CAISO's Real-Time market (in the appropriate region if CAISO is procuring Ancillary Services on a regional basis) that have not closed, subject to the Bid Sufficiency Test described below.
 - (C) CAISO shall not issue a Dispatch Notice for Ancillary Services for any hour of the Trading Day before the earlier of (a) the time at which the real-time market for that hour closes or (b) if a Start-up would be required to provide the Ancillary Service, such earlier time as is necessary to comply with the applicable Start-up Lead Time and Ramping Constraints on Schedule A.
- (ii) CAISO shall not be required to accept any bid for an Ancillary Service above applicable bid caps then in effect under the CAISO Tariff before issuing a Dispatch Notice for Ancillary Services.
 - (iii) Bid Sufficiency Test
 - (A) The Bid Sufficiency Test may only be applied:
 - (1) To purchases from the real-time market;
 - (2) If CAISO has fully complied with its obligation to promptly notify Scheduling Coordinators of its need to acquire additional ancillary services from the real-time market; and
 - (3) To the extent that the approved CAISO Tariff does not preclude such a test.
 - (B) The Bid Sufficiency Test shall be applied on an individual hourly basis and for an individual Ancillary Service type. The test result shall be considered "insufficient" in real-time market if, and only if - (1) bids in the real-time market for the particular Ancillary Service (including any bids that can be used to satisfy that particular Ancillary Services requirement under Section 8.2.3.5 of the CAISO Tariff) represent less than two times such remaining Ancillary Service requirement; or (2) there are fewer than two unaffiliated bidders to provide such remaining Ancillary Service requirement. If the application of the Bid Sufficiency Test results in a determination of "insufficiency", the CAISO may issue a Dispatch Notice to satisfy its needs for that hour and that individual Ancillary Service.
 - (C) If the result of the Bid Sufficiency Test is a finding that available bids are "insufficient", CAISO may nonetheless accept available market bids if it determines in its sole discretion that the prices bid and the supply curve created by

the bids indicate that the bidders were not attempting to exercise market power.

4.2 Timing of Dispatch Notices

Subject to the terms and conditions of this Agreement, CAISO shall issue Manual RMR Dispatch Notices promptly after it makes a determination that it will require ~~Energy or~~ Ancillary Services under this Agreement.

4.3 Form and Content of Dispatch Notices

- (a) All Dispatch Notices shall be in writing if circumstances permit. If circumstances require that a Dispatch Notice be given or changed orally, the Dispatch Notice shall be confirmed in writing within 24 hours after the oral notice or change was given.
- (b) Each Dispatch Notice shall specify the Unit from which CAISO requests Owner to Deliver ~~Energy or~~ Ancillary Services, the time of commencement and termination of the Requested Operation Period and, for each hour of the Requested Operation Period, ~~the Requested MW or~~ the Requested Ancillary Services. A Dispatch Notice for a hydroelectric Facility must request that Owner Deliver Energy from the entire Facility rather than from a specific Unit. However, CAISO may request that Owner Deliver Ancillary Services from specific Units in a hydroelectric Facility; provided that Energy associated with such Ancillary Services shall be Delivered from the Facility and not the specified Units. CAISO may issue Dispatch Notices in real time without specifying the time the Requested Operation Period is to terminate and may adjust the Requested ~~MW or Requested~~ Ancillary Services in real time if CAISO provides all such information in writing as provided in Section 4.3(a).

4.4. Non-complying Dispatch Notices

Owner shall not be obligated to comply with a Dispatch Notice that does not comply with Section 4.3 or 4.6 and Owner shall not be liable, suffer any penalties or suffer any reduction in payments for failure ~~to~~ comply with a Dispatch Notice which is not in compliance with those Sections, provided that Owner promptly notifies CAISO that the notice does not comply with Section 4.3 or 4.6 and provides the reasons the Dispatch Notice does not comply. Owner may provide such notice after the Requested Operation Period if the notice concerns a Dispatch Notice given during, or less than one-half hour prior to, the Requested Operation Period. Compliance with a Dispatch Notice shall not be deemed a waiver of objections to the Dispatch Notice.

4.5 Intentionally left blank.

4.6 Limitations on CAISO's Right to Dispatch

CAISO's Dispatch Notice may not request Owner to, and Owner shall not be obligated to:

- (i) Provide service from a Unit at less than the Minimum Load for the Unit;
- (ii) Provide service from a Unit for less than the Minimum Run Time;
- (iii) Start-up a Unit after less than the Minimum Off Time;
- (iv) Start-up a Unit unless the time between the delivery of the Dispatch Notice requesting such Start-up and the commencement of the applicable Requested Operation Period equals at least the Start-up Lead Time for the Unit and the Dispatch Notice provides sufficient time to satisfy the Ramping Constraint of the Unit;
- (v) Provide service from a Unit in excess of its Unit Availability Limit;
- (vi) Provide service from a Unit when to do so would violate environmental limitations applicable to the Unit as set forth in Section 3 of Schedule A;
- (vii) Start-up or provide service from a Unit in violation of any applicable law, regulation, license or permit; or
- (viii) Start-up or provide service from a Unit to the extent that doing so would cause a breach of an Existing Contractual Limitation; or
- (ix) Deliver ~~Energy or~~ Ancillary Services to the extent such Delivery would cause a breach of a contract for ~~capacity~~Ancillary Services made available through an Upgrade or a Capital Item or Repair for which CAISO is not obligated to make a Surcharge Payment or pay CAISO's Repair Share.

4.7 Dispatch in Excess of Contract Service Limits

- (a) CAISO shall use its best efforts in accordance with Good Industry Practice not to issue a Dispatch Notice that would cause a Unit's Counted Start-ups, ~~Counted MWh~~, or Counted Service Hours to exceed any of the Unit's Contract Service Limits.
- (b) CAISO may issue a Dispatch Notice requiring a Unit to Deliver ~~Energy or~~ Ancillary Services after the Unit has exceeded a Contract Service Limit only if the ~~Requested MWh or~~ Requested Ancillary Services cannot be obtained by CAISO either (i) by accepting market bids in accordance with Section 4.1 or (ii) from Comparable RMR Unit(s) without exceeding the contract service limits or violating other operational limitations under CAISO's agreement with the Comparable RMR Unit(s). Owner shall use its best efforts, in accordance with Good Industry Practice, to comply with such Dispatch Notice.
- (c) If Owner of a hydroelectric Facility complies with a request to exceed the Maximum Monthly MWh, Owner may reduce the Maximum Monthly MWh for remaining Months of the Contract Year to reflect the accelerated use of available water. Not later than 15 days after any delivery in excess of Maximum Monthly MWh, Owner shall provide CAISO a notice showing revised Maximum Monthly MWh for remaining Months of the Contract Year.
- (d) If the Owner does not comply with a Dispatch Notice under Section 4.7(b), Owner at CAISO's request shall provide a written explanation.

- (e) If Owner, in compliance with a Dispatch Notice, Starts- up a Unit and the Counted Start-ups for the Contract Year exceed the Maximum Annual Start-ups for the Unit, CAISO shall pay for ~~each~~ such excess Start-up ~~at the rate~~ ups as set out in Schedule G. If Owner, in compliance with a Dispatch Notice, Delivers Energy Ancillary Services and the Counted MWh Service Hours for the Unit for the Contract Year exceeds the Maximum Annual ~~MWh, the Counted Service Hours from the Unit for the Contract Year exceed the Maximum Annual~~ Service Hours, or if applicable, the Counted MWh Service Hours for the Month exceed the Maximum Monthly MWh Service Hours, CAISO shall ~~pay~~ make the payments for the ~~Billable MWh Delivered~~ Deliveries in response to such Dispatch Notice and exceeding the Contract Service Limit ~~at the rates~~ as set forth in Schedule G.
- (f) For purposes of this Section 4.7:
- (i) “Best efforts” does not require Owner to provide service inconsistent with the limitations set forth in Section 4.6 or if Owner reasonably believes providing the service might cause significant physical harm to the Unit.
 - (ii) The term “Good Industry Practice” shall not be applied to permit CAISO to consider the relative costs of Comparable RMR Units when determining whether to request dispatch of a Unit in excess of the Contract Service Limits.
 - (iii) “Comparable RMR Unit” means a unit which has been designated a Reliability Must-Run Unit and which, in CAISO’s reasonable judgment, is capable of providing system reliability benefits to CAISO equivalent to the system reliability benefits provided by the Unit which otherwise would be subject to the Dispatch Notice. In the case of Units providing Ancillary Services, a Comparable RMR Unit must: (A) be certified to provide the Requested type of Ancillary Service, (B) provide the same or higher ~~ramp rate and MW capacity~~ MVAr capability and (C) is located in the same Local Capacity Area as the Unit which otherwise would be subject to the Dispatch Notice.
- (g) CAISO and Owner shall have the right to dispute the other Party’s actions or inactions under this Section 4.7 and any dispute shall be subject to resolution through ADR.

4.8 Air Emissions

If CAISO determines that it is necessary to reserve MWh to satisfy potential dispatches under this Agreement without violating present or future limitations on the discharge of air pollutants or contaminants into the atmosphere specified by any federal, state, regional or local law by any regulation, air quality implementation plan, or permit condition promulgated or imposed by any Governmental Authority, the terms and conditions of such reservation shall be set out on Schedule P.

4.9 Test Dispatch Notices

(a) Availability Tests

- (i) CAISO may from time to time test the Availability of a Unit by requiring the Unit to Deliver EnergyAncillary Services pursuant to a Test Dispatch Notice provided to Owner's Scheduling Coordinator using the procedures described in Section 4.2 and 4.3. CAISO, without cause, may request one Availability Test each Contract Year. CAISO may request additional Availability Tests if the Unit fails to comply fully with a Dispatch Notice. CAISO shall not request an Availability Test for a hydroelectric Unit during periods of constrained water availability. Lack of available water shall not be deemed to result in a failed test and reduction of the Unit Availability Limit for a hydroelectric Unit.
- (ii) Owner may request an Availability Test at any time. CAISO shall issue a Test Dispatch Notice within three days after receipt of Owner's request, but for good cause, CAISO may reschedule the test to a date acceptable to Owner. Owner's request shall state the amount of EnergyAncillary Services to be produced. The effect of operations pursuant to such a request is set out in Section 5.3.
- (iii) The Test Dispatch Notice shall be marked "Availability Test Dispatch Notice." The Test Dispatch Notice shall specify a Requested Operation Period of four hours of continuous operations at the requested output plus any applicable Start-up Lead Time, time to satisfy Ramping Constraints and time for Shutdown (or for hydroelectric Units the time sufficient water is available, if that is less).
- (iv) Subject to the other conditions or restrictions expressed in this Agreement, Owner shall provide service from the Unit and Deliver the Requested MWhAncillary Services in accordance with the Availability Test Dispatch Notice; ~~provided, however, that Owner, in response to such Test Dispatch Notice, may deliver all or part of the Requested MWh in a Market Transaction by complying with the procedures set forth in Section 5.2.~~
- (v) An Availability Test shall be treated as having been successfully completed if the average MW/MVAr Delivered at the Delivery Point during the Availability Test was not less than 99% of the Requested MW/MVAr for the Requested Operation Period. The average MW/MVAr Delivered during the Availability Test shall be computed by dividing (i) the total MWh/MVAr produced during the four-hour period immediately following completion of the ramp up, multiplied by the appropriate ambient temperature correction factors for the Unit as set out in Section 3 of Schedule A, by (ii) four hours.
- (vi) If a Unit fails an Availability Test, CAISO may issue a CAISO Availability Notice restating the Availability of the Unit to a level not less than the average MW/MVAr Delivered during the Availability

- Test. Following the notice, Owner shall not issue an Owner's Availability Notice increasing the Availability of the Unit above the level determined through such failed Availability Test until (A) the Unit has successfully completed a subsequent Availability Test, (B) the Unit has delivered in Market Transactions, pursuant to a Dispatch Notice or in a combination of the two, during a continuous four hour operating period, average ~~MW~~MVAr in excess of those determined in the Availability Test or (C) Owner has otherwise demonstrated to CAISO's reasonable satisfaction that the Availability of the Unit has been restored.
- (vii) If the average ~~MW~~MVAr Delivered during the Availability Test exceed 101% of the Unit Availability Limit in effect prior to the Availability Test, Owner may issue an Owner's Availability Notice setting Availability retroactive to the time the request was received by CAISO to the lesser of (A) the average ~~MW~~MVAr Delivered during the Availability Test or (B) the Maximum Net ~~Dependable-Capacity~~MVAr Capability.
- (b) Emissions Test
If it is necessary for Owner to operate a Unit to fulfill regulatory requirements for emissions testing, Owner may request CAISO to issue a Dispatch Notice for such operation. Owner shall provide a request specifying the test date at least seven days in advance of the emissions test. CAISO shall issue a Dispatch Notice to schedule the requested operation on the date specified in Owner's request, or for good cause, CAISO may cause the test to be rescheduled to a date acceptable to Owner, provided that CAISO shall not delay the test by more than seven days without Owner's consent. The Test Dispatch Notice shall be marked "Emissions Test Dispatch Notice".
- (c) Black Start Test
CAISO may from time to time test Unit(s) designated to provide Black Start service by requiring the Unit to deliver Black Start service pursuant to a Test Dispatch Notice provided to Owner's Scheduling Coordinator using the procedures described in Sections 4.2 and 4.3. Such Test Dispatch Notice shall be marked "Black Start Test Notice." The Black Start Test shall be performed in accordance with the Ancillary Services Requirements Protocol in the CAISO Tariff. CAISO shall not request a Black Start Test for a hydroelectric Unit during periods of constrained water availability.
- (d) Heat Input Test
Not more frequently than once each Contract Year, Owner may, by giving at least seven days' prior notice to CAISO, request CAISO to issue a Test Dispatch Notice in order for Owner to determine the heat input of a Unit. CAISO shall not unreasonably refuse to issue a Test Dispatch Notice for a heat input test. The Test Dispatch Notice shall be marked "Heat Input Test Notice." The heat input test shall be conducted in accordance with testing standards and procedures agreed to by CAISO and Owner. In the

absence of such agreement, the standards and procedures shall be determined through ADR before such test may be conducted. The arbitrator shall specify procedures for testing which are consistent with Good Industry Practice. Following such a heat input test, Owner shall be permitted to make a filing under Section 205 of the Federal Power Act limited to modifying the heat inputs used in the Variable Cost Payment, Start-up Payment, Preempted Dispatch Payment and Mandatory Energy Bid in Schedules C, D, E and M, respectively, to reflect the results of such test.

4.10 Forecasts Of CAISO's Requirements

Not later than November 15 of each year, CAISO shall provide Owner and the Responsible Utility with a non-binding forecast representing CAISO's then current best estimate of the ~~monthly MWh, monthly peak day MW, and~~ monthly Service Hours that CAISO will require each Unit to provide each month during the ensuing Contract Year ("Annual Forecast"). In addition, not later than June 15 of each year, CAISO shall provide Owner and with a non-binding forecast ("Update") representing CAISO's then current best estimate of the monthly ~~MWh, monthly peak day MW, and monthly~~ Service Hours that CAISO will require each Unit to provide each month from June through the end of the Contract Year. Each Annual Forecast and Update will take into account the Long-term Planned Outages. The Annual Forecasts and Updates shall be treated as confidential pursuant to Section 12.5 and shall not be binding.

4.11 Determination of Contract Service Limits

- (a) If CAISO has extended the term of this Agreement pursuant to Section 2.1 (b), then not later than October 31 of the expiring Contract Year Owner shall make a filing under Section 205 of the Federal Power Act ~~limited to~~ revising consistent with Schedule A and Schedule B to reflect the Contract Service Limits and payments for all Units other than hydroelectric Units for the ensuing Contract Year. The Contract Service Limits for each year after the initial Contract Year shall be ~~determined through application of the following rules; as set forth in Schedule A.~~
- (i) ~~Maximum Annual MWh for each Unit shall be the average annual MWh produced in Market and Nonmarket Transactions by the Unit during the 60 month period ending June 30 of the expiring Contract Year;~~
 - (ii) ~~Maximum Annual Service Hours for each Unit shall be the average annual Service Hours the Unit operated in Market and Nonmarket Transactions during the 60 month period ending June 30 of the expiring Contract Year; and~~
 - (iii) ~~Maximum Annual Start-Ups shall be the number of Start-ups of the Unit for Market and Nonmarket Transactions during the year selected by CAISO. CAISO may select any of the five preceding years to determine Maximum Annual Start-Ups but shall select the same year for all Units at the Facility. For purposes of the~~

~~foregoing sentence only, a year shall mean a 12-month period ending June 30. Thus, by way of example, CAISO may determine Maximum Annual Start-ups for calendar year 2002 based on the Maximum Annual Start-ups during any of the following five periods: (A) 12 months ended June 30, 2001; (B) 12 months ended June 30, 2000; (C) 12 months ended June 30, 1999; (D) 12 months ended June 30, 1998; or (E) 12 months ended June 30, 1997.~~

~~Owner shall provide the information necessary to determine the Contract Service Limits to CAISO and the Responsible Utility not less than 15 days prior to the filing. CAISO shall give notice to Owner and Responsible Utility identifying the year to be used to determine Maximum Annual Start-ups not later than five Business Days after it receives the information from Owner.~~

- (b) If CAISO has extended the term of this Agreement pursuant to Section 2.1 (b), then not later than 15 days prior to the beginning of the ensuing Contract Year, Owner of a hydroelectric Facility shall make a filing under Section 205 of the Federal Power Act to reflect the revised Contract Service Limits to be in effect during the ensuing Contract Year for the hydroelectric Facility. Such filing shall be based on Owner's current water management forecast and shall reflect the water expected to be available for electric generation above the Hydroelectric Dependable Capacity. Such filing, if accepted or approved, shall set the Maximum Monthly MWh in Schedule A for the ensuing Contract Year, subject to adjustment in accordance with the notice described below giving revised Monthly Maximum MWh. The Maximum Monthly MWh in Schedule A of this Agreement on the Effective Date reflects the Hydroelectric Dependable Capacity. Not later than April 15 of each Contract Year, Owner shall provide notice to CAISO giving revised Maximum Monthly MWh for each remaining Month of the Contract Year based on its then current water management forecast. If, during any Contract Year, Owner determines that drought conditions jeopardize its ability to supply Hydroelectric Dependable Capacity, Owner shall promptly give notice to the CAISO of this determination, including revised Maximum Monthly MWh for each remaining Month of the Contract Year. Following such a determination, Owner shall provide CAISO with weekly updated water management forecasts until the earlier of the end of the Contract Year or Owner's determination that its ability to supply the Hydroelectric Dependable Capacity is no longer jeopardized by such conditions. CAISO acknowledges that the accuracy of a water management forecast may be substantially affected by a Force Majeure Event at any time after the Owner provides the forecast and consequently Owner shall not be liable for the accuracy of the water management forecast or any reliance on it other than a Monthly Maximum MWh amount.

ARTICLE 5
DELIVERY OF ~~ENERGY AND~~ ANCILLARY SERVICES BY OWNER

5.1 Owner's Delivery of ~~Energy and~~ Ancillary Services

- (a) Subject to the limits in this Agreement, and subject to the CAISO's Real-Time Dispatch instructions whether flagged as an RMR Dispatch or not, Owner shall provide service from the Units and Deliver the Requested ~~MWh or Requested~~ Ancillary Services in accordance with each Dispatch Notice. To the maximum extent practical, and except for regulation, Owner shall Deliver at each moment of each hour during the Requested Operation Period not less than the ~~Requested MW or~~ Requested Ancillary Services. If Owner has disputed a Dispatch Notice under Section 4.6 (i) (Minimum Load) (ii) (Minimum Run Time) (iii) (Minimum Off Time) (iv) (Start-up Lead Time and Ramping Constraint), or (v) (Unit Availability Limit) and such dispute is not resolved prior to the time for delivery, Owner will use reasonable efforts to comply with the Dispatch Notice, but shall not be liable to CAISO if it is unable to do so and Owner prevails in the dispute.
- (b) If Owner has disputed a Dispatch Notice under Section 4.6 (vi) (environmental), (vii) (violation of law), (viii) (Existing Contractual Limitations) or (ix) (Upgrade Contract), Owner shall not be required to Deliver ~~Energy or~~ Ancillary Services pending resolution of the dispute as to whether the Dispatch Notice violated such Section; provided, however, that Owner shall not be relieved from any liability that it would otherwise have for failure to comply with the disputed Dispatch Notice if it subsequently is determined that the Dispatch Notice did not violate Section 4.6 (vi), (vii), (viii) or (ix).
- (c) Subject to CAISO approval, if Owner cannot Deliver the ~~Requested MWh or~~ Requested Ancillary Services by providing service from the Unit identified in a Dispatch Notice, Owner may Deliver the requested services by providing service from a Substitute Unit. Owner shall provide oral or written notice to CAISO as soon as possible in advance of the first Real-Time Dispatch of the Requested Operation Period stating why it cannot provide the requested service from the Unit identified in the Dispatch Notice, identifying the Substitute Unit, describing the services it will provide from the Substitute Unit and specifying the charges applicable to service from the Substitute Unit. CAISO may deny approval only if the proposed unit does not qualify as a Substitute Unit or if there is insufficient time to accommodate the request prior to the running of the MPM-RRD process and the operator determines that the substitution would affect the MPM-RRD results, in which case the substitution request will be accommodated for any remaining portion of the Requested Operation Period, if the unit is otherwise acceptable. The total cost to CAISO for service from the Substitute Unit shall be at the rate specified by the

- Owner, provided that the total cost will not exceed the total costs for the same amount of service from the Unit specified in the Dispatch Notice.
- (d) If Owner can Deliver the ~~Requested MWh or~~ Requested Ancillary Services by providing service from the Unit identified in the Dispatch Notice, Owner may Deliver the requested services by providing service from (i) the Unit identified in CAISO's Dispatch Notice or (ii) with CAISO's consent, a Substitute Unit. Owner of a hydroelectric Unit will Deliver the Requested MWh from the Facility and will Deliver the Voltage Support and Black Start requested in a Dispatch Notice from the specified Unit or a Substitute Unit. If Owner proposes to satisfy its delivery obligations by providing service from a Substitute Unit, Owner shall provide oral or written notice to CAISO prior to the Requested Operation Period identifying the Substitute Unit, describing the services it will provide from Substitute Unit and specifying the charges applicable to service from the Substitute Unit. Owner may Deliver the agreed services from the Substitute Unit and will be paid at the agreed rates if CAISO accepts Owner's proposal, or CAISO and Owner otherwise agree on the services and applicable rates for service from a Substitute Unit. CAISO's decision shall not be subject to ADR.
- (e) Owner shall Deliver the ~~Requested MWh or~~ Requested Ancillary Services at the Delivery Point or such other point(s) reasonably acceptable to CAISO and shall comply with the metering and related arrangements set forth in Section 5 of Schedule A to this Agreement or as otherwise specified in Owner's applicable Meter Service Agreement.
- (f) If Owner would have been able to Deliver the ~~Requested MWh or~~ Requested Ancillary Services but for an outage in the CAISO Controlled Grid or Distribution Grid beyond Owner's reasonable control, Owner shall be deemed to have complied with the Dispatch Notice for purposes of Sections 5.4 and 8.5.

5.2 Substitution of Market Transactions for Dispatch Notices - Not Applicable

- (a) Owner may satisfy, in whole or in part, its obligation to Deliver Energy, but not Ancillary Services, during a Requested Operation Period by delivering Energy under a Market Transaction from the Unit identified in a Dispatch Notice if Owner complies with the requirements and procedures of this Section 5.2.
- (b) Owner shall give notice of its intent to substitute a Market Transaction through the submission of bids in the CAISO's Markets. Any dispatch level that clears the Competitive Constraint Run of the MPM-RRD process through the submission of Economic Bids or Self-Schedules, and is reflected in the Day-Ahead Schedule or Real-Time Dispatch, shall be deemed a Market Transaction.
- (c) Owner may substitute a Market Transaction only if the deadline for bids into the market selected by Owner has not passed.
- (d) Intentionally left blank.

5.3 Rules for Calculating Counted Start-ups, ~~Counted MWh~~ and Counted

Service Hours

- (a) The following rules shall govern calculation of Counted Start-ups:
- (i) Except as limited below, all Start-ups successfully completed in compliance with a Dispatch Notice shall be included in Counted Start-ups for the Unit for which the Dispatch Notice was issued.
 - (ii) If a Start-up required by a Dispatch Notice is canceled by CAISO after the Start-up is initiated, Counted Start-ups shall include a fractional Start-up computed by dividing (i) the lesser of (a) the time elapsed between initiation of the Start-up and cancellation or (b) the Start-up Lead Time by (ii) the applicable Start-up Lead Time for the Unit.
 - (iii) For Units under Condition 1, if a Dispatch Notice is issued pursuant to Section 4.5 for a period in which the Unit is scheduled to operate or is operating in a Market Transaction for which a Start-up was required, or Owner substitutes a Market Transaction under Section 5.2 for a Requested Operation Period for which a Start-up was required, Counted Start-ups shall include one-half of the Start-up for the Unit for which the Dispatch Notice was issued. No Start-up shall be counted more than once.
 - (iv) For Units under Condition 2, Counted Start-ups shall include each Start-up ~~whether the Energy is Delivered to the CAISO in a Nonmarket Transaction or is delivered in a Market Transaction pursuant to bids made under Section 6.1 (b).~~
 - (v) If Owner complies with a Dispatch Notice by Delivering the Requested ~~MWh or~~ Ancillary Services from a Substitute Unit, any Start-ups of the Substitute Unit will not be included in Counted Start-ups for the Unit specified in the Dispatch Notice or the Substitute Unit.
 - (vi) Except as provided in Section 5.3(a)(iii), any Start-up not required to comply with a Dispatch Notice will not be included in Counted Start-ups.
- (b) Reserved. ~~The following rules shall govern calculation of Counted MWh:~~
- ~~(i) Except as limited below, all MWh Delivered in compliance with a Dispatch Notice shall be included in Counted MWh for the Unit for which the Dispatch Notice was issued.~~
 - ~~(ii) For Units under Condition 1, if a Dispatch Notice is issued pursuant to Section 4.5 for a period in which a Unit is scheduled to operate or is operating in a Market Transaction or if Owner, in response to a Dispatch Notice, substitutes a Market Transaction under Section 5.2 for all or part of the Requested MWh, MWh equal to the sum of (A) Billable MWh plus (B) 50% of the Hybrid MWh, will be included in Counted MWh for the Unit for which the Dispatch Notice was issued.~~
 - ~~(iii) If a Unit operating under Condition 2 sells Energy pursuant to bids made under Section 6.1 (b), the Billable MWh shall be included in Counted MWh for the Unit.~~

- (iv) ~~Intentionally left blank~~
- (v) ~~If Owner Delivers Requested MWh or Energy associated with Ancillary Services from a Substitute Unit, the MWh Delivered from the Substitute Unit will not be included in Counted MWh for the Unit specified in the Dispatch Notice or the Substitute Unit.~~
- (c) The following rules shall govern calculation of Counted Service Hours:
 - (i) Except as limited below, all Service Hours expended in compliance with a Dispatch Notice other than Service Hours expended for Ancillary Services during which the Unit is not Synchronized shall be included in Counted Service Hours for the Unit for which the Dispatch Notice was issued.
 - (ii) For Units under Condition 1, if a Dispatch Notice is issued pursuant to Section 4.5 for a period in which a Unit is scheduled to operate or is operating in a Market Transaction or if Owner, in response to a Dispatch Notice, substitutes a Market Transaction under Section 5.2 for all or part of the Requested MWh, one-half of the Requested Operation Period will be included in Counted Service Hours for the Unit for which the Dispatch Notice was issued.
 - (iii) If a Unit operating under Condition 2 sells Energy pursuant to bids made under Section 6.1 (b), each Service Hour expended by the Unit to produce the Energy shall be included in Counted Service Hours.
 - (iv) If Owner Delivers Requested ~~MWh or~~ Ancillary Services from a Substitute Unit, the Service Hours expended by the Substitute Unit will not be included in Counted Service Hours for the Unit specified in the Dispatch Notice or the Substitute Unit.
- (d) ~~Counted MWh, Counted Service Hours and Counted Start-ups for the Contract Year ending December 31, 1999 shall include MWh, Service Hours and Start-ups for the period January 1, 1999 through the Effective Date under the reliability must run rate schedule which is superseded by this Agreement using the rules set out in this Section 5.3 as if this Agreement had been in effect during that period. Owner's initial report under Section 5.5 shall show the MWh, Service Hours and Start-ups for the period January 1, 1999 through the Effective Date calculated using the rules set out in this Section 5.3.~~

5.4 Owner's Failure To Deliver Requested ~~MWh or Requested~~ Ancillary Services

- (a) Owner shall promptly notify CAISO if Owner will not be able to Deliver all or part of the Requested ~~MWh or Requested~~ Ancillary Services from the Unit identified in the Dispatch Notice or from the Substitute Unit previously accepted by CAISO.
- (b) If a Unit fails to Deliver the full amount of ~~Requested MWh or~~ Requested Ancillary Services, CAISO may issue an CAISO Availability Notice restating the Availability to a level not less than the Availability indicated by the actual deliveries. If CAISO has issued an CAISO Availability Notice

under this Section 5.4(b), Owner shall not issue an Owner's Availability Notice increasing the Availability of the Unit until (i) the Unit has successfully completed an Availability Test, (ii) the Unit has delivered ~~in-Market Transactions or in a combination of Market Transactions and Nonmarket Transactions~~ pursuant to a Dispatch Notice during a continuous four hour operating period, average ~~MW~~MVAr in excess of those shown in the CAISO Availability Notice, or (iii) Owner has otherwise demonstrated to the CAISO's reasonable satisfaction that the Availability of the Unit has been restored. CAISO's only other remedies for Owner's failure to Deliver Requested Ancillary Services ~~or Requested MWh~~ are as set out in Sections 8.5, 11.3 and 12.6.

5.5 Reports

Not less than two days prior to the beginning of every Month during the Contract Year, Owner or Owner's Scheduling Coordinator shall provide CAISO and the Responsible Utility a report for each Unit setting forth as of the day before the date of the report the Counted ~~MWh, Counted~~ Service Hours and Counted Start-ups for the current Contract Year. All reports shall be treated as confidential pursuant to Section 12.5.

ARTICLE 6 MARKET TRANSACTIONS - Not Applicable

6.1 Right To Engage In Market Transactions

- (a) In addition to the right to substitute a Market Transaction pursuant to Section 5.2, if a Unit is operating under Condition 1, Owner may enter into Market Transactions for Energy or Ancillary Services at any level outside of a Requested Operation Period. If CAISO has issued a Dispatch Notice for Energy to a Unit under Condition 1, Owner may enter into Market Transactions for Energy at any level during the Requested Operation Period, and may enter into a Market Transaction for Ancillary Services at any level that does not preclude compliance with the Dispatch Notice. If CAISO has issued a Dispatch Notice for Ancillary Services to a Unit under Condition 1, Owner may enter into Market Transactions for Energy or Ancillary Services at any level that does not preclude compliance with the Dispatch Notice.
- (b) If CAISO issues a Dispatch Notice for a Unit operating under Condition 2, Owner shall submit bids in succeeding available Energy and Ancillary Services markets for the Requested Operation Period in accordance with the following requirements:
- (i) If the next available market is an Energy market, Owner shall bid all Energy the Unit can produce, up to the Unit Availability Limit, in excess of the higher of (A) Energy or Ancillary Services capacity cleared in a prior market; or (B) capacity required to Deliver Requested Ancillary Services. Owner shall bid all Energy at the bid price calculated using the formula in Part I of Schedule M.

- (ii) If the next available market is an Ancillary Services market, Owner shall bid all available capacity, up to the Unit Availability Limit, in excess of the higher of the capacity needed to (A) deliver Energy and Ancillary Services cleared in a prior market or (B) Deliver the Requested MWh or Ancillary Services different from the Requested Ancillary Service.
- (iii) If the markets are concurrent, Owner shall bid in the Ancillary Services market all available capacity, up to the Unit Availability Limit, in excess of the higher of the capacity needed to (A) deliver Energy and Ancillary Services cleared in a prior market or (B) Deliver the Requested MWh or Ancillary Services different from the Requested Ancillary Service.
- (iv) Owner shall bid all Ancillary Service capacity at the bid price calculated using the formula in Part II of Schedule M.
- (v) Owner shall not bid Energy or Ancillary Services in excess of the quantities the Unit can provide during the Requested Operation Period given the Unit's ramp rates, Ramping Constraints and any other applicable operating limitations, with due allowance for a Unit's ability to change output during the Requested Operation Period.
- (vi) Neither Owner nor Owner's Scheduling Coordinator shall bid Energy or Ancillary Services to the extent that participating in a Market Transaction would conflict with a contract entered into prior to the Effective Date. Owner shall include in Section 14 of Schedule A a description of all contract restrictions affecting Owner's ability to participate in Market Transactions.

CAISO may order Owner not to bid to participate in a Market Transaction if CAISO determines that participation in Market Transactions would cause a Unit to exceed Contract Service Limits or impair CAISO's ability to dispatch the Unit to meet reliability needs at other times during the Contract Year. A Unit operating under Condition 2 shall not otherwise engage in Market Transactions.

ARTICLE 7

OPERATION AND MAINTENANCE

7.1 Owner's Obligation

Owner shall fuel, operate and maintain each Unit, or cause the Unit to be fueled, operated and maintained, in accordance with applicable law and Good Industry Practice and with due regard for the reliability purpose of this Agreement. Owner is not required to have or maintain fuel oil burning capability, fuel oil inventories, or permits to burn fuel oil and shall not be required to burn fuel oil to respond to a Dispatch Notice unless, and then only to the extent that, the Unit's primary fuel is distillate fuel oil or Schedule H requires Owner to maintain fuel oil capability.

7.2 Outages and Overhauls

- (a) Owner shall be entitled to take a Unit out of operation or reduce the Availability of the Unit to repair and maintain the Unit in accordance with Good Industry Practice and the requirements of the CAISO Tariff. The dates and times of the outages and any changes to those dates and times shall be determined in accordance with the CAISO Tariff. For purposes of complying with the requirements of the CAISO Tariff, Other Outage shall be separated between “maintenance outage” and “forced outage,” as defined in the CAISO Tariff.
- (b) Owner shall have the right to curtail or discontinue, in whole or in part, Deliveries of ~~Energy or~~ Ancillary Services from a Unit for so long as, and to the extent that, a Forced Outage affecting the Unit continues or when, in Owner’s judgment in accordance with Good Industry Practice, operating conditions at the Unit so require. Curtailment or discontinuance under this Section shall give rise to applicable remedies under Article 8.

7.3 Reports and Notices

- (a) As soon as practical after commencement of a Forced Outage, Owner shall give CAISO notice of the Forced Outage, the expected duration of the outage, and the expected time when the Unit will be available to ~~generate electricity and the~~ [provide Ancillary Services and the](#) expected Availability during and following the Forced Outage. Owner shall keep CAISO informed of any developments that will affect either the duration of the Forced Outage or the Availability of the Unit during or after the end of the Forced Outage.
- (b) Owner shall keep CAISO advised of the Availability of each Unit by promptly issuing Owner’s Availability Notices any time Owner becomes aware that the Unit’s Availability changed in accordance with Section 9 of the CAISO Tariff. Owner may not reduce a Unit’s Availability due to the cost of fuel. An Owner’s Availability Notice shall become effective when issued, provided, however, that if Owner becomes subject to a Non-Performance Penalty under Section 8.5, any Owner’s Availability Notice given during the Penalty Period shall not become effective until 72 hours after the Owner’s Availability Notice is given. An Owner’s Availability Notice or CAISO’s Availability Notice shall continue in effect until it is superseded by a subsequent Owner’s Availability Notice or CAISO’s Availability Notice.

7.4 Planned Capital Items

- (a) On or before March 1 of each year following the initial Contract Year, Owner shall provide CAISO a preliminary report in the form required by this Section 7.4 showing Owner's proposed Capital Items for the next Contract Year and a five-year forecast of anticipated Capital Items in the Form attached as Schedule L-1, assuming the Agreement will be extended. Owner shall submit a final report in the form required by this Section 7.4 reflecting updated information by August 1 of each year. Owner may, but shall not be obligated to, include an Upgrade as a proposed Capital Item in either the preliminary or final report.
- (b) The ~~preliminary and final reports~~ report for proposed Capital Items for the ~~next initial~~ Contract Year ~~shall be~~ is being submitted on the form attached as Schedule L-1. Owner shall provide additional information requested by the CAISO necessary to evaluate the proposal. Each preliminary and final report shall separately list individual projects expected to cost more than \$500,000 and shall include two "Small Project Estimates." One Small Project Estimate shall identify Capital Items (projected to cost less than \$500,000 each) required to maintain or enhance reliability. The second Small Project Estimate shall identify all other Capital Items projected to cost less than \$500,000 each. Individual Capital Items projected to cost more than \$50,000 shall be identified separately in one of the two Small Project Estimates. All Capital Items covered by the Small Project Estimate will be depreciated over 10 years.
- (c) Within 60 days after submission of the final report, CAISO will notify Owner of the proposed Capital Items CAISO has approved and the Capital Items it has not approved. If CAISO fails to provide notice within such 60 day period, all Capital Items included in the final report shall be deemed approved as proposed by Owner. Approval constitutes CAISO agreement that the CAISO's share of the estimated cost of the Capital Item will be recovered through Surcharge Payment under Article 8 and will be eligible for recovery through a Termination Fee pursuant to Section 2.5. If the actual cost of the Capital Item exceeds the estimated cost, CAISO may initiate ADR to determine whether the additional costs were reasonable and shall not be obligated to pay through Surcharge Payments or as a Termination Fee any portion of the overrun found to be unreasonable in such ADR proceeding. If CAISO contests the additional costs, Owner shall have the burden of proving that the additional costs were reasonable. If CAISO does not initiate ADR or makes a separate agreement with Owner, the additional costs shall be deemed reasonable and CAISO shall be obligated to pay CAISO's share of the actual costs through Surcharge Payments or as a Termination Fee. For the avoidance of doubt, the attached Schedule L-1 for the Capital Items for the 2013 Contract Year has been approved by CAISO.
- (d) If a proposed Capital Item is not approved, CAISO shall provide Owner a detailed statement of the reasons for the disapproval and, if the proposal

would be acceptable with modifications, a detailed list of the proposed modifications. Owner may accept the modifications proposed by CAISO, or CAISO or Owner may initiate an ADR proceeding to review CAISO's rejection or proposed modification if the Capital Item is necessary for Owner to meet its obligations under this Agreement. In such proceeding, CAISO may not support its disapproval on any basis not shown in its detailed statement of the reasons for disapproval. Any Capital Items approved through such ADR proceeding shall be recovered by Owner through Surcharge Payments under Article 8 and will be eligible for recovery through a Termination Fee pursuant to Section 2.5. Owner shall not be obligated to install any Capital Item unless CAISO is obligated to pay a Surcharge Payment for the Capital Item. For the avoidance of doubt, the attached Schedule L-1 for the Capital Items for the 2013 Contract Year has been approved by CAISO.

- (e) The preliminary and final reports and all additional information about proposed Capital Items provided to CAISO shall be treated as Confidential Information in accordance with Section 12.5.
- (f) If CAISO rejects a proposed Capital Item, such rejection is not reversed by ADR and it would be uneconomical, impractical or illegal to continue operation without the Capital Item, then Owner, subject to obtaining authorization from FERC (if required by law to do so), may terminate this Agreement with respect to the affected Unit without cost or liability therefore, except as provided in Section 2.4.

7.5 Unplanned Repairs and Unrecovered Upfront Costs

- (a) In the event of any loss or damage to the Facility that impairs the capability of one or more Units to Deliver ~~Energy or~~ Ancillary Services, Owner shall, without additional charge, make necessary Repairs, to the extent that:
 - (i) the total cost (net of proceeds received by Owner from Insurers and other third parties pursuant to applicable insurance, warranties and other contracts in connection with all Repairs and excluding costs covered by clause (ii)) of all Repairs for all Units ("Net Repair Costs") during the Contract Year does not exceed Owner's Repair Cost Obligation for the Facility; or
 - (ii) the loss or damage impairing the Unit's capability to produce ~~Energy or~~ Ancillary Services was caused by Owner's failure to comply with Good Industry Practice or by any wrongful act or omission by Owner. The reference to "Units" in clause (i) includes all Reliability Must-Run Units located at the Facility, but no other Reliability Must-Run Units. Except as provided above, Owner shall not be obligated to make any Repairs unless CAISO is obligated to pay CAISO's Repair Share for the Repairs.
- (b) If the Net Repair Costs incurred by Owner for all Repairs since the beginning of the Contract Year exceed Owner's Repair Cost Obligation, then Owner shall provide a notice thereof ("Unplanned Repair Notice") in

- the form attached as Schedule L-1 to CAISO. Owner shall provide such additional information as CAISO may reasonably require to evaluate such proposed Repairs.
- (c) CAISO shall submit a written acceptance or objection to Owner's proposal within 21 days of receipt of an Unplanned Repair Notice. CAISO shall be deemed to have accepted Owner's proposal in the Unplanned Repair Notice if CAISO does not submit a written objection within 21 days after receipt of the Unplanned Repair Notice, as provided above. Any objection shall be based on one or more of the following grounds:
- (i) the loss or damage was caused by Owner's failure to comply with Good Industry Practice;
 - (ii) the loss or damage was caused by a wrongful act or omission by Owner;
 - (iii) the Repairs are not required or are more extensive than required in order to make good the loss or damage concerned or to comply with applicable law;
 - (iv) the Net Repair Costs for the Contract Year will not exceed or has not exceeded the Owner's Repair Cost Obligation;
 - (v) the estimated cost of Repairs exceeds that which is reasonably necessary to effect such Repairs;
 - (vi) the Repair will not result in benefits to CAISO as compared to alternatives available to CAISO;
 - (vii) Owner's proposals for carrying out the Repairs or the proposed CAISO's Repair Share are unreasonable;
 - (viii) Owner's proposal includes estimated costs which are not properly treated as an expense under FERC's Uniform System of Accounts; or
 - (ix) Owner has not provided sufficient information to evaluate Owner's proposal. In addition to providing the basis of the objection, any objection of CAISO shall include a list of all changes CAISO contends should be made to Owner's proposal and justification of all such changes.
- (d) If CAISO submits an objection to an Unplanned Repair Notice, the Parties shall attempt to reach agreement on changes to Owner's proposal. If the Parties have not reached agreement within 30 days after CAISO's receipt of the Unplanned Repair Notice, Owner or CAISO may refer the matter to ADR under a schedule (specified by the arbitrator if the participants cannot agree) requiring a decision within 30 days following appointment of the arbitrator. The ADR decision will be effective without delay.
- (e) Owner shall proceed with the Repairs if it is agreed or determined pursuant to ADR that CAISO will pay CAISO's Repair Share or that Owner is otherwise obligated to make the Repairs. Owner shall keep full and detailed records of the cost of the Repairs and shall make them available to CAISO for inspection upon reasonable request.
- (f) If the actual cost of the Repairs exceeds the estimated cost, CAISO may initiate ADR to determine whether the additional costs were reasonable

- and shall not be obligated to pay any portion of the additional cost found to be unreasonable in such ADR proceeding. Owner shall have the burden of proving that the additional costs were reasonable.
- (g) If it is agreed or determined pursuant to ADR that CAISO will pay for a Repair, CAISO shall pay CAISO's Repair Share of the actual cost as a lump sum within 60 days after the later of (i) the completion of the Repair and (ii) the effective date of authorization by FERC, if any is necessary, for Owner to charge such cost to CAISO. "CAISO's Repair Share" means the Repair Payment Factor for the Repair at issue multiplied by the amount by which (i) the agreed or determined cost of Repairs at issue plus the Net Repair Costs of all prior Repairs for the Contract Year minus the cost of all prior Repairs for which CAISO is obligated to pay CAISO's Repair Share during the Contract Year exceeds (ii) Owner's Repair Cost Obligation. The Repair Payment Factor shall be as agreed to by Owner and CAISO. If Owner and CAISO do not agree on the Repair Payment Factor, the Repair Payment Factor shall equal the Fixed Option Payment Factor, unless the Owner demonstrates in ADR that it would not have made the proposed Repair in accordance with Good Industry Practice but for its obligations under this Agreement, in which case the Repair Payment Factor shall be as determined in ADR.
- (h) Owner shall use commercially reasonable efforts to recover its full entitlements under applicable insurance policies, warranties and other contracts even after CAISO has paid CAISO's Repair Share. Owner shall keep CAISO informed of the status of such recovery efforts and will refund to CAISO any portions of CAISO's Repair Share payment that is later recovered from any other party as a credit to CAISO on the next invoice with interest at the Interest Rate from the date such proceeds are received by Owner to the Due Date of such next invoice, or if this Agreement is terminated, as a payment upon submission of the Final Invoice.
- (i) If Owner is not obligated to make a Repair and does not do so, and if it would be uneconomical, impractical or illegal to continue operation without the Repair, then Owner, subject to obtaining authorization from FERC (if required by law to do so), may terminate this Agreement with respect to the affected Unit without cost or liability therefor, except as provided in Section 2.4.
- (j) If Owner makes a Repair notwithstanding that CAISO is not obligated to pay for the Repair, Owner shall not be entitled to recover the costs of the Repair from CAISO unless FERC approves recovery of the costs.
- (k) Owner's Repair Cost Obligation shall be an amount computed as follows:
- (i) Intentionally left blank
 - (ii) The Owner's Repair Cost Obligation shall be equal to 3% of the fixed operation and maintenance costs for all Units at the Facility, underlying the rates in effect at the beginning of the Contract Year.
- (l) [CAISO shall reimburse Owner for all of its unrecovered upfront costs incurred by Owner and its affiliates in connection with the implementation of the Synchronous Condenser Transaction, up to an aggregate maximum](#)

of \$875,000. Immediately following the Effective Date, Owner shall submit to CAISO a Schedule L-1 for such actually incurred costs in accordance with Article 9.

7.6 Unplanned Capital Items

- (a) To the extent a Capital Item is required to remedy or prevent impairment of the Unit's capability to Deliver ~~Energy or~~ Ancillary Services and the impairment was caused by Owner's failure to comply with Good Industry Practice or by any wrongful act or omission by Owner, Owner shall install such Capital Item at Owner's expense. Otherwise, Owner shall not be obligated to install any Capital Item unless CAISO is obligated to pay a Surcharge Payment for the Capital Item. The issue of whether Owner is obligated to install a Capital Item is subject to ADR.
- (b) If, during the Contract Year, Owner determines it is necessary to install Capital Items not approved under Section 7.4 and Owner has expended all amounts covered by the approved Small Project Estimates under Section 7.4, Owner shall provide a notice thereof ("Unplanned Capital Item Notice") on the form attached as Schedule L-1 to CAISO. Owner shall provide such information as CAISO may reasonably require in order to evaluate the proposed Capital Items.
- (c) CAISO shall submit a written acceptance or objection to Owner's proposal within 21 days after receipt of a complete Unplanned Capital Item Notice provided that if the proposal does not involve either loss or damage to the Facility or a Capital Item required by law or regulation, CAISO shall respond within 60 days. If CAISO fails to provide notice within such period, Owner's proposal in the Unplanned Capital Item Notice shall be deemed approved. Any objection shall be based on one or more of the following grounds:
 - (i) the impairment being remedied or prevented was caused by Owner's failure to comply with Good Industry Practice;
 - (ii) the impairment being remedied or prevented was caused by a wrongful act or omission by Owner;
 - (iii) the Capital Item is not required or is more extensive than required in order to remedy or prevent impairment to the Facility or to comply with applicable law;
 - (iv) the estimated cost of the Capital Item exceeds that which is reasonably necessary;
 - (v) installation of the Capital Item will not result in benefits to CAISO as compared to alternatives available to CAISO;
 - (vi) Owner's proposals for installing or testing the Capital Item are unreasonable;
 - (vii) Owner's proposals for depreciation of the cost of the Capital Item or calculation of the Annual Capital Item Cost and Surcharge Payment Factor are unreasonable; or
 - (viii) Owner has not provided sufficient information to evaluate Owner's proposal. In addition to providing the basis of the objection, any

objection of CAISO shall include a list of all changes CAISO contends should be made to Owner's proposal and justification of all such changes.

- (d) If CAISO submits an objection to an Unplanned Capital Item Notice, the Parties shall attempt to reach agreement on changes to Owner's proposal. If Owner's proposal involves either loss or damage to the Facility or the Capital Item is required by law and the Parties have not reached agreement 30 days after CAISO's receipt of the Unplanned Capital Item Notice, either Owner or CAISO may refer the matter to ADR under a schedule (specified by the arbitrator if the participants cannot agree) requiring a decision within 30 days following appointment of the arbitrator. The ADR decision will be effective without delay. Failure to agree on other proposed Capital Items may also be referred to ADR but without an expedited schedule.
- (e) Owner shall proceed to install the Capital Item if it is agreed or determined pursuant to ADR that CAISO will pay a Surcharge Payment for the Capital Item or that Owner is otherwise required to install the Capital Item. Owner shall keep full and detailed records of the cost of the Capital Item and shall make them available to CAISO for inspection upon reasonable request.
- (f) If the actual cost of the Capital Item exceeds the estimated cost, CAISO may initiate ADR to determine whether the additional costs were reasonable and shall not be obligated to pay any portion of the additional cost found to be unreasonable in such ADR proceeding. Owner shall have the burden of proving that the additional costs were reasonable.
- (g) If it is agreed or determined pursuant to ADR that CAISO will pay for the Capital Item, CAISO shall be deemed to have agreed that the cost of the Capital Item will be recovered through a Surcharge Payment under Article 8 and will be eligible for recovery through a Termination Fee pursuant to Section 2.5. The costs included in Surcharge Payments and Termination Fees to be paid by CAISO shall be net of all proceeds received by Owner from insurers and other third parties pursuant to applicable insurance, warranties and other contracts after deducting all costs Owner incurred to collect the proceeds. Owner shall use commercially reasonable efforts to recover its full entitlements under applicable insurance policies, warranties and other contracts. Owner shall keep CAISO informed of the status of such recovery efforts and will adjust future Surcharge Payments to reflect proceeds later recovered from any other party.
- (h) If the capability or performance of a Unit is impaired, if Owner is not obligated to install a Capital Item to remedy such impairment under Section 7.6(a) and does not do so, and if it would be uneconomical, impractical or illegal to continue operation without the Capital Item, then Owner, subject to obtaining authorization from FERC (if required by law to do so), may terminate this Agreement with respect to the affected Unit without cost or liability therefor except as provided in Section 2.4.
- (i) If Owner installs a Capital Item notwithstanding that CAISO is not obligated to pay for the Capital Item, Owner shall not be entitled to recover

- the costs of the Capital Item from CAISO unless FERC approves recovery of the costs.
- (j) Notwithstanding any other provision of this Agreement, if a Capital Item is required to remedy impairment of the Facility, the Unit's Monthly Option Payment shall not be decreased for any of the period of time during which Owner is waiting for CAISO's response to an Unplanned Capital Item Notice or during which ADR concerning an Unplanned Capital Item Notice is pending unless it is determined that Owner is required to install the Capital Item pursuant to Section 7.6 (a).

7.7 Adjustments to Performance Characteristics

- (a) If Owner installs any Capital Item or makes any Repairs the costs of which are paid by CAISO under this Agreement, Owner shall modify the Maximum Net Dependable ~~Capacity~~MVAr Capability, Unit Availability Limit, and performance characteristics of the affected Unit to reflect the resulting changes in operating costs effective as of the date CAISO's payment of CAISO's Repair Share of the Repairs is made, or in the case of a Capital Item, the date the cost of the Capital Item is included in a Surcharge Payment or the rates paid by CAISO.
- (b) If FERC authorization is required to permit Owner to recover the CAISO's Repair Share from CAISO or to include the costs of a Capital Item in a Surcharge Payment or the rates paid by CAISO hereunder, Owner shall make a Section 205 filing limited to recovery of the costs and implementation of related changes to performance characteristics, shall request that the filing become effective as of the date the Capital Item or Repair was placed in service and request expedited consideration of the filing. If CAISO has approved the Capital Item or Repair, CAISO shall intervene in support of such filing including support of requests to place the change in effect without suspension or hearing.
- (c) If Owner makes Repairs or installs a Capital Item when not required to do so and CAISO has not agreed or is not required by ADR to pay for such Repair or Capital Item, Owner may either:
- (i) make an appropriate adjustment to the Maximum Net Dependable ~~Capacity~~MVAr Capability, Unit Availability Limit and performance characteristics of the affected Unit to reflect the capability the Unit would have had if the Capital Item had not been installed or the Repairs had not been made; or
 - (ii) make appropriate adjustment to the Maximum Net Dependable ~~Capacity~~MVAr Capability, Unit Availability Limit and performance characteristics of the affected Unit to reflect the Repairs or installation of the Capital Item.
- (d) Any adjustment to the Heat Input characteristics of the Unit shall be made in accordance with Section 4.9(d).

7.8 Upgrades of Generating Units

Owner may Upgrade any Unit at the Facility, provided that no Upgrade shall release Owner from Owner's performance obligations under this Agreement. CAISO shall secure no rights under this Agreement to any capacity or services increased or enhanced by any Upgrade unless the Parties agree as to the terms of CAISO's rights and the amount of CAISO's payment for such Upgrade. If the Parties so agree, the Maximum Net Dependable ~~Capacity~~[MVar Capability](#), Unit Availability Limit and performance characteristics of the affected Unit shall be adjusted to reflect CAISO's agreed upon rights to the Upgrade provided that any adjustment in heat input shall be made in accordance with Section 4.9(d). If FERC authorization is required to permit Owner to recover the portion of the Upgrade cost CAISO has agreed to pay for the agreed revisions to the Unit characteristics, Owner shall make a Section 205 filing limited to recovery of the costs and implementation of related changes to the Maximum Net Dependable ~~Capacity~~[MVar Capability](#), Unit Availability Limit and performance characteristics, shall request that the filing become effective as of the date CAISO begins paying its agreed portion of the cost of the Upgrade and request expedited consideration of the filing. CAISO shall intervene in support of such filing including support of requests to place the change in effect without suspension or hearing.

7.9 Third-Party Participation in CAISO Review Process

- (a) Subject to fulfillment of the requirements of Section 7.9 (b), CAISO shall consult with the Responsible Utility and the California Agencies prior to approving Capital Items or Repairs. CAISO may approve Capital Items or Repairs aggregating less than \$5,000,000 for the Facility in a Contract Year without approval of the Responsible Utility or the California Agencies. After Capital Items and Repairs aggregating \$5,000,000 for the Facility in a Contract Year have been approved by CAISO, CAISO's approval of all other Capital Items and Repairs for that Contract Year shall not be effective unless the Responsible Utility has consented to such Capital Item or Repair. [For the avoidance of doubt, the Responsible Utility has approved recovery of the costs shown in the attached Schedule L-1 for the Capital Items for the 2013 Contract Year and the unrecovered upfront costs as Capital Items Repairs for the 2013 Contract Year up to an aggregate maximum of \\$875,000.](#)
- (b) The requirements of Section 7.9 (a) relating to Responsible Utilities shall apply only if and to the extent that the Responsible Utility agrees to waive its right to challenge before the FERC Owner's recovery of approved costs of Repairs or Capital Items. The requirement of Section 7.9 (a) relating to the California Agency shall apply only if and to the extent that each California Agency agrees to waive its right to challenge Owner's recovery of costs associated with the proposed Repairs or Capital Item on any grounds not set out in written objections provided by the California Agencies to CAISO and Owner within 30 days of the California Agencies'

receipt of the preliminary and final reports under Section 7.5 or Section 7.6.

- (c) Provided that the California Agencies and Responsible Utility are bound by the provisions of the Confidentiality and Non-disclosure Agreement attached as Schedule N and make the waivers required in Section 7.9 (b), Owner will provide copies of the required reports and notices under Section 7.4, Section 7.5 or Section 7.6, and any additional information provided to the CAISO pursuant to Sections 7.4, 7.5 and 7.6, as the case may be, to the California Agencies and Responsible Utility at the same time as the reports, notices and information are provided to CAISO, and CAISO will provide copies of all information provided to Owner pursuant to such Sections to the California Agencies and Responsible Utility.

ARTICLE 8 RATES AND CHARGES

8.1 **Condition 1 - [Not Applicable](#)**

When a Unit is under Condition 1, CAISO shall pay Owner each Month for each Unit the sum of:

- (a) the Monthly Option Payment which shall be equal to the Monthly Availability Payment plus the Monthly Surcharge Payment, minus the sum of all Non-Performance Penalties for the Month. In no event shall (i) the Monthly Option Payment for any month be less than zero, (ii) the sum of the Monthly Availability Payments for a Contract Year exceed the Annual Fixed Revenue Requirement for the Contract Year, or (iii) the sum of the Monthly Surcharge Payments for the Contract Year exceed the Annual Capital Item Cost (as defined in Schedule B) for the Contract Year. The Monthly Availability Payment and the Monthly Surcharge Payment shall each be computed in accordance with Schedule B. The Non-Performance Penalties for the Month shall be calculated in accordance with Section 8.5;
- (b) the Variable Cost Payment computed in accordance with Schedule C;
- (c) one-twelfth of the Prepaid Start-up Charge as set out on Schedule D;
- (d) the sum of the Start-up Adjustments calculated in accordance with Schedule D for each Start-up during the Month which was a Prepaid Start-up;
- (e) the sum for all Settlement Periods in the Month of the Pre-empted Dispatch Payments and Motoring Charges calculated in accordance with Schedule E;
- (f) once the Counted MWh for the Contract Year equals the Maximum Annual MWh, the Counted Service Hours for the Contract Year equals the Maximum Annual Service Hours, or the Counted MWh for hydroelectric units for the Month equals the Maximum Monthly MWh, a payment for each subsequent Billable MWh at the rate set out on Schedule G;
- (g) once the Counted Start-ups for the Contract Year equals the Maximum Annual Start-ups, a payment for each additional Start-up calculated in accordance with Schedule G; and

- (h) charges for services Delivered from Substitute Units pursuant to Sections 5.1(c) and (d).

8.2 Condition 2

When a Unit is operating under Condition 2, CAISO shall pay Owner the sum of:

- (a) the Monthly Option Payment, which shall be equal to the Monthly Availability Payment plus the Monthly Surcharge Payment, minus the sum of all Non-Performance Penalties for the Month. In no event shall (i) the Monthly Option Payment for any month be less than zero, (ii) the sum of the Monthly Availability Payments for a Contract Year exceed the Annual Fixed Revenue Requirement for the Contract Year or (iii) the sum of the Monthly Surcharge Payments for the Contract Year exceed the Annual Capital Item Cost (as defined in Schedule B) for the Contract Year. The Monthly Availability Payment and the Monthly Surcharge Payment shall each be computed in accordance with Schedule B. The Non-Performance Penalties for the Month shall be calculated in accordance with Section 8.5.
- (b) the Variable Cost Payment computed in accordance with Schedule C;
- (c) the sum of all Start-up Payments for the Month until Counted Start-ups equal Maximum Annual Start-ups computed in accordance with Schedule D;
- (d) the sum for all Settlement Periods in the Month of Motoring Charges calculated in accordance with Schedule E;
- (e) once the Counted ~~MWh for the Contract Year equals the Maximum Annual MWh or the Counted~~ Service Hours for the Contract Year ~~equals~~exceed the Maximum Annual Service Hours, a payment ~~for each subsequent Billable MWh at the rates~~shall be made as set out on Schedule G;
- (f) once the Counted Start-ups for the Contract Year equals the Maximum Annual Start-ups, a payment for each additional Start-up calculated in accordance with Schedule G; and
- (g) charges for services Delivered from Substitute Units pursuant to Section 5.1(c) and (d).

8.3 Determination of Billable MWh and Hybrid MWh - Not Applicable

- (a) "Billable MWh" shall be determined by application of the following rules:
- (i) If a Unit under Condition 1 or Condition 2 Delivers MWh only in Nonmarket Transactions during a Settlement Period, the Billable MWh shall be the lesser of (A) the Hourly Metered Total Net Generation or (B) the Requested MWh.
- (ii) If a Unit under Condition 1 delivers MWh in both Market and Nonmarket Transactions during a Settlement Period:
- (A) If the Hourly Metered Total Net Generation during the Settlement Period is equal to or greater than the Requested MWh applicable to the Settlement Period, the Billable MWh shall be (1) the Requested MWh minus (2) the Hybrid MWh, but shall never be less than zero.

- (B) If the Hourly Metered Total Net Generation during the Settlement Period is less than the Requested MWh applicable to the Settlement Period, the Billable MWh shall be (1) Hourly Metered Total Net Generation minus (2) the Hybrid MWh, but shall never be less than zero.
- (iii) If a Unit is under Condition 2, the Billable MWh shall be the lesser of (A) the Hourly Metered Total Net Generation or (B) the sum of (1) Requested MWh and (2) the amount, if any, by which the total MWh for which Owner's bids pursuant to Section 6.1 (b) cleared the market exceeds the Requested MWh.
- (b) "Hybrid MWh" shall be the sum of the MWh scheduled in Market Transactions which were substituted for Requested MWh under Section 5.2 and the MWh scheduled in Market Transactions for which CAISO issued a Dispatch Notice pursuant to Section 4.5 provided that Hybrid MWh shall never exceed the Hourly Metered Total Net Generation.

8.4 Determination of Prepaid Start-ups

Prepaid Start-ups for Condition 1 shall be the Maximum Annual Start-ups. There shall be no Prepaid Start-ups for Condition 2.

8.5 Non-Performance Penalty

- (a) If a Unit fails to comply fully with a Dispatch Notice and such failure is not due to a Force Majeure Event under this Agreement, the Unit shall be subject to a Non-Performance Penalty computed in accordance with this Section 8.5.
- (b) The Non-Performance Penalty shall be calculated for each hour of the Penalty Period in which Owner is not deemed to be in full compliance with a Dispatch Notice and is not excused from performance. The Non-Performance Penalty shall be the sum of the amounts calculated for each Settlement Period in the Month by multiplying (i) the Availability Deficiency Factor for the Settlement Period by (ii) the sum of the Hourly Penalty Rate and the Hourly Surcharge Penalty Rate for the Unit as set forth on Schedule B; provided that the Non-Performance Penalty for any Month shall not exceed the sum of the Condition 1 Availability Payment and Condition 1 Surcharge Payment (for Units on Condition 1), or the sum of the Condition 2 Availability Payment and Condition 2 Surcharge Payment (for Units on Condition 2) for the Month. For purposes of this calculation:
 - (i) an Availability Deficiency Factor shall be calculated for each hour of the Penalty Period as one minus the number determined by dividing (a) the Delivered ~~MWh~~ MVA_{rh} for the hour in question by (b) the product of the Unit Availability Limit and the percentage of the hour (up to 100%) that the Unit was subject to a Dispatch Notice;
 - (ii) the Penalty Period shall be the 72 hour period beginning at the time Owner fails to comply fully with a Dispatch Notice, provided that if

- Owner in accordance with Section 7.2(a) had scheduled an outage to begin during the 72 hour period, the Penalty Period will terminate at the time the outage was scheduled to begin.
- (iii) the Unit Availability Limit shall be the Unit Availability Limit as it existed at the time CAISO issued the Dispatch Notice with which Owner failed to comply but reduced to eliminate the effect of any Force Majeure Event affecting deliveries during the Penalty Period.
- (c) For purposes of this Section 8.5 and Section 4.9(a)(i), a Unit shall be deemed to be in full compliance with a Dispatch Notice if the Unit Delivers (i) at least 97 percent of the Requested ~~MW or (ii) not more than 2 MW less than the Requested MW~~ MVAr.

8.6 Long-term Planned Outage Adjustment

Not later than 60 days after the end of each Contract Year, Owner shall submit to CAISO a statement showing the Long-term Planned Outage Adjustment for the Contract Year. The Long-term Planned Outage Adjustment shall equal (a) the Hourly Availability Charge plus each Hourly Capital Item Charge, as shown in Schedule B, multiplied by (b) the difference, if positive, of (i) the hours scheduled for performance of Long-term Planned Outages minus (ii) the actual hours spent performing Long-term Planned Outages during the Contract Year. Owner shall credit any Long-term Planned Outage Adjustment on the next invoice or, if this Agreement has terminated, shall pay any Long-term Planned Outage Adjustment to the CAISO upon submission of the Final Invoice. This Section 8.6 shall not apply to 2013 Contract Year.

ARTICLE 9 STATEMENTS AND PAYMENTS

9.1 Invoicing

- (a) The billing, invoicing and payment of charges under this Agreement shall be as specified in this Article 9, Schedule O to this Agreement and Section 11.13 of the CAISO Tariff. CAISO shall not modify any provision of Section 41 of the CAISO Tariff or Section 11.13 as they apply to this Agreement without Owner's consent, provided that Owner's consent shall not be required for a change of allocations of RMR costs among market participants under the CAISO Tariff. Notwithstanding anything in this Agreement to the contrary, invoices either due or from the RMR Owner or Responsible Utility for an amount less than \$10.00 will be adjusted to \$0.00 and no amounts will be due to or from that RMR Owner or Responsible Utility for that invoice.

- (b) Owner will submit to CAISO RMR Invoices for each Month during the term of this Agreement, which are defined in this Section 9.1(b) as follows: (i) Estimated RMR Invoice; (ii) Revised Estimated RMR Invoice; (iii) Adjusted RMR Invoice; and (iv) Revised Adjusted RMR Invoice. In the event there are no revisions to the Estimated RMR Invoice or the Adjusted RMR Invoice, Owner shall submit an e-mail to CAISO with a copy to the Responsible Utility indicating that the Estimated RMR Invoice or the Adjusted RMR Invoice shall be deemed to be the Revised Estimated RMR Invoice or the Revised Adjusted RMR Invoice.
- (i) Within 14 days after the end of each Month during the term of this Agreement (and, if this Agreement does not expire or terminate at the end of a Month, within 14 days after the end of the Month in which the Agreement expires or terminates), Owner shall submit an estimated invoice (“Estimated RMR Invoice”) to CAISO for all charges and credits due under this Agreement for the Month (“Billing Month”). Each Estimated RMR Invoice shall reflect actual data for the Billing Month to the extent actual data is available and shall otherwise reflect estimated data.
- (ii) By the date specified on the RMR Payments Calendar, Owner shall submit a revised estimated invoice (“Revised Estimated RMR Invoice”) to CAISO, which will include appropriate revisions based on the CAISO’s validation of the Estimated RMR Invoice. The Due Date of the Revised Estimated RMR Invoice shall be the 30th day after the date on which Owner submitted the Estimated RMR Invoice to CAISO, or if such date is not a Business Day, the Due Date shall be the next Business Day.
- (iii) By the date specified on the RMR Payments Calendar, CAISO shall submit an invoice (“CAISO Invoice”) to the Responsible Utility, with an e-mail notification to Owner and the Responsible Utility, which specifies the payment due from the Responsible Utility to CAISO and from CAISO to Owner on the basis of the Revised Estimated RMR Invoice. However, in the event the payment is due from Owner to CAISO and from CAISO to the Responsible Utility, then CAISO shall submit the CAISO Invoice to Owner with an e-mail notification to Owner and the Responsible Utility.
- (iv) Within 7 days of receipt by Owner of the Recalculation Settlement Statement for the last day of the Billing Month, Owner shall submit an adjusted invoice (“Adjusted RMR Invoice”) to CAISO, reflecting actual data for the Billing Month.
- (v) By the date specified on the RMR Payments Calendar, Owner shall submit to CAISO an invoice reflecting actual data for the Billing Month and including appropriate revisions based on the CAISO’s validation of the Adjusted RMR Invoice (“Revised Adjusted RMR Invoice”). The Due Date of the Revised Adjusted RMR Invoice shall be the 30th day after the date on which Owner submitted the

Adjusted RMR Invoice to CAISO, or if such date is not a Business Day, the Due Date shall be the next Business Day.

- (vi) By the date specified on the RMR Payments Calendar, CAISO shall submit an CAISO Invoice to the Responsible Utility, with an e-mail notification to Owner and the Responsible Utility, which specifies the payment due from the Responsible Utility to CAISO and from CAISO to Owner on the basis of the Revised Adjusted RMR Invoice. However, in the event the payment is due from Owner to CAISO and from CAISO to the Responsible Utility, then CAISO shall submit the CAISO Invoice to Owner with an e-mail notification to Owner and the Responsible Utility.
- (c) If the day on which any RMR Invoice is due to be issued is not a Business Day, such RMR Invoice shall be issued on the next succeeding Business Day.
- (d) Each RMR Invoice shall use the template posted on the CAISO Website in accordance with Schedule O ("RMR Invoice Template"). Each RMR Invoice shall set out detailed calculations and breakdowns of the amounts due, shall identify the source of each input used in the calculations, and shall identify all relationships among data in different invoice levels.
- (e) This section 9.1(e) applies to all Condition 1 Units. Any amounts received by or due to Owner's Scheduling Coordinator for Billable MWh and Ancillary Services Delivered in Nonmarket Transactions during the Billing Month shall be subtracted from the amount otherwise due under each RMR Invoice. If subtraction of the Energy and any Ancillary Service amounts for a Unit under Condition 1 results in a credit to CAISO on an RMR Invoice, the credit shall be carried forward ("Credit Carryforward") to the RMR Invoices for each succeeding Billing Month in that Contract Year until extinguished; provided that Owner shall not be required to carry any such credit into a later Contract Year or to pay any part of such credit to CAISO.
- (f) This section 9.1(f) applies to all Condition 2 Units. All amounts received by or due to Owner's Scheduling Coordinator in connection with Market Transactions and Nonmarket Transactions during the Billing Month ("Scheduling Coordinator Revenues") shall be subtracted from the amount otherwise due under each RMR Invoice. If subtracting the Scheduling Coordinator Revenues results in a credit to CAISO on an RMR Invoice, the credit shall be carried forward ("Credit Carryforward") to the appropriate RMR Invoices for each succeeding Billing Month in that Contract Year until extinguished. If there is an unextinguished credit balance remaining at the end of the Contract Year, Owner shall refund to CAISO an amount equal to the lesser of (i) the remaining balance of Scheduling Coordinator Revenues or (ii) the total amounts due Owner pursuant to Section 8.2 for the Contract Year minus all Scheduling Coordinator Revenues previously credited to Owner during such Contract

- Year. Such refund amount will be included on December's Adjusted RMR Invoice, or the Final Invoice if the Agreement is terminated.
- (g) In the event any corrections, surcharges, credits, refunds or other adjustments pertaining to a Billing Month are discovered after the Revised Adjusted RMR Invoice for such Billing Month has been issued ("Prior Period Changes"), then such Prior Period Changes shall be included in a worksheet for the prior period ("Prior Period Change Worksheet") and submitted for payment in the next allowed Billing Month for Prior Period Changes. The allowed Billing Months for Prior Period Changes are as follows. Any Prior Period Changes pertaining to the months of January through June of a Contract Year which are discovered prior to the submission of the December Estimated RMR Invoice for such Contract Year shall be included in a Prior Period Change Worksheet submitted with the December Estimated RMR Invoice. Any Prior Period Changes pertaining to the months of July through December of a Contract year which are discovered prior to the submission of the May Estimated RMR Invoice for the subsequent Contract year shall be included, subject to Section 9.8, in a Prior Period Change Worksheet submitted with the May Estimated RMR Invoice for the subsequent Contract Year. Any Prior Period Changes pertaining to a Billing Month for a prior Contract Year which are discovered after the first opportunity to submit a Prior Period Change Worksheet has passed, shall be included in a Prior Period Change Worksheet submitted with the Estimated RMR Invoice for the next December or May Billing Month, whichever comes first. Any Prior Period Changes pertaining to the time when the Facilities were under a superseded rate schedule using Conditions of Must Run Agreement A, B, and C, shall be calculated through a separate process and not included on RMR Invoices issued under this Agreement unless the Prior Period Changes result from the Revenue Requirements Settlements outlined in the Stipulation and Agreement approved on May 28, 1999, in FERC Docket No. ER98-441-000, et al.
- (h) Owner shall send a copy of each RMR Invoice and any Prior Period Change Worksheet(s) to the Responsible Utility at the time it sends such invoices to CAISO.
- (i) Owner shall provide supporting detail with the Prior Period Change Worksheets to identify the relevant Contract Year and provide clear calculations by Facility, by Billing Month, and such other detail as necessary to support the Prior Period Change(s). This level of detail shall be consistent with the level of detail originally required to perform the computation(s) that are being corrected in the Prior Period Change Worksheet. Prior Period Change Worksheets, when required, shall include all identified Prior Period Changes for each applicable prior Contract Year, and shall be computed as specified in section 9.1(j).
- (j) A Prior Period Change Worksheet shall contain the following information and calculations for each Billing Month in the relevant Contract Year(s),

commencing with the Billing Month pertaining to the Prior Period Change(s):

- (i) The Revised Adjusted RMR Invoice for the Billing Month or, if such Billing Month has previously been submitted on a Prior Period Change Worksheet, the most recent revision of such RMR Invoice.
- (ii) A revision of the RMR Invoice specified in paragraph (1) above which shows the RMR Invoice revised to incorporate the Prior Period Change(s) as if such Prior Period Change(s) had been invoiced in the Billing Month which gave rise to the Prior Period Change(s). Such revision shall incorporate the impact of the Prior Period Change(s) on RMR payments, including any impact resulting from the Credit Carryforward calculation for the current or previous Billing Months in the Contract Year. For Condition 2 Units, such calculation shall include a recalculation of the refund described in Section 9.1(f).
- (iii) The difference between the amounts calculated under paragraph (2) above and paragraph (1) above. The amount due to or from Owner as a result of this calculation shall be clearly specified, with interest shown separately from any other amount due. Interest shall be calculated at the Interest Rate from the Due Date of the Revised Estimated RMR Invoice for the Billing Month to the date payment of the amount due is made.

Owner shall total for all Billing Months which are included on the Prior Period Change Worksheet, the amount due as a result of the calculation in paragraph (3) above for each Billing Month. Owner shall also total for all Billing Months which are included on the Prior Period Change Worksheet, the interest due as a result of the calculation in paragraph (3) above for each Billing Month. The total amount due and interest due shall be transferred from the Prior Period Change Worksheet to the appropriate Estimated RMR Invoice, and such amounts shall be due as specified on the Estimated RMR Invoice.

- (k) Any time a Unit switches from Condition 1 to Condition 2 or Condition 2 to Condition 1 during a Contract Year, the provisions of Section 9.1(e) shall apply to the months when the unit was on Condition 1 and the provisions of Section 9.1(g) shall apply to the months when the unit was on Condition 2.
- (l) CAISO shall separately post on the CAISO Website examples ("Prior Period Change Examples") developed and agreed to by the RMR Invoice Task Force created under Schedule O of the calculations described in Sections 9.1(e), 9.1(f), 9.1(g) and 9.1(j) to provide guidance on the correct treatment of Prior Period Changes and to show the correct preparation of the Prior Period Change Worksheet and transfer of amount due to the appropriate Estimated RMR Invoice. Additionally, the RMR Invoice Task Force shall develop and agree to, and CAISO shall post on the CAISO Website, guidelines ("Prior Period Change Guidelines") underlying the calculations described in Sections 9.1(e), 9.1(f), 9.1(g) and 9.1(j). The

Prior Period Change Worksheet shall be prepared, and the amount due shall be calculated and transferred to the Estimated RMR Invoice, in accordance with the RMR Invoice Template, the Prior Period Change Examples, and the Prior Period Change Guidelines posted on the CAISO Website. In the event of a dispute regarding the treatment of Prior Period Changes, all Parties to such dispute shall refer to the Prior Period Change Examples and Prior Period Change Guidelines posted on the CAISO Website for guidance.

9.2 Facility Trust Accounts

CAISO shall establish two segregated commercial bank accounts under the "Facility Trust Account" referred to in Sections 11.13 and 41 of the CAISO Tariff for each Responsible Utility. One commercial bank account, the "RMR Owner Facility Trust Account", shall be held in trust by CAISO for Owner. The other commercial bank account, the "Responsible Utility Facility Trust Account", shall be held in trust by CAISO for the Responsible Utility. Payments received by CAISO from a Responsible Utility in connection with this Agreement, including payments following termination of this Agreement, will be deposited into the RMR Owner Facility Trust Account and payments from CAISO to Owner will be withdrawn from such Account, all in accordance with Sections 11.13 and 41 of the CAISO Tariff and this Article 9. Any payments received by CAISO from Owner in connection with this Agreement, including payments following termination of this Agreement, will be deposited into the Responsible Utility Facility Trust Account. Any payments to a Responsible Utility of funds received from Owner under this Agreement will be withdrawn from the Responsible Utility Facility Trust Account, all in accordance with Section 11.13 and 41 of the CAISO Tariff, and this Agreement. Neither the RMR Owner Facility Trust Account nor the Responsible Utility Facility Trust Account shall have other funds commingled in it at any time.

9.3 Payment

(a) CAISO shall pay Owner all invoiced amounts due on Revised Estimated RMR Invoices, Revised Adjusted RMR Invoices, and Final Invoices whether or not disputed by CAISO or the Responsible Utility except to the extent that CAISO (i) is entitled to a refund on a Revised Estimated or Revised Adjusted RMR Invoice or Final Invoice against such payment under this Agreement or (ii) is entitled to deduct an amount under Section 9.6. All payments shall be made from the RMR Owner Facility Trust Account on or before the Due Date by wire transfer in accordance with instructions from Owner. If Owner is also the Responsible Utility, at the discretion of Owner payments to it may be made by memorandum account instead of wire transfer. Owner shall establish and maintain a settlement account at a commercial bank located in the United States and reasonably acceptable to CAISO which can effect money transfers via Fed-Wire where payments to and from the Facility Trust Accounts shall be made in accordance with Section 9.2 and Section 11.13 of the CAISO

Tariff. Owner shall notify CAISO of its settlement account details prior to the Effective Date. Owner may from time to time change its settlement account details, provided that, Owner shall give CAISO 15 days notice before making changes. In the event there is a refund amount due to CAISO, Owner shall refund the amount due CAISO in accordance with Section 9.2 and Section 11.13 of the CAISO Tariff.

- (b) If a Revised Adjusted RMR Invoice is less than the amount paid by CAISO on the Revised Estimated RMR Invoice, the difference shall be paid by Owner to CAISO with interest at the Interest Rate from the Due Date of the Revised Estimated RMR Invoice to the Due Date of the Revised Adjusted RMR Invoice, or, if the Agreement is terminated, shall be paid to CAISO on submission of the Final Invoice. If a Revised Adjusted RMR Invoice is greater than the amount paid by CAISO under the Revised Estimated RMR Invoice, CAISO shall pay Owner the difference with interest at the Interest Rate from the Due Date of the Revised Estimated RMR Invoice to the Due Date of the Revised Adjusted RMR Invoice by CAISO.

9.4 Payment Default

- (a) Except as provided in Section 9.4 (b), Owner, in addition to any other remedy it may have, may pursue all claims against CAISO and the Collateral, as defined in Section 9.7 below, if CAISO fails to pay any invoice in full by the Due Date as required under Section 9.3. CAISO, in addition to any other remedy it may have, may pursue all claims against Owner if Owner fails to pay any invoice in full by the Due Date as required under Section 9.3. The parties' remedies shall be subject to the limitations set forth in Article 11.
- (b) If the amounts CAISO has not paid have been invoiced by CAISO to the Responsible Utility and the Responsible Utility has not paid such amounts to CAISO, Owner shall cause execution to issue against, and shall collect solely from the Collateral or the Responsible Utility, and not CAISO, if all of the following conditions have been satisfied:
- (i) The Responsible Utility is ~~INSERT SCE, PGE or SDGE, as applicable~~ Southern California Edison Company ("SCE") and San Diego Gas & Electric Company ("SDG&E"), with SCE responsible for 80% and SDG&E responsible for 20% of all costs under this Agreement, with each severally liable for that percentage.
 - (ii) CAISO has invoiced via the CAISO Invoice ~~INSERT SCE, PGE or SDGE, as applicable~~ and SDG&E for costs (net of any applicable credits, all as shown on the Revised Estimated or Revised Adjusted RMR Invoice) after deducting only amounts permitted to be deducted under Section 9.6.
 - (iii) The CAISO Tariff expressly requires ~~INSERT SCE, PGE or SDGE, as applicable~~ and SDG&E to pay all amounts shown on the CAISO Invoices without offset, recoupment or deduction (except to the extent that Section 41 of the CAISO Tariff permits

- deduction of amounts that are due the Responsible Utility after resolution of a dispute) and, to the extent that ~~INSERT SCE, PGE or SDGE, as applicable~~SDG&E disputes any amounts due under the CAISO Invoices, to pay the disputed amounts under protest and subject to refund with interest; and
- (iv) ~~INSERT SCE, PGE or SDGE, as applicable~~SDG&E fails to pay all or a portion of the amounts due under the CAISO Invoices and did not have the right to have such amount deducted under Section 41 of the CAISO Tariff.
- (c) Notwithstanding the provisions of Section 9.4 (b), Owner may cause execution to issue against, and collect from, CAISO, the Responsible Utility, the Collateral or insurance maintained by CAISO pursuant to Section 12.1(a), if notwithstanding the requirement to pay CAISO Invoices without offset, recoupment or deduction (except to the extent that Section 41 of the CAISO Tariff permits deduction of amounts that are due the Responsible Utility after resolution of a dispute), a Responsible Utility nonetheless offsets amounts unrelated to this Agreement or withholds amounts based on a breach or default by CAISO of any of its obligations to the Responsible Utility.
- (d) The CAISO Invoices shall separately show the amounts due for services from each Facility. If the Responsible Utility withholds any portion of the amount due under the CAISO Invoices, CAISO shall inform Owner of the specific Facility and time periods for which the Responsible Utility withheld payments.
- (e) As a condition for Owner's agreement not to seek to recover amounts from CAISO under Section 9.4(b), CAISO agrees to include and retain in the CAISO Tariff provisions expressly recognizing that Owner is a third party beneficiary of, and has all rights that CAISO has under the CAISO Tariff, at law, in equity or otherwise, to enforce the Responsible Utility's obligation to pay all sums invoiced to it in the CAISO Invoices but not paid by the Responsible Utility, to the extent that, as a result of the Responsible Utility's failure to pay, CAISO does not pay Owner on a timely basis amounts due under this Agreement. Owner recognizes that its rights as a third party beneficiary are (i) no greater than CAISO's rights against the Responsible Utility, and (ii) subject to Section 13 of the CAISO Tariff regarding dispute resolution. Either CAISO or Owner (but not both) will be entitled to enforce any claim arising from unpaid CAISO Invoices, and only one party will be a "disputing party" under Section 13 of the CAISO Tariff with respect to such claim so that the Responsible Utility will not be subject to duplicate claims or recoveries. Owner shall have the right to control the disposition of claims against the Responsible Utility for non-payments which result in payment defaults by CAISO under this Agreement. To that end, CAISO agrees that in the event of nonpayment by the Responsible Utility of amounts due under the CAISO Invoices, CAISO will not take any action to enforce its rights against the Responsible Utility unless CAISO is requested to do so by Owner. CAISO

shall cooperate with Owner in a timely manner as necessary or appropriate to most fully effectuate Owner's rights related to such enforcement, including using its best efforts to enforce the Responsible Utility's payment obligations if, as, to the extent, and within the time frame, requested by Owner. CAISO shall intervene and participate where procedurally necessary to the assertion of a claim by Owner.

- (f) If a Responsibility Utility was not the Responsible Utility on April 1, 1998 (a "New Responsible Utility") and if:
- (i) The senior unsecured debt of the New Responsible Utility is rated or becomes rated at less than A- from Standard & Poors ("S&P") or A3 from Moody's Investment Services ("Moody's), and
 - (ii) Such ratings do not improve to A- or better from S&P or A3 or better from Moody's within 60 days,

CAISO shall then require the New Responsible Utility to issue and confirm to CAISO an irrevocable and unconditional letter of credit in an amount equal to three times the highest monthly payment invoiced by CAISO to the New Responsible Utility (or the prior Responsible Utility) in connection with services provided under this Agreement during the last 3 months for which invoices have been issued. The letter of credit must be issued by a bank or other financial institution whose senior unsecured debt rating is not less than A from S&P and A2 from Moody's. The letter of credit shall authorize CAISO or Owner to draw on the letter of credit for deposit solely into the RMR Owner Facility Trust Account in an amount equal to any amount due and not paid by the Responsible Utility under the CAISO Invoices.

9.5 Interest

If CAISO or Owner fails to make any payment by the Due Date, the amount due but not paid shall accrue interest at the Interest Rate from the Due Date until the amount is paid.

9.6 Disputed Amounts

- (a) If CAISO or the Responsible Utility disputes a Revised Estimated or Revised Adjusted RMR Invoice or Final Invoice or part thereof submitted by Owner under this Agreement, or if the Responsible Utility disputes an CAISO Invoice or part thereof that relates to an RMR Invoice or Final Invoice submitted by Owner to CAISO under this Agreement, and if such dispute is based in whole or part on an alleged error or breach or default of Owner's obligations to CAISO under this Agreement, then CAISO promptly shall give written notice to Owner of the reasons for the dispute and the amount in dispute. CAISO shall pay Owner the disputed amount without offset, recoupment or reduction of any kind or nature. Such payment may, however, be made by CAISO under protest with reservation of the right to seek a refund with interest at the Interest Rate from the date of the disputed payment to the date of repayment. If CAISO notifies Owner that CAISO or the Responsible Utility disputes any amount of

Owner's RMR Invoice or Final Invoice, Owner shall at its own cost provide CAISO with all information and assistance CAISO reasonably requires to resolve the dispute and shall join with CAISO in any discussions and negotiations with the Responsible Utility to resolve the dispute. The dispute shall be subject to ADR provided that in such ADR proceeding only one entity (CAISO or Responsible Utility) will be the disputing party with respect to such claim. Owner shall be obligated to refund to CAISO as a result of resolution of such dispute only if, and to the extent, the resolution determines the amount invoiced by Owner exceeded the amounts due Owner under this Agreement for the period covered by the RMR Invoices(s) and/or Final Invoice. Any amount agreed or determined to be owed by Owner to CAISO under this Section 9.6 (a) shall be refunded by Owner to CAISO with interest, by Owner's inclusion of such refund (including interest) in a Prior Period Change Worksheet included with the next appropriate May or December Estimated RMR Invoice as specified in Sections 9.1(g) through 9.1(l) of this Agreement. If Owner does not include such refund (including interest) in the appropriate RMR Invoice, then such refund shall be made by CAISO's deduction of such amount from the next Revised Estimated and Revised Adjusted RMR Invoice(s) and Final Invoice submitted by Owner to CAISO under this Agreement until such amount is extinguished, or, if this Agreement has terminated, by paying such amount to CAISO. Interest shall be at the Interest Rate unless it is determined through ADR that the amount invoiced by Owner was submitted without a good faith basis in fact or law, in which case interest shall be at twice the Interest Rate.

- (b) It is expressly understood that the Responsible Utility shall, to the extent set forth herein, be a third party beneficiary of, and shall have all rights that CAISO has under this Agreement, at law, in equity and otherwise, to dispute an RMR Invoice or Final Invoice submitted to CAISO by Owner under this Agreement and to enforce Owner's obligation to make any required payment to CAISO under this Agreement to the extent CAISO does not make a related deposit into the Responsible Utility Facility Trust Account as a result of Owner's failure to make the required payment. The rights of the Responsible Utility as third party beneficiary shall be no greater than CAISO's rights against Owner and shall be subject to the ADR provisions of this Agreement. Either CAISO or the Responsible Utility, but not both, will be entitled to enforce any claim arising from a related set of facts, and only one such entity will be a disputing party under Article 11 of this Agreement with respect to any such claim so that Owner shall not be subject to duplicate claims or recoveries. If the Responsible Utility is not the Owner, the Responsible Utility shall control the disposition of all claims against Owner for non-payment described in this Section 9.6, including the choice of disputing party. The CAISO shall have the right to intervene for the purpose of participating in the proceeding even if it is not the disputing party. CAISO shall cooperate with the Responsible Utility in a timely manner as necessary or

appropriate to most fully effectuate the Responsible Utility rights related to such enforcement, including using its best efforts to enforce Owner's payment obligations if, as, to the extent, and within the time frame, requested by Responsible Utility. Subject to the foregoing, CAISO shall intervene and participate where procedurally necessary to the assertion of a claim by the Responsible Utility.

9.7 Payment Security

To secure all of CAISO's payment obligations to Owner under this Agreement, CAISO agrees to grant Owner a security interest and lien in the following collateral (collectively, the "Collateral"): (a) all past, present and future accounts and other amounts Responsible Utility owes CAISO at any time pursuant to Section 41 of the CAISO Tariff attributable to invoices submitted by Owner under this Agreement (collectively, the "Accounts"), (b) the RMR Owner Facility Trust Account, all funds in the RMR Owner Facility Trust Account at any time, and all funds paid on account of any Accounts, (c) all proceeds of the Collateral, if any, and (d) all of CAISO's right, title and interest in the Collateral. CAISO represents and warrants to Owner that (a) CAISO has the authority to grant such security interest, (b) CAISO will have good, marketable and exclusive title to all of the Collateral, (c) such security interest and lien will at all times be a valid, enforceable and first-priority lien on the Collateral, and (d) such security interest will be duly perfected by the filing of a financing statement under the California Uniform Commercial Code describing the Collateral in the office of the Secretary of State of California and the delivery of a written notice of Owner's security interest to the bank with which the RMR Owner Facility Trust Account is maintained. If CAISO defaults on its obligation to pay under this Agreement, Owner shall be entitled to enforce such security interest, to exercise its rights in the Collateral, to collect the Accounts from Responsible Utility, to collect all funds in the RMR Owner Facility Trust Account, and to exercise all other rights and remedies under the California Uniform Commercial Code. CAISO agrees to promptly execute and deliver all financing statements and other documents Owner reasonably requests, including but not limited to a written notice of Owner's security interest in the Collateral to the bank with which the RMR Owner Facility Trust Account is maintained, in order to maintain, perfect and enforce such security interest.

9.8 Errors

If a Party discovers an error in the amount of an invoice or payment under this Agreement and notifies the other Party within 60 days after discovering the error, the error shall be corrected as specified in Sections 9.1(g) through 9.1(l) of this Agreement; provided that a Party shall not be entitled to have an error corrected unless the Party notifies the other Party within 12 months after the date of the applicable Revised Adjusted RMR Invoice or Final Invoice, or within 60 days after

issuance of the final report with respect to an audit pursuant to Section 12.2(g), whichever is later.

9.9 Payment of Termination Fee

- (a) Within 14 days after the end of each Month during the period in which any Termination Fee is payable under Section 2.5, Owner shall submit an invoice ("Termination Fee Invoice") to CAISO and a copy to the Responsible Utility for all Termination Fee amounts due for the Month. Each Termination Fee Invoice shall: (i) be broken down by Unit and (ii) clearly identify the source of each input used.
- (b) CAISO shall pay Owner amounts invoiced under this Section 9.9 in accordance with Sections 9.3 through 9.8. If CAISO or, if applicable, the Responsible Utility, has disputed the amount of a Termination Fee stated in a Termination Fee Invoice, then neither CAISO nor the Responsible Utility shall be required to give notice of the same disputed amount as to subsequent Termination Fee Invoices.

9.10 Payment of Final Invoice

- (a) Within 7 days of receipt by Owner of the Recalculation Settlement Statement for market transactions for the effective date of termination of this Agreement, Owner shall submit an invoice ("Final Invoice") to CAISO and a copy to the Responsible Utility for all charges and other amounts then due under this Agreement. Amounts then due shall include: (i) charges for all ~~Billable MWh and~~ Ancillary Services provided under this Agreement and not previously invoiced; (ii) the Long-term Planned Outage Adjustment under Section 8.6. and (iii) refunds described in section 9.1(f) for Condition 2 Units. Calculation of the Long-term Planned Outage Adjustment shall be made by deeming the effective date of termination to be the end of the Contract Year, and by assuming that all Long-term Planned Outages scheduled to occur after the termination date occur as scheduled. The Final Invoice shall not include remaining Monthly payments of a Termination Fee under Section 2.5, which shall continue to be paid monthly until the obligation is extinguished.
- (b) CAISO shall pay Owner the amount stated in the Final Invoice in accordance with Section 9.3 through 9.8.

ARTICLE 10 FORCE MAJEURE EVENTS

10.1 Notice of Force Majeure Events

If either Party is unable to perform its obligations under this Agreement due to a Force Majeure Event, the Party unable to perform shall notify the other Party of the Force Majeure Event promptly after the occurrence thereof. The Party's notice may be given orally but shall promptly be confirmed in writing or electronically.

10.2 Effect of Force Majeure Event

- (a) If a Force Majeure Event prevents a Party from performing, in whole or in part, its obligations under this Agreement, such Party's obligations, other than obligations to pay money (unless the means of transferring funds is affected), shall be suspended and such Party shall have no liability with respect to such obligations; provided, that the suspension of the Party's obligations is of no greater scope and of no longer duration than is required by the Force Majeure Event.
- (b) If a Force Majeure Event (other than a flood, storm or drought affecting a hydroelectric Unit) reduces the Availability of a Unit, the Availability shall be determined as if the Unit were available up to the Unit Availability Limit in effect prior to the Force Majeure Event through the earlier of the 120th day following the Force Majeure Event or until the Unit's Availability is restored, whichever occurs first. If a flood or storm Force Majeure Event reduces the Availability of a hydroelectric Unit, the Availability shall be determined as if the Unit were available up to its Unit Availability Limit in effect prior to the Force Majeure Event through the earlier of the 120th day following the Force Majeure Event or until the Unit's Availability is restored, and as if the Unit were available up to one-half of such Unit Availability Limit from the 120th day through the earlier of the 240th day or the date on which the Unit's Availability is restored. If a drought Force Majeure Event reduces the Availability of a hydroelectric Unit, the Availability shall be determined as if the Unit were available up to its Unit Availability Limit in effect prior to the Force Majeure Event until the Unit's Availability is restored following the end of the drought Force Majeure Event.

10.3 Remedial Efforts

The Party that is unable to perform by reason of a Force Majeure Event shall use commercially reasonable efforts to remedy its inability to perform and to mitigate the consequences of the Force Majeure Event as soon as reasonably practicable; provided, that no Party shall be required to obtain replacement power or to settle any strike or other labor dispute on terms which, in the Party's sole discretion, are contrary to its interest and, except to the extent that the Unit's primary fuel is distillate fuel oil or Schedule H expressly requires Owner to maintain fuel oil capability for the Unit, Owner shall not be required to obtain or use fuel oil to operate a Unit. The Party unable to perform shall advise the other Party of its efforts to remedy its inability to perform and to mitigate the consequences of the Force Majeure Event, and shall advise the other Party of when it believes it will be able to resume performance of its obligations under this Agreement.

ARTICLE 11 REMEDIES

11.1 Dispute Resolution

The Parties shall make reasonable efforts to settle all disputes arising out of or in connection with this Agreement. Unless this Agreement expressly provides that a particular type of dispute is not subject to ADR, the Parties shall use ADR procedures to resolve all disputes which are not otherwise settled. Owner and CAISO will promptly join with all other owners of Reliability Must-Run Units and all Responsible Utilities to jointly develop ADR procedures to be used in connection with such disputes. Following unanimous agreement of Owner, CAISO and Responsible Utilities to the ADR procedures, such procedures shall be posted on CAISO Website. Until there is unanimous agreement on such procedures, the Parties shall use the ADR procedures contained in Schedule K.

11.2 Waiver of Damages

- (a) Except for the obligations set forth in Section 11.4 (Termination for Default) and Section 12.6 (Indemnity), neither Party shall be liable to the other Party for any claim, loss or damage of any nature arising out of or relating to the performance or breach of this Agreement including replacement power costs, loss of revenue, loss of anticipated profits or loss of use of, or damage to, plant or other property, personal injury, or death; provided, however, that this waiver of liability shall not include or cover any claim, damage or loss arising out of the willful misconduct of either Party. Amounts that are specifically payable or reimbursable by the other Party under the terms of this Agreement shall not be considered "claims, losses or damages" for purposes of this Section.
- (b) Neither Party shall be liable to the other for any special, indirect, incidental or consequential damages suffered by the other Party or by third parties arising out of, or relating to, this Agreement or the performance of, or breach of any obligation under, this Agreement, or the negligence of any Party. This limitation shall apply even if the Party is advised of the possibility of these damages.
- (c) Except for the obligations to make or adjust payments or pay penalties expressly provided in Section 2.5 (Termination Fee), Section 7.4 (Planned Capital Items), Section 7.5 (Unplanned Repairs), Section 7.6 (Unplanned Capital Items), Section 7.8 (Upgrades of Generating Units), Article 8 (Rates and Charges) and Article 9 (Statements and Payments), of this Agreement, either Party's maximum aggregate liability for any and all claims arising out of or relating to performance or breach of this Agreement during the Contract Year, whether based upon contract, tort (regardless of degree of fault or negligence), strict liability, warranty, or otherwise, including any liability for Owner's failure to Deliver Requested ~~MWh or Requested~~ Ancillary Services shall not exceed \$20 million.

11.3 Injunctive Relief

In addition to any other remedy to which a Party may be entitled by reason of the other Party's breach of this Agreement, the Party not in default shall be entitled to seek temporary, preliminary and permanent injunctive relief from any court of competent jurisdiction restraining the other Party from committing or continuing any breach of this Agreement.

11.4 Termination For Default

- (a) If either Party shall fail to perform any material obligation imposed on it by this Agreement and that obligation has not been suspended pursuant to Section 10, the other Party, at its option, may terminate this Agreement by giving the Party in default notice setting out specifically the circumstances constituting the default and declaring its intention to terminate this Agreement. If the Party receiving the notice disputes the notice, it shall notify the other Party within 14 days after receipt of the notice setting out specifically the grounds of such disputes. Time is of the essence in remedying a default. If the Party receiving the notice does not, within 30 days after receiving the notice, remedy the default or refer the dispute to ADR, the Party not in default shall be entitled by a further notice to terminate this Agreement. The Party not in default shall have a duty to mitigate damages.
- (b) Termination of this Agreement pursuant to this Section 11.4 shall be without prejudice to the right of Owner or CAISO to collect any amounts due to it prior to the time of termination. ~~If CAISO terminates this Agreement as to any Unit(s) due to Owner's default, Owner shall reimburse to CAISO the amount, if any, by which costs incurred by CAISO as a direct result of the termination through the end of the then current Contract Year exceed the costs which CAISO would have incurred absent such termination.~~

11.5 Cumulative and Nonexclusive

Except as provided in Section 5.4(b), each remedy provided for in this Agreement shall be cumulative and not exclusive.

11.6 Beneficiaries

Except as is specifically set forth in this Agreement, nothing in this Agreement, whether express or implied, confers any rights or remedies under, or by reason of, this Agreement on any persons other than the Parties and their respective successors and assigns, nor is anything in this Agreement intended to relieve or discharge the obligations or liability of any third party, nor give any third person any rights of subrogation or action against any Party. The owner of title to a Unit that is leased to Owner is an intended beneficiary of Section 2.2(e).

ARTICLE 12

COVENANTS OF THE PARTIES

12.1 Insurance

- (a) The CAISO shall maintain (i) an errors and omissions insurance policy and (ii) director and officer insurance, with combined aggregate coverage of at least \$150 million under the two policies and an operating reserve of at least \$15 million. The CAISO may reduce the level of insurance coverage, but may not do so unless it provides Owner at least 90 days notice of its intent to reduce the insurance coverage. At Owner's request, CAISO shall provide Owner with evidence of the insurance coverage it has in place. This Section 12.1 shall not be construed to require CAISO to maintain any level of coverage for any period after termination of the Agreement.
- (b) Owner and CAISO will secure and maintain in effect during the term of this Agreement the insurance required by Schedule I. Self-insurance may be utilized by mutual agreement. Owner shall name CAISO as an additional insured on its general commercial liability insurance policies. CAISO shall name Owner as an additional insured on its errors and omissions insurance policies. Owner and CAISO will each certify or cause its respective insurance agent to certify that it is insured under a major risk management program, including self-insured retentions, and except for policies covered by Section 12.1 (a), such insurance will remain in effect in amounts meeting the requirements of Schedule I.

12.2 Books And Records

- (a) For a period of 36 months from creation of the records, Owner shall maintain and make available for audit by CAISO complete operations records for each Unit. Such records shall include:
 - (i) information for each Settlement Period on the Availability of the Units, Delivered ~~MWh and Delivered~~ Ancillary Services,
 - (ii) outages,
 - (iii) Facility licenses and permits,
 - (iv) copies of operating and maintenance agreements for the Unit,
 - (v) a list of citations filed against the Unit by any environmental, air quality, health and safety, or other regulatory agency in the last 36 months,
 - (vi) a list of any resolved and unresolved WSCC log items from the last 36 months pertaining to the Unit,
 - (vii) maintenance, overhauls and inspections performed, and
 - (viii) books, accounts and all documents required to support Owner's statements, invoices, charges and computations made pursuant to this Agreement.

CAISO may audit Owner's books, accounts and documents relating to invoices, statements, charges and computations no more frequently than

- once each Contract Year, and only one time following expiration or termination of this Agreement.
- (b) The Responsible Utility shall have the right to participate jointly with CAISO in auditing books, accounts, documents and operating records of the Facilities to the extent required to verify the accuracy and correctness of all Owner's statements, invoices, and computations underlying all Owner charges passed through by CAISO to the Responsible Utility in connection with services rendered by Owner under this Agreement.
 - (c) For a period of 36 months from the creation of the records, CAISO shall maintain and make available for audit by Owner all operations records required to permit Owner to verify that CAISO has complied with its obligations to Owner under this Agreement.
 - (d) In addition to the audit rights under Section 12.2 (a) and (b), if Owner's rates are determined pursuant to the formula contained in Schedule F, representatives of CAISO and the Responsible Utility shall have the right jointly to audit the records, accounts and supporting documents of Owner to verify (i) the accuracy of any arithmetic calculation and (ii) application of the formula.
 - (e) If Owner's rates are determined pursuant to the formula contained in Schedule F, the California Agency shall have the right to audit the records, accounts and supporting documents of Owner or CAISO to verify the accuracy of any arithmetic calculation and application of the formula, including the accuracy of allocation to accounts under the FERC Uniform System of Accounts, 18 C.F.R. Part 101. If there is more than one California Agency, only one audit shall be conducted by the California Agencies and such audit shall be binding on all the California Agencies.
 - (f) Any entity exercising its right to audit under this Section 12.2 shall give the audited entity not less than 30 days prior written notice of the audit. Books or records requested in any audit shall be available for inspection by the auditing entity at the offices of the entity being audited between 9:00 A.M. and 5:00 P.M. on Business Days. Any audit under this Section 12.2 shall be completed not more than 36 months after the records were created. Any audit right herein shall be limited to the books and accounts of Owner or CAISO and shall not extend to the books and accounts of the parent or any other affiliate of Owner or CAISO. The expense of any audit shall be borne solely by the auditing Party or entity.
 - (g) No adjustments to payments shall be required as a result of an audit unless, and then only to the extent that, CAISO, Owner, or another entity making such an audit under this Section 12.2 takes written exception to the books and accounts and makes a claim upon Owner or CAISO for any discrepancies disclosed by such audit within 60 days following issuance of the final audit report.
 - (h) All information provided during the course of an audit shall be treated as Confidential Information in accordance with Section 12.5.
 - (i) Nothing in this Agreement shall override any obligation Owner or CAISO may have under applicable law to maintain books and records for periods

longer than 36 months nor shall this Agreement override any obligation Owner or CAISO may have to make books and records available for audit by FERC or any other entity. Nothing in this Agreement is intended to limit in any manner (i) the authority of FERC to audit the books and records of Owner or CAISO or the manner in which such audit is noticed or conducted or (ii) CAISO's right to audit market participants (including Owner) under the CAISO Tariff.

12.3 Representations And Warranties

- (a) CAISO represents and warrants to Owner as follows:
 - (i) CAISO is a validly existing corporation with full authority to enter into this Agreement.
 - (ii) CAISO has taken all necessary measures to have the execution and delivery of this Agreement authorized, and upon the execution and delivery of this Agreement shall be a legally binding obligation of CAISO.
- (b) Owner represents and warrants to CAISO as follows:
 - (i) Owner is a validly existing ~~[limited liability company]~~~~[corporation]~~~~[municipal corporation]~~ with full authority to enter into this Agreement.
 - (ii) Owner has taken all necessary measures to have the execution and delivery of this Agreement authorized, and upon the execution and delivery this Agreement shall be a legally binding obligation of Owner.

12.4 Responsibilities

Each Party shall be responsible for protecting its facilities from possible damage by reason of electrical disturbances or faults caused by the operation, faulty operation, or non-operation of the other Party's facilities. The other Party shall not be liable for any damages so caused.

12.5 Confidentiality

- (a) Except as may otherwise be required by applicable law, all information and data provided by the Parties to one another pursuant to this Agreement and marked "Confidential" or otherwise identified with specificity in writing as confidential at the time of disclosure ("Confidential Information") shall be treated as confidential and proprietary material of the providing Party and will be kept confidential by the receiving Party and used solely for purposes of this Agreement. Confidential Information will not include information that is or becomes available to the public through no breach of this Agreement, information that was previously known by the receiving Party without any obligation to hold it in confidence, information that the receiving Party receives from a third party who may disclose that information without breach of law or agreement, information that the receiving Party develops independently without using the Confidential Information, and information that the disclosing Party

approves for release in writing. The receiving Party shall keep such information confidential and shall limit the disclosure of any such Confidential Information to only those personnel within its organization with responsibility for using such information in connection with this Agreement. The receiving Party shall assure that personnel within its organization read and comply with the provisions of this Section 12.5 and any Confidentiality Agreement implementing this Section 12.5. The Parties shall use all reasonable efforts to maintain the confidentiality of the Confidential Information in any litigation, shall promptly notify the providing Party of any attempt by a third party to obtain the Confidential Information through legal process or otherwise. A Party or third party beneficiary under Article 9 which has received Confidential Information may use that information in litigation or regulatory proceedings related to this Agreement but only after notice to the other Party and affording the other Party an opportunity to obtain a protective order or other relief to prevent or limit disclosure of the Confidential Information.

- (b) The Parties may provide any Confidential Information (i) to the Responsible Utility pursuant to provisions of this Agreement under which information is to be provided to that Responsible Utility and as required for settlement and billing; (ii) to any entity with audit rights under Section 12.2 or review rights specified in other provisions of this Agreement, (iii) on a need-to-know basis, to Owner's Scheduling Coordinator, financial institutions, agents, lessors of the Unit and potential purchasers of interests in a Unit; and, (iv) as required for settlement and billing, to Scheduling Coordinators responsible for paying for services provided under this Agreement. As a condition to receiving any Confidential Information under this Section 12.5, the recipient shall execute a Confidentiality Agreement in the applicable form contained in Schedule N and thereby agree to be subject to the non-disclosure and other obligations contained in this Section 12.5.
- (c) The obligation to provide confidential treatment to Confidential Information shall not be affected by the inadvertent disclosure of Confidential Information by either Party.

12.6 Indemnity

Subject to the limitations in Section 11.2 (b), each Party shall indemnify, defend and hold harmless the other Party and its officers, directors, employees, agents, contractors and sub-contractors, from and against all third party claims, judgments, losses, liabilities, costs, expenses (including reasonable attorneys' fees) and damages for personal injury, death or property damage, caused by the negligence or willful misconduct related to this Agreement or breach of this Agreement of the indemnifying Party, its officers, directors, agents, employees, contractors or sub-contractors, provided that this indemnification shall be only to the extent such personal injury, death or property damage is not attributable to the negligence or willful misconduct related to this Agreement or breach of this Agreement of the Party seeking indemnification, its officers, directors, agents,

employees, contractors or sub-contractors. This indemnification shall not include or cover any claim covered by any workers' compensation law. This indemnification shall be for an amount not exceeding the deductible of the indemnifying Party's commercial general liability insurance in the case of Owner and errors and omission insurance in the case of CAISO. The indemnified Party shall give the other Party prompt notice of any such claim. The indemnifying Party shall have the right to choose competent counsel, control the conduct of any litigation or other proceeding, and settle any claim. The indemnified Party shall provide all documents and assistance reasonably requested by the indemnifying Party. Section 14 of the CAISO Tariff shall not apply to this Agreement.

12.7 Owner Financial Requirements

- (a) Through the term of the Agreement, Owner shall maintain an investment grade rating by Moody's or Standard and Poor's or provide documentation from a financial institution or corporate owner acceptable to the CAISO that there is an equity position described below. The CAISO shall not unreasonably withhold acceptance of the documentation.
- (i) An equity to debt ratio of at least 30%, or
 - (ii) An equity to total asset ratio of at least 30% or
 - (iii) Demonstrate to the CAISO's reasonable satisfaction that other factors, including, without limitations, commercial financing arrangements, and working capital positions, mitigate the risk of Owner failing to meet the performance requirements under this Agreement.
- (b) If the Owner does not possess and maintain an investment grade rating, an equity position or make other arrangements as described in Section 12.7 (a), then it must provide one of the following:
- (i) Proof of insurance to cover the financial exposure to the CAISO for one year of Capital Items, Repairs, fuel and any other operating expenses; or
 - (ii) Security to cover the financial exposure to the CAISO for one year of Capital Items, Repairs, fuel and any other operating expenses in one of the following forms:
 - (A) standby letter of credit;
 - (B) corporate guarantee;
 - (C) cash deposit; or
 - (D) security bond.

ARTICLE 13 ASSIGNMENT

13.1 Assignment Rights and Procedures

Neither Party shall assign its rights or delegate its duties under this Agreement without the prior written consent of the other Party, which shall not be unreasonably withheld. CAISO shall be entitled to deny consent to a proposed

assignment by Owner only if the assignee does not meet the financial criteria set out in Section 13.2 (a) or the technical criteria set out in Section 13.2 (b). Notwithstanding the foregoing, if FERC approves an assignment, then the non-assigning Party shall be deemed to have consented to the assignment, subject to the non-assigning Party's right to seek judicial review of a FERC decision. Each Party shall give the other Party prompt notice of any proposed assignment or delegation, together with such information as the other Party may reasonably request with respect to the proposed assignment or assignee. Each Party shall be deemed to consent to the assignment or delegation unless it submits a written objection to the assignment or delegation within 14 days of receiving the notice and all financial and technical information as required in Sections 13.2(a) and 13.2(b). In the event of an assignment of this Agreement pursuant to a Financing Agreement, CAISO will execute for the benefit of the bank, financial institution or other entity with an interest in the Financing Agreement, a consent to such assignment reasonably acceptable to CAISO and Owner. An assignment of this Agreement by Owner in connection with the sale of a Unit shall terminate Owner's rights and obligations under this Agreement prospectively from the effective date of the assignment.

13.2 Limitation on Right to Withhold Consent

- (a) CAISO shall not withhold consent to assignment of this Agreement on financial grounds if the assignee meets the financial requirements in Section 12.7(a) or provides financial security pursuant to Section 12.7(b).
- (b) CAISO shall not withhold consent to an assignment on grounds that the assignee is not technically qualified if the assignee was an Owner of a Reliability Must-Run Unit as of May 1, 1999 or the assignee submits appropriate documentation to the CAISO to establish that it has sufficient resources and expertise to be able to:
 - (i) Secure the necessary fuel and transportation for the fuel for the Facility;
 - (ii) Secure all necessary support services, including water supply, communications, waste disposal, etc. for the Facility;
 - (iii) Provide service from the Facility in compliance with the terms of this Agreement;
 - (iv) Provide the engineering and other technical services required to support operation and maintenance of the Facility;
 - (v) Obtain as necessary, and comply with all permits or licenses required to operate or maintain the Facility; and
 - (vi) Provide environmental services required for the operation and maintenance of the Facility.
- (c) The proposed assignee shall provide the last two years' annual audited financial statements and quarterly financial statements (unaudited) prior to the proposed date of purchase. If the proposed assignee is a new company and there are no historical financial statements, then a financial institution or corporate owner must provide pro forma financial statements in a form acceptable to the CAISO.

13.3 Transfer of Conditions Following Assignment

If this Agreement is assigned to a new Owner pursuant to Section 13.1, the new Owner may transfer one or more Units to a different Condition by giving CAISO at least seven days prior notice provided that such notice is given not later than 30 days after the effective date of the assignment. The transfer shall become effective on the first day of month following the later of (i) seven days after the effective date of the assignment or (ii) seven days after the date CAISO receives the new Owner's transfer notice. This section shall not apply to assignment to a new Owner which is an affiliate of Owner as defined in 18 C.F.R. Section 161.2.

ARTICLE 14
MISCELLANEOUS PROVISIONS**14.1 Notices**

Except as otherwise expressly provided in this Agreement or required by law, all notices, consents, requests, demands, approvals, authorizations and other communications provided for in this Agreement shall be in writing and shall be sent by personal delivery, certified mail, return receipt requested, facsimile transmission or by recognized overnight courier service, to the intended Party at such Party's address set forth in Schedule J. Any notices which may be given orally and are given orally shall be confirmed in writing. All such notices shall be deemed to have been duly given and to have become effective: (a) upon receipt if delivered in person or by facsimile; (b) two days after having been delivered to an air courier for overnight delivery; or (c) seven days after having been deposited in the United States mail as certified or registered mail, return receipt requested, all fees pre-paid, addressed to the applicable address(es) set forth in Schedule J.

14.2 Effect of Invalidation

Each covenant, condition, restriction and other term of this Agreement is intended to be, and shall be construed as, independent and severable from each other covenant, condition, restriction and other term. If any covenant, condition, restriction or other term of this Agreement is held to be invalid by any court or regulatory body having jurisdiction, the invalidity of such covenant, condition, restriction or other term shall not affect the validity of the remaining covenants, conditions, restrictions or other terms hereof unless the invalidity has a material impact upon the rights and obligations of the Parties. If an invalidity has a material impact on the rights and obligations of the Parties, the Parties shall make a good faith effort to renegotiate and restore the benefits and burdens of this Agreement as they existed prior to the determination of an invalidity.

14.3 Amendments

- (a) Any amendments or modifications of this Agreement shall be made only in writing and, except for changes authorized by the FERC under Sections 205 or 206 of the Federal Power Act, shall be duly executed by both

- Parties. To the extent that any amendments or modifications are subject to FERC approval, such amendments or modifications shall become effective when permitted to be effective by FERC. For purposes of this Agreement, transfer of any Unit from one condition to the other condition or termination of the Agreement as to less than all Units shall not constitute a modification or amendment to this Agreement.
- (b) Where Owner's rates are not subject to FERC jurisdiction, either CAISO or Owner may, not later than 90 days prior to the end of each Contract Year, serve a notice on the other Party and the Responsible Utility stating that it requires a review of the terms of this Agreement, including any rates, prices and charges contained therein ("Review Notice").
- (i) The Review Notice shall, as a minimum requirement, set forth the following:
- (A) the precise nature of the proposed revisions (indicating, where possible, the relevant Article, Section and Schedule); and
- (B) justification for each proposed revision.
- (ii) The Party in receipt of the Review Notice shall respond to such notice within 30 days of its receipt by issuing a notice in response ("Response Notice"). The Response Notice shall, as a minimum requirement, set forth the following:
- (A) those revisions set forth in the Review Notice that are accepted as proposed;
- (B) those revisions set out in the Review Notice that are not accepted;
- (C) alternative proposals (if any) to the proposed revisions set out in the Review Notice;
- (D) any revisions required by the responding party not covered by (A) through (C) above; and
- (E) its justification for any of the matters raised under Sections 14.3 (b) (ii) (B) (C) or (D).
- (iii) Any Party failing to respond to a Review Notice shall be deemed to have accepted the revisions set out in the Review Notice.
- (iv) Following receipt of the Response Notice the duly authorized representatives of the Parties shall meet to negotiate in good faith any revisions to this Agreement.
- (v) In the event that the Parties are unable to reach agreement on the revisions to be made to this Agreement within 60 days of the date of the Review Notice, either Party may refer the matter for resolution through ADR. The arbitrator shall determine the revisions, if any, to the Agreement on the basis that:
- (A) the purpose of the Agreement is to maintain the reliability of CAISO Controlled Grid; and
- (B) costs and charges payable by CAISO should reflect the costs of providing services to the CAISO.

- (vi) In the event that the Parties agree to the revisions, or such matters are determined through ADR, or a Party fails to respond to a Review Notice, the agreed, determined or deemed accepted revisions shall take effect and the rights and obligations of the Parties shall be amended as from the beginning of the ensuing Contract Year or from such other date and time agreed between the Parties or determined through ADR, and following such time the Parties shall act in accordance with the terms and conditions of this Agreement as amended.

14.4 Filings Under Sections 205 or 206 of the Federal Power Act

~~Nothing~~ Except as otherwise provided in this Agreement, nothing contained in this Agreement shall be construed as affecting the right of Owner unilaterally to make application to FERC for a change in rates, terms and conditions under Section 205 of the Federal Power Act and pursuant to FERC rules and regulations promulgated thereunder. CAISO may challenge such application or may submit complaints concerning Owner's rates, terms and conditions under Section 206 of the Federal Power Act and pursuant to FERC rules and regulations promulgated thereunder.

14.5 Construction

The language in all parts of this Agreement shall in all cases be construed as a whole and in accordance with its fair meaning, and shall not be construed strictly for or against either of the Parties.

14.6 Governing Law

This Agreement shall be interpreted and construed under and pursuant to the laws of the State of California, without regard to conflicts of laws principles.

14.7 Parties' Representatives

Both Parties shall ensure that throughout the term of this Agreement, a duly appointed Representative is available for communications between the Parties. The Representatives shall have full authority to deal with all day-to-day matters arising under this Agreement. If a Party's Representative becomes unavailable, the Party shall promptly appoint another Representative. Acts and omissions of Representatives shall be deemed to be acts and omissions of the Party. Owner and CAISO shall be entitled to assume that the Representative of the other Party is at all times acting within the limits of the authority given by the Representative's Party. Owner's Representatives and CAISO's Representatives shall be identified on Schedule J.

14.8 Merger

This Agreement and the Stipulation and Agreements filed April 2, 1999 and August 14, 2000 in Docket Nos. ER98-441-000 et al. constitute the full agreement of the Parties with respect to the subject matter hereto and supersede all prior agreements, whether written or oral, with respect to such subject matter.

14.9 Independent Contractors

Nothing contained in this Agreement shall create any joint venture, partnership or principal/agent relationship between the Parties. Neither Party shall have any right, power or authority to enter into any agreement or commitment, act on behalf of, or otherwise bind the other Party in any way.

14.10 Conflict with CAISO Tariff

The CAISO Tariff shall govern matters relating to the subject matter of this Agreement which are not set forth in this Agreement. In all other circumstances, this Agreement shall govern. In the event of a conflict between the terms and conditions of this Agreement and any terms and conditions set forth in the CAISO Tariff the terms and conditions of this Agreement shall prevail. For the avoidance of doubt, the provisions of the CAISO Tariff applicable to Generating Units shall apply to the Units except where the context makes them clearly inapplicable to synchronous condensers.

14.11 Waiver

The failure to exercise any remedy or to enforce any right provided in this Agreement shall not constitute a waiver of such remedy or right or of any other remedy or right provided herein. A Party shall be considered to have waived any remedies or rights hereunder only if such waiver is in writing.

14.12 Assistance

During the term of this Agreement, each Party shall provide such reasonable assistance and cooperation as the other Party may require in connection with performance of the duties and obligations of each Party under this Agreement, including, but not limited to, assistance in securing any necessary regulatory approvals and in facilitating necessary financing.

14.13 Headings

Article and section headings used in this Agreement are inserted for convenience only and are not intended to be a part hereof or in any way to define, limit, describe or to otherwise be used in interpreting the scope and intent of the particular provisions to which they refer.

IN WITNESS WHEREOF, this Agreement has been executed as of the date first above written.

AES Huntington Beach, L.L.C.

By: _____

Name:

Title:

The California Independent System Operator Corporation

By: *SBRL*

Name: **Steve Berberich**

President &

Title: **Chief Executive Officer**

FERC
RELIABILITY MUST-RUN SCHEDULES

- Schedule A Unit Characteristics, Limitations and Owner Commitments
- Schedule B Monthly Option Payment
- Schedule C Variable Cost Payment **– Not Applicable**
- Part 1 for Thermal Units
 - Part 2 for Geothermal Units
 - Part 3 for Conventional Hydro Units
 - Part 4 for Pumped Storage Hydro Units
 - Part 5 for Biomass Generation Units
- Schedule D Start-up Payment
- Part 1 for Condition 1 Units **– Not Applicable**
 - Part 2 for Condition 2 Units
- Schedule E Ancillary Services Payment
- Part 1 for Condition 1 **– Not Applicable**
 - Part 2 for Condition 2
 - Part 3 for Black Start Services **– Not Applicable**
- Schedule F Determination of Annual Revenue Requirements of Must-Run Generating Units **– Not Applicable**
- Schedule G Charges for Service in Excess of Contract Service Limits
- Schedule H Fuel Oil Service **– Not Applicable**
- Schedule I Insurance Requirements
- Schedule J Notices
- Schedule K Dispute Resolution
- Schedule L-1 Request for Approval of Capital Items or Repairs
- Schedule L-2 Capital Item and Repair Progress Reports

Schedule M Mandatory Market Bid for Condition 2 Units
When Dispatched by the CAISO [– Not Applicable](#)

Schedule N-1 Non-Disclosure and Confidentiality Agreement for Responsible
Utilities

Schedule N-2 Non-Disclosure and Confidentiality Agreement for Entities
Other than Responsible Utilities

Schedule O Owner's Invoice Process

Schedule P Reserved Energy for Air Emissions Limitations [– Not Applicable](#)

Schedule A**Unit Characteristics, Limitations and Owner Commitments****1. Description of Facility**

Provide the following information for all units at the Facility, regardless of their RMR designation status. Information regarding units not designated as Reliability Must-Run Units is required only if and to the extent that the information is used to allocate Facility costs between Reliability Must-Run Units and other units.

Unit	RMR (Y/N)	Maximum Net Dependable Capacity MVar Capability (includes CAISO-paid Upgrade capacity)*	Fuel Type
Huntington Beach Unit 3	Y	145 MVar	N/A
Huntington Beach Unit 4	Y	145 MVar	N/A

~~For this Facility, the Owner will use _____ [insert either MW, MWhs, or service hours] in Schedule B to allocate Annual Fixed Revenue Requirements to and among Units. This election shall be applicable to all Facilities containing Reliability Must Run Units subject to any "RMR contract" as defined in the CAISO Tariff executed by Owner or any of its affiliates as defined in 18 CFR § 161.2.~~

* Maximum Net Dependable ~~Capacity~~[MVar Capability](#) shall reflect any transformer or line loss to the Delivery Point.

2. Description of RMR Units

Provide the address(es) of the Units at the Facility and the following tabular information:

	Huntington Beach Unit 3	Huntington Beach Unit 4
Type (fossil, combustion turbine, etc.)	Synchronous Condenser	Synchronous Condenser
Synchronous Condenser Capability (Y/N)	Y	Y
Power Factor Range (lead to lag)	N/A	N/A
Maximum Reactive Power Leading, MVar MVar	145	145
Maximum Reactive Power Lagging, MVar MVar	145	145
Load at Maximum MVar MVar Lagging, MW	N/A	N/A
Load at Maximum MVar MVar Leading, MW	N/A	N/A
Black Start Capable (Y/N)	N	N
Automatic Start or Ramp (Y/N)*	N	N
Upgrade Capacity Paid by CAISO, MW	N/A	N/A

* If "Y", describe the conditions under which the Unit will start or ramp automatically.

*

3. Operational and Regulatory Limitations of RMR Units: [N/A](#)

Air Emissions Limitations - [N/A](#)

List applicable NO_x, CO, SO₂, particulate, and other appropriate emissions limits; note the name and address of the lead agency; the agency's applicable rule number(s); and note those pollutants for which an emissions cap applies.

Monthly Reserved MWh for Air Emission Limitations - [N/A](#)

Operating Limits related to Ambient Temperatures

Ambient Temperature Correction Factors for Availability Test

Provide a curve or table showing the Ambient Temperature Correction Factors for each Unit (the relationship between Ambient Temperature and Maximum Net Dependable Capability).

FERC License Conditions (hydroelectric Units)

Other Limits (e.g., cooling water discharge)

4. Delivery Point

Unit	Transmission Node (Station Name)	Voltage
Huntington Beach Unit 3	SCE Ellis 230 kV Bus	230kV
Huntington Beach Unit 4	SCE Ellis 230 kV Bus	230kV

5. Metering and Related Arrangements

Unit	Meter Location	Meter (Manufacturer & Model No.)
Huntington Beach Unit 3	Huntington Beach Units 3&4 Control Room	Landis + Gyr; MaxSYS 2510
Huntington Beach Unit 4	Huntington Beach Units 3&4 Control Room	Landis + Gyr; MaxSYS 2510

6. Start-up Lead Times

Non-hydroelectric Units

Unit	Start-up Segment Number	Generating Unit Down Time (Minutes)	Generating Unit Start-up Time (Minutes)
Huntington Beach Unit 3	4 N/A	N/A	60
Huntington Beach Unit 4	2 N/A	N/A	60
	1		

~~“X_{max}” used in Schedules C and D shall be equal to or less than the hours in the heading of this column. The Start up Lead Time shall be the Startup time as defined and submitted by the Owner through the process outlined in the CAISO-Tariff Schedules and Bids Protocol Section 6.6 or its successor.~~

Hydroelectric Start-up Lead Times

Unit	Time from notification to Minimum Load - Normal work hours	Time from notification to Minimum Load - Outside Normal Work hours
N/A	N/A	N/A

7. **Ramping Constraint**

Describe any constraints the Unit incurs between Minimum Load and PMax.

[N/A](#)

8. **Ramp Rate**

Unit	Ramp Rate Segment Number	Output of Point Range (MW)	Minimum Ramp Rate (MW/Minute)	Maximum Ramp Rate (MW/Minute)
Huntington Beach Unit 3	1 N/A	N/A	N/A	N/A
Huntington Beach Unit 4	2 N/A	N/A	N/A	N/A
	1			

Separate Ramp Rates will be shown for each load range and will describe any special restrictions affecting Ramp Rates at various load points, e.g., feed pump operation, heat soaks, etc.

The Ramp Rate shall be the Operational Ramp Rate submitted by the Owner through the process described in the CAISO Tariff. On the Effective Date, the values in the CAISO Master File shall be set equal to the values shown in the table above.

9. **Minimum Load**

Unit	Manual (MW)	AGC (MW)
Huntington Beach Unit 3	N/A	N/A
Huntington Beach Unit 4	N/A	N/A

10. Minimum Run Time

Unit	Hours
Huntington Beach Unit 3	0
Huntington Beach Unit 4	0

11. Minimum Off Time

Unit	Hours
Huntington Beach Unit 3	0.5
Huntington Beach Unit 4	0.5

12. Contract Service Limits

Unit	Unit Contract Year	Maximum Annual MWh	Maximum Annual Service Hrs	Maximum Annual Start-ups
Huntington Beach Unit 3	2013	N/A	2086	145
	2014-2016	N/A	2636	200
Huntington Beach Unit 4	2013	N/A	2086	145
	2014-2017	N/A	2636	200

Maximum Monthly MWh (Hydroelectric Units only)

~~MWh~~
[N/A](#)

13. Owner's Repair Cost Obligation

Owner's Repair Cost Obligation ~~for the current Contract Year~~ is \$~~—~~[.as follows:](#)

Unit	Jan2013	Feb2014	Mar2015	Apr2016	May2017	J un	J un	A ug	S ep	O ct	N ov	D ec
Owner's Repair Cost	\$131,845	\$153,284	\$157,205	\$161,865	\$87,411							

Obligation														
----------------------------	--	--	--	--	--	--	--	--	--	--	--	--	--	--

14. Existing Contractual Limitations and Other Contract Restrictions on Market Transactions

[N/A](#)

15. Applicable UDC Tariff(s)

~~[List each Tariff and schedule to which it applies]~~
[Schedule S – Standby](#)

[Schedule TOU-8 – Time of Use General Service - Large](#)

**Schedule B
 Monthly Option Payment**

In the event that the required consents and confirmations specified in Section 2.1 of the Agreement have not been received by January 7, 2013 (with respect to all such required consents and confirmations other than the consent of Owner's lenders) or the required consent from Owner's lenders has not been received by February 1, 2013, as the case may be, and Owner or its affiliate, as the case may be, (at the request of the CAISO and the Responsible Utilities) agrees to suspend the Synchronous Condenser Transaction, the terms of Schedule B hereto will be revised in such a manner as to keep Owner whole for any additional costs or foregone 2013 revenues that it reasonably incurs or suffers as a result of such delayed execution or such suspension and associated delay in achieving the Commercial Operations Date pursuant to the Synchronous Condenser Transaction.

The formulas and values used to compute the Monthly Option Payment in accordance with Section 8.1 and Section 8.2 for each Unit for each Month are set forth in Equation B-1 below:

Equation B-1

$$\text{Monthly Option Payment} = \text{Monthly Availability Payment} + \text{Monthly Surcharge Payment} - \text{Monthly Nonperformance Penalty}$$

The Monthly Option Payment can never be less than zero.

1. The Monthly Availability Payment is calculated in accordance with Equation B-2 below:

Equation B-2

$$\text{Monthly Availability Payment (\$)} = \text{lesser of } \left[\begin{array}{l} \text{Current Monthly Availability Payment (\$)} \\ \text{or} \\ 100\% \text{ of AFRR} \\ \text{minus} \\ \text{Cumulative Monthly Availability Payments} \\ \text{Excluding Current Monthly Availability Payment (\$)} \end{array} \right]$$

2. The Current Monthly Availability Payment is calculated in accordance with Equation B-3 below:

Equation B-3

$$\text{Current Monthly Availability Payment (\$)} = \text{Sum for all hours} \left[\begin{array}{l} \text{Hourly Availability Charge (\$/hr)} * \\ \frac{\text{Unit Availability Limit } (\text{MW/MVAr})}{\text{Maximum Net Dependable Capacity/MVAr Capability } (\text{MW/MVAr})} \end{array} \right]$$

Where:

- A. Hourly Availability Charge is calculated in accordance with Equation B-4 below:

Equation B-4

$$\text{Hourly Availability Charge} = \text{Hourly Availability Rate} * \text{Fixed Option Payment Factor}$$

Where:

- Hourly Availability Rate is calculated in accordance with Equation B-5 below.

Equation B-5

$$\text{Hourly Availability Rate} = \frac{\text{Annual Fixed Revenue Requirement}}{\text{Target Available Hours}}$$

Annual Fixed Revenue Requirement is set forth in Section 7 below.

Target Available Hours are set forth in Section 6 below.

- For Units under Condition 1, the Fixed Option Payment Factor is set forth in Table B-0 below:

Unit	Fixed Option Payment Factor
Huntington Beach Unit 3	N/A
Huntington Beach Unit 4	N/A

For Units under Condition 2, the Fixed Option Payment Factor is 1.

The Hourly Availability Charges for [the applicable Summer Month or Non-Summer Month](#) of the Contract Year are set forth in Table B-1 below: [Payment of the Hourly Availability Charges will be effective upon the Commercial Operations Date.](#)

	Condition 1	Condition 2
Unit 1		

Unit	Contract Year	Contract Month	Condition 1	Condition 2 (AFRR/TAH)
Huntington Beach Unit 3	2013	Summer Months	N/A	\$2,020.87
		Non-Summer Months	N/A	\$237.07
	2014	Summer Months	N/A	\$1,368.32
		Non-Summer Months	N/A	\$336.29
	2015	Summer Months	N/A	\$1,339.58
		Non-Summer Months	N/A	\$329.74
	2016	Summer Months	N/A	\$1,313.53
		Non-Summer Months	N/A	\$322.47

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	<u>2017</u>	<u>Summer Months</u>	<u>N/A</u>	<u>N/A</u>
		<u>Non-Summer Months</u>	<u>N/A</u>	<u>N/A</u>
<u>Huntington Beach Unit 4</u>	<u>2013</u>	<u>Summer Months</u>	<u>N/A</u>	<u>\$2,020.87</u>
		<u>Non-Summer Months</u>	<u>N/A</u>	<u>\$237.07</u>
	<u>2014</u>	<u>Summer Months</u>	<u>N/A</u>	<u>\$1,368.32</u>
		<u>Non-Summer Months</u>	<u>N/A</u>	<u>\$336.29</u>
	<u>2015</u>	<u>Summer Months</u>	<u>N/A</u>	<u>\$1,339.58</u>
		<u>Non-Summer Months</u>	<u>N/A</u>	<u>\$329.74</u>
	<u>2016</u>	<u>Summer Months</u>	<u>N/A</u>	<u>\$1,313.53</u>
		<u>Non-Summer Months</u>	<u>N/A</u>	<u>\$322.47</u>
	<u>2017</u>	<u>Summer Months</u>	<u>N/A</u>	<u>\$1,357.45</u>
		<u>Non-Summer Months</u>	<u>N/A</u>	<u>\$335.75</u>

- B. Unit Availability Limit is defined in Article 1 of the Agreement.
- C. Maximum Net Dependable ~~Capacity~~MVAr Capability is shown in Section 1 of Schedule A.
3. The Monthly Surcharge Payment is calculated in accordance with Equation B-6 below:

Equation B-6

$$\text{Monthly Surcharge Payment (\$)} = \text{lesser of} \left[\begin{array}{l} \text{Current Monthly Surcharge Payment (\$)} \\ \text{100\% of Sum of all Annual Capital Item Costs minus Cumulative Monthly Surcharge Payments Excluding Current Monthly Surcharge Payment (\$)} \end{array} \right]$$

4. The Current Monthly Surcharge Payment is calculated in accordance with Equation B-7 below:

Equation B-7

$$\text{Current Monthly Surcharge Payment (\$)} = \text{Sum for all hours} \left[\begin{array}{l} \text{Sum of all Hourly Capital Item Charges (\$/hr)} \\ * \left[\frac{\text{Unit Availability Limit (MW)MVar}}{\text{Maximum Net Dependable CapacityMVar Capability (MW)MVar}} \right] \end{array} \right]$$

Where:

- A. The Hourly Capital Item Charge for each Capital Item approved pursuant to Sections 7.4 or 7.6 is calculated in accordance with Equation B-8 below:

Equation B-8

$$\text{Hourly Capital Item Charge} = \text{Hourly Capital Item Rate} * \text{Surcharge Payment Factor}$$

Where:

- Hourly Capital Item Rate is calculated in accordance with Equation B-9 below:

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Equation B-9

$$\text{Hourly Capital Item Rate} = \frac{\text{Annual Capital Item Cost}}{\text{Target Available Hours}}$$

- Annual Capital Item Cost is the amount recoverable by Owner under this Agreement in a Contract Year for each Capital Item approved pursuant to Section 7.4 or Section 7.6.
- Target Available Hours are shown in Section 6 below.
- For Units under Condition 1, the Surcharge Payment Factor for all Capital Items covered by the Small Project Budget shall be the Fixed Option Payment Factor. For all other Capital Items, the Surcharge Payment Factor shall be as agreed to by Owner and CAISO. If the Owner and CAISO do not agree on the Surcharge Payment Factor, the Surcharge Payment Factor shall equal the Fixed Option Payment Factor, unless the Owner demonstrates in ADR that it would not have installed the proposed Capital Item in accordance with Good Industry Practice but for its obligations to the CAISO under this Agreement, in which case the Surcharge Payment Factor shall be as determined in ADR.
- For Units under Condition 2, the Surcharge Payment Factor is 1.

The Hourly Capital Item Charges for [the applicable Summer Month or Non-Summer Month](#) of the Contract Year are set forth in Table B-2 below: [Payment of the Hourly Capital Item Charges will be effective upon the Commercial Operations Date.](#)

Table B-2					
Unit	Capital Item Project No.	Annual Capital Item Cost	Condition 1 Surcharge Payment Factor	Condition 1 Hourly Capital Item Charge	Condition 2 Hourly Capital Item Charge

Table B-2 - Hourly Capital Item Charges				
Unit	Contract Year	Contract Month	Annual Capital Item Cost	Condition 2 Hourly Capital Item Charge
Huntington Beach Unit 3	2013	Summer Months	\$2,886,519	\$1,316.24

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		<u>Non-Summer Months</u>	<u>\$481,087</u>	<u>\$165.44</u>
		<u>Full Year</u>	<u>\$3,367,606</u>	<u>\$660.19</u>
		<u>Summer Months</u>	<u>\$2,068,443</u>	<u>\$711.29</u>
	<u>2014</u>	<u>Non-Summer Months</u>	<u>\$1,034,221</u>	<u>\$186.28</u>
		<u>Full Year</u>	<u>\$3,102,664</u>	<u>\$366.75</u>
		<u>Summer Months</u>	<u>\$1,871,150</u>	<u>\$643.45</u>
	<u>2015</u>	<u>Non-Summer Months</u>	<u>\$935,575</u>	<u>\$168.51</u>
		<u>Full Year</u>	<u>\$2,806,725</u>	<u>\$331.76</u>
		<u>Summer Months</u>	<u>\$1,675,509</u>	<u>\$576.17</u>
	<u>2016</u>	<u>Non-Summer Months</u>	<u>\$837,754</u>	<u>\$150.24</u>
		<u>Full Year</u>	<u>\$2,513,263</u>	<u>\$296.24</u>
		<u>Summer Months</u>		
<u>2017</u>	<u>Non-Summer Months</u>	<u>N/A</u>	<u>N/A</u>	
	<u>Full Year</u>			
	<u>Summer Months</u>			
<u>Huntington Beach Unit 4</u>	<u>2013</u>	<u>Summer Months</u>	<u>\$2,574,686</u>	<u>\$1,174.05</u>
		<u>Non-Summer Months</u>	<u>\$429,114</u>	<u>\$147.56</u>
		<u>Full Year</u>	<u>\$3,003,801</u>	<u>\$588.87</u>
	<u>2014</u>	<u>Summer Months</u>	<u>\$1,853,135</u>	<u>\$637.25</u>
		<u>Non-Summer Months</u>	<u>\$926,567</u>	<u>\$166.89</u>
		<u>Full Year</u>	<u>\$2,779,702</u>	<u>\$328.57</u>
	<u>2015</u>	<u>Summer Months</u>	<u>\$1,690,922</u>	<u>\$581.47</u>
		<u>Non-Summer Months</u>	<u>\$845,461</u>	<u>\$152.28</u>
		<u>Full Year</u>	<u>\$2,536,382</u>	<u>\$299.81</u>
	<u>2016</u>	<u>Summer Months</u>	<u>\$1,530,359</u>	<u>\$526.26</u>
		<u>Non-Summer Months</u>	<u>\$765,180</u>	<u>\$137.23</u>
		<u>Full Year</u>	<u>\$2,295,539</u>	<u>\$270.57</u>
	<u>2017</u>	<u>Summer Months</u>	<u>\$1,371,323</u>	<u>\$471.57</u>
		<u>Non-Summer Months</u>	<u>\$685,662</u>	<u>\$123.50</u>
		<u>Full Year</u>	<u>\$2,056,985</u>	<u>\$243.14</u>

B. Unit Availability Limit is defined in Article 1 of the Agreement.

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- C. Maximum Net Dependable ~~Capacity~~MVAr Capability is shown in Section 1 of Schedule A.
5. The Monthly Nonperformance Penalty is calculated pursuant to Section 8.5 using the following variables:

A. Hourly Penalty Rate

A Unit's Hourly Penalty Rate for the applicable Summer Month or Non-Summer Month of each Contract Year is the lesser of (a) the Unit's Hourly Availability Rate for the applicable Summer Month or Non-Summer Month of the Contract Year (calculated pursuant to Item 2.A above), or (b) three times the Unit's Hourly Availability Charge for the applicable Summer Month or Non-Summer Month of the Contract Year (as shown in Table B-1 above). The Hourly Penalty Rates for the applicable Summer Month or Non-Summer Month of the Contract Year are set forth in Table B-3 below. Payment of the Hourly Penalty Rate will be effective upon the Commercial Operations Date.

Table B-3		
Unit	Condition 1	Condition 2
Unit 1		

Table B-3 - Hourly Penalty Rate				
Unit	Contract Year	Contract Month	Condition 1	Condition 2
Huntington Beach Unit 3	2013	Summer Months	N/A	\$2,020.87
		Non-Summer Months	N/A	\$237.07
	2014	Summer Months	N/A	\$1,368.32
		Non-Summer Months	N/A	\$336.29
	2015	Summer Months	N/A	\$1,339.58
		Non-Summer Months	N/A	\$329.74
	2016	Summer Months	N/A	\$1,313.53
		Non-Summer Months	N/A	\$322.47
2017	Summer Months	N/A	N/A	
	Non-Summer Months	N/A	N/A	
Huntington Beach Unit 4	2013	Summer Months	N/A	\$2,020.87
		Non-Summer Months	N/A	\$237.07
	2014	Summer Months	N/A	\$1,368.32
		Non-Summer Months	N/A	\$336.29
	2015	Summer Months	N/A	\$1,339.58
		Non-Summer Months	N/A	\$329.74
	2016	Summer Months	N/A	\$1,313.53
		Non-Summer Months	N/A	\$322.47

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		<u>Non-Summer Months</u>	<u>N/A</u>	<u>\$322.47</u>
	<u>2017</u>	<u>Summer Months</u>	<u>N/A</u>	<u>\$1,357.45</u>
		<u>Non-Summer Months</u>	<u>N/A</u>	<u>\$335.75</u>

B. Hourly Surcharge Penalty Rate

A Unit's Hourly Surcharge Penalty Rate for each Capital Item for the applicable Summer Month or Non-Summer Month of each Contract Year is the lesser of (a) the corresponding Hourly Capital Item Rate for the applicable Summer Month or Non-Summer Month of the Contract Year (calculated pursuant to Item 4.A above), or (b) three times the applicable Hourly Capital Item Charge for the applicable Summer Month or Non-Summer Month of the Contract Year (as shown in Table B-2 above). The Hourly Surcharge Penalty Rates for the applicable Summer Month or Non-Summer Month of the Contract Year are set forth in Table B-4 below: Payment of the Hourly Surcharge Penalty Rate will be effective upon the Commercial Operations Date.

<u>Table B-4 - Hourly Surcharge Penalty Rate</u>					
<u>Unit</u>	<u>Contract Year</u> <u>Capital Item</u> <u>Project</u> <u>No.</u>	<u>Contract Month</u>	<u>Hourly Capital Item Rate</u>	<u>Condition 1 Hourly Surcharge Penalty Rate</u>	<u>Condition 2 Hourly Surcharge Penalty Rate</u>
<u>Huntington Beach Unit 3</u>	<u>2013</u>	<u>Summer Months</u>	<u>\$1,316.24</u>	<u>N/A</u>	<u>\$1,316.24</u>
		<u>Non-Summer Months</u>	<u>\$165.44</u>	<u>N/A</u>	<u>\$165.44</u>
	<u>2014</u>	<u>Summer Months</u>	<u>\$711.29</u>	<u>N/A</u>	<u>\$711.29</u>
		<u>Non-Summer Months</u>	<u>\$186.28</u>	<u>N/A</u>	<u>\$186.28</u>
	<u>2015</u>	<u>Summer Months</u>	<u>\$643.45</u>	<u>N/A</u>	<u>\$643.45</u>
		<u>Non-Summer Months</u>	<u>\$168.51</u>	<u>N/A</u>	<u>\$168.51</u>
	<u>2016</u>	<u>Summer Months</u>	<u>\$576.17</u>	<u>N/A</u>	<u>\$576.17</u>
		<u>Non-Summer Months</u>	<u>\$150.24</u>	<u>N/A</u>	<u>\$150.24</u>
	<u>2017</u>	<u>Summer Months</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
		<u>Non-Summer Months</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

<u>Table B-4 (cont'd) - Hourly Surcharge Penalty Rate</u>					
<u>Unit</u>	<u>Contract Year</u>	<u>Contract Month</u>	<u>Hourly Capital Item</u>	<u>Condition 1 Hourly Surcharge</u>	<u>Condition 2 Hourly Surcharge</u>

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			<u>Rate</u>	<u>Penalty Rate</u>	<u>Penalty Rate</u>
<u>Huntington Beach Unit 4</u>	<u>2013</u>	<u>Summer Months</u>	<u>\$1,174.05</u>	<u>N/A</u>	<u>\$1,174.05</u>
		<u>Non-Summer Months</u>	<u>\$147.56</u>	<u>N/A</u>	<u>\$147.56</u>
	<u>2014</u>	<u>Summer Months</u>	<u>\$637.25</u>	<u>N/A</u>	<u>\$637.25</u>
		<u>Non-Summer Months</u>	<u>\$166.89</u>	<u>N/A</u>	<u>\$166.89</u>
	<u>2015</u>	<u>Summer Months</u>	<u>\$581.47</u>	<u>N/A</u>	<u>\$581.47</u>
		<u>Non-Summer Months</u>	<u>\$152.28</u>	<u>N/A</u>	<u>\$152.28</u>
	<u>2016</u>	<u>Summer Months</u>	<u>\$526.26</u>	<u>N/A</u>	<u>\$526.26</u>
		<u>Non-Summer Months</u>	<u>\$137.23</u>	<u>N/A</u>	<u>\$137.23</u>
	<u>2017</u>	<u>Summer Months</u>	<u>\$471.57</u>	<u>N/A</u>	<u>\$471.57</u>
		<u>Non-Summer Months</u>	<u>\$123.50</u>	<u>N/A</u>	<u>\$123.50</u>

6. Target Available Hours

A Unit's Target Available Hours for each Contract Year are calculated in accordance with the Equation B-10 below:

Equation B-10

$$\text{Target Available Hours (TAH)} = \text{Hours in the Calendar Year} - (\text{Average Other Outage Hours} + \text{Long-Term Planned Outage Hours})$$

Average Other Outage Hours means the average annual Other Outage Hours ~~for the Unit during the 60-month period ending June 30 of the previous calendar years~~ as set forth in Table B-5 below.

Long-term Planned Outage Hours means the Long-term Planned Outage Hours for the Contract Year scheduled with CAISO pursuant to Section 7.2(a). For periods prior to December 31, 1998, Other Outage Hours shall exclude a planned interruption, in whole or in part, in the electrical output of a Unit to permit Owner to perform a major equipment overhaul or inspection or for new construction work, but only if the outage lasted 21 or more consecutive days.

Long-term Planned Outage Hours scheduled for a Contract Year shall be subject to the Long-term Scheduled Outage Adjustment pursuant to Section 8.6 of the Agreement, except for 2013 Contract Year.

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The Average Other Outage Hours, Long-term Planned Outage Hours and Target Available Hours for each Unit for the Contract Year are shown in Table B-5 below:

Table B-5			
Unit	Average Other Outage Hours	Long-term Planned Outage Hours	TAH

<u>Table B-5 - Target Available Hours</u>					
<u>Unit</u>	<u>Contract Year</u>	<u>Contract Month</u>	<u>Average Other Outage Hours</u>	<u>Long-term Planned Outage Hours</u>	<u>TAH</u>
<u>Huntington Beach Unit 3</u>	<u>2013</u>	<u>Summer Months</u>	<u>15</u>	<u>0</u>	<u>2,193</u>
		<u>Non-Summer Months</u>	<u>20</u>	<u>3,624</u>	<u>2,908</u>
		<u>Full Year</u>	<u>35</u>	<u>3,624</u>	<u>5,101</u>
	<u>2014</u>	<u>Summer Months</u>	<u>20</u>	<u>0</u>	<u>2,908</u>
		<u>Non-Summer Months</u>	<u>280</u>	<u>0</u>	<u>5,552</u>
		<u>Full Year</u>	<u>300</u>	<u>0</u>	<u>8,460</u>
	<u>2015</u>	<u>Summer Months</u>	<u>20</u>	<u>0</u>	<u>2,908</u>
		<u>Non-Summer Months</u>	<u>280</u>	<u>0</u>	<u>5,552</u>
		<u>Full Year</u>	<u>300</u>	<u>0</u>	<u>8,460</u>
	<u>2016</u>	<u>Summer Months</u>	<u>20</u>	<u>0</u>	<u>2,908</u>
		<u>Non-Summer Months</u>	<u>280</u>	<u>0</u>	<u>5,576</u>
		<u>Full Year</u>	<u>300</u>	<u>0</u>	<u>8,484</u>
	<u>2017</u>	<u>Summer Months</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
		<u>Non-Summer Months</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
		<u>Full Year</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

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<u>Table B-5 (cont'd) - Target Available Hours</u>					
<u>Unit</u>	<u>Contract Year</u>	<u>Contract Month</u>	<u>Average Other Outage Hours</u>	<u>Long-term Planned Outage Hours</u>	<u>TAH</u>
<u>Huntington Beach Unit 4</u>	<u>2013</u>	<u>Summer Months</u>	<u>15</u>	<u>0</u>	<u>2,193</u>
		<u>Non-Summer Months</u>	<u>20</u>	<u>3,624</u>	<u>2,908</u>
		<u>Full Year</u>	<u>35</u>	<u>3,624</u>	<u>5,101</u>
	<u>2014</u>	<u>Summer Months</u>	<u>20</u>	<u>0</u>	<u>2,908</u>
		<u>Non-Summer Months</u>	<u>280</u>	<u>0</u>	<u>5,552</u>
		<u>Full Year</u>	<u>300</u>	<u>0</u>	<u>8,460</u>
	<u>2015</u>	<u>Summer Months</u>	<u>20</u>	<u>0</u>	<u>2,908</u>
		<u>Non-Summer Months</u>	<u>280</u>	<u>0</u>	<u>5,552</u>
		<u>Full Year</u>	<u>300</u>	<u>0</u>	<u>8,460</u>
	<u>2016</u>	<u>Summer Months</u>	<u>20</u>	<u>0</u>	<u>2,908</u>
		<u>Non-Summer Months</u>	<u>280</u>	<u>0</u>	<u>5,576</u>
		<u>Full Year</u>	<u>300</u>	<u>0</u>	<u>8,484</u>
	<u>2017</u>	<u>Summer Months</u>	<u>20</u>	<u>0</u>	<u>2,908</u>
		<u>Non-Summer Months</u>	<u>280</u>	<u>0</u>	<u>5,552</u>
		<u>Full Year</u>	<u>300</u>	<u>0</u>	<u>8,460</u>

~~For the purposes of calculating Target Available Hours for the Contract Year ending December 31, 1999, (a) Average Other Outage Hours shall be calculated using the average annual Other Outage Hours for the Unit during the 60-month period ending December 31, 1998, and (b) Long-term Planned Outage Hours shall be calculated using the hours scheduled for performing Long-term Planned Outages as if the Agreement had become effective on January 1, 1999.~~

7. Annual Fixed Revenue Requirement (AFRR)

The Annual Fixed Revenue Requirement for each Unit is set forth in Table B-6 below. ~~For any Contract Year commencing on or after January 1, 2002, the Annual Fixed Revenue Requirement shall be determined by the Formula Rate set forth in Schedule F, unless Owner files a superseding rate schedule under Section 205 of the Federal Power Act.~~

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Table B-6 - <u>Annual Fixed Revenue Requirement (AFRR)</u>			
<u>Unit</u>	<u>Contract Year</u>	<u>Unit</u> <u>Contract Month</u>	Annual Fixed Revenue Requirement
<u>Huntington Beach Unit 3</u>	<u>2013</u>	<u>Summer Months</u>	<u>\$4,431,758</u>
		<u>Non-Summer Months</u>	<u>\$689,412</u>
		<u>Full Year</u>	<u>\$5,121,171</u>
	<u>2014</u>	<u>Summer Months</u>	<u>\$3,979,089</u>
		<u>Non-Summer Months</u>	<u>\$1,867,102</u>
		<u>Full Year</u>	<u>\$5,846,191</u>
	<u>2015</u>	<u>Summer Months</u>	<u>\$3,895,490</u>
		<u>Non-Summer Months</u>	<u>\$1,830,731</u>
		<u>Full Year</u>	<u>\$5,726,221</u>
	<u>2016</u>	<u>Summer Months</u>	<u>\$3,819,742</u>
		<u>Non-Summer Months</u>	<u>\$1,798,090</u>
		<u>Full Year</u>	<u>\$5,617,832</u>
	<u>2017</u>	<u>Summer Months</u>	<u>N/A</u>
		<u>Non-Summer Months</u>	<u>N/A</u>
		<u>Full Year</u>	<u>N/A</u>
<u>Huntington Beach Unit 4</u>	<u>2013</u>	<u>Summer Months</u>	<u>\$4,431,758</u>
		<u>Non-Summer Months</u>	<u>\$689,412</u>
		<u>Full Year</u>	<u>\$5,121,171</u>
	<u>2014</u>	<u>Summer Months</u>	<u>\$3,979,089</u>
		<u>Non-Summer Months</u>	<u>\$1,867,102</u>
		<u>Full Year</u>	<u>\$5,846,191</u>
	<u>2015</u>	<u>Summer Months</u>	<u>\$3,895,490</u>
		<u>Non-Summer Months</u>	<u>\$1,830,731</u>
		<u>Full Year</u>	<u>\$5,726,221</u>
	<u>2016</u>	<u>Summer Months</u>	<u>\$3,819,742</u>
		<u>Non-Summer Months</u>	<u>\$1,798,090</u>
		<u>Full Year</u>	<u>\$5,617,832</u>
	<u>2017</u>	<u>Summer Months</u>	<u>\$3,947,477</u>
		<u>Non-Summer Months</u>	<u>\$1,864,099</u>
		<u>Full Year</u>	<u>\$5,811,576</u>

8. Limited Section 205 Filing for an Extension of Contract Term

If CAISO has extended the term of this Agreement pursuant to Section 2.1(b), then not later than October 31 of the expiring Contract Year, Owner shall make a

filing with FERC under Section 205 of the Federal Power Act containing the values in Tables B-1 through B-6 for the [ensuingapplicable](#) Contract Year.

In the event that a Long-term Planned Outage that is scheduled for the last quarter of the expiring Contract Year is postponed or rescheduled after October 31 of such year to the ensuing Contract Year, Owner shall make an additional Section 205 filing to revise the values in Tables B-1 through B-5 to reflect such rescheduled Long-term Planned Outage Hours.

SCHEDULE C – N/A

**Variable Cost Payment
 Part 1 for Thermal Units**

The Variable Cost Payment for each Unit for the Billing Month shall be the amount calculated in accordance with the following formula:

$$\begin{aligned} \text{Variable Cost Payment} &= \text{A. CAISO Unit Monthly Billed Fuel} \\ &+ \text{B. Cost} \\ &+ \text{C. CAISO Unit Monthly Fuel Imbalance} \\ &+ \text{D. Charge} \\ &+ \text{E. CAISO Monthly Other Fuel Related} \\ &+ \text{F. Cost} \\ &+ \text{G. CAISO Monthly Emissions Cost} \\ &+ \text{CAISO Monthly Variable O\&M Cost} \\ &+ \text{CAISO Scheduling Coordinator} \\ &+ \text{Charge} \\ &+ \text{CAISO ACA Charge} \end{aligned}$$

Each component of the Variable Cost Payment for thermal Units will be calculated as described below:

A. CAISO Unit Monthly Billed Fuel Cost

The CAISO Unit Monthly Billed Fuel Cost is calculated in accordance with Equation C1-0.

Equation C1-0

$$\left(\begin{array}{l} \text{CAISO} \\ \text{Unit} \\ \text{Monthly} \\ \text{Billed} \\ \text{Fuel Cost} \\ (\$) \end{array} \right) = \frac{\text{Monthly sum of the CAISO Unit Hourly Cap Heat Input for this Unit (MMBtu)}}{\text{Monthly sum of the CAISO Unit Hourly Cap Heat Input for all Units at the Facility (MMBtu)}} * \left(\begin{array}{l} \text{CAISO} \\ \text{Facility} \\ \text{Monthly} \\ \text{Billed} \\ \text{Fuel Cost} \end{array} \right)$$

Where:

- CAISO Unit Hourly Cap Heat Input for each Unit is calculated in accordance with Equation C1-6;
- The CAISO Facility Monthly Billed Fuel Cost is calculated in accordance with Equation C1-1.

1. **The CAISO Facility Monthly Billed Fuel Cost**

The CAISO Facility Monthly Billed Fuel Cost is calculated in accordance with Equation C1-1.

Equation C1-1

$$\left(\begin{array}{l} \text{CAISO} \\ \text{Facility} \\ \text{Monthly} \\ \text{Billed} \\ \text{Fuel Cost} \\ (\$) \end{array} \right) = \text{Lesser of} \left(\begin{array}{l} \text{CAISO} \\ \text{Facility} \\ \text{Cumulative} \\ \text{Actual} \\ \text{Fuel Cost} \\ (\$) \end{array} \right) \text{ or } \left(\begin{array}{l} \text{CAISO} \\ \text{Facility} \\ \text{Cumulative} \\ \text{Cap} \\ \text{Fuel Cost} \\ (\$) \end{array} \right) - \left(\begin{array}{l} \text{CAISO Facility} \\ \text{Cumulative} \\ \text{Billed} \\ \text{Fuel Cost} \\ (\$) \end{array} \right)$$

Where:

- The CAISO Facility Cumulative Actual Fuel Cost is the sum of all CAISO Unit Monthly Actual Fuel Costs for all Units at the Facility since the start of the Contract Year, including the current Month. CAISO Unit Monthly Actual Fuel Costs for each Unit is calculated in accordance with Equation C1-2.
- The CAISO Facility Cumulative Cap Fuel Cost is the sum of all CAISO Unit Monthly Cap Fuel Costs for all Units at the Facility since the start of the Contract Year, including the current Month. CAISO Unit Monthly Cap Fuel Costs is the sum of the CAISO Unit Hourly Cap Fuel Cost (calculated pursuant to Equation C1-5) for each hour of the Month for each Unit.
- The CAISO Facility Cumulative Billed Fuel Cost is the sum of all CAISO Unit Monthly Billed Fuel Costs for all Units at the Facility since the start of the Contract Year, excluding the current Month. CAISO Unit Monthly Billed Fuel Cost for each Unit is calculated in accordance with Equation C1-0.

2. **CAISO Unit Monthly Actual Fuel Cost**

The CAISO Unit Monthly Actual Fuel Cost is calculated in accordance with Equation C1-2.

Equation C1-2

$$\begin{array}{l}
 \text{CAISO Unit Monthly Actual Fuel Cost (\$)} \\
 = \frac{\text{Monthly sum of the CAISO Unit Hourly Cap Heat Input for the Unit (MMBtu)}}{\text{Monthly sum of the Unit Hourly Cap Heat Inputs for all units at the Facility metered by the Fuel Meter (MMBtu)}} * \left[\begin{array}{l} \text{Monthly Metered Fuel MMBtu} * \text{CAISO Monthly Fuel Price (\$/MMBtu)} - \text{Monthly Start-up Fuel Cost (\$)} \end{array} \right]
 \end{array}$$

Where:

- CAISO Unit Hourly Cap Heat Input is calculated in accordance with Equation C1-6.
- Unit Hourly Cap Heat Input is calculated in accordance with either Equation C1-7a or C1-7b.
- Monthly Metered Fuel is the non-duplicative sum of the quantities of fuel for the Month as measured by all gas metering systems or fuel oil measuring systems, as applicable (“Fuel Meters”), for the Unit.
 - (a) If the fuel is natural gas, the Owner may select from one of three options for the Fuel Meter:
 - (i) the revenue meter used by the entity providing natural gas to measure gas delivered to one or more Units (“Fuel Custody Meter”);
 - (ii) a gas metering system installed at the Facility to measure gas used in one or more Units that meets the measurement accuracy standard in the tariff of the local gas distribution company in whose service area the Facility is located and the measurement accuracy standards set forth below, and is subject to an annual accuracy test performed under the CAISO’s direction, as described below; or
 - (iii) a gas metering system installed at the Facility by the local gas distribution company in whose service area the Facility is located and maintained by the local gas distribution company to the same standards as revenue meters of the local gas distribution company.

For the selected Fuel Meter option, the Owner shall provide the required information for all Units, both RMR and non-RMR, connected to the specific Fuel Custody Meter.

If the Owner selects option (ii), the Owner shall assure the overall accuracy of the gas metering systems¹ in use for the Units are within acceptable industry and regulatory

¹ The gas metering system includes the primary measurement element (orifice, turbine meter, etc.); secondary elements such as pressure, temperature and heating-value measurement devices; the gas chromatograph, the flow computer or other data-collection and storage device; and the communication or output system.

standards.² Gas metering systems shall be designed, installed, calibrated and maintained according to standards set forth by the American Gas Association (AGA), the American National Standards Institute (ANSI) and the California Public Utilities Commission (CPUC). An audit trail of all calibration records and measurement parameters used in volume and heating-value calculations as recorded electronically by the flow computer shall be maintained and all data shall be in no-longer-than-hourly intervals. All equations and calculations performed by the flow computer may be reviewed for accuracy and completeness, including compressibility, volumetric flow and energy flow, by the CAISO or its agent. A consistent base pressure (14.73 psi) and base temperature (60°F) shall be used at all times. If the Facility has multiple sources of fuel gas, a gas chromatograph (“GC”) shall be installed which analyzes all constituents of the blended gas, with the sampling point downstream of the individual supplies such that proper mixing occurs prior to sampling. The GC speed loop shall permit analysis of the gas in “real time”.

In order to ensure the accuracy of a gas metering system selected under option (ii), an initial acceptance test shall be conducted by Owner and shall be witnessed by the CAISO or its agent to assure the installation meets applicable industry standards. Such a test shall be conducted at five load points (maximum load, minimum load, and three evenly spaced load points), under steady state conditions (i.e., off Automatic Generation Control), and for a minimum of one hour at each load point. Analysis of the test results shall consist of a side-by-side comparison of volumetric flow, energy flow, gas-specific gravity and mole percents, and other factors mutually agreed to by the CAISO and Owner for the Fuel Custody Meter and the meter installed at the Facility under option (ii). The gas metering system installed under option (ii) shall be deemed acceptable if the side-by-side energy flow comparison for the period shall be within +1 percent to –2 percent. The gas-metering system shall meet the required accuracy throughout the entire operating range of the RMR Unit. Following CAISO acceptance, an annual routine test shall be conducted at a time chosen by the CAISO to verify and confirm the performance of Owner’s gas-metering system. With the exception that the test shall be conducted at one load point specified by the CAISO, such a test shall be conducted in a similar fashion to the initial acceptance test and shall include inspection of the primary flow element; instrument end-to-end calibration; confirmation of integrity of sensing lines (meaning there shall be no leaks); confirmation of proper GC operation; and proper flow-computer operation and data handling. All systems and sub-systems utilized during the initial acceptance test, including, but not limited to, (a) all primary devices, including the differential producing device of the gas metering system, the GC, and differential pressure (“dP”) and temperature instruments; (b) all secondary devices and circuits, including dP and temperature transmitters and circuits, sensing lines, GC

² The American Gas Association (AGA) and the American National Standards Institute (ANSI) publish industry standards that gas utilities and gas transportation companies use for gas metering. Applicable standards include: AGA Report No. 3, Orifice Metering of Natural Gas; AGA Report No. 7, Measurement of Gas by Turbine Meters, AGA Report No. 8, Compressibility Factors of Natural Gas; AGA Report No. 9, Measurement of Gas by Multipath Ultrasonic Meters; ANSI B109.2, Diaphragm Type Gas Displacement Meters; and ANSI B109.3 Rotary Type Gas Displacement Meters. Also, CPUC General Order 58-A requires customer meters to register accurately to within – 2% to 1%.

sampling line and secondary circuits; and (c) all electronic devices, flow computers and devices, shall be sealed with an CAISO-certified seal and no maintenance work or modifications and changes, including making any changes to flow computer programming, shall be permitted without prior approval by the CAISO.

If any part of the option (ii) gas-metering system requires either routine or emergency maintenance, the Owner shall notify the CAISO immediately by telephone or other means specified by the CAISO. The Owner shall inform the CAISO of the time period during which such maintenance is expected to occur. The CAISO may, at its discretion, require gas-metering systems which are changed or modified during maintenance or repair to undergo re-certification, including acceptance testing. If the maintenance activity is necessary due to concerns that the gas-metering system is not operating in accordance with the required accuracy standards, such maintenance work shall be completed within 2 business days from the time when the concern was first noted.

A V-cone meter may not be used under option (ii), unless the meter was installed prior to January 1, 1997.

If, as a result of a change in the use of fuel gas from a supplier other than the local distribution company, the properties of the fuel gas change materially (Higher Heating Value (HHV) or Specific Gravity (SG) varies more than -3 percent to +3 percent due to the addition of new gas constituents) following the installation of a gas metering system under option (ii) or option (iii), Owner shall notify the CAISO within twenty-four (24) hours. Acceptance testing shall be conducted to verify the metering accuracy due to the change in fuel gas supply and to test whether Owner's gas metering system meets the technical requirements of this specification. Owner shall be obligated to install any equipment necessary to bring its gas metering system into compliance. Owner shall not enter into any third-party agreements for non-pipeline grade fuel gas without the prior approval of the CAISO. Such approval shall not be granted until the CAISO has evaluated Owner's gas metering system, including the effect of the non-pipeline grade fuel gas on metering accuracy.

If an Owner selects option (iii) and the Facility has multiple sources of fuel gas, the local gas distribution company shall install a GC which analyzes all constituents of the blended gas, with the sampling point downstream of the individual supplies such that proper mixing occurs prior to sampling. The GC speed loop should permit analysis of the gas in "real time".

(b) If the fuel is other than natural gas, the Fuel Meter value shall be determined monthly by measuring the fuel oil consumed during the month using, at Owner's one-time election, either (i) a metering process which is acceptable to the Owner and CAISO or (ii) a calculation acceptable to the Owner and CAISO based on a tank-volume measurement process performed on the day immediately prior to the beginning of the Month and the last day of the Month and fuel oil deliveries during the Month. The metering or measurement process adopted shall comply with, or be comparable to, one or more applicable American Petroleum Institute ("API") Manual of Petroleum

Measurement Standards.³ If Owner and CAISO cannot agree on an acceptable process, it shall be determined through ADR pursuant to Schedule K to this Agreement. Owner shall be permitted to change its election between metering as described in (i) above or tank volume measurement described in (ii) above only to reflect changes in the physical circumstances of the Unit or a change in the type of fuel burned at the Unit.

During any period in which the Fuel Meter fails to accurately measure gas flow, the Owner shall provide information to the CAISO sufficient to estimate the gas flow during such failure. This information may include unit electric-generating history, accurate recorded gas flow based on another meter and heat input characteristics of all Units served by the failed meter. This information will be used to estimate the gas flow during the failure period to the mutual satisfaction of the CAISO, the Responsible Utility and the Owner.

If a Fuel Meter serves RMR Units as well as other units, the heat input characteristics of the other units will be included in Table C1-7a or C1-7b, as applicable, and the Monthly sum of the Unit Hourly Cap Heat Inputs for all units at the Facility metered by the Fuel Meter used in Equation C1-2 will include Hourly Cap Heat Inputs for such other units calculated using Equation C1-7a or C1-7b, whichever is applicable.

- CAISO Monthly Fuel Price is calculated in accordance with Equation C1-3.
- Monthly Start-Up Fuel Cost is the sum of the Start-Up Fuel Costs for all Start-ups (for Market and Nonmarket Transactions) in the Month for all units metered by the Fuel Meter with the Start-up Fuel Costs for each Unit calculated in accordance with Equations D-1a or D-1b in Schedule D, as applicable. If a Start-up is initiated but is not successfully completed, the Start-up Fuel Costs shall be adjusted in accordance with Equation C1-2a:

Equation C1-2a

$$\begin{array}{l} \text{Adjusted} \\ \text{Start-up} \\ \text{Fuel Cost} \\ \text{for Canceled} \\ \text{Starts} \\ (\$) \end{array} = \frac{\text{Number of hours} \\ \text{committed to the} \\ \text{Start-up}}{\text{Applicable} \\ \text{Start-up Lead Time} \\ \text{in hours shown in} \\ \text{Section 6 of} \\ \text{Schedule A}} \times \text{Start-up} \\ \text{Fuel Costs} \\ (\$)$$

³ The applicable API Manual of Petroleum Measurement Standards are: Chapter 2.2A (Measurement and Calibration of Upright Cylindrical Tanks by the Manual Strapping Method); Chapter 3.1B (Standard Practice for Level Measurement of Liquid Hydrocarbons in Stationary Tanks by Automatic Tank Gauging); Chapter 3.3 (Level Measurement of Liquid Hydrocarbons in Stationary Pressurized Storage Tanks by Automatic Tank Gauging); Chapter 5.2 (Measurement of Liquid Hydrocarbons by Displacement Meters); and Chapter 5.3 (Measurement of Liquid Hydrocarbons by Turbine Meters).

Where:

- The “number of hours committed to the Start-up” is the lesser of (a) time elapsed between the initiation of the Start-up and the cancellation or (b) the Applicable Start-up Lead Time as shown in Section 6 of Schedule A.

3. **CAISO Monthly Fuel Price**

The CAISO Monthly Fuel Price is calculated in accordance with Equation C1-3.

Equation C1-3

$$\text{CAISO Monthly Fuel Price (\$/MMBtu)} = \frac{\text{Monthly sum of CAISO Unit Hourly Cap Fuel Cost (\$)}}{\text{Monthly sum of CAISO Unit Hourly Cap Heat Input (MMBtu)}}$$

Where:

- CAISO Unit Hourly Cap Fuel Cost (\$) is calculated in accordance with Equation C1-5;
- CAISO Unit Hourly Cap Heat Input (MMBtu) is calculated in accordance with Equation C1-6.

4. **Intentionally Omitted** (There is no Equation C1-4.)

5. **CAISO Unit Hourly Cap Fuel Cost**

For each hour, the CAISO Unit Hourly Cap Fuel Cost is calculated in accordance with Equation C1-5.

Equation C1-5

$$\text{CAISO Unit Hourly Cap Fuel Cost (\$)} = \text{CAISO Unit Hourly Cap Heat Input (MMBtu)} \times \text{Hourly Fuel Price (\$/MMBtu)}$$

Where:

- The Hourly Fuel Price is calculated in accordance with Equation C1-8;
- The CAISO Unit Hourly Cap Heat Input (MMBtu) is calculated in accordance with Equation C1-6.

6. CAISO Unit Hourly Cap Heat Input

For each hour, the CAISO Unit Hourly Cap Heat Input is calculated in accordance with Equation C1-6.

Equation C1-6

$$\text{CAISO Unit Hourly Cap Heat Input} = \text{Unit Hourly Cap Heat Input (MMBtu)} \star \frac{\text{Billable MWh}}{\text{Hourly Metered Total Net Generation (MWh)}}$$

Where:

- Unit Hourly Cap Heat Input is calculated in accordance with either Equation C1-7a or C1-7b.

7. Unit Hourly Cap Heat Input (MMBtu)

The Unit Hourly Cap Heat Input to a Unit for any load is given by the following equations and shall be determined either by a polynomial equation (C1-7a) or exponential equation (C1-7b):

Equation C1-7a

$$\text{Unit Hourly Cap Heat Input} = \frac{1.0}{2} \star (AX^3 + BX^2 + CX + D) \star E$$

Equation C1-7b

$$\text{Unit Hourly Cap Heat Input} = \frac{1.0}{2} \star (A \star (B + CX + De^{FX})) \star E$$

Where:

- X is Unit's Hourly Metered Total Net Generation, MWh;
- e is the base of natural logarithms;
- A, B, C, D are coefficients given for Equation C1-7a in Table C1-7a and given for Equation C1-7b in Table C1-7b;

- The coefficient E is applicable only when burning fuel oil. At all other times, it shall be set to 1.0.
- F is a coefficient given in Table C1-7b.

Table C1-7a					
	A	B	C	D	E
N/A	N/A	N/A	N/A	N/A	N/A

Table C1-7b						
	A	B	C	D	E	F
N/A	N/A	N/A	N/A	N/A	N/A	N/A

8. **Hourly Fuel Price**

The Hourly Fuel Price for Units shall be the same for each hour of a given day and is calculated in accordance with Equation C1-8.

Equation C1-8 (Gas)

Hourly Fuel Price (\$/MMBtu) = Commodity Price (\$/MMBtu) + Intrastate Transportation Rate (\$/MMBtu)

Equation C1-8 (Oil)

Hourly Fuel Price (\$/MMBtu) = Commodity Price (\$/MMBtu) + Transportation Rate (\$/MMBtu)

Commodity Price for Natural Gas

For the Facilities within the service area of SCE or SDG&E, the Commodity Price shall be the product of 1.02 and the simple average of the following indices:

Gas Daily, SoCal Gas, Large Packages index (midpoint)
 BTU Daily Gas Wire, SoCal Border index, Topock
 NGI Daily Gas Price Index, Southern California Border (average)

For the Facilities within the service territory of PG&E, the Commodity Price shall be the product of 1.02 and the simple average of the following indices:

Gas Daily, PG&E Citygate index (midpoint)
NGI Daily Gas Price Index, PG&E Citygate (average)

The indices to be used for each Settlement Period in a given day are shown in Table C1-8. Where more than one day's index is shown for a Trading Day, the average of the two daily indices should be used. If an applicable index for a day, which is used to compute the index's average for a Trading Day, is not published, then that index will not be used to compute the Commodity Price for that trading day. If no index for a day is published, then the average of applicable indices on the Index Publication Date preceding and the Index Publication Date following such day will be substituted for the Index Publication Date index for that day in Table C1-8. In the event that an index ceases to be published, Parties shall agree on a replacement index.

Table C1-8
Natural Gas Price Indices

Trading Day	Index Publication Date*		
	<u>Gas Daily</u> **	Btu Daily ** <u>Gas Wire</u>	NGI Daily ** <u>Price Index</u>
Tuesday	Tuesday/ Wednesday	Monday/ Tuesday	Tuesday/ Wednesday
Wednesday	Wednesday/ Thursday	Tuesday/ Wednesday	Wednesday/ Thursday
Thursday	Thursday/ Friday	Wednesday/ Thursday	Thursday/ Friday
Friday	Friday/ Monday	Thursday/ Friday	Friday/ Monday
Saturday	Monday/ Tuesday	Friday/ Monday	Monday/ Tuesday
Sunday	Monday/ Tuesday	Friday/ Monday	Monday/ Tuesday
Monday	Monday/ Tuesday	Friday/ Monday	Monday/ Tuesday

* *The Index Publication Date is the date of the publication which contains the prices for the applicable Trading Day.*

** *Where more than one day's index is shown for a Trading Day, the average of the two daily indices should be used.*

Gas Daily: The "Flow Date(s)" column should match the Trading Day.

Btu Daily: The Index Publication Date should be the day prior to the Trading Date in the Table above, except for Sunday and Monday, where Friday should be used as the Index Publication Date.

NGI Daily: The Index Publication Date should be the same as the Trading Date in the tables above, except for Saturday and Sunday, where Monday should be used as the Index Publication Date.

Commodity Price for Distillate Fuel Oil

The Commodity Price for Distillate Fuel Oil shall be the simple average of the midpoint of the ranges for CARB No. 2 Diesel and for Jet as published in Platt's Oilgram United States West Coast Product Assessments (page 22). If the Unit can burn only Jet, the Commodity Price shall be the midpoint of the range for Jet.

In an event the index ceases to be published, the Parties shall agree on a replacement index.

For distillate fuel, the index will be for the last day prior to the RMR Transaction Day.

Commodity Price for No. 6 Residual Fuel Oil

The fuel price shall be the prudent actual replacement cost of the fuel consumed, or, if the fuel is consumed and not replaced, then the fuel price will be "last-in-first-out" (LIFO) inventory price of the fuel consumed.

Where conversion from barrels of Fuel to MMBtu is required, the following conversion coefficients shall be used:

- No. 1 Distillate Fuel Oil - 5.754 MMBtu per barrel;
- No. 2 Distillate Fuel Oil - 5.796 MMBtu per barrel;
- Jet Fuel - 5.650 MMBtu per barrel;
- No. 6 Residual Fuel Oil - 6.258 MMBtu per barrel.

Intrastate Transportation Rate for Gas

The Intrastate Transportation Rate for Gas shall be the applicable intrastate transportation rate determined as follows:

Units served by SDG&E: The Southern California Gas Company intrastate transportation rate (currently GT-SD) plus the volumetric component of the SDG&E gas transportation rate for electric generation service, including the ITCS⁴ (currently GTUEG - SD), or any successor rate for electric generation service applicable to deliveries to the Facility, divided by one minus the applicable in-kind shrinkage allowance, if any.

Units served by Southern California Gas: The Southern California Gas Company intrastate transportation rate for firm electric generation service, including the ITCS (GT-F) plus the G-ITC Wheeler Ridge Interconnection Access fee, if applicable, or any successor rate for firm electric generation service applicable to deliveries to the Facility, divided by one minus the applicable in-kind shrinkage allowance, if any.

Units served by PG&E: The PG&E intrastate transportation charge stated in Rate Schedule G-EG, or any successor rate for electric generation service applicable to deliveries to the Facility, divided by one minus the applicable in-kind shrinkage allowance, if any.⁵

Transportation Rate for Distillate Fuel Oil

The Transportation Rate for Distillate Fuel Oil shall be ~~—~~ N/A. There shall be no Transportation Rate for No. 6 Residual Fuel Oil.

B. CAISO Monthly Fuel Imbalance Charge

Levels of Responsibility

Each month, the Owner is responsible for all Nonmarket fuel imbalance charges incurred up to and including 2.25 percent of the CAISO Facility Monthly Billed Fuel Cost.

The Monthly Fuel Imbalance Charge is equal to 75% of 1st Tier Imbalance plus 100% of 2nd Tier Imbalances;

Where:

The **1st Tier Imbalances** is that portion of the Monthly Sum of Daily Imbalance Charges which exceeds 2.25 percent of the CAISO Facility Monthly Billed Fuel Cost for the Month and is less than or equal to 10.0 percent of the CAISO Facility Monthly Billed Fuel Cost for the Month.

⁴ ITCS means Interstate Transition Cost Surcharges.

⁵ If the Facility does not qualify for service under Rate Schedule G-EG, the applicable rate shall be given by Rate Schedule G-NT.

The **2nd Tier Imbalances** is that portion of the Monthly Sum of Daily Imbalance Charges which is greater than 10.0 percent of the CAISO Facility Monthly Billed Fuel Cost for the Month.

The Monthly Sum of Daily Imbalance Charges is the sum for all days in the month of imbalance charges and similar fees and penalties imposed on Owner (or its fuel supplier and paid by Owner) by transportation providers delivering gas to the Units because deliveries were in excess of or less than scheduled for a given day, but only to the extent that (i) the imbalance was caused by Owner compliance with a Dispatch Notice issued after (or less than 30 minutes prior) to the Transporter's deadline for scheduling transportation, and (ii) Owner issued a notice to the CAISO as soon as possible after the Owner became aware it might incur imbalance charges advising CAISO of such possible charges.

In any month in which Owner incurs a 1st Tier or 2nd Tier Imbalance charge, Owner will provide the CAISO with a report showing the allocation of the imbalance charges between Market Transactions and Nonmarket Transactions. If CAISO or the Responsible Utility disagree on allocation, the dispute will be resolved through ADR.

To receive payment for a 2nd Tier Imbalance, Owner must document in an informational filing with FERC that the charges were appropriately allocated to Nonmarket Transactions and it was commercially reasonable to incur them. As used in this context and for purposes of calculating imbalance charges, "commercially reasonable" does not mean that Owner is required to acquire storage to avoid imbalances. If either the CAISO or Responsible Utility disagree with the imbalance charges, desires a formal review and gives such notice to the Owner within 30 days of the informational filing, the Owner must file under Section 205 of the Federal Power Act to collect any 2nd Tier Imbalance charges.

Pursuant to the above, the Monthly Fuel Imbalance Charge is calculated in accordance with Equation C1-9.

Equation C1-9

$$\text{Monthly Fuel Imbalance Charge} = 0.75 * \left[\text{Monthly Sum of Daily Imbalance Charges} - 0.0225 * \text{CAISO Facility Monthly Billed Fuel Cost} \right] + 0.25 * \left[\text{Monthly Sum of Daily Imbalance Charges} - 0.10 * \text{CAISO Facility Monthly Billed Fuel Cost} \right]$$

Note that if either of the two bracketed portions of the equation yields a value less than or equal to zero, then that portion of the equation is set to zero.

C. CAISO Monthly Other Fuel Related Cost

The CAISO Monthly Other Fuel Related Cost is calculated in accordance with Equation C1-10.

Equation C1-10

$$\text{CAISO Monthly Other Fuel Related Cost} = \frac{\text{Monthly sum of Billable MWh}}{\text{Monthly sum of Total Hourly Metered Net Generation}} * \left[\text{Other Gas Tariff Charges} + \text{Applicable Taxes} \right]$$

Where:

- Other Gas Tariff Charges are those intrastate gas transportation tariff charges not included in Transportation Rate Charges set forth in Section A.8 of this Schedule listed below:

[Insert applicable charges]

- Applicable taxes and fees are:
 1. [Insert applicable local utility user taxes]
 2. [Insert applicable G-SUR fee]

All other fuel related taxes and fees are intended to be covered by the two percent adder in Hourly Fuel Cost and are the Owner's responsibility.

D. CAISO Monthly Emissions Cost**Part 1 for SCAQMD-Jurisdictional Thermal Units**

The CAISO Monthly Emissions Cost for each Unit shall be the sum, for all hours in the month, of the CAISO Hourly Emissions Cost. These costs apply to a Facility within the South Coast Air Quality Management District (SCAQMD).

The CAISO Hourly Emissions Cost shall be calculated in accordance with Equation C1-11.

Equation C1-11

CAISO Hourly Emissions Cost (\$/hr) =

- a. CAISO Hourly RECLAIM Trading Credit Cost
- b. (\$/hr) +
- c. CAISO Hourly NOx Emissions Cost (\$/hr) +
- d. CAISO Hourly Organic Gases Emissions
- e. Cost (\$/hr) +
- f. CAISO Hourly Sulfur Oxides Emissions Cost
- g. (\$/hr) +
- CAISO Hourly Particulate Matter Emissions Cost (\$/hr) +
- CAISO Hourly Carbon Monoxide Emissions Cost (\$/hr) +
- CAISO Hourly Sulfur Dioxides Trading Credit Costs (\$/hr)

a. CAISO Hourly RECLAIM Trading Credit Cost

For each hour, the CAISO Hourly RECLAIM Trading Credit (“RTC”) Cost for NOx emissions required for the Unit to generate the Billable MWh is calculated in accordance with Equation C1-12.

Equation C1-12

$$\text{CAISO Hourly RECLAIM Trading Credit Cost (\$/hr)} = \text{Hourly NO}_x \text{ Emissions (lbs/hr)} * \text{RECLAIM NO}_x \text{ Trading Credit Rate (\$/lb)} * \frac{\text{Billable MWh}}{\text{Hourly Metered Total Net Generation}}$$

Where:

- Hourly NOx Emissions is calculated in accordance with Equation C1-13.

Equation C-13

$$\text{Hourly NO}_x \text{ Emissions (lbs/hr)} = \frac{AX}{2} + \frac{B}{X} + C$$

Where:

- X is the Hourly Metered Total Net Generation for the hour.
- Coefficients A, B, and C are given in Table C1-13 for each Unit.

Table C1-13

Description of Unit	A	B	C
N/A	N/A	N/A	N/A

The RECLAIM NOx Trading Credit Rate (\$/lb) will be equal to the 13-week sales-weighted average sales price for RTCs calculated as of the last day of the Month from sales records available from the SCAQMD for all actual sales in the SCAQMD during the thirteen preceding weeks, including the Settlement Period.

b. CAISO Hourly NOx Emissions Cost

For each hour, the CAISO Hourly NOx Emissions Cost for the Billable MWh is calculated in accordance with Equation C1-14.

Equation C1-14

$$\text{CAISO Hourly Nox Emissions Cost (\$/hr)} = (5 * 10^{-4}) * \text{Hourly Nox Emissions (lbs/hr)} * \text{NOx Emissions Fee (\$/ton)} * \frac{\text{Billable MWh}}{\text{Hourly Metered Total Net Generation}}$$

Where:

- (5×10^{-4}) is the conversion factor from lbs to tons.
- Hourly NOx Emissions is calculated in accordance with Equation C1-13.
- NOx Emissions Fee is obtained from Table III of SCAQMD Rule 301(e). The fee is dependent upon the Cumulative Tons of Pollutant (NOx), which is calculated in accordance with Equation C1-15. The Cumulative Tons of Pollutant is reset to zero each July 1st.

Equation C1-15

$$\text{Cumulative Tons of Pollutant (tons/hr)} = \text{Tons of Pollutant From the prior July 1st to the Previous Hour} + \text{Tons of Pollutant For Current Hour}$$

Where:

- Tons of Pollutant for Current Hour is in accordance with Equation C1-16.

Equation C1-16

$$\begin{array}{l} \text{Tons of Pollutant} \\ \text{for Current Hour} \\ \text{(tons/hr)} \end{array} = (4.76 * 10^{-7}) * (AX^3 + BX^2 + CX + D) * \begin{array}{l} \text{Pollutant Emissions Amount} \\ \text{for Natural Gas} \end{array}$$

Where:

- $(4.76 * 10^{-7})$ is the conversion factor from lbs. to tons (1 ton/2000 lbs.) and from mmcf to MMBtu (1 mmcf/1050 MMBtu).
- X is the Hourly Metered Total Net Generation, MWh.
- Coefficients A, B, C, and D are the coefficients of the hourly heat rate curve given in Table C1-16 for each Unit.

Description of Unit	A	B	C
N/A	N/A	N/A	N/A

Pollutant Emissions Amount For Natural Gas is the applicable pollutant from SCAQMD General Instruction Book (for the latest year), Annual Emissions Reporting Program, Appendix A - Common Emission Factors For Combustion Equipment, Table 1 - Common Emission Factors For Combustion Equipment for Forms B1 and B1U.

c. **CAISO Hourly Organic Gases Emissions Cost, CAISO Hourly Sulfur Oxides Emissions Cost, CAISO Hourly Particulate Matter Emissions Cost, and CAISO Hourly Carbon Monoxide Emissions Cost**

The CAISO Hourly Organic Gases (OG) Emissions Cost, CAISO Hourly Sulfur Oxides (SOx) Emissions Cost, CAISO Hourly Particulate Matter (PM) Emissions Cost, and CAISO Hourly Carbon Monoxide (CO) Emissions Cost are each calculated in accordance with Equation C1-17.

Equation C1-17

$$\begin{array}{l} \text{CAISO Hourly} \\ \text{Applicable} \\ \text{Emissions Cost} \\ \text{($/hr)} \end{array} = (4.76 * 10^{-7}) * \begin{array}{l} \text{CAISO Unit Hourly} \\ \text{Cap Heat Input} \\ \text{(MMBtu/hr)} \end{array} * \begin{array}{l} \text{Associated} \\ \text{Emissions Factor} \\ \text{(lbs/mmcf)} \end{array} * \begin{array}{l} \text{Associated} \\ \text{Emissions Fee} \\ \text{($/ton)} \end{array}$$

Where:

- CAISO Hourly Applicable Emissions Cost is the CAISO Hourly OG Emissions Cost, CAISO Hourly SOx Emissions Cost, CAISO Hourly PM Emissions Cost, or CAISO Hourly CO Emissions Cost.

- $(4.76 * 10^{-7})$ is the conversion factor from lbs. to tons (1 ton/2000 lbs.) and from mmcf to MMBtu (1 mmcf/1050 MMBtu).
- Associated Emissions Factor is the associated OG Emissions Factor, SOx Emissions Factor, PM Emissions Factor or CO Emissions Factor from Table 1 from General Instruction Book for the SCAQMD (for the latest year) Annual Emissions Reporting Program.
- Associated Emissions Fee is the associated OG Emissions Fee, SOx Emissions Fee, PM Emissions Fee, or CO Emissions Fee from Table III of SCAQMD Rule 301(e), and is dependent upon the Cumulative Tons of Pollutant pursuant to Equation C1-15.

d. CAISO Hourly Sulfur Dioxides Trading Credit Costs

Beginning in the year 2000, certain Units will be subject to Title IV of the Federal Clean Air Act for providing SO₂ Allowances to cover related trading costs. Prior to 2000, the CAISO Hourly Sulfur Dioxides Trading Credit Cost will be zero. The Owner may make a filing under Section 205 of the Federal Power Act limited to recovering applicable CAISO Hourly Sulfur Dioxides Trading Credit Costs when such costs are incurred.

Part 2 for Ventura County Air Pollution Control District⁶

Beginning in the year 2000, certain Units will be subject to Title IV of the Federal Clean Air Act for providing SO₂ Allowances to cover related trading costs. Prior to 2000, the CAISO Hourly Sulfur Dioxides Trading Credit Cost will be zero. The Owner may make a filing under Section 205 of the Federal Power Act limited to recovering applicable CAISO Hourly Sulfur Dioxides Trading Credit Costs when such costs are incurred.

E. CAISO Monthly Variable O&M Cost

The CAISO Monthly Variable O&M Cost for each Unit shall be the product of the Unit's Billable MWh for the Billing Month and the Unit's Variable O&M Rate. Variable O&M Rate for each Unit shall be:

Table C1-18	
Unit	Variable O&M Rate (\$/MWh)

⁶ Ventura County APCD, where Mandalay Generating Station is located, does not require payment of emissions fees, but rather permit renewal fees. The permit renewal fees are included in the fixed O&M costs.

N/A	N/A
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F. CAISO Scheduling Coordinator Charge

The CAISO Scheduling Coordinator Charge for each Unit shall be the product of \$0.31 and the Unit's Billable MWh for the Billing Month.

G. CAISO ACA Charge

The CAISO ACA Charge is the product of the Unit's Billable MWh for the Billing Month and the applicable annual charge for short-term sales under 18 CFR Section 382.201 of the FERC Regulations.

SCHEDULE C – N/A**Variable Cost Payment for All Conditions
Part 2 for Geothermal Units**

For each Unit each Month, the Variable Cost Payment for Billable MWh from the Unit pursuant to Nonmarket Transactions during that Month shall be the amount calculated in accordance with the following formula:

$$\begin{array}{l} \text{Variable Cost Payment} \\ = \end{array} \begin{array}{l} \text{A. CAISO Monthly Billed Fuel Cost +} \\ \text{B. CAISO Monthly Variable O\&M Cost +} \\ \text{C. CAISO Scheduling Coordinator Charge} \\ \text{D. +} \\ \text{CAISO ACA Charge} \end{array}$$

Each component of the Variable Cost Payment for geothermal Units is calculated as described below:

A. CAISO Monthly Billed Fuel Cost [for Geysers Main only]

The CAISO Monthly Billed Fuel Cost is given by Equation C2-1.

Equation C2-1

$$\text{CAISO Monthly Billed Fuel Cost} = \text{Billable MWh} * \text{Steam Price (\$/MWh)}$$

Where:

- Steam Price is \$16.34/MWh.
- For purposes of Equation C2-1, Billable MWh is all Billable MWh Delivered after cumulative Hourly Metered Total Net Generation during the Contract Year from all Units exceeds the Minimum Annual Generation given by Equation C2-2.

Equation C2-2

$$\text{Minimum Annual Generation} = (\text{Annual Average Field Capacity} * 8760 \text{ hours} * 0.4) - (\text{A+B+C})$$

Where:

- Annual Average Field Capacity is the arithmetic average of the two Field Capacities in MW for each Contract Year, determined as described below.

Field Capacity shall be determined for each six-month period from July 1 through December 31 of the preceding calendar year and January 1 through June 30 of the Contract Year. Field Capacity shall be the average of the five highest amounts of net generation (in MWh) simultaneously achieved by all Units during eight-hour periods within the six-month period. The capacity simultaneously achieved by all Units during each eight-hour period shall be the sum of Hourly Metered Total Net Generation for all Units during such eight-hour period, divided by eight hours. Such eight-hour periods shall not overlap or be counted more than once but may be consecutive.

Within 30 days after the end of each six-month period, Owner shall provide CAISO and the Responsible Utility with its determination of Field Capacity, including all information necessary to validate that determination.

- A is the amount of Energy that cannot be produced (as defined below) due to the curtailment of a Unit during a test of the Facility, a Unit or the steam field agreed to by CAISO and Owner.
- B is the amount of Energy that cannot be produced (as defined below) due to the retirement of a Unit or due to a Unit's Availability remaining at zero after a period of ten Months during which the Unit's Availability has been zero.
- C is the amount of Energy that cannot be produced (as defined below) because a Force Majeure Event reduces a Unit's Availability to zero for at least thirty (30) days or because a Force Majeure Event reduces a Unit's Availability for at least one hundred eighty (180) days to a level below the Unit Availability Limit immediately prior to the Force Majeure Event.
- The amount of Energy that cannot be produced is the sum, for each Settlement Period during which the condition applicable to A, B or C above exists, of the difference between the Unit Availability Limit immediately prior to the condition and the Unit Availability Limit during the condition.

B. CAISO Monthly Billed Fuel Cost [for Geysers Units 13 & 16 only]

The CAISO Monthly Billed Fuel Cost is given by Equation C2-1.

Equation C2-1

$$\text{CAISO Monthly Billed Fuel Cost} = \text{Billable MWh} * \text{Steam Price (\$/MWh)}$$

Where:

- Steam Price is \$11.25/MWh, which includes the cost of steam condensate re-injection.

C. CAISO Monthly Variable O&M Cost

The CAISO Monthly Variable O&M Cost for each Unit is given by Equation C2-3 and is the product of the sum of Billable MWh for the Billing Month and the Unit's Variable O&M Rate. Variable O&M Rate for each Unit is shown in Table C2-1:

Equation C2-3

$$\text{CAISO Monthly Variable O\&M Cost} = \text{Monthly sum of Billable MWh} * \text{Variable O\&M Rate}$$

Unit	Variable O&M Rate (\$/MWh)

D. CAISO Scheduling Coordinator Charge

The CAISO Scheduling Coordinator Charge for each Unit shall be the product of \$0.31 and the Unit's of Billable MWh for the Billing Month.

E. CAISO ACA Charge

The CAISO ACA Charge is the product of the Unit's Billable MWh for the Billing Month and the applicable annual charge for short-term sales under 18 CFR Section 382.201 of the FERC Regulations, to the extent payable by Owner for Billable MWh.

SCHEDULE C - N/A**Variable Cost Payment for All Conditions
Part 3 for Conventional Hydro Units**

For each month and each Unit, the Variable Cost Payment for Billable MWh from the Unit pursuant to Nonmarket Transactions during that Month shall be the amount calculated in accordance with the following formula:

$$\begin{array}{l} \text{Variable Cost Payment} \\ = \end{array} \quad \begin{array}{l} \text{A. CAISO Scheduling Coordinator} \\ \text{Charge +} \\ \text{CAISO ACA Charge} \end{array}$$

A. CAISO Scheduling Coordinator Charge

The CAISO Scheduling Coordinator Charge for each Unit shall be the product of \$0.31 and the Unit's Billable MWh for the Billing Month.

B. CAISO ACA Charge

The CAISO ACA Charge is the product of the Unit's Billable MWh for the Billing Month and the applicable annual charge for short-term sales under 18 CFR Section 382.201 of the FERC Regulations.

SCHEDULE C – N/A**Variable Cost Payment for All Conditions
Part 4 for Pumped Storage Hydro Units**

For each month and each Unit, the Variable Cost Payment for Billable MWh from the Unit pursuant to Nonmarket Transactions during that Month shall be the amount calculated in accordance with the following formula:

$$\text{Variable Cost Payment} = \begin{array}{l} \text{A. CAISO Monthly Billed Fuel Cost +} \\ \text{B. CAISO Scheduling Coordinator} \\ \text{C. Charge +} \\ \text{CAISO ACA Charge} \end{array}$$

A. CAISO Monthly Billed Fuel Cost

The CAISO Monthly Billed Fuel Cost is given by Equation C4-1:

Equation C4-1

CAISO Monthly Billed Fuel Cost = Year-to-Date CAISO Fuel Cost – Sum of Previous Months' CAISO Monthly Billed Fuel Cost in the Contract Year

Where:

- Year-to-Date CAISO Fuel Cost is given by Equation C4-2.
- Sum of Previous Months' CAISO Monthly Billed Fuel Cost in the Contract Year shall be the sum of the CAISO Monthly billed Fuel Cost for each Month from January 1 of the Contract Year⁷ through the end of the Month in the Contract Year before the Billing Month.

Equation C4-2

$$\text{Year-to-Date CAISO Fuel Cost} = \frac{\text{YTD Pumping Cost/YTD Energy Produced}}{\text{*Variable O\&M Rate}}$$

Where:

- YTD Pumping Cost = Total cost of Energy purchased by Owner for pumping, including transmission charges, from January 1 of the Contract Year through the end of the Billing Month.

⁷ For purposes of Equations C4-1 and C4-2 as applied in 1999, Contract Year includes those months in the year, beginning in January 1999, when the same services as under this Agreement were provided to ISO under a predecessor rate schedule, as well as months when such services are provided under this Agreement.

- YTD Energy Produced = Total Energy produced by the Facility for Market and Nonmarket Transactions from January 1 of the Contract Year through the end of the Billing Month.
- YTD Billable MWh = Total Billable MWh from January 1 of the Contract Year through the end of the Billing Month.

B. CAISO Scheduling Coordinator Charge

The CAISO Scheduling Coordinator Charge for each Unit shall be the product of \$0.31 and the Unit's Billable MWh for the Billing Month.

C. CAISO ACA Charge

The CAISO ACA Charge is the product of the Unit's Billable MWh for the Billing Month and the applicable annual charge for short-term sales under 18 CFR Section 382.201 of the FERC Regulations.

Schedule C – N/A

**Variable Cost Payment for All Conditions
 Part 5 for Biomass Generation Units**

For each month and each Unit, the Variable Cost Payment for Billable MWh from the Unit pursuant to Nonmarket Transaction during that Month shall be the amount calculated in accordance with the following formula:

$$\text{Variable Cost Payment} = \begin{matrix} \text{A. CAISO Monthly Billed Fuel Cost +} \\ \text{B. CAISO Variable O\&M Cost +} \\ \text{C. CAISO Scheduling Coordinator} \\ \text{Charge} \end{matrix}$$

A. CAISO Monthly Billed Fuel Cost

The CAISO Monthly Billed Fuel Cost is given by Equation C5-1:

Equation C4-1

$$\text{CAISO Monthly Billed Fuel Cost} = \text{Billable MWh} * \text{Monthly Average Fuel Cost} (\$/\text{MWh})$$

Where:

- Monthly Average Fuel Cost (\$ / MWh) = Negotiated Cost Based Amount.

B. CAISO Monthly Variable O&M Cost

The CAISO ACA Charge is the product of the Unit’s Billable MWh for the Billing Month and the applicable annual charge for short-term sales under 18 CFR Section 382.201 of the FERC Regulations.

Equation C5-2

$$\text{CAISO Monthly Variable O\&M Cost} = \text{Monthly Sum of billable MWh} * \text{Variable O\&M Rate}$$

Table C5-1	
Unit	Variable O&M Rate (\$/MWh)

C. CAISO Scheduling Coordinator Charge

The CAISO Scheduling Coordinator Charge for each Unit shall be the product of \$0.31 and the Unit's Billable MWh for the Billing Month.

SCHEDULE D**Part 1—N/A****Start-up Payment for Condition 1 Units****1. Prepaid Start-up Charge**

Prepaid Start-up Charge for each Unit operating under Condition 1 for each Contract Year will be calculated as the Prepaid Start-up Cost times the number of Prepaid Start-ups. The number of Prepaid Start-up equals the Maximum Annual Start-ups per Unit. The Prepaid Start-up Cost will be calculated in accordance with Equation D-1 for Start-up Cost with the following assumptions:

- a. Hourly Fuel Price: For the initial Contract Year the Hourly Fuel Price shall be the simple average of the applicable index prices from Table C1-8 of Schedule C for the period beginning on the later of the initial publication date of such indices or January 1, 1998 and ending December 31, 1998, plus the applicable Transportation Rate under Equation C1-8 as in effect on April 1, 1999. For each subsequent Contract Year, the Hourly Fuel Price shall be agreed upon by CAISO and Owner; if there is no agreement, the Hourly Fuel Price shall be the simple average of the Hourly Fuel Prices for the twelve months ending the prior June 30 as calculated in accordance with Equation C1-8 of Schedule C;
- b. Energy Price shall be based on the [insert Applicable UDC Tariff rate], including applicable demand charges, provided that the Applicable UDC Tariff rate shall only be the energy charge rate at those Facilities where Units have the capability to use Energy from other units at the same Facility to effect Start-ups or where generation from other units is otherwise permitted under the CAISO Tariff to be netted against auxiliary power needed to effect Start-up of the Unit. For the initial Contract Year, the Energy Price shall be calculated as the total auxiliary power (including Energy for Start-ups) costs charged to the Facility by its supplier of end-use Energy for the six-month period ending December 31, 1998 divided by the auxiliary power (including Energy for Start-ups) consumed at the Facility for that same time period. For Facilities that have not been charged for auxiliary power for the six-month period ending December 31, 1998, the Energy Price for the Initial Contract Year shall be the simple average of the prices for Energy for varying times of day shown in the Applicable UDC Tariff. For each subsequent Contract Year, the Energy Price shall be calculated as the total auxiliary power (including Energy for Start-ups) costs charged to the Facility by its supplier of end-use Energy for the twelve months ending the prior June 30 divided by the auxiliary power (including Energy for Start-ups) consumed at the Facility for that same twelve-month period;

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- c) All Start-ups are assumed to be from maximum time off line as shown by value XMax in Table D-1, and
- d) Other Start-up Costs shall be zero (\$0) for non-hydroelectric Units; for hydroelectric Units, other Start-up costs shall be the cost shown in Table D-2 for Normal Work Hours.

The Prepaid Start-up Cost and Prepaid Start-up Charge for the current Contract Year are set forth in Table D-0:

Table D-0			
Unit	Number of Prepaid Start-ups	Prepaid Start-up Cost	Prepaid Start-up Charge
Huntington Beach Unit 3	N/A	N/A	N/A
Huntington Beach Unit 4	N/A	N/A	N/A

2. Start-up Cost

The cost for a Start-up shall be calculated in accordance with Equation D-1:

Equation D-1

$$\begin{array}{r} \text{Start-up} \\ \text{Cost} \\ (\$) \end{array} = \begin{array}{r} \text{Start-up} \\ \text{Fuel Cost} \\ (\$) \end{array} + \begin{array}{r} \text{Start-up} \\ \text{Power Cost} \\ (\$) \end{array} + \begin{array}{r} \text{Other} \\ \text{Start-up Costs} \\ (\$) \end{array} + \begin{array}{r} \text{Shutdown} \\ \text{Power Cost} \\ (\$) \end{array}$$

Each component of the Start-up Cost in Equation D-1 is set forth below.

a. Start-up Fuel Costs

The Start-up Fuel Cost shall be calculated in accordance with Equation D-1a:

Equation D-1a

$$\begin{array}{r} \text{Start-up} \\ \text{Fuel Cost} \\ (\$) \end{array} = \left[\begin{array}{r} \text{(A)} \\ \text{(MMBtu/hr)} \end{array} * \begin{array}{r} \text{x)} \\ \text{(hrs)} \end{array} + \begin{array}{r} \text{B} \\ \text{(MMBtu)} \end{array} \right] * \begin{array}{r} \text{Hourly} \\ \text{Fuel Price} \\ (\$ \text{MMBtu}) \end{array}$$

Where:

- “x” equals the number of hours since the Unit ceased operation and cannot exceed “X_{Max}”.
- The Hourly Fuel Price is calculated pursuant to Schedule C Equation C1-8

for the hour in which the Start-up began.

- The values A, B and x_{Max} for each Unit are given in Table D-1 below.

b. Start-up Power Costs

The Start-up Power Cost shall be calculated in accordance with Equation D-1b:

Equation D-1b

$$\begin{array}{l} \text{Start-up} \\ \text{Power Cost} \\ (\$) \end{array} = \left(\begin{array}{l} [C \\ (\text{MWh/hr}) \end{array} * \begin{array}{l} x \\ (\text{hrs}) \end{array} \right) + \begin{array}{l} D \\ (\text{MWh}) \end{array} \begin{array}{l} * \\ \end{array} \begin{array}{l} \text{Energy} \\ \text{Price} \\ (\$/\text{MWh}) \end{array}$$

Where:

- “x” is equal to the hours since the Unit ceased operation and cannot exceed “xMax”.
- The Energy Price shall be equal to the total auxiliary power (including Energy for Start-ups) costs charged to the Facility by its supplier of end-use Energy for the billing cycle in which the Start-up was initiated divided by the total auxiliary power (including Energy for Start-ups) consumed at the Facility during such billing cycle.
- The values C, D and xMax are given in Table D-1 below.

c. Shutdown Power Costs

The Shutdown Power Cost shall be calculated in accordance with Equation D-1c:

Equation D-1c

$$\begin{array}{l} \text{Shutdown} \\ \text{Power Cost} \\ (\$) \end{array} = \begin{array}{l} \text{Shutdown Power} \\ \text{Requirement} \\ (\text{MWh}) \end{array} * \begin{array}{l} \text{Energy} \\ \text{Price} \\ (\$/\text{MWh}) \end{array}$$

The Energy Price shall be equal to the total auxiliary power (including Energy for Shutdowns) costs charged to the Facility by its supplier of end-use Energy for the billing cycle in which the Shutdown was initiated divided by the total auxiliary power (including Energy for Shutdowns) consumed at the Facility during such billing cycle. The Shutdown Power Requirement is given in Table D-1 below.

d. Other Start-up Costs for Hydroelectric Only

Other Start-up Costs are the cost of labor to start hydroelectric Units that require an operator to manually parallel, and reflect the labor costs to travel to the site. If the Start-up of a hydroelectric Unit occurs outside normal work hours, the Start-up Costs include the minimum work hours and labor rates as set by the applicable collective bargaining agreement(s).

The Other Start-up Costs shall be calculated in accordance with Equation D1-d. The values for E are provided in Table D-2 for normal work hour and outside of normal work hour situations.

Equation D-1d

$$\text{Other Start-up Costs (\$)} = E$$

Once a Unit has been given a Dispatch Notice to Start-up, other Start-up Costs are incurred.

	X _{Max}	A	B ⁸	C	D	Shutdown Power Requirement
Unit	(Hrs)	(mmBtu)/ hr	(mmBtu)	(MWh)/hr	(MWh)	(MWh)
N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A	N/A	N/A

Unit	E (Normal Work Hours) (\$)	E (Outside Normal Work Hours) (\$)
N/A	N/A	N/A
N/A	N/A	N/A

3. Monthly Start-up Adjustment

⁸ Includes fuel consumed from the time Unit reaches Synchronization to the time Unit reaches Minimum Load.

For each Start-up successfully completed in compliance with a Dispatch Notice during the Billing Month, and each Start-up initiated in compliance with a Dispatch Notice but not successfully completed because it is canceled or rescinded by CAISO, until the total Counted Start-ups for the Contract Year equals the number of Prepaid Start-ups for the Contract Year, the Monthly Start-up Adjustment, which shall be a credit or payment, is the sum of Prepaid Start-up Adjustments, and Prepaid Start-up Adjustments for Canceled Start-ups calculated in accordance with Equations D-2 and D-3:

Equation D2

Prepaid Start-up Adjustment = Prepaid Start-up Cost calculated in accordance with Section 1 minus the actual Start-up Cost calculated in accordance with Equation D-1.

Equation D-3

Prepaid Start-up Adjustment for Canceled Start-up = $\frac{\text{Number of hours committed to the Start-up applicable Start-up Lead Time (hrs) as shown in Schedule A, Section 6}}{\text{Prepaid Start-up Adjustment calculated in accordance with Equation D-2}}$ *

Where:

- The “number of hours committed to the Start-up” is the lesser of (a) time elapsed between the initiation of the Start-up and the cancellation and (b) the applicable Start-up Lead Time.

SCHEDULE D

Part 2 Start-up Payment for Condition 2 Units

1. Start-up Payment

The Start-up Payment for each Start-up successfully completed for each Unit operating under Condition 2 equals the Start-up Cost calculated using Equation D-1.

<u>Table D-1, Start-Up Costs</u>						
	<u>X_{Max}</u>	<u>A</u>	<u>B⁹</u>	<u>C</u>	<u>D</u>	<u>Shutdown Power Requirement</u>
<u>Unit</u>	<u>(Hrs)</u>	<u>(mmBtu)/hr</u>	<u>(mmBtu)</u>	<u>(MWh)/hr</u>	<u>(MWh)</u>	<u>(MWh)</u>
<u>Huntington Beach Unit 3</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>3.0</u>	<u>0.2</u>
<u>Huntington Beach Unit 4</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>3.0</u>	<u>0.2</u>

2. Payment for Canceled Start-up

If Start-up is initiated under a Dispatch Notice but is not successfully completed because it is canceled or rescinded by the CAISO, the Start-up Payment is calculated in accordance with Equation D-4:

Equation D-4

$$\begin{array}{l}
 \text{Start-up Payment for} \\
 \text{Canceled Start-up} \\
 \text{(\$)}
 \end{array}
 =
 \begin{array}{l}
 \text{Number of hours} \\
 \text{committed to the} \\
 \text{Start-up} \\
 \text{applicable Start-up} \\
 \text{Lead Time (hrs)} \\
 \text{as shown in} \\
 \text{Schedule A, Section 6}
 \end{array}
 *
 \begin{array}{l}
 \text{Start-up Cost} \\
 \text{calculated in} \\
 \text{accordance with} \\
 \text{Equation D-1 (\$)}
 \end{array}$$

⁹ [Includes fuel consumed from the time Unit reaches Synchronization to the time Unit reaches Minimum Load.](#)

The “number of hours committed to the Start-up” is the lesser of (a) time elapsed between the initiation of the Start-up and the cancellation or (b) the applicable Start-up Lead Time.

SCHEDULE E**Ancillary Services**
Part 1 for Condition 1 – N/A

The CAISO may call upon the Unit to provide the following Ancillary Services as defined in the CAISO Tariff:

- Regulation
- Spinning Reserve
- Nonspinning Reserve
- Replacement Reserve
- Voltage Support (including synchronous condenser operation)
- Black Start

If the Unit is otherwise generating, the Owner shall be required to operate the Unit within the Power Factor range of the Unit specified in Schedule A to provide Ancillary Services without additional compensation.

Certain Units (hydroelectric and synchronous condensers) can provide Ancillary Services without generating Energy. Under this Condition, Owner will be compensated for Motoring Charges if the Unit is providing Ancillary Services while synchronized without generating Energy.

Motoring Charge

When Units are operated as synchronous condensers (i.e., motored using electric power) to provide Ancillary Services, if applicable, the payment for that service is given by the following formula:

$$\text{Motoring Charge} = (\text{Power consumption rate (MWh/hr)}) * (\text{hours operated}) * (\text{Energy Price})$$

Where the Power consumption rate is given by the following table:

Unit	Power consumption rate (MWh/hour)
------	-----------------------------------

The Energy Price shall be equal to the total power costs charged to the Facility by its supplier of end-use Energy under the Applicable UDC Tariff for the billing cycle in which

the Motoring Charge was incurred divided by the total power consumed at the Facility under such tariff during such billing cycle.

Pre-empted Dispatch Payment

If the CAISO issues a Dispatch Notice to:

- (i) decrease a Unit's scheduled output of Energy in a Market Transaction to provide Ancillary Services;
- (ii) decrease a Unit's scheduled provision of Ancillary Services capacity in a Market Transaction in order to provide Regulation, Spinning Reserve, Nonspinning Reserve, or Replacement Reserve pursuant to a Dispatch Notice,
- (iii) decrease a Unit's scheduled provision of Ancillary Service capacity in a Market Transaction in order to provide Energy pursuant to a Dispatch Notice, the CAISO shall pay the appropriate Pre-empted Dispatch Payment described below. The Pre-empted Dispatch Payments are intended to make an Owner whole with respect to the original Market Transaction.

A. For Pre-empted Energy Market Transactions:

Pre-empted Dispatch Payment = Imbalance Energy Charge – Cost Savings

- Imbalance Energy Charge = $(X_o - X_n) \times$ Penalty Price
- Penalty Price = Unrestricted Imbalance Energy Price + additional penalties (per MWh) imposed by the CAISO for failure to comply with Market Schedules due to compliance with Dispatch Notice.
- Cost Savings = Fuel Cost Savings + Emissions Savings + Other Savings

Where:

- X_o = Original Total Schedule in Market and Nonmarket Transactions;
- X_n = New Total Schedule in Market and Nonmarket Transactions;

For fossil fuel Units, the Fuel Cost Savings is calculated as follows:

- Fuel Cost Savings = Fuel Savings x Hourly Fuel Price
- Fuel Savings = $(AX_o^3 + BX_o^2 + CX_o + D) - (AX_n^3 + BX_n^2 + CX_n + D) \times E$

or

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- Fuel Savings = $[(A * (B + CX_o + De^{FX_o})) - (A * (B + CX_n + De^{FX_n}))] * E$
- A, B, C, D, E and F are the coefficients from Table C1-7a or C1-7b, as applicable;
- Hourly Fuel Price is calculated in Equation C1-8.

For geothermal Units, the Fuel Cost Savings is calculated by the following formula:

$$\text{Fuel Cost Savings} = (X_o - X_n) * \text{Hourly Fuel Price}$$

Where:

- Hourly Fuel Price is the Steam Price identified in Equation C2-1 in Schedule C. However, for purposes of this Pre-empted Dispatch Payment calculation, the value for the Steam Price will be set to zero for Geysers Main Units until the cumulative Hourly Metered Total Net Generation for the Contract Year from all Units exceeds the Minimum Annual Generation given in Equation C2-2.

For pumped storage hydroelectric Units, the Fuel Cost Savings is calculated by the following formula:

$$\text{Fuel Cost Savings} = (X_o - X_n) * \text{Hourly Fuel Price}$$

Where:

- Hourly Fuel Price is YTD Pumping Cost / YTD Energy Produced; and YTD Pumping Cost and YTD Energy Produced are as defined in Equation C4-2.

For conventional hydroelectric Units, the Fuel Cost Savings is zero.

Other Savings = $((X_o - X_n) * (\text{Variable O\&M Rate} + \text{applicable annual charge for short-term sales under 18 CFR 382.201 of the FERC Regulations}))$

Emissions Savings = RECLAIM Savings + NOx Emissions Fee Savings + Organic Gases Fee Savings + Sulfur Oxides Fee Savings + Particulate Matter Savings + Carbon Monoxide Fee Savings

RECLAIM Savings = $((AX_o^2 + BX_o + C) - (AX_n^2 + BX_n + C)) * \text{RECLAIM NO}_x \text{ Trading Credit Rate}$

Where:

- A, B and C are the coefficients from Table C1-13;
- X_o = Original Total Schedule in Market and Nonmarket Transactions;
- X_n = New Total Schedule in Market and Nonmarket Transactions;

NO_x Emissions Fee Savings = $\frac{((AX_o^2 + BX_o + C) - (AX_n^2 + BX_n + C))}{2000} * \text{NO}_x \text{ Emissions Fee}$;

Where:

- A, B and C are the coefficients from Table C1-13;
- X_o = Original Total Schedule in Market and Nonmarket Transactions;
- X_n = New Total Schedule in Market and Nonmarket Transactions;

Organic Gases Fee Savings =

$4.76 * 10^{-7} * \text{Gas Fuel Savings} * \text{Associated Emission Factor for Organic Gases} * \text{Associated Emissions Fee for Organic Gases}$

Sulfur Oxides Fee Savings =

$4.76 * 10^{-7} * \text{Gas Fuel Savings} * \text{Associated Emission Factor for Sulfur Oxides} * \text{Associated Emissions Fee for Sulfur Oxides}$

Particulate Matter Oxides Fee Savings =

$4.76 * 10^{-7} * \text{Gas Fuel Savings} * \text{Associated Emission Factor for Particulate Matter} * \text{Associated Emission Fee for Particulate Matter}$

Carbon Monoxide Fee Savings =

$4.76 * 10^{-7} * \text{Gas Fuel Savings} * \text{Associated Emission Factor for Carbon Monoxide} * \text{Associated Emission Fee for Carbon Monoxide}$

All Emissions Fees and Emission Factors are determined in accordance with Schedule C.

[If applicable, insert emission cost savings formula for fuel other than natural gas.]

The Owner will be entitled to retain all payments received from the Owner's Scheduling Coordinator for the Unit's scheduled output.

B. For Pre-empted Ancillary Services Market Transactions:

CAISO shall pay Owner the product of (i) the difference between the MW of the Ancillary Service Owner had scheduled to provide in a Market Transaction and the MW of Ancillary Services Owner is able to provide after complying with the Dispatch Notice and (ii) the Market Clearing Price the Owner pays to buy back its commitment to deliver the preempted MW of Ancillary Services (if the Owner actually incurs such a cost), or the penalty the Owner pays for failure to deliver the preempted MW of Ancillary Services (if the Owner actually incurs such a cost) for the applicable Ancillary Service, market, and hour. In addition, if compliance with the Dispatch Notice causes reduction of a market regulation transaction, the CAISO shall also pay the Owner the product of the Regulation Energy Payment Adjustment (REPA) amount, if applicable, and the MW of Regulation which Owner had scheduled but is unable to provide because of its compliance with the Dispatch Notice.

Schedule E**Ancillary Services
Part 2 for Condition 2**

The CAISO may call upon the Unit to provide the following Ancillary Services as defined in the CAISO Tariff:

~~Regulation~~
~~Spinning Reserve~~
~~Nonspinning Reserve~~
~~Replacement Reserve~~
Voltage Support (including synchronous condenser operation)
~~Black Start~~

The Owner shall be required to operate the Unit within the Power Factor range of the Unit specified in Schedule A to provide Voltage Support without additional compensation.

The Owner shall receive no payment for any Ancillary Services Capacity provided. However, operation of a Unit in synchronous condenser mode will be compensated as shown below.

Motoring Charge

When Units are operated as synchronous condensers (i.e., motored using electric power) to provide Ancillary Services, if applicable, the payment for that service is given by the following formula:

Motoring Charge = (Power consumption rate (MWh/hr)) * (hours operated) * (Energy Price)

Where the Power consumption rate is given by the following table:

Unit	Power consumption rate (MWh/hour)	
	With Both Units Dispatched Simultaneously	With Only One Unit Dispatched
Huntington Beach Unit 3	2.661	3.106

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Huntington Beach Unit 4	2.608	3.053
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The Energy Price shall be equal to the total power costs charged to the Facility by its supplier of end-use Energy under the Applicable UDC Tariff for the billing cycle in which the Motoring Charge was incurred divided by the total power consumed at the Facility under such tariff during such billing cycle.

Schedule E
Ancillary Services
Part 3 for Black Start Services – [N/A](#)

For those Units with Black Start capability, the cost of maintaining such capability is included in this Agreement and no additional costs shall be charged to the CAISO for maintaining such capability. The CAISO will pay for Black Start service, including for a Black Start Test Dispatch Notice, at the rates and prices in this Agreement for Start-Ups and Delivery of Energy in connection with the Black Start service. Owner shall maintain the Black Start capability of the Unit and the Facility and provide Black Starts in accordance with the CAISO Ancillary Services Requirements Protocol and the CAISO Dispatch Protocol, which shall be deemed incorporated by reference into this Agreement.

When the CAISO first gives written notice to the Owner that it has obtained adequate Black Start service through an auction or a separate agreement with Owner or other Generators and Black Start service under this Agreement is no longer required, the CAISO shall not be entitled to call upon this Unit to provide Black Start service. Once the CAISO has given this notice, the Owner may remove Black Start service from this Agreement by filing unilaterally a change in rate schedule with FERC. Such filing shall not be required to include any reduction in rate or revenue solely because Black Start service is removed. The CAISO shall not oppose the absence of any rate or revenue reduction that results solely from removing such service.

Schedule F – [N/A](#)**Determination of Annual Revenue Requirements
of Must-Run Generating Units**

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Article I. Purpose and General Procedures

Part A. Determination of Rates and Charges

This Schedule F establishes the procedures and methodology for determining the Annual Fixed Revenue Requirements (in dollars) and Variable O&M Rates (in \$/MWh) for facilities designated for must-run service for purposes of calculating certain charges for such service under the RMR Contract.

The Annual Fixed Revenue Requirements and the Variable O&M Rate for each designated must-run generating facility shall be determined annually. The Annual Fixed Revenue Requirements and the Variable O&M Rate for each such facility that shall be used for calculating charges to the CAISO during each calendar year shall be determined by application of the Formula set forth in Article II hereof to the Owner's costs incurred during the twelve-month period ended on June 30 of the prior calendar year. Each twelve-month period ending on June 30 of each year is hereinafter referred to as the "Cost Year" relating to the rates and charges that are effective during the succeeding calendar year.

Part B. Informational Filings

In connection with the determination of rates and charges for each calendar year, reflecting costs incurred during the June 30 Cost Year as described in the foregoing Part A of this Article I, the Owner shall provide to the CAISO an Information Package detailing and supporting all calculations involved in such determination. A single Information Package may contain all such informational materials pertaining to all of the Owner's designated must-run facilities. On or before October 1, 2001, the Owner shall provide to the CAISO the Information Package relating to the rates and charges to become effective on January 1, 2002. Thereafter, on November 1 of each year, the Owner shall provide to the CAISO the Information Package relating to the rates and charges to be effective during the calendar year beginning on the following January 1.

Each such Information Package shall be in a clear and readable format and shall contain:

1. detailed workpapers showing the derivation of costs under the Formula for the relevant Cost Year along with supporting schedules showing the data used in applying the formula, presented in a format consistent with the presentation of information in the FERC Form No. 1;
2. a clear identification of the depreciation rates reflected in claimed costs for the Cost Year and the rate of return and every other stated item (i.e., any item which appears as a numerical value in the Formula and which only may be changed by a filing with the FERC);

3. a comparison of the major components of the resulting revenue requirements for the relevant Cost Year with the corresponding components of the revenue requirements that result from the application of the Formula using costs from the Owner's FERC Form No. 1 relating to the preceding calendar year;
4. such additional documentation as to specific items of costs required by the Formula.

The Owner shall provide each Information Package to the CAISO in printed form and a suitable electronic format. The CAISO shall post the Information Package on its website. A suitable electronic format shall be any format that the FERC permits for electronic filings.

Coincident with providing each such Information Package to the CAISO, the Owner shall also submit the Information Package to the FERC in an informational filing so as to allow for review of the related rates and charges by the FERC staff and affected parties. As to the informational filing relating to rates and charges to be effective during calendar year 2002, (i) discovery requests by the FERC staff and affected parties shall be made within 45 days of the filing, with responses by the Owner due within 60 days of the filing, and (ii) protests, if any, by affected parties shall be filed with the FERC within 75 days of the filing. As to each subsequent informational filing, (i) discovery requests by the FERC staff and affected parties shall be made within 20 days of the filing, with responses by the Owner due within 35 days of the filing, and (ii) protests, if any, by affected parties shall be filed with the FERC within 45 days of the filing. In the event that the need arises during the discovery process for the nondisclosure or confidentiality of information, the Owner and affected parties, other than FERC Staff and state regulatory agencies, shall utilize the procedures contained in Schedules N-1 and N-2 of the RMR Contract. If the Owner seeks the confidentiality or nondisclosure of information provided to FERC or state regulatory agencies, it shall follow the applicable rules, regulations and statutory provisions of those agencies.

Protests to the Information Package challenging arithmetic calculations or conformity to the Rate Formula, not resolved by summary disposition of the FERC, shall be resolved by the use of the Alternative Dispute Resolution procedures in Schedule K of the RMR contract. In such a proceeding, the Owner will bear the burden of proof as in a proceeding under Section 205 of the Federal Power Act (FPA). If it is found that an erroneous calculation or non-conforming formula element has been used, refunds shall be ordered. The amount of refunds shall restore the parties to the positions they would have occupied had the erroneous calculations or non-conforming formula elements not been used, with interest calculated pursuant to Section 35.19a of the Commission's regulations, 18 C.F.R. Section 35.19a.

If a matter is set for hearing, additional discovery shall be permitted in accordance with the Commission's Rules of Practice and Procedure. Under hearings established pursuant to this provision, refund rights will be as in a proceeding under Section 205 of

the FPA. Any refunds due as the result of a final Commission order will be credited or paid to the CAISO with interest in accordance with 18 C.F.R. 35.19a.

In addition to the discovery provided above, affected parties shall have the ability to audit the Owner's books and records as provided in Section 12.2 of the RMR Contract. To the extent that an audit discloses that the formula was not correctly applied for a particular year, the affected prior billings shall be corrected, and appropriate refunds or credits shall be provided to the CAISO, with interest determined in accordance with 18 C.F.R. 35.19a.

Notwithstanding the above procedures, all parties retain full rights to make filings at any time under Sections 205 and 206 of the FPA, as appropriate.

Article II. Formula for Determination of Annual Revenue Requirements

Part A. Purpose and Overview

The purpose of this Formula For Determination of Annual Revenue Requirements ("Formula") is to specify the method for determining the Annual Revenue Requirements, and certain components thereof, of particular must-run generating units for each Cost Year.

Part B of this Formula contains the specifications for the components of costs that may be included in the Annual Revenue Requirements of individual designated must-run generating units (*i.e.*, for each "Subject Resource").

Part C of this Formula sets forth (i) general instructions for the use and application of the Formula, and (ii) certain general definitions of terms used herein.

Part B. Determination of Annual Revenue Requirements

Section 1. Annual Fixed Revenue Requirements and Variable O&M Rate

Annual Fixed Revenue Requirements

The "Annual Fixed Revenue Requirements" for the Subject Resource is the amount determined as the following difference:

1. Total Annual Revenue Requirements, as defined below; less
2. Total Annual Variable Costs, as defined below.

Variable O&M Rate

The "Variable O&M Rate" for the Subject Resource is the rate (in \$/MWh) determined as the follows:

Variable O&M Rate = [Annual Variable O&M Expenses]/[Annual Net Generation]

where "Annual Variable O&M Expenses" is defined hereinbelow, and "Annual Net Generation" is the net generation (in MWh) of the Subject Resource during the Cost Year.

Notwithstanding the foregoing, whenever the Annual Net Generation of the Subject Resource is zero or negative, the Variable O&M Rate shall be deemed to be zero.

Total Annual Revenue Requirements

The "Total Annual Revenue Requirements" for the Subject Resource is the amount that is the sum of the following amounts:

1. Operating Expenses, determined pursuant to Section 2 below; and
2. Return and Income Tax Allowance, determined pursuant to Section 3 below.

Section 2. Operating Expenses

"**Operating Expenses**" for the Subject Resource is the quantity that is the sum of the following amounts:

0. Total O&M Expenses, as defined below;
1. Depreciation Expenses, as defined below;
2. Taxes Other Than Income Taxes, as defined below; and
3. Revenue Credits, as defined below.

Total O&M Expenses

"Total O&M Expenses" is the amount of expenses arising from the operation and maintenance of the Subject Resource, including Production O&M Expenses, Transmission O&M Expenses, Distribution O&M Expenses, and Administrative & General Expenses, all as defined below.

- (1) **Production O&M Expenses:** Expenses incurred directly in operating and maintaining the Subject Resource:
 - (a) **Steam Production O&M:** For steam units only, amounts

properly recorded in Accounts 500-515.

- (b) **Hydro Production O&M:** For hydro units only, amounts properly recorded in Accounts 535-545.
- (c) **Other Power Generation O&M:** For other types of units, amounts properly recorded in Accounts 546-554.
- (d) **Other Power Supply Expenses:** Amounts properly recorded in Accounts 555-557, if any, that are reasonably assignable or allocable to the Subject Resource.

- (2) **Transmission O&M Expenses:** Expenses incurred directly in operating and maintaining the transmission facilities associated with the Subject Resource, as properly recorded in Accounts 560-573 and reasonably assignable or allocable to the Subject Resource.
- (3) **Distribution O&M Expenses:** Expenses incurred directly in operating and maintaining the distribution facilities associated with the Subject Resource, as properly recorded in Accounts 580-598 and reasonably assignable or allocable to the Subject Resource.
- (4) **Administrative and General (A&G) Expenses:** Those portions, if any, of administrative and general expenses, as properly recorded in Accounts 920-935, that are reasonably related to the operation of the Subject Resource, determined from appropriate direct assignment or reasonable allocation. Such expenses shall exclude (i) franchise fees related solely to the Owner's retail sales, (ii) retail regulatory expenses, (iii) assessments under 18 CFR Section 382.201 of the FERC Regulations, (iv) association dues, and (v) general advertising expenses.

Notwithstanding the foregoing, O&M Expenses hereunder shall exclude all Scheduling Coordinator Charges as charged under the CAISO Tariff, irrespective of in which Account or Accounts such charges are included.

Depreciation Expenses

"Depreciation Expenses" are provisions for depreciation and amortization for the Subject Resource, as properly recorded in Accounts 403, 404, 405, 406, and 407, including only:

- (1) **Production Plant Depreciation:** Depreciation and amortization, if any, of investment in the Subject Resource;
- (2) **Transmission Plant Depreciation:** Depreciation and amortization,

if any, of investment in the transmission facilities associated with the Subject Resource, as reasonably assignable or allocable to the Subject Resource;

- (3) **Distribution Plant Depreciation:** Depreciation and amortization, if any, of investment in the distribution facilities associated with the Subject Resource, as reasonably assignable or allocable to the Subject Resource;
- (4) **General and Intangible Plant Depreciation:** Depreciation and amortization, if any, of general and intangible plant investments that are reasonably assignable or allocable to the Subject Resource.

Notwithstanding the foregoing, costs recorded in Accounts 405, 406 and 407 shall be included hereunder only if, and to the extent that, FERC shall have permitted the inclusion of such costs for ratemaking purposes for the Owner under the RMR Contract.

Taxes Other Than Income Taxes

"Taxes Other Than Income Taxes" are taxes other than income and revenue taxes, as properly recorded in Account 408.1, that are reasonably assignable and allocable to the Subject Resource, including for example:

1. Property and Property-Related Taxes;
2. Payroll and Labor-Related Taxes;
3. Other Taxes, if any, identifiable as reasonably assignable or allocable to the Subject Resource.

Taxes Other Than Income Taxes assignable and allocable to the Subject Resource shall not include any taxes related solely to, or arising solely from, the Owner's retail sales.

Revenue Credits

"Revenue Credits" are those revenues, if any, that are (i) properly recorded in Account 451 (Miscellaneous Service Revenues), Account 453 (Sales of Water and Water Power), Account 454 (Rent From Electric Property), Account 455 (Interdepartmental Sales), and Account 456 (Other Electric Revenues), and (ii) directly related to, or reasonably allocable to, the Subject Resource. Such Revenue Credits shall be treated as negative values hereunder.

Treatment of Capital Leases

The foregoing components of Operating Expenses may include expenses associated with capital leases as approved by the Commission, as set forth more fully under Article II, Part B, Section 4(A) of this Formula.

Section 3. Return and Income Tax Allowance

"Return and Income Tax Allowance" is the quantity that is the sum of:

1. the product of:
 - a. Allowable Pre-Tax Rate of Return, and
 - b. Net Investment,
 as both such quantities are hereinafter defined; and
2. the quantity equal to:

$$[ITC Amortization]/(1-t)$$

where:

- a. "t" is the effective, combined state and federal income tax rate.
- b. "ITC Amortization," is amortization, if any, of investment tax credits, as properly recorded in Account 411.4, that are reasonably assignable or allocable to the Subject Resource and to those portions of general and intangible plant investments that are reasonably assignable or allocable to the Subject Resource. Notwithstanding the foregoing, this term shall include only those amounts of amortization of investment tax credits which the Owner shall have elected to receive under Section 46(f)(1) of the Internal Revenue Code. ITC Amortization amounts that reduce net income shall be treated as negative values hereunder, while ITC Amortization amounts, if any, that increase net income shall be treated as positive values hereunder.

Section 4. Net Investment

"Net Investment" is the quantity that is determined as follows:

$$\text{Net Investment} = \text{Gross Plant Investment} - \text{Depreciation Reserve} + \text{CWIP} + \text{PHFU} - \text{ADIT} + \text{Working Capital}$$

where the quantities appearing in the foregoing equation are defined hereinafter below.

In determining Net Investment hereunder, each component thereof, other than Cash Allowance, shall be determined as the end-of-year balances in the Accounts specified for the relevant Cost Year.

(A) Gross Plant Investment

"Gross Plant Investment" is gross original cost plant investment as properly recorded in Accounts 101, 102, 106, and 114, including only the following amounts:

- (1) **Production Plant Investment:** investment in the generating unit itself and in common facilities associated with the unit, as recorded in Accounts 310-316, 330-336, or 340-346, 106 and 114;
- (2) **Transmission Plant Investment:** investment in transmission facilities associated with the Subject Resource, as properly recorded in Accounts 350-359, 106, and 114, and reasonably assignable or allocable to the Subject Resource;
- (3) **Distribution Plant Investment:** investment in distribution facilities associated with the Subject Resource, as properly recorded in Accounts 360-373, 106, and 114, and reasonably assignable or allocable to the Subject Resource; and
- (4) **General and Intangible Plant Investment:** reasonably assignable and allocable portions, if any, of general and intangible plant investment, recorded in Accounts 389-399 and 301-303, 106 and 114.

Subject to the limitations detailed in this paragraph, when the Owner has a capital lease in lieu of gross plant investment, it may include Account 101.1 hereunder. A lease may be capitalized and the costs included for ratemaking purposes if the Owner demonstrates that the lease qualifies as a capital lease under 18 C.F.R. Part 101, General Instruction No. 19 (1998), and the Owner has obtained, prior to the informational filing, approval to include such costs for ratemaking purposes from the FERC under the FPA. Capital leases shall be accounted for in accordance with 18 C.F.R. Part 101, General Instruction No. 20 (1998).

(B) Depreciation Reserve

"Depreciation Reserve" is accumulated provision for depreciation and amortization, as properly recorded in Accounts 108, 111, and 115, related to the Subject Resource, including the following amounts:

- (1) **Production Plant Depreciation Reserve:** amounts of Depreciation Reserve for the investment in the unit itself and in common facilities associated with the unit;
- (2) **Transmission Plant Depreciation Reserve:** amounts of Depreciation Reserve for the investment in transmission facilities associated with the Subject Resource, as reasonably assignable or allocable to the Subject Resource;
- (3) **Distribution Plant Depreciation Reserve:** amounts of Depreciation Reserve for the investment in distribution facilities associated with the Subject Resource, as reasonably assignable or allocable to the Subject Resource;
- (4) **General and Intangible Plant Reserve:** amounts of Depreciation Reserve for the portions, if any, of general and intangible plant investments reasonably assignable and allocable to the Subject Resource.

Credit balances in the aforementioned accounts shall be treated as positive values hereunder, and debit balances in such accounts shall be treated as negative values.

(C) CWIP

"CWIP" is the amount of construction work in progress, as properly recorded in Account 107 for construction projects associated with the Subject Resource related solely and directly to pollution control for the Subject Resource.

(D) PHFU

"PHFU" is the cost of plant held for future use, as properly recorded in Account 105 that is reasonably assignable or allocable to the Subject Resource.

(E) ADIT

"ADIT" is accumulated provision for deferred income taxes, as properly recorded in Accounts 190, 281, 282, 283, and 255, that are reasonably assignable or allocable to the investment in, or operation of, the Subject Resource, including the following amounts:

- (1) **Production Plant ADIT:** amounts of ADIT arising directly from the investment in, or operation of, the Subject Resource itself and common facilities associated with the Subject Resource;

- (2) **Transmission Plant ADIT:** amounts of ADIT arising directly from the investment in, or operation of, the transmission facilities, if any, associated with the Subject Resource;
- (3) **Distribution Plant ADIT:** amounts of ADIT arising directly from the investment in, or operation of, distribution facilities, if any, associated with the Subject Resource; and
- (4) **General and Intangible Plant ADIT:** amounts of ADIT arising from the portions, if any, of general and intangible plant investments reasonably assignable and allocable to the Subject Resource.

For purposes of this Formula, ADIT means accumulated provision for deferred income taxes, as properly recorded in the aforementioned Accounts, *including* amounts previously recorded in such accounts and reclassified as a result of the adoption of SFAS No. 109, but *excluding* amounts recorded in such accounts as a result of the adoption of SFAS No. 109, such that the required adoption of SFAS No. 109 will have no effect on the costs determined hereunder.

Notwithstanding the foregoing, as to Account 255, ADIT hereunder shall include only those amounts, if any, related to investment tax credits which the Owner shall have elected to receive under Section 46(f)(2) of the Internal Revenue Code.

ADIT balances that are credit balances shall be treated as positive values hereunder, while ADIT balances that are debit balances shall be treated as negative values hereunder.

Owner shall support all amounts of ADIT included and not included hereunder in the manner described in sections 35.13(h)(6) and (7) of the Commission's regulations (Statements AF and AG, respectively), except that the time period for the relevant data for the informational package will be consistent with the requirements of this formula, rather than the "Periods" referenced in those regulations.

Working Capital

"Working Capital" is the sum of the portions, if any, of the following items that are reasonably assignable or allocable to the Subject Resource:

- (1) **Fuel Stocks**, which is the amount of fossil fuel stock, if any, maintained for the Subject Resource, as properly recorded in Account 151;
- (2) **Plant Materials and Supplies**, consisting of the value of plant

materials and supplies reasonably assignable or allocable to the Subject Resource, as properly recorded in Accounts 154 and 163;

- (3) **Prepayments**, consisting of the amount, if any, of prepayments reasonably assignable or allocable to the Subject Resource, as properly recorded in Account 165;
- (4) **Working Cash Allowance**, which is one-eighth of O&M Expenses (as defined herein), less (a) Total Annual Fuel Costs (as defined hereinbelow), and (b) all amounts or portions, if any, of Account 555 (Purchased Power) that may be included in such O&M Expenses; and

Unamortized Deferred Costs, which shall be that portion, if any, of Account 186 directly related to, or reasonably allocable to, the Subject Resource.

Section 5. Allowable Pre-Tax Rate of Return

The Allowable Pre-Tax Rate of Return shall be the sum of:

- (a) 12.25%, and
- (b) 30% of the amount, if any, by which (a) the latest available 6-month average of yields on 10-year U.S. Treasury Bonds, as of the date of the first Informational Filing, exceeds (b) the latest available 6-month average of yields on 10-year U.S. Treasury Bonds as of *[the effective date of the settlement]*.

Notwithstanding the foregoing, the Owner may make application to the FERC, prior to or in conjunction with the first Informational Filing, in a limited proceeding to seek to establish a different Allowable Pre-Tax Rate of Return under Section 205 of the Federal Power Act.

Section 6. Additional Quantities

(A) Annual Variable O&M Expenses

"Annual Variable O&M Expenses" is the sum of the following quantities:

- (1) **Variable Production O&M Expenses:** those portions of Production O&M Expenses, as defined above, other than fuel expenses, that are reasonably determined to be variable expenses, in the sense that they are incurred as a result of, or otherwise are reasonably associated with, the production of energy by the Subject Resource.

- (2) **Variable A&G Expenses:** that portion of A&G Expenses that is related or allocable to the foregoing Variable Production O&M Expenses.

Notwithstanding the foregoing, starting with the first information filing hereunder and continuing until the Owner elects to use a different method to determine its Annual Variable O&M Expenses, the Owner may compute Annual Variable O&M Expenses as the amount equal to the product of (a) the Initial Variable O&M Rate, in \$/MWh, for the Subject Resource, as set forth in Exhibit A hereto (Exhibit A can be found in Appendix B to the Stipulation and Agreement), times (b) the Net Generation of the Subject Resource (as defined hereinabove). Whenever the Owner does not compute Annual Variable O&M Expenses based on the Initial Variable O&M Rate in the foregoing manner, the Owner shall include in each of Informational Package a detailed explanation of the method or methods used to classify O&M expenses as between fixed (*i.e.*, capacity-related) expenses and variable (*i.e.*, energy-related) expenses and the reason(s) such method results in just and reasonable rates.

(B) Annual Fixed O&M Expenses

"Annual Fixed O&M Expenses" is the quantity that is equal to the following:

- (1) Total O&M Expenses, as defined hereinabove, less
- (2) the sum of:
- a. Annual Variable O&M Expenses, as defined hereinabove, and
 - b. Annual Variable Fuel Costs, as defined hereinbelow,
 - c. Annual Emissions Costs, as defined hereinbelow, and
 - d. Annual Non-Fuel Start-Up Costs, as defined hereinbelow.

(C) Fuel Expenses

(1) Total Annual Fuel Costs

"Total Annual Fuel Costs" is the total fuel expense for the Subject Resource for the Cost Year properly recorded in Account 501 or Account 547, as appropriate depending on the nature of the Subject Resource.

(2) Annual Fixed Fuel Costs

"Annual Fixed Fuel Costs" is that portion, if any, of Total Annual Fuel Costs related to fuel handling and administration of fuel planning, procurement and transportation which do not vary with the amount of fuel purchased.

(3) Annual Variable Fuel Costs

"Annual Variable Fuel Costs" is the quantity that is the following difference:

1. Total Annual Fuel Costs, less
2. Annual Fixed Fuel Costs.

(D) Annual Emissions Costs

"Annual Emissions Costs" is the total emissions costs that are related to the operation of the Subject Resource during the Cost Year.

(E) Annual Non-Fuel Start-Up Costs

"Annual Non-Fuel Start-Up Costs" is the aggregate sum of costs, other than fuel costs, attributable to start-ups of the Subject Resource during the Cost Year, consisting of start-up power costs, shut-down power costs, and other non-fuel start-up costs, all as determined pursuant to the applicable sections of Schedule D of the RMR Contract, as applied to all start-ups of the Subject Resource during the Cost Year.

(F) Total Annual Variable Costs

"Total Annual Variable Costs" is the sum of:

1. Annual Variable O&M Expenses,
2. Annual Variable Fuel Costs, and
3. Annual Emissions Costs.

Part C. General Instructions and Explanatory Notes

Section 1. General Instructions

In applying this Formula to a Subject Resource, the following instructions and explanations shall be followed:

(A) No Duplicative Charges

The costs determined and referenced by this Formula shall exclude costs that are recoverable, or that are actually recovered, elsewhere under the applicable contract or agreement between the Owner and the CAISO. There shall be no double counting of costs hereunder.

(B) Determination of Depreciation Expenses

Depreciation Expenses, Depreciation Reserve, and Deferred Income Taxes reflected in the revenue requirements determined pursuant to this Formula shall be computed using either fixed depreciation rates or depreciation rates determined annually from fixed mortality characteristics (i.e., service lives, net salvage ratios, etc.). Such depreciation rates and/or mortality characteristics, which may differ for particular assets or groups of assets comprising, or related to, the Subject Resource, are set forth on Exhibit B, which is attached hereto and made a part hereof. Such depreciation rates and/or mortality characteristics may not be changed except pursuant to Section 205 or Section 206 of the FPA. Nothing herein shall be construed as affecting any requirements of the FERC regarding the use by the Owner of depreciation rates for financial reporting purposes.

(C) Costs in Excess of Original Cost

The components of rate base and the costs reflected under the Formula shall not include an acquisition adjustment or costs associated with an acquisition adjustment unless the Owner shall have obtained approval from the FERC to include under the Formula such an adjustment or such costs for ratemaking purposes under the FPA. The effective date for the inclusion of such costs shall be as set forth in the FERC order.

(D) Use of FERC Accounting

The costs determined and referenced by this Formula shall reflect only FERC-basis accounting, and shall not reflect any accounting for costs approved by any state regulatory commission or other body if not approved or accepted by the FERC for use in connection with the RMR Contract. Except as otherwise provided herein, the accounting for costs

for purposes of applying this Formula shall be consistent with the requirements of the Uniform System of Accounts.

(E) Accounting Methods

The costs determined and referenced by this Formula shall reflect only such accounting methods prescribed by such authorities as AICPA and FASB that shall have been approved or accepted by the FERC for use in connection with the RMR Contract. The Owner shall be required to seek and gain such approval or acceptance from the FERC prior to reflecting any changed accounting methods in the determination of costs in connection with this Formula.

The Owner shall carry the burden of demonstrating that its accounting methods and entries reflected in the costs determined and referenced by this Formula produce just, reasonable, and nondiscriminatory rates for its customers.

(F) Out-of-Period Adjustments

The costs determined and referenced by this Formula shall not reflect any accounting entries the purpose of which is to adjust or correct for accounting entries in years other than the Cost Year if such adjusting or correcting entries would have an unjust, unreasonable, or discriminatory effect on the CAISO.

(G) Extraordinary Costs

Extraordinary costs included in the costs determined and referenced by this Formula shall be subject to amortization over a reasonable period of time. In determining how costs should be amortized, the parties shall also determine how the costs being amortized should be recovered in the event that the plant closes and does not reopen.

As used herein, "extraordinary costs" mean costs arising from events and transactions that are of an unusual nature and infrequent occurrence, the effects of which are abnormal and significantly different from the ordinary and typical activities of the Owner, and would not reasonably be expected to recur in the foreseeable future. In determining significance, items should be considered individually and not in the aggregate. However, the effects of a series of related transactions arising from a single specific and identifiable event or plan of action should be considered in the aggregate. An item can be extraordinary even if it is less than five (5) percent of income computed before the extraordinary item. In its annual Information Package, the Owner shall identify and provide explanations for all extraordinary costs which it seeks to include in the rates and charges

determined pursuant to this Formula, and the Owner shall bear the burden of proof, as in a proceeding under Section 205 of the FPA, that its proposed treatment of extraordinary costs is just and reasonable.

(H) Imprudently Incurred Costs

The costs determined and referenced by this Formula shall not include any costs which have been determined by the FERC in a proceeding under Section 206 of the FPA to have been imprudently incurred by the Owner.

(I) Transmission Cost Assignments and Allocations

Costs of transmission facilities assigned and/or allocated to the Subject Resource hereunder are intended to include only those costs, if any, related to the step-up substation facilities and other transmission facilities directly connected to the Subject Resource and used to deliver the output of the Subject Resource to the transmission grid. In each annual Informational Package, the Owner shall clearly identify and fully describe all transmission facilities which it claims satisfy the foregoing criteria.

(J) Distribution Cost Assignments and Allocations

Costs of distribution facilities assigned and/or allocated to the Subject Resource hereunder are intended to include only those costs, if any, related to the step-up substation facilities and other distribution facilities directly connected to the Subject Resource and used to deliver the output of the Subject Resource to the transmission or distribution system. In each annual Informational Package, the Owner shall clearly identify and fully describe all distribution facilities which it claims satisfy the foregoing criteria.

(K) Inclusion of Certain Costs

The Owner shall include in its annual Informational Package detailed workpapers and explanations supporting the reasonableness of including in the revenue requirements determined pursuant to this formula any amounts recorded in Accounts 501, 547, 555, 561, 927, 105, and 186. The Owner shall bear the burden of proof, as in a proceeding under Section 205 of the FPA, to affirmatively demonstrate that all such included amounts are directly related to the provisions of service under the RMR Contract and are reasonably assignable or allocable to the Subject Resource. As to Account 105, the requirement for a definitive plan required by the description of Account 105 in the Uniform System of Accounts, and the affirmative demonstration required by this paragraph, shall be deemed to be met upon a showing that the CAISO has approved,

in accordance with the provisions of Section 7.4 of the RMR Contract, a plan for the future use of the property.

(L) Direct Assignments and Allocations

Where Part B of this Formula provides for the identification and/or assignment of costs incurred directly in connection with a particular facility or facilities (including a Subject Resource), or directly related to such a facility or facilities, the Owner shall bear the burden of demonstrating the reasonableness of each such identification and/or assignment, and each failure to make such an identification and/or assignment. Notwithstanding the foregoing, where this Formula provides for such a direct identification or assignment of costs, the Owner may use an allocation method to apportion such costs among particular facilities; provided, however, that (i) the Owner shall in its Informational Package clearly identify and describe such allocation method and the basis for it, and (ii) the Owner shall bear the burden of demonstrating the reasonableness of the method. It is recognized that such allocation methods may, for example, be appropriate for apportioning certain types of costs between individual generating units at a multi-unit generating station. Such allocations of costs between individual generating units at a plant site shall be consistent with the requirements for such allocations, if any, provided in the RMR Contract.

(M) No Adverse Distinction

In applying this Formula and in maintaining its books and records insofar as they affect the results of applying this Formula, the Owner shall not make an adverse distinction between the Subject Resource and any other facility or facilities owned or operated by the Owner; e.g., the Owner shall assign certain costs directly to the Subject Resource only if, and to the extent that, the Owner directly assigns such costs to other, similar facilities.

Section 2. General Definitions

Except as may be expressly stated otherwise, the following terms have the followings meanings as used herein:

(A) Account

"Account" refers to a particular account for "major" utilities as prescribed by the Uniform System of Accounts.

(B) FERC

"FERC" means the Federal Energy Regulatory Commission or its successor.

(C) Uniform System of Accounts

"Uniform System of Accounts" means the FERC's "Uniform System of Accounts Prescribed For Public Utilities and Licensees Subject to the Provisions of the Federal Power Act," as such uniform system of accounts was in effect as of the first effective date of the RMR Contract.

(D) RMR Contract

"RMR Contract" means the contract to which this Formula is attached and made a part thereof.

(E) Subject Resource

"Subject Resource" means any particular generating unit to which this Formula is applied for purposes of determining the annual costs thereof.

(F) Cost Year

"Cost Year" means the twelve-month period ended June 30 to which this Formula is applied to determine the Annual Fixed Revenue Requirements and Variable O&M Rate for a Subject Resource to be applicable during the next succeeding calendar year.

(G) Owner

"Owner" means the entity, other than the CAISO, that is a party to the RMR Contract.

(H) CAISO

The "CAISO" means the California Independent System Operator Corporation.

Exhibit A - Initial Variable O&M Rates¹⁰

Line	RMR Facility	Unit	Initial Variable O&M Rate (\$/MWh)

Exhibit B - Depreciation Rate and Mortality Characteristics^{11 12}

Line	RMR Facility	Unit	Plant Account	Depreciation Rate (%)	Mortality Characteristics			
					Retirement Date	Average Service Life	Salvage Value or Rate	Interim Retirements Rate

¹⁰ Exhibit A for each owner is filed in Appendix to the Stipulation and Agreement.
¹¹ Exhibit B for each owner is filed in Appendix B to the Stipulation and Agreement.
¹² Effective as of the effective date of the Settlement.

Exhibit C - 1998 Cost Information

Pursuant to Article IV.E of the Stipulation and Agreement filed with the FERC on April 2, 1999, the Owner shall file with the FERC in Docket No. ER98-441-000, et. al., a superceding Exhibit C, setting forth the following information for each unit for the period ending December 31, 1998:

- (1) Name of the facility and unit;
- (2) Gross Plant In Service, *i.e.* the original cost plus plant additions minus retirements, by major plant function (*i.e.* production, transmission, distribution and general);
- (3) Net Plant In Service Gross Plant, *i.e.* gross plant minus depreciation reserve, by major plant function;
- (4) Rate Base, *i.e.* net plant and other components of Net Investment as defined in the Formula, such as working capital, Accumulated Deferred Income Taxes (ADIT), etc.

This Exhibit C shall be for informational purposes only and shall be initially filed with FERC by June 1, 1999.

Schedule G**Charge for Service in Excess of
Contract Service Limits**

Payment for service in excess of the ~~Maximum Annual MWh~~, Maximum Annual Service Hours or Maximum Annual Start-ups shall be determined in accordance with Option A or Option B. Payment for service from hydroelectric Units in excess of the Maximum Monthly MWh shall be determined in accordance with Option A only. Owner shall make a one-time election between Option A or Option B. Owner must choose Option A for both Billable MWh and Start-ups or Option B for both Billable MWh and Start-ups. This election shall be applicable to all of the Owner's Units under this Agreement and all other Reliability Must-Run Units subject to a "reliability must-run contract" as defined in the CAISO Tariff with Owner or any of its affiliates as defined in 18 C.F.R. Section 161.2.

1. Option A

- A. For all Billable MWh Delivered after the Counted MWh for the Contract Year equals the Maximum Annual MWh, the Counted Service Hours equals the Maximum Annual Service Hours or, for hydroelectric Units, the Counted MWh for the Month equals the Maximum Monthly MWh ("Schedule G Billable MWh"):

Fossil Fuel Units

In addition to the Variable Cost Payment computed in accordance with Schedule C, the CAISO shall pay the Option A Variable Cost Payment, which shall be calculated in accordance with Equation G-1:

Equation G-1

$$\text{Option A Variable Cost Payment} = \frac{0.5 * (\text{Variable Cost Payment for the Billing Month})}{\text{Billable MWh for the Billing Month}} * \text{Schedule G Billable MWh}$$

Pumped Storage Hydroelectric Facilities

In addition to the Variable Cost Payment computed in accordance with Schedule C, CAISO shall pay the product of (a) the Schedule G Billable MWh, (b) 0.5, and (c) YTD Pumping Costs divided by YTD Energy Produced as computed in accordance with Equation C4-2 in Schedule C.

Conventional Hydroelectric Facilities

In addition to the Variable Cost Payment computed in accordance with Schedule C, CAISO shall pay the sum of the products for each hour in the Billing Month of (a) the Hourly Fuel Price for natural gas for the hour calculated in accordance with Equation C1-8 of Schedule C, (b) 12,000 Btu/kWh, (c) the Schedule G Billable MWh for that hour, and (d) 0.5.

- B. For all Service Hours provided after the Counted Service Hours for the Contract Year equals the Maximum Annual Service Hours.

Synchronous Condensers

In addition to the Motoring Charge computed in accordance with Schedule E, CAISO shall pay the product of (a) the Motoring Charges calculated in accordance with Schedule E, and (b) 0.5.

- C. For all Start-ups required to comply with a Dispatch Notice after the Counted Start-ups for the Unit equals the Maximum Annual Start-ups ("Schedule G Start-ups"), the CAISO shall pay:

Fossil Fuel Units and Geothermal Units

Two times (a) the Start-up Payment computed in accordance with Equation D-1 in Schedule D, or (b) if the Schedule G Start-up is initiated under a Dispatch Notice but is not successfully completed because it is canceled or rescinded by the CAISO, the Start-up Payment for Canceled Start-up is computed in accordance with Equation D-4 in Schedule D.

Conventional Hydroelectric Facilities and Units Capable Only of Synchronous Condenser Operation

The Start-up Payment computed in accordance with Schedule D, plus (a) (0.00338) * the Unit's Annual Fixed Revenue Requirement stated in Section 7 of Schedule B, divided by (b) the Unit's Maximum Annual Start-ups.

Pumped Storage Hydroelectric Facilities

The Start-up Payment computed in accordance with Equation D-1 in Schedule D, plus (a) 0.00167 * the Unit's Annual Fixed Revenue Requirement stated in Section 7 of Schedule B, divided by (b) the Unit's Maximum Annual Start-ups.

2. Option B

- A. For all Schedule G Billable MWh Delivered in the Billing Month, the CAISO shall pay the Variable Cost Payment computed in accordance with Schedule C. Since Schedule G Billable MWh are included in calculating the Variable Cost Payment for Billable MWh for the Billing Month under Schedule C, there is no additional payment for Schedule G Billable MWh under Option B.
- B. For all Service Hours provided after the Counted Service Hours for the Contract Year equals the Maximum Annual Service Hours:

Synchronous Condensers

In addition to the Motoring Charge computed in accordance with Schedule E, CAISO shall pay the product of (a) the Motoring Charges calculated in accordance with Schedule E, and (b) 0.5.

- C. For all Schedule G Start-ups in the Billing Month, the CAISO pay:

Units Capable Only of Synchronous Condenser Operation

The Start-up Payment computed in accordance with Schedule D, plus (a) (0.00338) * the Unit's Annual Fixed Revenue Requirement stated in Section 7 of Schedule B, divided by (b) the Unit's Maximum Annual Start-ups.

Fossil Fuel Units and Geothermal Units

Three times (a) the Start-up Payment computed in accordance with Equation D-1 in Schedule D, or (b) if the Schedule G Start-up is initiated under a Dispatch Notice but is not successfully completed because it is canceled or rescinded by the CAISO, the Start-up Payment for Canceled Start-up is computed in accordance with Equation D-4 in Schedule D.

3. Owner's Election

Option A *

Option B *

*Option A or Option B results in the same terms for Synchronous Condenser operation.

Schedule H – [N/A](#)***Fuel Oil Service***

The following is a description of existing capability of the Facility to burn fuel oil in lieu of or addition to natural gas:

[N/A](#)

Schedule I***Insurance Requirements*****Owner - Obtained Insurance*****Commercial General Liability***

Commercial general liability insurance covering personal injury and property damage to third parties in connection with the activities at the Facility. The coverage will have a limit of not less than \$—[20 million](#) per occurrence, and will include coverage for sudden and accidental pollution losses. The CAISO will be added as an additional insured under the terms of this coverage to the per-occurrence limit above.

Property

Property Insurance for direct physical loss or damage to the Facility, in an amount not less than the probable maximum loss at the Facility.

CAISO – Obtained Insurance***Errors and Omissions Insurance and Directors & Officers Insurance***

Errors and omissions insurance and directors and officers insurance coverage will have a combined limit of not less than \$150 million for the shorter of (i) until the termination of this Agreement or (ii) until January 1, 2002.

Schedule J
Notices

Owner

Name: [Weikko Wirta](#)
Title: [Plant Manager](#)
Address: [21730 Newland Street, Huntington Beach, CA 92646](#)
Telephone: [714-374-1421](#)
Facsimile:
E-mail: Weikko.wirta@aes.com

With a copy to: Owner's Representative:

[Name: Yiyu Zhong](#)
[Title: Billing and Settlement](#)
[Address: 690 North Studebaker Road, Long Beach, CA 90803](#)
[Telephone: 562-493-7704](#)
[Facsimile: 562-493-7320](#)
[E-mail: yiyu.zhong@aes.com](mailto:yiyu.zhong@aes.com)

CAISO:

~~Nancy Traweek~~
[Benik Der-Gevorgian](#)
Director, ~~Operations Support~~[Market Services](#)
California ISO Corporation
~~151 Blue Ravine Road~~
[250 Outcropping Way](#)
Folsom, CA 95630
Telephone: (916) 351-~~2113~~[2277](#)
~~Facsimile: (916) 351-2267~~
Email: ~~ntraweck~~BDGevorgian@caiso.com

With ~~a copy~~[copies](#) to:

Sidney Mannheim Davies
Assistant General Counsel
~~Tariff and Tariff Compliance~~
California ISO Corporation
~~151 Blue Ravine Road~~
[250 Outcropping Way](#)
Folsom, CA 95630
Telephone: (916) 608-7144
Facsimile: (916) 608-7222
Email: sdavies@caiso.com

[AES Huntington Beach, L.L.C](#)
[Rate Schedule FERC No. 2](#)

Must-Run Service Agreement

[Robert Kott](#)
[Manager, Model and Contract Implementation](#)
[California ISO Corporation](#)
[250 Outcropping Way](#)
[Folsom, CA 95630](#)
[Telephone: \(916\) 608-5804](#)
[Email: rkott@caiso.com](#)

SCHEDULE K DISPUTE RESOLUTION

Applicability

1.1 General Applicability.

Except as limited below or otherwise as limited by law (including the rights of any party to file a complaint with FERC under the relevant provisions of the Federal Power Act (FPA)), these ADR Procedures shall apply to (a) all disputes between parties which arise under this Agreement and (b) disputes between CAISO and a Responsible Utility relating to a Responsible Utility Invoice, "Final Estimated RMR Invoice, Final Adjusted RMR Invoice" as defined in the CAISO Tariff, or RMR Charge or RMR Refund as defined in Section 11.13 in the CAISO Tariff. The foregoing shall not impair the applicability of the CAISO Tariff ADR procedures to other disputes between the parties that do not arise under this Agreement. All alternative dispute resolution proceedings hereunder shall be administered by the American Arbitration Association ("AAA"). The Owner, Responsible Utility and the CAISO shall enter into such arrangements with the AAA as are necessary to provide for AAA administration of this Schedule K.

1.1.2 This Schedule K shall not apply to disputes as to whether rates and charges under the Agreement are just and reasonable under the Federal Power Act except as provided in Schedule F. Nothing herein shall limit the right of the FERC to initiate or adjudicate complaints or other proceedings in accordance with applicable statutes or regulations or to compel FERC to exceed its statutory authority as defined by any applicable federal statutes, regulations or orders lawfully promulgated thereunder.

1.2 Disputes Involving Government Agencies.

If a party to a dispute is a government agency the procedures herein which provide for the resolution of claims and arbitration of disputes are subject to any limitations imposed on the agency by law, including but not limited to the authority of the agency to effect a remedy. If the governmental agency is a federal entity, the procedures herein shall not apply to disputes involving issues arising under the United States Constitution.

1.3 Injunctive and Declaratory Relief.

Where the court having jurisdiction so determines, use of the ADR Procedures shall not be a condition precedent to a court action for injunctive relief nor shall the provisions of California Code of Civil Procedure sections 1281 *et seq.* apply to such court actions.

1.4 Negotiation and Mediation.

1.4.1 Negotiation.

CAISO, Responsible Utility and Owner (“Parties”) shall make good-faith efforts to negotiate and resolve any dispute between them arising under this Agreement prior to invoking the ADR Procedures herein. Each Party shall designate an individual with authority to negotiate the matter in dispute to participate in such negotiations. The Responsible Utility may participate in the ADR proceedings arising under this Agreement to the extent the dispute involves billing or payment obligations, in which case CAISO or the Responsible Utility, but not both shall be the disputing party. In addition, to the extent Article 7 or other provisions of this Agreement provide the Responsible Utility third-party beneficiary rights, the Responsible Utility may also participate in the ADR as a Party.

The Owner may participate in the ADR proceedings relating to a Responsible Utility Invoice, “Final Estimated RMR Invoice, Final Adjusted RMR Invoice” as defined in the CAISO Tariff or RMR Charge or RMR Refund as defined in Section 11.13, in which case, CAISO or the Owner, but not both, shall be the disputing party. In addition, to the extent the CAISO Tariff provides the Owner third-party beneficiary rights, the Owner may also participate in the ADR as a Party.

1.4.2 Statement of Claim.

In the event a dispute is not resolved through such good-faith negotiations, any party may submit a statement of claim, in writing, to each other disputing party, which submission shall commence the ADR Procedures. The statement of claim shall set forth in reasonable detail (i) each claim, (ii) the relief sought, including the proposed award, if applicable, (iii) a summary of the grounds for such relief and the basis for each claim, (iv) the parties to the dispute, and (v) the individuals having knowledge of each claim. The other parties to the dispute shall similarly submit their respective statements of claim within 14 days of the date of the initial statement of claim or such longer period as the AAA may permit following an application by the responding party. If any responding party wishes to submit a counterclaim in response to the statement of claim, it shall be included in such party’s responsive statement of claim. No party shall be considered as having received notice of a claim decided or relief granted by a decision made under these procedures unless the statement of claim includes such claim or relief.

1.4.3 Selection of Mediator.

After submission of the statements of claim, the parties may request mediation, if the disputing parties so agree. If the parties agree to mediate, the AAA shall distribute to the parties by facsimile or other electronic means a list containing the names of at least seven prospective mediators with mediation experience, or with technical or business experience in the electric power industry, or both, as he or she shall deem appropriate to the dispute. The parties shall either agree upon a mediator from the list provided or from any alternative source, or alternate in striking names from the list with the last name on the list becoming the mediator. The first party to strike off a name from the list shall be determined by lot. The parties shall have seven days from the date of receipt of the AAA's list of prospective mediators to complete the mediator selection process and appoint the mediator, unless the time is extended by mutual agreement. The mediator shall comply with the requirements of Section 1.5.2.

1.4.4 Mediation.

The mediator and representatives of the disputing parties, with authority to settle the dispute, shall within 14 days after the mediator's date of appointment schedule a date to mediate the dispute. Matters discussed during the mediation shall be confidential and shall not be referred to in any subsequent proceeding. With the consent of all disputing parties, a resolution may include referring the dispute directly to a technical body (such as a WSCC technical advisory panel) for resolution or an advisory opinion, or referring the dispute directly to FERC.

1.4.5 Demand for Arbitration.

If the disputing parties have not succeeded in negotiating a resolution of the dispute within 30 days of the initial statement of claim or, if within that period the parties agreed to mediate, within 30 days of the parties' first meeting with the mediator, such parties shall be deemed to be at impasse and any such disputing party may then commence the arbitration process, unless the parties by mutual agreement agree to extend the time. A party seeking arbitration shall provide notice of its demand for arbitration to the other disputing parties.

1.5 Arbitration.

1.5.1 Selection of Arbitrator.

1.5.1.1 Disputes Under \$1,000,000. Where the total amount of claims and counterclaims in controversy is less than \$1,000,000 (exclusive of costs and interest), the disputing parties shall select an arbitrator from a list containing the names of at least 10 qualified individuals supplied by AAA, within 14 days following submission of the demand for arbitration. If

the disputing parties cannot agree upon an arbitrator within the stated time, they shall take turns striking names from the list of proposed arbitrators. The first party to strike off a name shall be determined by lot. This process shall be repeated until one name remains on the list, and that individual shall be the designated arbitrator.

1.5.1.2 Disputes of \$1,000,000 or Over. Where the total amount of claims and counterclaims in controversy is \$1,000,000 or more (exclusive of interest and costs), the disputing parties may agree on any person to serve as a single arbitrator, or shall endeavor in good faith to agree on a single arbitrator from a list of ten qualified individuals provided by the AAA, 14 days following submission of the demand for arbitration. If the disputing parties are unable to agree on a single arbitrator within the stated time, the party or parties demanding arbitration, and the party or parties responding to the demand for arbitration, shall each designate an arbitrator. Each designation shall be from the AAA list of arbitrators, as applicable, no later than the tenth day thereafter. The two arbitrators so chosen shall then choose a third arbitrator.

1.5.2 Disclosures Required of Arbitrators.

The designated arbitrator(s) shall be required to disclose to the parties any circumstances that might preclude him or her from rendering an objective and impartial determination. Each designated arbitrator shall disclose:

1.5.2.1 Any direct financial or personal interest in the outcome of the arbitration;

1.5.2.2 Any information required to be disclosed by California Code of Civil Procedure Section 1281.9.; and

1.5.2.3 Any existing or past financial, business, professional, or personal interest that are likely to affect impartiality or might reasonably create an appearance of partiality or bias. The designated arbitrator shall disclose any such relationships that he or she personally has with any party or its counsel, or with any individual whom they have been told will be a witness. They should also disclose any such relationship involving members of their families or their current employers, partners, or business associates. All designated arbitrators shall make a reasonable effort to inform themselves of any interests or relationships described above. The obligation to disclose interests, relationships, or circumstances that might preclude an arbitrator from rendering an objective and impartial determination is a continuing duty that requires the arbitrator to disclose, at any stage of the arbitration, any such interests, relationships, or circumstances that arise, or are recalled or discovered.

1.5.2.4 If, as a result of the continuing disclosure duty, an arbitrator makes a disclosure which is likely to affect his or her partiality, or might reasonably create an appearance of partiality or bias or if a party independently discovers the existence of such circumstances, a party wishing to object to the continuing use of the arbitrator must provide written notice of its objection to the other parties within ten days of receipt of the arbitrator's disclosure or the date of a party's discovery of the circumstances giving rise to that party's objection. Failure to provide such notice shall be deemed a waiver of such objection. If a party timely provides a notice of objection to the continuing use of the arbitrator the parties shall attempt to agree whether the arbitrator should be dismissed and replaced in the manner described in Section 1.5.1. If within ten days of a party's objection notice the parties have not agreed how to proceed the matter shall be referred to the AAA for resolution.

1.5.3 Arbitration Procedures.

The AAA shall compile and make available to the arbitrator and the parties standard procedures for the arbitration of disputes, which procedures (i) shall conform to the requirements specified herein, and (ii) may be modified or adopted for use in a particular proceeding as the arbitrator deems appropriate, in accordance with Section 1.5.4. The procedures shall be based on the latest edition of the American Arbitration Association Commercial Arbitration Rules, to the extent such rules are not inconsistent with this Schedule K. Except as provided herein, all parties shall be bound by such procedures.

1.5.4 Modification of Arbitration Procedures.

In determining whether to modify the standard procedures for use in the pending matter, the arbitrator shall consider (i) the complexity of the dispute, (ii) the extent to which facts are disputed, (iii) the extent to which the credibility of witnesses is relevant to a resolution, (iv) the amount in controversy, and (v) any representations made by the parties. Alternatively, the parties may, by mutual agreement, modify the standard procedures. In the event of a disagreement between the arbitrator and the agreement of the parties regarding arbitration procedures to be utilized, the parties' agreement shall prevail.

1.5.5 Remedies.

1.5.5.1 Arbitrator's Discretion. The arbitrator shall have the discretion to grant the relief sought by a party, or determine such other remedy as is appropriate, unless the parties agree to conduct the arbitration "baseball" style. Unless otherwise expressly limited herein, the arbitrator shall have the authority to award any remedy or relief available from FERC, or any

court of competent jurisdiction. Where this Agreement leaves any matter to be agreed between the parties at some future time and provides that in default of agreement the matter shall be referred to the ADR, the arbitrator shall have authority to decide upon the terms of the agreement which, in the arbitrator's opinion, it is reasonable that the parties should reach, having regard to the other terms this Agreement concerned and the arbitrator's opinion as to what is fair and reasonable in all the circumstances.

1.5.5.2 "Baseball" Arbitration. If the parties agree to conduct the arbitration "baseball" style, the parties shall submit to the arbitrator and exchange with each other their last best offers in the form of the award they consider the arbitrator should make, not less than seven days in advance of the date fixed for the hearing, or such later date as the arbitrator may decide. If a party fails to submit its last best offer in accordance with this Section, that party shall be deemed to have accepted the offer proposed by the other party. The arbitrator shall be limited to awarding only one of the proposed offers, and may not determine an alternative or compromise remedy.

1.5.6 Summary Disposition.

The procedures for arbitration of a dispute shall provide a means for summary disposition of a demand for arbitration, or a response to a demand for arbitration, that in the reasoned opinion of the arbitrator does not have a good faith basis in either law or fact. If the arbitrator determines that a demand for arbitration or response to a demand for arbitration does not have a good faith basis in either law or fact, the arbitrator shall have discretion to award the costs of the time, expenses, and other charges of the arbitrator to the prevailing party. A determination made under this Section is subject to appeal pursuant to Section 1.6.

1.5.7 Discovery Procedures.

The procedures for the arbitration of a dispute shall include adequate provision for the discovery of relevant facts, including the taking of testimony under oath, production of documents and other things, the presentation of evidence, the taking of samples, conducting of tests, and inspection of land and tangible items. The nature and extent of such discovery shall be determined as provided herein and shall take into account (i) the complexity of the dispute, (ii) the extent to which facts are disputed, (iii) the extent to which the credibility of witnesses is relevant to a resolution, and (iv) the amount in controversy. The forms and methods for taking such discovery shall be as described in the Federal Rules of Civil Procedure, except as modified pursuant to Section 1.5.4.

1.5.8 Evidentiary Hearing.

The arbitration procedures shall provide for an evidentiary hearing, with provision for the cross-examination of witnesses, unless all parties consent to the resolution of the matter on the basis of a written record. The forms and methods for taking evidence shall be determined by the arbitrator(s) and modified pursuant to Section 1.5.4. The arbitrator may require such written or other submissions from the parties as he or she may deem appropriate, including submission of direct and rebuttal testimony of witnesses in written form. The arbitrator may exclude any evidence that is irrelevant, immaterial, unduly repetitious or prejudicial, or privileged. The arbitrator shall compile a complete evidentiary record of the arbitration that shall be available to the parties on its completion upon request.

1.5.9 Confidentiality.

Subject to the other provisions of this Agreement, any party may claim that information contained in a document otherwise subject to discovery is "Confidential" if such information would be so characterized under the Federal Rules of Evidence or the provisions of the Agreement. The party making such claim shall provide to the arbitrator in writing the basis for its assertion. If the claim of confidentiality is confirmed by the arbitrator, he or she shall establish requirements for the protection of such documents or other information designated as "Confidential" as may be reasonable and necessary to protect the confidentiality and commercial value of such information. Any party disclosing information in violation of these provisions or requirements established by the arbitrator, unless such disclosure is required by federal or state law or by a court order, shall thereby waive any right to introduce or otherwise use such information in any judicial, regulatory, or other legal or dispute resolution proceeding, including the proceeding in which the information was obtained.

1.5.10 Timetable.

Promptly after the appointment of the arbitrator, the arbitrator shall set a date for the issuance of the arbitration decision, which shall be no later than six months (or such earlier date as the parties and the arbitrator may agree) from the date of the appointment of the arbitrator, with other dates, including the dates for an evidentiary hearing or other final submissions of evidence, set in light of this date. The date for the evidentiary hearing or other final submission of evidence shall not be changed, absent extraordinary circumstances. The arbitrator shall have the power to impose sanctions, including dismissal of the proceeding, for dilatory tactics or undue delay in completing the arbitration proceedings.

1.5.11 Decision.

1.5.11.1 Except as provided below with respect to "baseball" style arbitration, the arbitrator shall issue a written decision granting the relief requested by one of the parties, or such other remedy as is appropriate, if any, and shall include findings of fact and law. The arbitration decision shall be based on (i) the evidence in the record, (ii) the terms of this Agreement and to the extent relevant, the CAISO Tariff and Protocols, (iii) applicable United States federal law, including the Federal Power Act and any applicable FERC regulations and decisions, and international treaties or agreements as applicable, and (iv) applicable state law. Additionally, the arbitrator may consider relevant decisions in previous arbitration proceedings involving this Agreement. To the extent it may do so without violating confidentiality requirements, a summary of the disputed matter and the arbitrator's decision may be published in an CAISO newsletter on CAISO Website.

1.5.11.2 In arbitration conducted "baseball" style, the arbitrator shall issue a written decision adopting one of the awards proposed by the parties, and shall include findings of fact and law. The arbitration decision shall be based on (i) the evidence in the record, (ii) the terms of this Agreement and to the extent relevant, the CAISO Tariff and Protocols, (iii) applicable United States federal law, including the Federal Power Act and any applicable FERC regulations and decisions, and international treaties or agreements as applicable, and (iv) applicable state law. If the arbitrator concludes that no proposed award is consistent with the factors enumerated in (i) through (iv) above, or addresses all of the issues in dispute, the arbitrator shall specify how each proposed award is deficient and direct that the parties submit new proposed awards that cure the identified deficiencies. To the extent it may do so without violating confidentiality requirements, a summary of the disputed matter and the arbitrator's decision may be published in an CAISO newsletter on CAISO Website.

1.5.11.3 Where a panel of arbitrators is appointed pursuant to Section 1.5.1.2, a majority of the arbitrators must agree on the decision. An award shall not be deemed to be precedent except in so far as a future dispute between the parties involves the same issue.

1.5.12 Compliance.

Unless the arbitrator's decision is appealed under Section 1.6, the disputing parties shall, upon receipt of the decision, immediately take whatever action is required to comply with the award to the extent the award does not require regulatory action. An award that is not appealed shall be deemed to have the same force and effect as an order entered by FERC or any court of competent jurisdiction.

1.5.13 Enforcement.

Following the expiration of the time for appeal of an award pursuant to Section 1.6.3, any party may apply to FERC or any court of competent jurisdiction for entry and enforcement of judgment based on the award.

1.5.14 Costs.

The costs of the time, expenses, and other charges of the arbitrator shall be borne by the parties to the dispute, with each side on an arbitrated issue bearing its pro-rata share of such costs, and each party to an arbitration proceeding bearing its own costs and fees. If the arbitrator determines that a demand for arbitration or response to a demand for arbitration was made in bad faith, the arbitrator shall have discretion to award the costs of the time, expenses, and other charges of the arbitrator to the prevailing party.

1.6 Appeal of Award.**1.6.1 Basis for Appeal.**

A party may apply to the FERC or any court of competent jurisdiction to hear an appeal of an arbitration decision only upon the grounds that the decision is contrary to or beyond the scope of this Agreement and to the extent relevant, the CAISO Tariff and Protocols, United States federal law, including, without limitation, the Federal Power Act, and any applicable FERC regulations and decisions, or state law. Appeals shall, unless otherwise ordered by FERC or the court of competent jurisdiction, conform to the procedural limitations set forth in this Section 1.6.

1.6.2 Appellate Record.

The parties intend that FERC or a court of competent jurisdiction should afford substantial deference to the factual findings of the arbitrator. No party shall seek to expand the record before FERC or a court of competent jurisdiction beyond that assembled by the arbitrator, except (i) by making reference to legal authority which did not exist at the time of

the arbitrator's decision, or (ii) if such party contends the decision was based upon or affected by fraud, collusion, corruption, misconduct or misrepresentation.

1.6.3 Procedures for Appeals.

1.6.3.1 If a party to an arbitration desires to appeal a decision, it shall provide a notice of appeal to all parties and the arbitrator(s) within 14 days following the date of the decision. Within ten days of the filing of the notice of appeal, the appealing party must file an appropriate application, petition or motion with FERC for review under the Federal Power Act or with a court of competent jurisdiction. Such filing shall state that the subject matter has been the subject of an arbitration pursuant to this Agreement and, to the extent relevant, the CAISO Tariff and protocols.

1.6.3.2 Within 30 days of filing the notice of appeal (or such period as FERC or the court of competent jurisdiction may specify) the appellant shall file the complete evidentiary record of the arbitration and a copy of the decision with FERC or with the court. The appellant shall serve on all parties to the arbitration copies of a description of all materials included in the submitted evidentiary record.

1.6.4 Award Implementation.

Implementation of the decision shall be deemed stayed pending an appeal unless and until, at the request of a party, FERC or the court of competent jurisdiction with which an appeal has been filed, issues an order dissolving, shortening, or extending such stay.

A summary of each appeal shall be published in a CAISO newsletter on the CAISO Website.

1.6.5 Judicial Review of FERC Orders.

FERC orders resulting from appeals shall be subject to judicial review pursuant to the Federal Power Act.

SCHEDULE L-1
REQUEST FOR APPROVAL OF CAPITAL ITEMS OR REPAIRS

This form should be used to request CAISO approval of Planned Capital Items, Unplanned Repairs or Unplanned Capital Items pursuant to Sections 7.4, 7.5 or 7.6 of the Agreement.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR
RELIABILITY MUST-RUN UNIT
CAPITAL ITEM AND REPAIR PROJECT REQUEST

Date:	TBD	CAISO Project Number:	TBD
Facility:	AES Huntington Beach Generating Station	Unit:	Unit 3 and Unit 4
Owner:	AES Huntington Beach, LLC	Location:	Huntington Beach, California

This request covers:

- Capital Items for the next Contract Year (preliminary)
- Capital Items for the next Contract Year (final)
- Unplanned Repairs
- Unplanned Capital Items
- [Capital Items for the 2013 Contract Year \(final\)](#)

If this request covers Capital Items for the next Contract Year, provide:**Small Project Estimate (reliability)**

[Not applicable](#)

Small Project Estimate (other)

Identify separately each Capital Item included in a small project estimate projected to cost more than \$50,000.

[Not applicable](#)

AES Huntington Beach, L.L.C
Rate Schedule FERC No. 2

Must-Run Service Agreement

If this request covers Unplanned Repairs, or Capital Items projected to cost more than \$500,000, provide the information in the remainder of this form for each project.

Project Description: (describe the project and its major scope items – materials, new systems, modifications to existing systems, etc.)

Capital Item request is required for the conversion of Units 3 & 4 to Synchronous Condensers. Siemens proposal for this project is attached as Exhibit I of this Schedule L1. The proposed solution utilizes a Pony Motor arrangement and a variable frequency drive (VFD) to accelerate the units to synchronous speed. Expected in-operation date is June 1st, 2013.

- One (1) Pony Motor package will be utilized for the Unit 3 HP generator.
- One (1) Pony Motor package will be utilized for the Unit 4 IP/LP generator.
- One (1) Thrust Bearing package will be utilized for the Unit 3 LP generator.
- One (1) Thrust Bearing package will be utilized for the Unit 4 HP/LP generator.
- Spare Parts (For details, refer to Section 4.1)
- Integration of Units 3 & 4 Synchronous Condensers into existing DCS (ABB) for Units 1 & 2.

Base Scope of Supply includes the following:

- Conversion of Units 3 & 4 STG into SC (For details, refer to Section 4.1)
- Spare Parts (For details, refer to Section 4.1)
- Integration of Units 3 & 4 SC into DCS (ABB) for Units 1 & 2

If the project is required because of loss or damage to a Unit, describe the cause and nature of the loss or damage and all repairs performed or required for all Units during the year:

Not applicable

Project Budget:

Year	Label	Material	Contract	Int-Svc	Other	Material	Over-head AEGE	Total- Cost	AD-VAL TAX	Total Expenditu res	Total Financi al-Costs

<u>Option: Siemens</u>	<u>Cost excluding sales tax \$</u>	<u>Sales Tax \$</u>	<u>AES Total Cost \$</u>
<u>Unit 3</u>	<u>5,496,000</u>	<u>325,152</u>	<u>5,821,152</u>
<u>Unit 4</u>	<u>5,496,000</u>	<u>325,152</u>	<u>5,821,152</u>
<u>Project Manager</u>	<u>228,605</u>	<u>-</u>	<u>228,605</u>
<u>Controls upgrade</u>	<u>700,000</u>	<u>34,557</u>	<u>734,557</u>
<u>Parts</u>	<u>1,568,900</u>	<u>121,590</u>	<u>1,690,490</u>

AES Huntington Beach, L.L.C
Rate Schedule FERC No. 2

Must-Run Service Agreement

Total Costs	13,489,505	806,450	14,295,955
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Describe any work or repairs performed relating to this project in the last five years:

Not applicable

As applicable, state the proposed depreciation life, Annual Capital Item Cost, Surcharge Payment Factor or Repair Payment Factor (percentage owed by CAISO) of the Capital Item or Repair:

Unit 3

		<u>CapAdd Amount</u>	<u>\$7,147,977</u>
<u>Fiscal year</u>	<u>Contract year</u>	<u>Annual Surcharge</u>	<u>Annual Depreciation</u>
<u>2013</u>	<u>1</u>	<u>3,367,606</u>	<u>25.00%</u>
<u>2014</u>	<u>2</u>	<u>3,102,664</u>	<u>25.00%</u>
<u>2015</u>	<u>3</u>	<u>2,806,725</u>	<u>25.00%</u>
<u>2016</u>	<u>4</u>	<u>2,513,263</u>	<u>25.00%</u>
Total		\$11,790,258	100.00%

Unit 4

		<u>CapAdd Amount</u>	<u>7,147,977</u>
<u>Fiscal year</u>	<u>Contract year</u>	<u>Annual Surcharge</u>	<u>Annual Depreciation</u>
<u>2013</u>	<u>1</u>	<u>3,003,801</u>	<u>20.00%</u>
<u>2014</u>	<u>2</u>	<u>2,779,702</u>	<u>20.00%</u>
<u>2015</u>	<u>3</u>	<u>2,536,382</u>	<u>20.00%</u>
<u>2016</u>	<u>4</u>	<u>2,295,539</u>	<u>20.00%</u>
<u>2017</u>	<u>5</u>	<u>2,056,985</u>	<u>20.00%</u>
Total		\$12,672,408	100.00%

Describe why this project is required (justification):

With the unexpected outage of the San Onofre Nuclear Generating Station ("SONGS"), HB 3&4 are providing critical voltage support and local reliability services to the system. Given the uncertainty surrounding when SONGS will return to service, the CAISO has determined that the conversion of HB3&4 into synchronous condensers is a necessary project to provide the required voltage support in the absence of SONGS.

Is this project required to comply with any laws, regulations or permits? If so, please list them and explain requirement.

Yes. Modification to the existing CEC permit 2000 – AFC – 013 is in progress.

Provide a cost/benefit analysis summary for this project:

Include all assumptions including changes to unit performance [efficiency, aux. power loads, etc.], impact on Maximum Net Dependable Capacity, grid interconnection/metering impacts, etc.

[Information and details have been previously provided and accepted by the parties.](#)

Describe the impacts on the Unit’s ability to perform its obligations under this Agreement if this project is not approved:

[If this CapAdd project is not approved, the Units will not be able to perform its obligations under the RMR Agreement.](#)

Describe alternatives to this project that were evaluated and the projected costs of those alternatives:

Describe alternatives along with their major scope items. Also, compare the projected cost of these alternatives with the selected alternative, and compare the unit performance impacts (efficiency, auxiliary power demands, Maximum Net Dependable Capacity effects, etc.) of these alternatives against the chosen alternative.

[Information and details have been previously provided and accepted by the parties.](#)

List any proceeds received or expected to be received by Owner from insurers or other third parties pursuant to applicable insurance, warranties and other contracts in connection with the project.

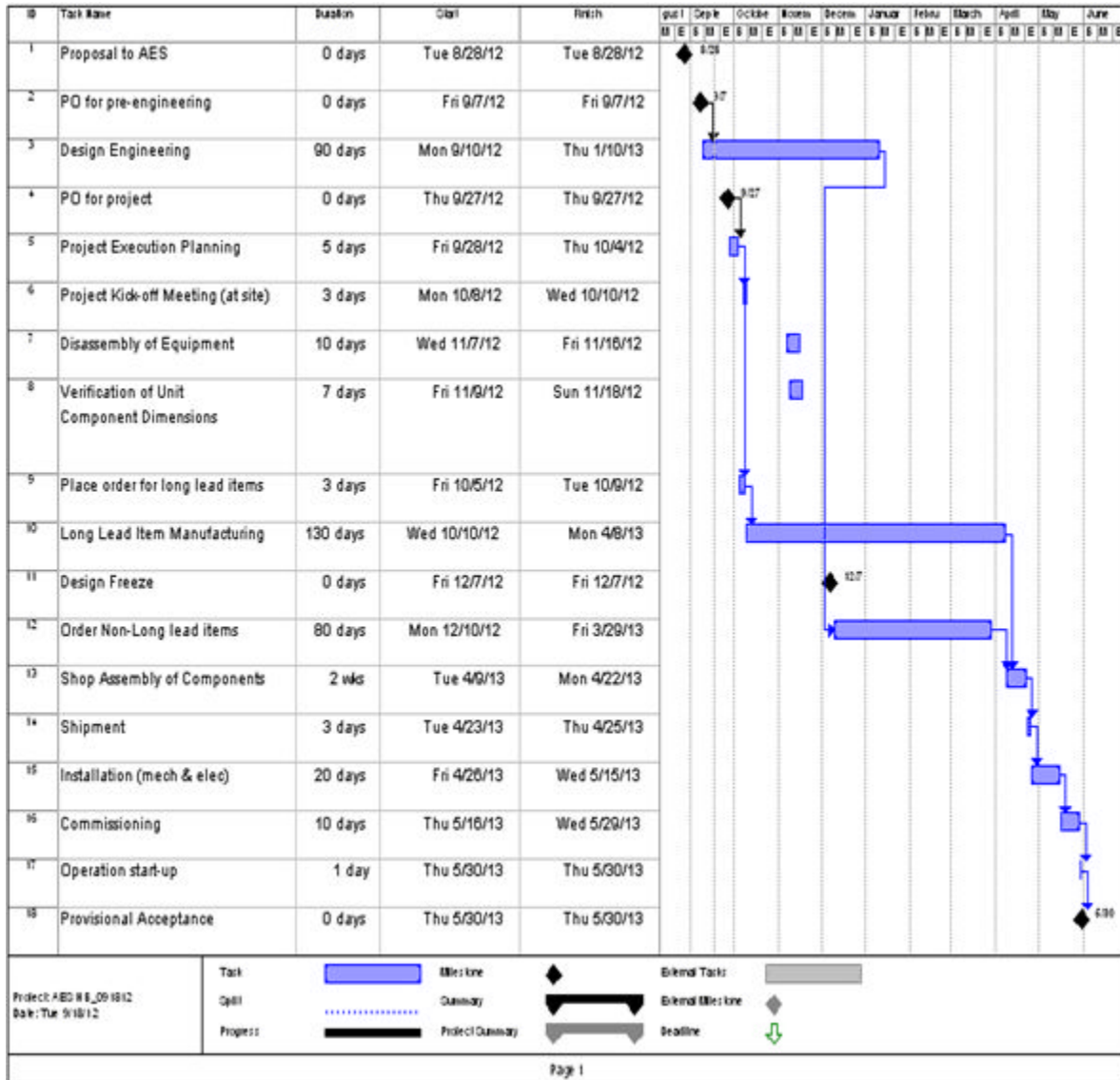
[Performance warranty and liquidated damages provisions are included in Exhibit I – Siemens Proposal.](#)

Provide the schedule for implementing this project:

Event	Begin	Complete

[AES Huntington Beach, L.L.C](#)
[Rate Schedule FERC No. 2](#)

Must-Run Service Agreement



Describe any outages required to implement this project:

[From RMR contract effective date through May 31, 2013.](#)

Other comments:

[None](#)

SCHEDULE L-2

CAPITAL ITEM AND REPAIR PROGRESS REPORT

CALIFORNIA INDEPENDENT SYSTEM OPERATOR
RELIABILITY MUST-RUN UNIT
CAPITAL ITEM AND REPAIR PROGRESS REPORT

Date:	CAISO Project Number:
Facility:	Unit:
Owner:	Location:
Capital Item or Repair:	
Original In-Service Date:	Current In-Service Date:

If Current In-Service Date has changed, describe the reason why:

Describe any additional costs or savings resulting from the change in the Current In-Service Date:

Describe what portion of any additional costs Owner is requesting CAISO to pay, and why Owner believes that CAISO should be obligated to pay those additional costs:

SCHEDULE M – N/A
Mandatory Market Bid for Condition 2 Units
When Dispatched by the CAISO

Energy Bid

The bid the Owner of a Condition 2 Fossil Fuel Unit must submit into Energy markets when dispatched by the CAISO is given in Equation M-1a (for Units with input/output data in polynomial form) or Equation M-1b (for Units with input/output data in exponential form):

Equation M-1a

$$\text{Energy Bid (\$/MWh)} = \frac{(AX^3 + BX^2 + CX + D)}{X} * P * E$$

+ [Variable O&M Rate + Emissions Rates + Scheduling Coordinator Charge + ACA Charge]

Equation M-1b

$$\text{Energy Bid (\$/MWh)} = \frac{A * (B + CX + De^{FX})}{X} * P * E$$

+ [Variable O&M Rate + Emissions Rate + Scheduling Coordinator Charge + ACA Charge]

Where:

- for Equation M-1a, A, B, C, D and E are the coefficients given in Table C1-7a;
- for Equation M-1b, A, B, C, D, E and F are the coefficients given in Table C1-7b;
- X is the Unit Availability Limit, MW;
- P is the Hourly Fuel Price as calculated by Equation C1-8 in Schedule C using the Commodity Prices most recently published before the day the bid is submitted.
- Scheduling Coordinator Charge (\$/MWh): \$0.31.
- ACA Charge (\$/MWh): The applicable annual charge for short-term sales

under 18 CFR Section 382.201 of the FERC Regulations.

- Variable O&M Rate (\$/MWh): as shown on Table C1-18

For Units in the SCAQMD only

Emissions Rate (\$/MWh) = Emissions Cost / Unit Availability Limit

Emissions Cost = (a) RECLAIM Cost + (b) NOx Emissions Cost + (c) Organic Gases Cost + (d) Sulfur Oxides Cost + (e) Particulate Matter Cost + (f) Carbon Monoxide Cost

(a) RECLAIM Cost = $((AX^2+BX+C) * \text{RECLAIM NOx Trading Credit Rate})$

(b) NOx Emissions Cost = $\frac{(AX^2+BX+C) * \text{NOx Emissions Fee}}{2000}$

Where:

A, B and C are the coefficients from Table C1-13;

X = Unit Availability Limit;

(c) Organic Gases Cost =

$4.76 * 10^{-7} * (\text{Gas Fuel}) * \text{Associated Emission Factor for Organic Gases} * \text{Associated Emissions Fee for Organic Gases}$

(d) Sulfur Oxides Cost =

$4.76 * 10^{-7} * (\text{Gas Fuel}) * \text{Associated Emission Factor for Sulfur Oxides} * \text{Associated Emissions Fee for Sulfur Oxides}$

(e) Particulate Matter Oxides Cost =

$4.76 * 10^{-7} * (\text{Gas Fuel}) * \text{Associated Emission Factor for Particulate Matter} * \text{Associated Emission Fee for Particulate Matter}$

(f) Carbon Monoxide Cost =

$4.76 * 10^{-7} * (\text{Gas Fuel}) * \text{Associated Emission Factor for Carbon Monoxide} * \text{Associated Emission Fee for Carbon Monoxide}$

Where:

Gas Fuel = $AX^3 + BX^2 + CX + D$ or $A * (B + CX + De^{FX})$, depending on the form of heat input the Owner is using

- A, B, C, D are the coefficients from C1-7a or C1-7b;
- F is the coefficient from C1-7b;
- X = Unit Availability Limit;
- Factors and Associated Emission fees are determined in Schedule C, Section D.3.

The bid the Owner of a geothermal Condition 2 Unit must submit into Energy markets when dispatched by the CAISO is given in Equation M-2.

Equation M-2

Energy Bid (\$/MWh) = Fuel Cost + [Variable O&M Rate + Scheduling Coordinator Charge + ACA Charge]

Where:

- The Fuel Cost is the Steam Price identified in Equation C2-1 in Schedule C. However, for purposes of this mandatory market bid, the value for the Steam Price will be zero for Geysers Main Units until the cumulative Hourly Metered Total Net Generation during the Contract Year from all Units exceeds the Minimum Annual Generation given in Equation C2-2.
- Variable O&M Cost (\$/MWh): the cost shall be as shown on Table C2-1.
- Scheduling Coordinator Charge: \$0.31.
- ACA Charge (\$/MWh): The applicable annual charge for short-term sales under 18 C.F.R. Section 382.201 of the FERC Regulations.

Ancillary Services Bid

The bid the Owner of a Condition 2 Unit must submit into Ancillary Service markets when dispatched by CAISO is as follows:

AES Huntington Beach, L.L.C
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$$\begin{array}{l}
 \text{Ancillary Services Bid (\$/MW per hr)} = \left[\begin{array}{l} \text{Annual Fixed} \\ \text{Revenue Requirement (\$)} \\ \hline 30 \text{ minutes x} \\ \text{Unit's} \\ \text{Highest Ramp} \\ \text{Rate} \\ \text{from Schedule} \\ \text{A,} \\ \text{MW/min} \end{array} \right] * \left[\begin{array}{l} \text{Target} \\ \text{Availabl} \\ \text{e} \\ \text{Hours} \end{array} \right] + \left[\begin{array}{l} \text{Annual Fixed} \\ \text{Revenue Requirement (\$)} \\ \hline \text{Maximum} \\ \text{Net} \\ \text{Dependa} \\ \text{ble} \\ \text{Capacity} \end{array} \right] * \left[\begin{array}{l} \text{Target} \\ \text{Availabl} \\ \text{e} \\ \text{Hours} \end{array} \right] \\
 \hline
 \mathbf{2}
 \end{array}$$

Annual Fixed Revenue Requirement is shown in Schedule B.

Target Available Hours is shown in Schedule B.

The product of 30 minutes times the Unit's highest Ramp Rate in Schedule A shall not exceed the Unit's Maximum Net Dependable Capacity.

Schedule N-1 Utility Non-Disclosure & Confidentiality Agreement**NON-DISCLOSURE and CONFIDENTIALITY AGREEMENT
for RESPONSIBLE UTILITY**

~~[Name of~~ San Diego Gas & Electric and Southern California Edison (jointly, the "Responsible Utility) (Utilities" and severally, the "Responsible Utility") ~~acknowledges that [Name of Owner] (acknowledge that AES Huntington Beach LLC ("AESHB" or "Owner") and the California Independent System Operator Corporation ("CAISO") (jointly, the "Providing Parties" and severally, the "Providing Party") have agreed to provide certain information to the Responsible Utility/Utilities pursuant to certain provisions of the Must-Run Service Agreement ("MRSA") between Owner and CAISO, in connection with discussions concerning the possible execution of such an MRSA, and as required for settlement and billing of charges under Article 9 of such Agreement. In order to permit the Responsible Utility/Utilities to receive such Confidential Information from Owner or CAISO pursuant to the above-referenced provisions of the MRSA, the Responsible Utility/Utilities and the Providing Parties hereby agree as follows:~~

~~(1)~~ For purposes of this Non-Disclosure and Confidentiality Agreement, the term "Confidential Information" shall have the same meaning it has in Section 12.5 of the pro forma MRSA, a copy of which is appended, except that the definition in Section 12.5 of the MRSA shall be deemed to also cover comparably designated information provided in connection with discussions concerning the possible execution of an MRSA;

~~(2)~~ The Providing Parties shall provide such Confidential Information pursuant to the terms of this Non-Disclosure and Confidentiality Agreement;

~~(3) The~~ Each Responsible Utility shall keep such Confidential Information confidential, shall use it only for the purposes related to the MRSA under discussion, and shall limit the disclosure of any such Confidential Information to only those personnel within its organization with responsibility for using such information in connection with ~~the~~ such MRSA. Such personnel may not include any person whose duties include (i) the marketing or sale of electric power or natural gas or gas transportation capacity at wholesale or retail, (ii) the purchase of electric power or natural gas or gas transportation capacity at wholesale or retail, (iii) the direct supervision of any employee with such responsibilities, or (iv) the provision of electricity or natural gas marketing consulting services to any employee with such responsibilities;

~~(4) The~~ Each Responsible Utility shall assure that personnel within its organization read and comply with the provisions of this Non-Disclosure and Confidentiality Agreement;

~~(5) The~~ Each Responsible Utility shall use all reasonable efforts to maintain the confidentiality of the Confidential Information in any litigation, and shall promptly notify the ~~providing~~ Providing Party of any attempt by a third party to obtain the Confidential Information through legal process or otherwise;

~~(6) The~~ Each Responsible Utility may use Confidential Information in litigation or regulatory proceedings related to the ~~Must-Run Service Agreement between Owner and~~

AES Huntington Beach, L.L.C
Rate Schedule FERC No. 2

Must-Run Service Agreement

~~CAISO~~ MRSA under discussion but only after notice to the Providing Party and affording the Providing Party an opportunity to obtain a protective order or other relief to prevent or limit disclosure of the Confidential Information.

~~The~~ Each Responsible Utility agrees to be bound by the terms of Section 12.5 of the pro forma MRSA in the same manner and to the same extent as the Providing Parties. The person signing on behalf of the Responsible Utility represents that he/she is authorized to bind the Responsible Utility to the terms of this Non-Disclosure and Confidentiality Agreement.

~~The undersigned signatory represents that he/she is authorized to bind the Responsible Utility, to the terms of this Non-Disclosure and Confidentiality Agreement.~~

This agreement may be executed in counterparts by each signatory, each of which shall be deemed to be an original, but which together shall constitute one and the same agreement.

Signature:  _____

Name: S. Yari Ali

Title: Director of Grid Operations

Responsible Utility: San Diego Gas & Electric

Address: Mail Code SD1160, PO Box 129831, San Diego, CA 92112-9831

Telephone: (619) 725-8639

Date:

Signature:  _____

Name: Jill Horswell

Title: Director of Federal Energy Regulatory Commission Policy and Contracts

Responsible Utility: Southern California Edison

Address: 2244 Walnut Grove Avenue, Rosemead, CA 91770

Telephone: (626) 302-3286

~~Address~~ Date: October 2, 2012

~~Telephone:~~ _____

Signature: _____

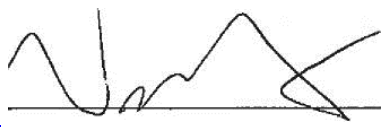
Name:

AES Huntington Beach, L.L.C
Rate Schedule FERC No. 2

Must-Run Service Agreement

Title: _____
Owner: _____
Address: _____
Telephone: _____

Signature: _____
Name: _____
Title: _____
Address: _____
Telephone: _____

Signature: 

Name: Weikko Wirta

Title: Chief Executive Manager

Owner: AES Huntington Beach, LLC

Address: 21730 Newland Street, Huntington Beach, CA 92646

Telephone: (714) 374-1476

Date: 09/24/2012

Signature: 

Name: Phil Pettingill

Title: Director Regulatory Affairs

California Independent System Operator Corporation

Address: 250 Outcropping Way, Folsom, CA 95630

Telephone: (916) 608-7241

Date: September 24, 2012

Schedule N-2 Non-Utility Persons Disclosure & Confidentiality Agreement**NON-DISCLOSURE and CONFIDENTIALITY AGREEMENT
for PERSONS OTHER THAN THE RESPONSIBLE UTILITY**

~~[Name of]~~ The California Public Utility Commission (the "Receiving Party" or "California Agency") acknowledges (a) that ~~[Name of Owner]~~ (AES Huntington Beach LLC ("AESHB" or "Owner") has agreed to provide Confidential Information to the California Agency pursuant to certain provisions of the Must-Run Service Agreement ("MRSA") between Owner and the California Independent System Operator Corporation ("CAISO") and in connections with discussions concerning the possible execution of such an MRSA, and (b) that Owner and CAISO (jointly, the "Providing Parties" and severally, the "Providing Party") may provide Confidential Information on a need-to-know basis to Owner's Scheduling Coordinator, financial institutions, agents and potential purchasers of interests in a Unit; and, as required for settlement and billing, to Scheduling Coordinators responsible for paying for services provided under the MRSA between Owner and CAISO. In order to permit the Receiving Party to receive such Confidential Information from Owner or CAISO, the Receiving Party and the Providing Parties hereby agree as follows:

- A. ~~(1)~~ For purposes of this Non-Disclosure and Confidentiality Agreement, the term "Confidential Information" shall have the same meaning it has in Section 12.5 of the pro forma MRSA ~~between Owner and CAISO~~, a copy of which is appended, except that the definition in Section 12.5 of the MRSA shall be deemed to also cover comparably designated information provided in connection with discussions concerning the possible execution of an MRSA;
- B. ~~(2)~~ The Providing Parties shall provide such Confidential Information pursuant to the terms of this Non-Disclosure and Confidentiality Agreement;
- C. ~~(3)~~ The Receiving Party shall keep such Confidential Information confidential, shall use it only for the purposes related to the MRSA under discussion, and shall limit the disclosure of any such Confidential Information to only those personnel within its organization with responsibility for using such information in connection with the MRSA upon their execution of this Non-Disclosure and Confidentiality Agreement. Such personnel may not include any person whose duties include (i) the marketing or sale of electric power or natural gas or gas transportation capacity at wholesale or retail, (ii) the purchase of electric power or natural gas or gas transportation capacity at wholesale or retail, (iii) the direct supervision of any employee with such responsibilities, or (iv) the provision of electricity or natural gas marketing consulting services to any employee with such responsibilities;
- D. ~~(4)~~ The Receiving Party shall assure that personnel within its organization authorized to receive Confidential Information read and comply with the provisions of this Non-Disclosure and Confidentiality Agreement;
- E. ~~(5)~~ The Receiving Party shall use all reasonable efforts to maintain the confidentiality of the Confidential Information in any litigation, and shall promptly notify the providing Party of any attempt by a third party to obtain the Confidential Information through

AES Huntington Beach, L.L.C
Rate Schedule FERC No. 2

Must-Run Service Agreement

legal process or otherwise;

The Receiving Party agrees to be bound by the terms of Section 12.5 of the pro forma MRSA, as modified by paragraph A above, in the same manner and to the same extent as the Providing Parties. The person signing on behalf of the Receiving Party represents that he/she is authorized to bind the Receiving Party to the terms of this Non-Disclosure and Confidentiality Agreement.

This agreement may be executed in counterparts by each signatory, each of which shall be deemed to be an original, but which together shall constitute one and the same agreement.

Signature: 

Name: Marion Peleo

Receiving Party: California Public Utilities Commission

Title: Staff Counsel

Address: 505 Van Ness Avenue, San Francisco, CA 94102

Telephone: (415) 703-2130

Date: 9/24/212

Company: _____

Title:

Address: _____

Telephone: _____

Signature: _____

Name: _____

Owner: _____

Address: _____

Signature: 

Name: Weikko Wirta

Owner: AES Huntington Beach LLC

AES Huntington Beach, L.L.C
Rate Schedule FERC No. 2

Must-Run Service Agreement

Title: Chief Executive Manager

Address: 21730 Newland Street, Huntington Beach, CA 92646

Telephone: (714) 374-1476

Date: 09/24/2012

Signature:



Name: Phil Pettingill

California Independent System Operator Corporation

Title: Director Regulatory Affairs

Address: 250 Outcropping Way, Folsom, CA 95630

Telephone: (916) 608-7241

Date: September 24, 2012

SCHEDULE O

RMR Owner's Invoice Process

The following principles and practices shall govern the submission of invoices to the CAISO for ~~Energy and~~ Ancillary Services provided under this Agreement ("RMR services"):

1. Invoices submitted by Owner to the CAISO for RMR services shall be clear, understandable and complete.
2. The CAISO, all RMR Owners and Responsible Utilities shall agree on the RMR invoice template, which agreement shall not be unreasonably withheld, prior to its implementation. The CAISO shall publish the current version of the RMR invoice template by including it on the CAISO Website. The CAISO will specifically tell each Owner and Responsible Utility where on the CAISO Website this RMR invoice template can be found. Each Owner shall use the then current RMR invoice template for invoicing RMR services for each Facility. The RMR invoice template may change from time to time. The CAISO shall notify the California Agency, all RMR Owners and Responsible Utilities when a new agreed upon RMR invoice template has been placed on the CAISO Website.
3. Subject to the provisions of paragraph 4 below, a Completed RMR invoice based on the version of the RMR invoice template posted on the CAISO Website seven days prior to submission of the invoice shall be deemed to satisfy the requirements of this Agreement. As used herein, the term "Completed RMR invoice" means that: (a) all of the raw data required to calculate debits and credits have been included; (b) all calculations have been performed in accordance with the formulae in the current RMR invoice template, or in the event that Owner believes a conflict exists between one or more formula(s) in the RMR Owner's invoice and the corresponding formula in the RMR invoice template, such conflict has been identified and substitute equations have been documented and used at the appropriate location(s) in the invoice; (c) linkages between invoice levels are identified; (d) all billing and service assumptions, data inputs and formulae reasonably necessary to understand the derivation of each charge on the invoice has been included; and (e) the invoice has been provided to the CAISO and the Responsible Utility.
4. The Estimated RMR invoice or the Adjusted RMR invoice timeline set forth in the CAISO's RMR Payments Calendar (for the appropriate invoice) shall not commence, payments shall not be made and interest shall not begin to accrue until a Completed RMR invoice has been submitted to the CAISO and Responsible Utility.

5. In the event of any conflict between the RMR invoice template and this Agreement, this Agreement shall govern. The Owner or Responsible Utility detecting the conflict shall promptly give notice to the CAISO. The CAISO shall notify all RMR Owners and all Responsible Utilities as soon as practicable after a conflict has been identified.
6. If Owner identifies a conflict, Owner shall identify the conflict in its letter transmitting its completed Estimated or Adjusted RMR invoice to the CAISO and include therein Owner's revised formula, which will be effective until agreement has been reached among the CAISO, Owner, the other RMR Owners and the Responsible Utilities on the correct formula, or a decision has been rendered through ADR from which no further appeal is possible.
7. An RMR Invoice Task Force has been formed with representatives from each of the RMR Owners, the Responsible Utilities and the CAISO. When a conflict has been identified, the CAISO, Owner, the other RMR Owners and the Responsible Utility will participate in meetings of the RMR Invoice Task Force to reach agreement on a revised RMR invoice template. The RMR Invoice Task Force shall meet at least monthly until all conflicts are resolved. Once all conflicts have been resolved, the RMR Invoice Task Force will meet approximately every six months to address invoicing and payment issues.
8. The RMR Invoice Task Force also shall be responsible for simplifying the RMR invoices so that they are easier to process and less burdensome to prepare.
9. To the extent that the Owner, the CAISO and the Responsible Utility have agreed, certain columns in the Owner's RMR invoice template shall be standard for the Facility and shall not change. The Owner shall not be required to complete such columns each month on its invoice for it to be considered a Completed RMR invoice, unless the underlying information requirements change.
10. Owner shall supply monthly RMR Level 0-3 invoice information in accordance with the RMR invoice template for each Responsible Utility service territory as follows:
 1. Level 0: the summary invoice for Owner's total amount invoiced to the CAISO for all of Owner's Facilities;
 2. Level 1: the summary invoice for all RMR Units at a Facility;
 3. Level 2: the detailed calculated information for individual RMR Units at the Facility; and
 4. Level 3: the detailed hourly data for individual RMR Units at each Facility.

Each invoice shall contain such other information as is necessary to perform the calculations, including indicated netted meter reads, CAISO Dispatch Notice information (both day-ahead, real time, and adjustments), Owner's Availability Notice information and final market schedule information. No quantities shall be left blank. Each assumption made by the Owner to perform a calculation shall be listed and explained either in the appropriate Level 0-3 template under Notes or in a transmittal letter accompanying the invoice.

The methods described shall be used to calculate quantities such as Hourly Fuel Price, Hourly Emissions Cost and Start-up calculations used as input data in the RMR invoice template.

Owner shall indicate any data appearing on the invoice which it considers confidential. Responsible Utility may use the data in accordance with Section 12.5 and Schedule N of this Agreement.

SCHEDULE P – N/A**Reserved Energy for Air Emissions Limitations**

This Schedule P applies only to Units located within the San Diego Air Quality Control Basin (“Basin”).

1. For purposes of this Schedule P, the term Emission Limitation means present or future limitations on the discharge of air pollutants or contaminants into the atmosphere specified by any federal, state, regional or local law (“Clean Air Law”), by any regulation, air quality implementation plan, or permit condition promulgated or imposed by any agency authorized under any such Clean Air Law or by the judgment of any court of competent jurisdiction.
2. (a) Except as set out in Sections 2 (b) and (c), if a Facility is located in the Basin and is subject to an Emission Limitation that would limit the MWh that can be produced from the Facility during the Contract Year or part thereof (such Contract Year or part being referred to as the “Limitation Period”), Owner shall, so long as some or all of the Units at the Facility are operating under Condition 1, reserve for the Facility for each Month of the Limitation Period for dispatch under this Agreement, a quantity of MWh equal to the average monthly Requested MWh for the Facility for that Month in the 36 Months preceding the next Contract Year (the “Monthly Reserved MWh”).
 - (b) If there are less than 36 Months of Requested MWh preceding the next Contract Year, the Monthly Reserved MWh for the Limitation Period shall be determined by agreement between CAISO and Owner. If Owner and CAISO are unable to reach agreement by October 31 preceding the next Contract Year, Owner or CAISO may refer the matter to ADR under a schedule (specified by the arbitrator if the participants cannot agree) requiring a decision within 30 days following appointment of the arbitrator.
 - (c) (i) If the Monthly Reserved MWh has been determined in accordance with Section 2(a) and this Agreement terminates as to a Unit at the Facility, the Monthly Reserved MWh shall be adjusted downward to the average of the Requested MWh for the Units that remain subject to this Agreement for the same 36 Month period previously used to calculate the Monthly Reserved MWh.
 - (ii) If the Monthly Reserved MWh has been determined in accordance with Section 2 (b) and the Agreement terminates as to a Unit at the Facility, the adjustment shall be determined by agreement of Owner and CAISO. If the Parties are unable to reach agreement at least 45 days before the Agreement terminates as to the Unit, Owner or

CAISO may refer the matter to ADR under a schedule (specified by the arbitrator if the participants cannot agree) requiring a decision within 30 days following appointment of the arbitrator

3. The Monthly Reserved MWh are set forth on Schedule A. No less than 15 days before the beginning of each Contract Year, Owner shall make a Section 205 filing limited to changing the terms of Schedule A to revise the Monthly Reserved MWh determined in accordance with Section 2. The revised Monthly Reserved MWh shall be effective from the first day of the Contract Year.
4. If the sum of the Billable MWh and Hybrid MWh during a Month is less than the Monthly Reserved MWh, CAISO may:
 - (a) carry forward into the following Months of the Limitation Period all unused Monthly Reserved MWh, provided the cumulative unused MWh that are carried forward into the following Months may not exceed 20% of the aggregate Monthly Reserved MWh for the remainder of the Limitation Period including the Monthly Reserved MWh for the Months into which unused Monthly Reserved MWh are to be carried forward, or
 - (b) carry forward less than all unused Monthly Reserved MWh and release to Owner the Monthly Unused Reserved MWh not carried forward.

CAISO shall notify Owner of the amount of unused Monthly Reserved MWh to be carried forward within 3 Business Days after the beginning of the next Month.
5. CAISO may elect to reduce the aggregate Monthly Reserved MWh for the remainder of the Limitation Period by notifying Owner not less than 5 days prior to the beginning of the Month in which the reduction is to be effective. Notwithstanding the foregoing, if CAISO or Owner forecasts that usage will approach the Emission Limitation in the last Month of the Limitation Period, CAISO and Owner shall closely coordinate to release any unused Monthly Reserved MWh as soon as possible.
6. If there are unused Monthly Reserved MWh for the Facility remaining at the end of the Limitation Period, CAISO shall pay the Unused Emission Reserve Payment. The Unused Emission Reserve Payment shall be the product of (a) the Unused Monthly Reserved MWh Payment Rate and (b) the lesser of (i) the unused Monthly Reserved MWh carried forward by the CAISO into the last Month of the Limitation Period and (ii) the unused Monthly Reserved MWh remaining at the end of the Limitation Period. The Unused Monthly Reserved MWh Payment Rate shall be \$10 per MWh. The Unused Emission Reserve Payment shall be included in the invoice for the last Billing Month of the Limitation Period.

7. If the CAISO determines that the Monthly Reserved MWh have become insufficient due to a Force Majeure Event at the Facility or at Reliability Must-Run Units at another facility or because of an outage on the CAISO Controlled Grid or the Distribution Grid due to a Force Majeure Event, CAISO may request Owner to undertake, and if so requested, Owner shall undertake all such necessary and commercially reasonable measures approved in advance by CAISO and the Responsible Utility to (a) obtain, where possible, a modification or variance from applicable Emission Limitations, or (b) procure necessary emission reduction credits or allowances sufficient to offset emissions in excess of Emission Limitations to enable Owner to provide additional MWh dispatched by the CAISO to meet reliability requirements arising by reason of such Force Majeure Event. CAISO shall reimburse Owner for all reasonable costs of procuring such emission reduction credits or allowances.
8. If the CAISO wishes to dispatch a Unit at a Facility that is within 5% of exceeding its Monthly Reserved MWh for the Limitation Period, the CAISO shall first dispatch Units at other Facilities that are not within 5% of the Monthly Reserved MWh during the Limitation Period if the other Unit(s), in the CAISO's sole judgment, provide equivalent reliability benefits.
9. If any Emission Limitation affecting the Facility materially changes, CAISO and Owner promptly shall renegotiate this Schedule P to reflect such change. If CAISO and Owner are unable to agree on revisions to this Schedule P, the Owner may file a revised Schedule P with FERC under Section 205 of the Federal Power Act for the limited purpose of taking such changes in the Emissions Limitation into account. Such filing may be with or without the concurrence of the CAISO, but CAISO reserves its right to protest any such filing.

ATTACHMENT C

**ISO Addendum to the Final Report and Study Results
of the 2013 Local Capacity Technical Analysis:
Absence of San Onofre Nuclear Generating Station**



**2013
LOCAL CAPACITY TECHNICAL
ANALYSIS**

**ADDENDUM TO THE FINAL REPORT
AND STUDY RESULTS**

**Absence of San Onofre Nuclear
Generating Station (SONGS)**

August 20, 2012

Local Capacity Technical Study Overview and Results

I. Executive Summary

This Addendum to the 2013 Local Capacity Technical Analysis, dated April 30, 2012 includes the results and recommendations of the 2013 Local Capacity Technical (LCT) Study in the absence of the San Onofre Nuclear Generating Station (SONGS). The results and recommendations affect the LA Basin and San Diego-Imperial Valley local areas.

This Addendum does not change the 2013 LCR allocations already provided to Load Serving Entities (LSEs) based on the 2013 Local Capacity Technical (LCT) Study report dated April 30, 2012. Instead, the ISO issues these results and recommendations to provide Load Serving Entities (LSEs) with advance notice of LCR needs in the absence of SONGS in order to facilitate a more informed 2013 Resource Adequacy (RA) procurement. It is also the intention of the ISO to mitigate any reliability conditions that will remain, even if the LSEs procured all the available resources in these local areas. These results, in the absence of SONGS, will also provide a basis to allocate the costs of any ISO procurement needed to mitigate reliability conditions notwithstanding the resource adequacy procurement of LSEs.¹

Please note that these studies assume that both SONGS units 2 and 3 are completely unavailable for operation in 2013. At the time this study was completed, SONGS was on an extended forced outage and the expected date that it would return to service was undetermined.

This study includes the most updated data available on July 15, 2012, namely the 2012 Net Qualifying Capacity (NQC) list and the California Energy Commission (CEC) adopted load forecast that was published in June 2012.

¹ For information regarding the conditions under which the CAISO may engage in procurement of local capacity and the allocation of the costs of such procurement, please see Sections 41 and 43 of the current CAISO Tariff, at: <http://www.caiso.com/238a/238acd24167f0.html>.

Below is a comparison of the LCR need with and without SONGS:

2013 Local Capacity Requirements with SONGS

Local Area Name	Qualifying Capacity			2013 LCR Need Based on Category B			2013 LCR Need Based on Category C with operating procedure		
	QF/Muni (MW)	Market (MW)	Total (MW)	Existing Capacity Needed	Deficiency	Total (MW)	Existing Capacity Needed**	Deficiency	Total (MW)
LA Basin	4452	8675	13127	10295	0	10295	10295	0	10295
San Diego/Imperial Valley	158	3991	4149	2938	0	2938	2938	144*	3082
Total	4610	12666	17276	13233	0	13233	13233	144	13377
Local Sub-Area Name									
Ellis	0	458	458	0	0	0	0	0	0
Western	3457	6118	9575	N/A	0	N/A	5540	0	5540
San Diego	158	2911	3069	2192	0	2192	2570	0	2570

2013 Local Capacity Requirements without SONGS

Local Area Name	Qualifying Capacity			2013 LCR Need Based on Category B			2013 LCR Need Based on Category C with operating procedure		
	QF/Muni (MW)	Market (MW)	Total (MW)	Existing Capacity Needed	Deficiency	Total (MW)	Existing Capacity Needed**	Deficiency	Total (MW)
LA Basin	2206	7710	9916	9745	0	9745	9916	1241	11157
San Diego/Imperial Valley	158	3991	4149	3385	0	3385	3385	467*	3852
Total	2364	11701	14065	13130	0	13130	13301	1708	15009
Local Sub-Area Name									
Ellis	0	458	458	0	0	0	458	360	818
Western	1211	5153	6364	N/A	0	N/A	4597	0	4597
San Diego	158	2911	3069	2462	0	2462	3069	467	3536

* San Diego-Imperial Valley area is not "overall deficient". Resource deficiency values result from a few deficient sub-areas; and since there are no resources that can mitigate this deficiency the numbers are carried forward into the total area needs.

** Since "deficiency" cannot be mitigated by any available resource, the "Existing Capacity Needed" will be split among LSEs on a load share ratio during the assignment of local area resource responsibility.

N/A - It is feasible that Western sub-area has Category B needs however they are smaller than the Category C needs and overall irrelevant due to high Category B need in the entire LA Basin.

Compared to the final 2013 Local Capacity Technical (LCT) report, the total available capacity in the LA Basin has decreased by 3,211 MW, representing the capacity from SONGS, El Segundo # 3 retirement and El Segundo Repower (because of the in-service date delay from June 1 to August 2013). The Ellis sub-area requirements have increased significantly by 818 MW, while the Western sub-area LCR needs have decreased by about 943 MW. Overall the LA Basin LCR needs are now driven by a new overlapping Category C contingency in the San Diego's electric system, due to voltage support needs that arise in the area. Without SONGS in operation, the LA Basin reflects a net increase of 862 MW in LCR need. The need for existing resources has decreased, however, by 379 MW due to the retirement or shut-down of other units. Basically, all existing available resources are needed for LCR in this area and additional deficiencies exist. For further details please see pages 5-19 below.

The total available capacity remains unchanged in the San Diego-Imperial Valley LCR area. The San Diego sub-area requirements have increased significantly, by 966 MW, and the San Diego-Imperial Valley area requirements have increased also by 447 MW, due to voltage support needs in the absence of SONGS. Overall for the San Diego-Imperial Valley LCR area, the additional resources needed for LCR has increased by 447 MW; however, there is a shift of sub-area needs and all available existing resources in the San Diego sub-area are now required for LCR. For further details, please see pages 19-27 below.

Even though resource procurement is the responsibilities of the LSEs in the area, the ISO is proposing mitigation for all new deficiencies created due to the absence of SONGS as a contingency plan for summer 2013. This mitigation is described in chapter II below.

II. Mitigation Plan for LA Basin and San Diego-Imperial Valley LCR areas and sub-areas due to the absence of SONGS

Ellis sub-area:

The following transmission upgrade plan has been identified which mitigates the identified reliability concerns in this sub-area:

Barre-Ellis 230k V lines reconfiguration from 2 to 4 circuits.

In addition to the mitigation measures needed for the adjacent LCR areas described below, reconfiguring the Barre-Ellis 230 kV lines from 2 to 4 circuits prior to next summer will mitigate the identified reliability concern in this sub-area, which is the loss of the Imperial Valley-North Gila 500 kV line followed by the loss of the Barre – Ellis #1 or #2 230 kV lines. Re-configuring the Barre-Ellis lines from 2 to 4 circuits will mitigate this issue by allowing three of the new Barre–Ellis circuits to remain in operation under this contingency.

LA Basin area and San Diego sub-area – common mitigation plan:

The following upgrade plan has been identified which mitigates the identified reliability concerns in this common area:

Install shunt capacitors (1 x 80 MVAR each) at Johanna and Santiago, (2 x 80 MVAR) at Viejo Substation (or 1 x 80 MVAR at Talega as an alternate location for the second 1 x 80 MVAR at Viejo) and convert Huntington Beach units 3 and 4 to synchronous condensers.

Together these projects will mitigate the post-transient voltage stability concerns in the San Diego sub-area and low voltage concern in the LA Basin LCR area². A mixture of dynamic (i.e., synchronous condensers) and static (shunt capacitors) reactive support is required in order to satisfy fast voltage recovery need at the SONGS 230 kV

² The NERC NUC-001 Standards require that the post-contingency voltage at San Onofre 230 kV switchyard be recovered to a minimum of 218 kV after a major contingency in less than 80 seconds.

bus without causing further operational concerns (i.e., capacitor “hunting” issue and slow response time if only static reactive support is installed).

Huntington Beach units 3 and 4, as generating units, will no longer be available due to lack of air emission credits, however due to their proximity to San Onofre switchyard they are best suited for dynamic voltage support which they can still provide without air emission credits or water permits by being converted to synchronous condensers.

As an added benefit, the shunt capacitors eliminate the need for a new SPS in the Johanna-Santiago area that is required to protect against voltage instability for the loss of 230 kV double circuit tower line (DCTL) of Ellis-Johanna and Ellis-Santiago when generating resources in the San Diego area are at medium to low output level. As a second benefit, this alternative will reduce the single contingency resource need to 3,069 MW in the San Diego-Imperial Valley LCR area. This amount of LCR need is equivalent to the need based on meeting Category C contingency requirement for the San Diego sub-area, effectively reducing the procurement target in the SDG&E service area by 316 MW.

The reduction in SDG&E service area need will consequently increase the LA Basin single contingency need to the point where a new small 83 MW deficiency exists. Mitigation for this new single contingency deficiency is twofold:

1. Some units at Imperial Valley (not required for local RA without SONGS and these mitigation measures) may be under an RA contract therefore satisfying this need, and
2. The ISO has received Demand Response (DR) program information from the Participating Transmission Owners (PTOs). It is possible that about 48 MW in Orange County and another 252 MW in the South of Lugo area could be used if available within 30 minutes of a transmission line loss or overload. If possible, the ISO will rely on them for the first part of summer 2013 until El Segundo Repower or Sentinel become commercially operational in August 2013 in order to mitigate this single contingency need that causes South of Lugo loading concerns. However, even if available within 30 minutes, these DR programs and the new generating resources are insufficient in mitigating the double contingency need as addressed above, however.

III. Local Capacity Requirement Study Results

1. LA Basin Area

Area Definition

The transmission tie lines into the LA Basin Area are:

- 1) San Onofre - San Luis Rey #1, #2, & #3 230 kV Lines
- 2) San Onofre - Talega #1 & #2 230 kV Lines
- 3) Lugo - Mira Loma #2 & #3 500 kV Lines
- 4) Lugo - Rancho Vista #1 500 kV line
- 5) Sylmar - Eagle Rock 230 kV Line
- 6) Sylmar - Gould 230 kV Line
- 7) Vincent - Mesa Cal 230 kV Line
- 8) Vincent - Rio Hondo #1 & #2 230 kV Lines
- 9) Eagle Rock - Pardee 230 kV Line
- 10) Devers - Palo Verde 500 kV Line
- 11) Mirage - Coachelv 230 kV Line
- 12) Mirage - Ramon 230 kV Line
- 13) Mirage - Julian Hinds 230 kV Line

These sub-stations form the boundary surrounding the LA Basin area:

- 1) San Onofre is in San Luis Rey is out
- 2) San Onofre is in Talega is out
- 3) Mira Loma is in Lugo is out
- 4) Rancho Vista is in Lugo is out
- 5) Eagle Rock is in Sylmar is out
- 6) Gould is in Sylmar is out
- 7) Mesa Cal is in Vincent is out
- 8) Rio Hondo is in Vincent is out
- 9) Eagle Rock is in Pardee is out
- 10) Devers is in Palo Verde is out
- 11) Mirage is in Coachelv is out
- 12) Mirage is in Ramon is out
- 13) Mirage is in Julian Hinds is out

This study includes the new CEC forecast posted June 2012. Total 2013 busload within the defined area is 19,300 MW with 133 MW of losses and 27 MW of pumps resulting in total load + losses + pumps of 19,460 MW. However, the electrically “defined area” is not aligned with the geographic substations included in the CEC demand forecast, and the load modeled in the base cases represents a 1-in-10 level or 20,460 MW (based on

the adopted CEC forecast).

Total units and qualifying capacity available in the LA Basin area:

MKT/SCHED RESOURCE ID	BUS #	BUS NAME	kV	NQC	UNIT ID	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
ALAMIT_7_UNIT 1	24001	ALAMT1 G	18	174.56	1	Western		Market
ALAMIT_7_UNIT 2	24002	ALAMT2 G	18	175.00	2	Western		Market
ALAMIT_7_UNIT 3	24003	ALAMT3 G	18	332.18	3	Western		Market
ALAMIT_7_UNIT 4	24004	ALAMT4 G	18	335.67	4	Western		Market
ALAMIT_7_UNIT 5	24005	ALAMT5 G	20	497.97	5	Western		Market
ALAMIT_7_UNIT 6	24161	ALAMT6 G	20	495.00	6	Western		Market
ANAHM_2_CANYN1	25211	CanyonGT	13.8	49.40	1	Western		MUNI
ANAHM_2_CANYN2	25212	CanyonGT	13.8	48.00	2	Western		MUNI
ANAHM_2_CANYN3	25213	CanyonGT	13.8	48.00	3	Western		MUNI
ANAHM_2_CANYN4	25214	CanyonGT	13.8	49.40	4	Western		MUNI
ANAHM_7_CT	25203	ANAHEIMG	13.8	40.64	1	Western	Aug NQC	MUNI
ARCOGN_2_UNITS	24011	ARCO 1G	13.8	54.28	1	Western	Aug NQC	QF/Selfgen
ARCOGN_2_UNITS	24012	ARCO 2G	13.8	54.28	2	Western	Aug NQC	QF/Selfgen
ARCOGN_2_UNITS	24013	ARCO 3G	13.8	54.28	3	Western	Aug NQC	QF/Selfgen
ARCOGN_2_UNITS	24014	ARCO 4G	13.8	54.28	4	Western	Aug NQC	QF/Selfgen
ARCOGN_2_UNITS	24163	ARCO 5G	13.8	27.14	5	Western	Aug NQC	QF/Selfgen
ARCOGN_2_UNITS	24164	ARCO 6G	13.8	27.15	6	Western	Aug NQC	QF/Selfgen
BARRE_2_QF	24016	BARRE	230	0.00		Western	Not modeled	QF/Selfgen
BARRE_6_PEAKER	29309	BARPKGEN	13.8	45.38	1	Western		Market
BRDWAY_7_UNIT 3	29007	BRODWYSC	13.8	65.00	1	Western		MUNI
BUCKWD_7_WINTCV	25634	BUCKWIND	115	0.15	W5	None	Aug NQC	Wind
CABZON_1_WINDA1	29290	CABAZON	33	11.29	1	None	Aug NQC	Wind
CENTER_2_QF	24203	CENTER S	66	18.10		Western	Not modeled Aug NQC	QF/Selfgen
CENTER_2_RHONDO	24203	CENTER S	66	1.91		Western	Not modeled	QF/Selfgen
CENTER_6_PEAKER	29308	CTRPKGEN	13.8	44.57	1	Western		Market
CENTRY_6_PL1X4	25302	CLTNCTRY	13.8	36.00	1	None	Aug NQC	MUNI
CHEVMN_2_UNITS	24022	CHEVGEN1	13.8	0.00	1	Western, El Nido	Aug NQC	QF/Selfgen
CHEVMN_2_UNITS	24023	CHEVGEN2	13.8	0.00	2	Western, El Nido	Aug NQC	QF/Selfgen
CHINO_2_QF	24024	CHINO	66	7.83		Western	Not modeled Aug NQC	QF/Selfgen
CHINO_2_SOLAR	24024	CHINO	66	0.00		Western	Not modeled	Market
CHINO_6_CIMGEN	24026	CIMGEN	13.8	25.29	1	Western	Aug NQC	QF/Selfgen
CHINO_6_SMPPAP	24140	SIMPSON	13.8	27.15	1	Western	Aug NQC	QF/Selfgen
CHINO_7_MILIKN	24024	CHINO	66	1.37		Western	Not modeled Aug NQC	Market
COLTON_6_AGUAM1	25303	CLTNAGUA	13.8	43.00	1	None		MUNI
CORONS_6_CLRWTR	24210	MIRALOMA	66	14.00		None	Not modeled	MUNI
CORONS_6_CLRWTR	24210	MIRALOMA	66	14.00		None	Not modeled	MUNI
DEVERS_1_QF	24815	GARNET	115	1.51	QF	None	Aug NQC	QF/Selfgen
DEVERS_1_QF	25632	TERAWND	115	2.94	QF	None	Aug NQC	QF/Selfgen
DEVERS_1_QF	25633	CAPWIND	115	0.56	QF	None	Aug NQC	QF/Selfgen
DEVERS_1_QF	25634	BUCKWIND	115	1.73	QF	None	Aug NQC	QF/Selfgen
DEVERS_1_QF	25635	ALTWIND	115	1.35	Q1	None	Aug NQC	QF/Selfgen
DEVERS_1_QF	25635	ALTWIND	115	2.50	Q2	None	Aug NQC	QF/Selfgen
DEVERS_1_QF	25636	RENWIND	115	0.59	Q1	None	Aug NQC	QF/Selfgen

DEVERS_1_QF	25636	RENWIND	115	2.28	Q2	None	Aug NQC	QF/Selfgen
DEVERS_1_QF	25636	RENWIND	115	0.27	W1	None	Aug NQC	QF/Selfgen
DEVERS_1_QF	25637	TRANWIND	115	6.68	QF	None	Aug NQC	QF/Selfgen
DEVERS_1_QF	25639	SEAWIND	115	2.01	QF	None	Aug NQC	QF/Selfgen
DEVERS_1_QF	25640	PANAERO	115	1.79	QF	None	Aug NQC	QF/Selfgen
DEVERS_1_QF	25645	VENWIND	115	1.53	EU	None	Aug NQC	QF/Selfgen
DEVERS_1_QF	25645	VENWIND	115	3.58	Q1	None	Aug NQC	QF/Selfgen
DEVERS_1_QF	25645	VENWIND	115	2.41	Q2	None	Aug NQC	QF/Selfgen
DEVERS_1_QF	25646	SANWIND	115	0.80	Q1	None	Aug NQC	QF/Selfgen
DEVERS_1_QF	25646	SANWIND	115	2.68	Q2	None	Aug NQC	QF/Selfgen
DMDVLY_1_UNITS	25425	ESRP P2	6.9	1.39		None	Not modeled Aug NQC	QF/Selfgen
DREWS_6_PL1X4	25301	CLTNDREW	13.8	36.00	1	None	Aug NQC	MUNI
DVLCYN_1_UNITS	25603	DVLCYN3G	13.8	67.15	3	None	Aug NQC	MUNI
DVLCYN_1_UNITS	25604	DVLCYN4G	13.8	67.15	4	None	Aug NQC	MUNI
DVLCYN_1_UNITS	25648	DVLCYN1G	13.8	50.35	1	None	Aug NQC	MUNI
DVLCYN_1_UNITS	25649	DVLCYN2G	13.8	50.35	2	None	Aug NQC	MUNI
ELLIS_2_QF	24197	ELLIS	66	0.00		Western, Ellis	Not modeled Aug NQC	QF/Selfgen
ELSEGN_7_UNIT 3	24047	ELSEG3 G	18	0.00	3	Western, El Nido	Retired	Market
ELSEGN_7_UNIT 4	24048	ELSEG4 G	18	335.00	4	Western, El Nido		Market
ETIWND_2_FONTNA	24055	ETIWANDA	66	0.81		None	Not modeled Aug NQC	QF/Selfgen
ETIWND_2_QF	24055	ETIWANDA	66	14.86		None	Not modeled Aug NQC	QF/Selfgen
ETIWND_2_SOLAR	24055	ETIWANDA	66	0.00		None	Not modeled Aug NQC	Market
ETIWND_6_GRPLND	29305	ETWPKGEN	13.8	42.53	1	None		Market
ETIWND_6_MWDETI	25422	ETI MWDG	13.8	10.37	1	None	Aug NQC	Market
ETIWND_7_MIDVLY	24055	ETIWANDA	66	1.54		None	Not modeled Aug NQC	QF/Selfgen
ETIWND_7_UNIT 3	24052	MTNVIST3	18	320.00	3	None		Market
ETIWND_7_UNIT 4	24053	MTNVIST4	18	320.00	4	None		Market
GARNET_1_UNITS	24815	GARNET	115	0.71	G1	None	Aug NQC	QF/Selfgen
GARNET_1_UNITS	24815	GARNET	115	0.25	G2	None	Aug NQC	QF/Selfgen
GARNET_1_UNITS	24815	GARNET	115	0.51	G3	None	Aug NQC	QF/Selfgen
GARNET_1_UNITS	24815	GARNET	115	0.25	PC	None	Aug NQC	QF/Selfgen
GARNET_1_WIND	24815	GARNET	115	0.66	W2	None	Aug NQC	Wind
GARNET_1_WIND	24815	GARNET	115	0.66	W3	None	Aug NQC	Wind
GLNARM_7_UNIT 1	29005	PASADNA1	13.8	22.30	1	Western		MUNI
GLNARM_7_UNIT 2	29006	PASADNA2	13.8	22.30	1	Western		MUNI
GLNARM_7_UNIT 3	29005	PASADNA1	13.8	44.83		Western	Not modeled	MUNI
GLNARM_7_UNIT 4	29006	PASADNA2	13.8	42.42		Western	Not modeled	MUNI
HARBGN_7_UNITS	24062	HARBOR G	13.8	76.28	1	Western		Market
HARBGN_7_UNITS	24062	HARBOR G	13.8	11.86	HP	Western		Market
HARBGN_7_UNITS	25510	HARBORG4	4.16	11.86	LP	Western		Market
HINSON_6_CARBG	24020	CARBOGEN	13.8	21.46	1	Western	Aug NQC	Market
HINSON_6_LBECH1	24078	LBEACH1G	13.8	65.00	1	Western		Market
HINSON_6_LBECH2	24170	LBEACH2G	13.8	65.00	2	Western		Market
HINSON_6_LBECH3	24171	LBEACH3G	13.8	65.00	3	Western		Market
HINSON_6_LBECH4	24172	LBEACH4G	13.8	65.00	4	Western		Market
HINSON_6_SERRGN	24139	SERRFGEN	13.8	28.38	1	Western	Aug NQC	QF/Selfgen
HNTGBH_7_UNIT 1	24066	HUNT1 G	13.8	225.75	1	Western, Ellis		Market

HNTGBH_7_UNIT 2	24067	HUNT2 G	13.8	225.80	2	Western, Ellis		Market
INDIGO_1_UNIT 1	29190	WINTECX2	13.8	42.00	1	None		Market
INDIGO_1_UNIT 2	29191	WINTECX1	13.8	42.00	1	None		Market
INDIGO_1_UNIT 3	29180	WINTECX8	13.8	42.00	1	None		Market
INLDEM_5_UNIT 1	29041	IIEEC-G1	19.5	335.00	1	Valley	Aug NQC	Market
INLDEM_5_UNIT 2	29042	IIEEC-G2	19.5	335.00	1	Valley	Aug NQC	Market
JOHANN_6_QFA1	24072	JOHANNA	230	0.00		Western, Ellis	Not modeled Aug NQC	QF/Selfgen
LACIEN_2_VENICE	24337	VENICE	13.8	4.45	1	Western, El Nido	Aug NQC	MUNI
LAFRES_6_QF	24073	LA FRESA	66	2.55		Western, El Nido	Not modeled Aug NQC	QF/Selfgen
LAGBEL_6_QF	24075	LAGUBELL	66	10.60		Western	Not modeled Aug NQC	QF/Selfgen
LGHTHP_6_ICEGEN	24070	ICEGEN	13.8	46.55	1	Western	Aug NQC	QF/Selfgen
LGHTHP_6_QF	24083	LITEHIPE	66	1.10		Western	Not modeled Aug NQC	QF/Selfgen
MESAS_2_QF	24209	MESA CAL	66	1.06		Western	Not modeled Aug NQC	QF/Selfgen
MIRLOM_2_CORONA				2.35		None	Not modeled Aug NQC	QF/Selfgen
MIRLOM_2_TEMESC				2.49		None	Not modeled Aug NQC	QF/Selfgen
MIRLOM_6_DELGEN	24030	DELGEN	13.8	29.78	1	None	Aug NQC	QF/Selfgen
MIRLOM_6_PEAKER	29307	MRLPKGEN	13.8	43.18	1	None		Market
MIRLOM_7_MWDLKM	24210	MIRALOMA	66	4.60		None	Not modeled Aug NQC	MUNI
MOJAVE_1_SIPHON	25657	MJVSPHN1	13.8	6.00	1	None	Aug NQC	Market
MOJAVE_1_SIPHON	25657	MJVSPHN1	13.8	6.00	2	None	Aug NQC	Market
MOJAVE_1_SIPHON	25657	MJVSPHN1	13.8	6.00	3	None	Aug NQC	Market
MTWIND_1_UNIT 1	29060	MOUNTWND	115	7.08	S1	None	Aug NQC	Wind
MTWIND_1_UNIT 2	29060	MOUNTWND	115	2.76	S2	None	Aug NQC	Wind
MTWIND_1_UNIT 3	29060	MOUNTWND	115	2.88	S3	None	Aug NQC	Wind
OLINDA_2_COYCRK	24211	OLINDA	66	3.13		Western	Not modeled	QF/Selfgen
OLINDA_2_QF	24211	OLINDA	66	0.78	1	Western	Aug NQC	QF/Selfgen
OLINDA_7_LNDFIL	24201	BARRE	66	4.50		Western	Not modeled Aug NQC	QF/Selfgen
PADUA_2_ONTARO	24111	PADUA	66	0.91		None	Not modeled Aug NQC	QF/Selfgen
PADUA_6_MWDSDM	24111	PADUA	66	7.70		None	Not modeled Aug NQC	MUNI
PADUA_6_QF	24111	PADUA	66	0.74		None	Not modeled Aug NQC	QF/Selfgen
PADUA_7_SDIMAS	24111	PADUA	66	1.05		None	Not modeled Aug NQC	QF/Selfgen
PWEST_1_UNIT				0.15		Western	Not modeled Aug NQC	Market
REDOND_7_UNIT 5	24121	REDON5 G	18	178.87	5	Western		Market
REDOND_7_UNIT 6	24122	REDON6 G	18	175.00	6	Western		Market
REDOND_7_UNIT 7	24123	REDON7 G	20	505.96	7	Western		Market
REDOND_7_UNIT 8	24124	REDON8 G	20	495.90	8	Western		Market
RHONDO_2_QF	24213	RIOHONDO	66	2.54		Western	Not modeled Aug NQC	QF/Selfgen
RHONDO_6_PUENTE	24213	RIOHONDO	66	0.00		Western	Not modeled Aug NQC	Market
RVSIDE_2_RERCU3	24299	RERC2G3	13.8	48.50	1	None		MUNI
RVSIDE_2_RERCU4	24300	RERC2G4	13.8	48.50	1	None		MUNI

RVSIDE_6_RERCU1	24242	RERC1G	13.8	48.35	1	None		MUNI
RVSIDE_6_RERCU2	24243	RERC2G	13.8	48.50	1	None		MUNI
RVSIDE_6_SPRING	24244	SPRINGEN	13.8	36.00	1	None		Market
SANTGO_6_COYOTE	24133	SANTIAGO	66	6.08	1	Western, Ellis	Aug NQC	Market
SBERDO_2_PSP3	24921	MNTV-CT1	18	129.71	1	None		Market
SBERDO_2_PSP3	24922	MNTV-CT2	18	129.71	1	None		Market
SBERDO_2_PSP3	24923	MNTV-ST1	18	225.08	1	None		Market
SBERDO_2_PSP4	24924	MNTV-CT3	18	129.71	1	None		Market
SBERDO_2_PSP4	24925	MNTV-CT4	18	129.71	1	None		Market
SBERDO_2_PSP4	24926	MNTV-ST2	18	225.08	1	None		Market
SBERDO_2_QF	24214	SANBRDNO	66	0.14		None	Not modeled Aug NQC	QF/Selfgen
SBERDO_2_SNTANA	24214	SANBRDNO	66	0.27		None	Not modeled Aug NQC	QF/Selfgen
SBERDO_6_MILLCK	24214	SANBRDNO	66	1.28		None	Not modeled Aug NQC	QF/Selfgen
SONGS_7_UNIT 2	24129	S.ONOFR2	22	0.00	2	Western	Not available	Nuclear
SONGS_7_UNIT 3	24130	S.ONOFR3	22	0.00	3	Western	Not available	Nuclear
TIFFNY_1_DILLON				5.63		Western	Not modeled Aug NQC	Wind
VALLEY_5_PERRIS	24160	VALLEYSC	115	7.94		Valley	Not modeled Aug NQC	QF/Selfgen
VALLEY_5_REDMTN	24160	VALLEYSC	115	2.00		Valley	Not modeled Aug NQC	QF/Selfgen
VALLEY_7_BADLND	24160	VALLEYSC	115	0.54		Valley	Not modeled Aug NQC	Market
VALLEY_7_UNITA1	24160	VALLEYSC	115	1.34		Valley	Not modeled Aug NQC	Market
VERNON_6_GONZL1				5.75		Western	Not modeled	MUNI
VERNON_6_GONZL2				5.75		Western	Not modeled	MUNI
VERNON_6_MALBRG	24239	MALBRG1G	13.8	42.37	C1	Western		MUNI
VERNON_6_MALBRG	24240	MALBRG2G	13.8	42.37	C2	Western		MUNI
VERNON_6_MALBRG	24241	MALBRG3G	13.8	49.26	S3	Western		MUNI
VILLPK_2_VALLYV	24216	VILLA PK	66	4.10		Western	Not modeled Aug NQC	QF/Selfgen
VILLPK_6_MWDYOR	24216	VILLA PK	66	0.00		Western	Not modeled Aug NQC	MUNI
VISTA_6_QF	24902	VSTA	66	0.17	1	None	Aug NQC	QF/Selfgen
WALNUT_6_HILLGEN	24063	HILLGEN	13.8	47.07	1	Western	Aug NQC	QF/Selfgen
WALNUT_7_WCOVCT	24157	WALNUT	66	3.43		Western	Not modeled Aug NQC	Market
WALNUT_7_WCOVST	24157	WALNUT	66	2.98		Western	Not modeled Aug NQC	Market
WHTWTR_1_WINDA1	29061	WHITEWTR	33	8.26	1	None	Aug NQC	Wind
ARCOGN_2_UNITS	24018	BRIGEN	13.8	0.00	1	Western	No NQC - hist. data	Market
HINSON_6_QF	24064	HINSON	66	0.00	1	Western	No NQC - hist. data	QF/Selfgen
INLAND_6_UNIT	24071	INLAND	13.8	30.30	1	None	No NQC - hist. data	QF/Selfgen
MOBGEN_6_UNIT 1	24094	MOBGEN	13.8	20.20	1	Western, El Nido	No NQC - hist. data	QF/Selfgen
NA	24324	SANIGEN	13.8	6.80	D1	None	No NQC - hist. data	QF/Selfgen
NA	24325	ORCOGEN	13.8	0.00	1	Western, Ellis	No NQC - hist. data	QF/Selfgen

NA	24327	THUMSGEN	13.8	40.00	1	Western	No NQC - hist. data	QF/Selfgen
NA	24328	CARBGEN2	13.8	15.2	1	Western	No NQC - hist. data	Market
NA	24329	MOBGEN2	13.8	20.2	1	Western, El Nido	No NQC - hist. data	QF/Selfgen
NA	24330	OUTFALL1	13.8	0.00	1	Western, El Nido	No NQC - hist. data	QF/Selfgen
NA	24331	OUTFALL2	13.8	0.00	1	Western, El Nido	No NQC - hist. data	QF/Selfgen
NA	24332	PALOGEN	13.8	3.60	D1	Western, El Nido	No NQC - hist. data	QF/Selfgen
NA	24341	COYGEN	13.8	0.00	1	Western, Ellis	No NQC - hist. data	QF/Selfgen
NA	24342	FEDGEN	13.8	0.00	1	Western	No NQC - hist. data	QF/Selfgen
NA	24839	BLAST	115	45.00	1	None	No NQC - hist. data	QF/Selfgen
NA	29021	WINTEC6	115	45.00	1	None	No NQC - hist. data	Wind
NA	29023	WINTEC4	12	16.50	1	None	No NQC - hist. data	Wind
NA	29060	SEAWEST	115	44.40	S1	None	No NQC - hist. data	Wind
NA	29060	SEAWEST	115	22.20	S2	None	No NQC - hist. data	Wind
NA	29060	SEAWEST	115	22.40	S3	None	No NQC - hist. data	Wind
NA	29260	ALTAMSA4	115	40.00	1	None	No NQC - hist. data	Wind
NA	29338	CLEARGEN	13.8	0.00	1	None	No NQC - hist. data	QF/Selfgen
NA	29339	DELGEN	13.8	0.00	1	None	No NQC - hist. data	QF/Selfgen
NA	29951	REFUSE	13.8	9.90	D1	Western	No NQC - Pmax	QF/Selfgen
NA	29953	SIGGEN	13.8	24.90	D1	Western	No NQC - Pmax	QF/Selfgen
HNTGBH_7_UNIT 3	24167	HUNT3 G	13.8	0.00	3	Western, Ellis	Retired	Market
HNTGBH_7_UNIT 4	24168	HUNT4 G	13.8	0.00	4	Western, Ellis	Retired	Market
New unit	29201	EME WCG1	13.8	100	1	Western	No NQC - Pmax	Market
New unit	29202	EME WCG2	13.8	100	1	Western	No NQC - Pmax	Market
New unit	29203	EME WCG3	13.8	100	1	Western	No NQC - Pmax	Market
New unit	29204	EME WCG4	13.8	100	1	Western	No NQC - Pmax	Market
New unit	29205	EME WCG5	13.8	100	1	Western	No NQC - Pmax	Market

Major new projects modeled:

1. Walnut Creek Energy Center
2. Huntington Beach #3 and #4 retirement
3. Del Amo – Ellis 230 kV line loops into Barre 230 kV substation

4. Recalibrate arming level for Santiago SPS
5. El Segundo #3 retirement

El Segundo Repowering (630 MW) and Sentinel (850 MW) have not been relied upon since the publicly announced commercial operating date is August 2013 (based on CEC web site http://www.energy.ca.gov/sitingcases/all_projects.html).

Critical Contingency Analysis Summary

LA Basin Overall:

The most critical contingency for the LA Basin is the loss of Imperial Valley-Miguel 500 kV line followed Imperial Valley-Suncrest 500 kV line or vice versa, which would result in voltage below the minimum allowable (218 kV) at the San Onofre 230 kV switchyard as specified in the Appendix E of the Transmission Control Agreement (TCA)³ as required by the NERC NUC-001 Standards. This limiting contingency establishes an LCR of 11,157 MW in 2013 (includes 810 MW of QF, 230 MW of Wind and 1166 MW of Muni generation as well as 1241 MW of deficiency) as the minimum generation capacity necessary for reliable load serving capability within this area.

The most critical single contingency for the LA Basin is the loss of Alamitos Unit #5 followed by Palo Verde-Devers 500 kV line, which would cause the South of Lugo flow to exceed its 6400 MW path rating limit. This limiting contingency establishes an LCR of 9,745 MW for 2013 (includes 810 MW of QF, 230 MW of Wind and 1166 MW of Muni generation as well as 83 MW of deficiency).

Effectiveness factors:

The following table has units that have at least 5% effectiveness to the above-mentioned South of Lugo constraint within the LA Basin area:

Gen Bus	Gen Name	Gen ID	MW Eff Fctr (%)
24052	MTNVIST3	3	76

³ TCA: http://www.caiso.com/Documents/TransmissionControlAgreement-Updatedas-Dec3_2010.pdf

24053	MTNVIST4	4	76
24071	INLAND	1	75
25422	ETI MWDG	1	75
29305	ETWPKGEN	1	75
29041	IIEEC-G1	1	74
29042	IIEEC-G2	2	74
24242	RERC1G	1	74
24243	RERC2G	1	74
24244	SPRINGEN	1	74
25301	CLTNDREW	1	74
25302	CLTNCTRY	1	74
25303	CLTNAGUA	1	74
24299	RERC2G3	1	74
24300	RERC2G4	1	74
24921	MNTV-CT1	1	72
24922	MNTV-CT2	1	72
24923	MNTV-ST1	1	72
24924	MNTV-CT3	1	72
24925	MNTV-CT4	1	72
24926	MNTV-ST2	1	72
29307	MRLPKGEN	1	72
29338	CLEARGEN	1	71
29339	DELGEN	1	71
24026	CIMGEN	D1	71
24140	SIMPSON	D1	71
24030	DELGEN	1	71
24815	GARNET	QF	71
24815	GARNET	W3	71
29190	WINTECX2	1	70
29191	WINTECX1	1	70
29180	WINTEC8	1	70
29023	WINTEC4	1	70
29021	WINTEC6	1	70
24839	BLAST	1	70
25648	DVLCYN1G	1	70
25649	DVLCYN2G	2	70
25603	DVLCYN3G	3	70
25604	DVLCYN4G	4	70
25632	TERAWND	QF	70
25634	BUCKWND	QF	70
25635	ALTWIND	Q1	70
25635	ALTWIND	Q2	70
25637	TRANWND	QF	70

25645	VENWIND	EU	70
25645	VENWIND	Q2	70
25645	VENWIND	Q1	70
25646	SANWIND	Q2	70
29060	MOUNTWND	S1	70
29060	MOUNTWND	S3	70
29060	MOUNTWND	S2	70
29061	WHITEWTR	1	70
29290	CABAZON	1	70
25639	SEAWIND	QF	69
25640	PANAERO	QF	69
29260	ALTAMSA4	1	69
25633	CAPWIND	QF	66
25657	MJVSPHN1	1	66
25658	MJVSPHN2	2	66
25659	MJVSPHN3	3	66
25203	ANAHEIMG	1	62
25211	CanyonGT 1	1	60
25212	CanyonGT 2	2	60
25213	CanyonGT 3	3	60
25214	CanyonGT 4	4	60
29309	BARPKGEN	1	58
24066	HUNT1 G	1	58
24067	HUNT2 G	2	58
24133	SANTIAGO	1	58
24325	ORCOGEN	1	58
24341	COYGEN	1	57
24005	ALAMT5 G	5	53
24161	ALAMT6 G	6	53
24063	HILLGEN	D1	53
29201	EME WCG1	1	53
29203	EME WCG3	1	53
29204	EME WCG4	1	53
29205	EME WCG5	1	53
29202	EME WCG2	1	53
24001	ALAMT1 G	1	50
24002	ALAMT2 G	2	50
24003	ALAMT3 G	3	50
24004	ALAMT4 G	4	50
29953	SIGGEN	D1	48
24018	BRIGEN	1	46
24011	ARCO 1G	1	44
24012	ARCO 2G	2	44

24013	ARCO 3G	3	44
24014	ARCO 4G	4	44
24163	ARCO 5G	5	44
24164	ARCO 6G	6	44
24020	CARBGEN1	1	44
24064	HINSON	1	44
24070	ICEGEN	D1	44
24170	LBEACH12	2	44
24171	LBEACH34	3	44
24094	MOBGEN1	1	44
24062	HARBOR G	1	44
25510	HARBORG4	LP	44
24062	HARBOR G	HP	44
24139	SERRFGEN	D1	44
24170	LBEACH12	1	44
24171	LBEACH34	4	44
24327	THUMSGEN	1	44
24328	CARBGEN2	1	44
24022	CHEVGEN1	1	41
24023	CHEVGEN2	2	41
24330	OUTFALL1	1	41
24331	OUTFALL2	1	41
24332	PALOGEN	D1	41
24333	REDON1 G	R1	41
24334	REDON2 G	R2	41
24335	REDON3 G	R3	41
24336	REDON4 G	R4	41
24337	VENICE	1	41
24047	ELSEG3 G	3	41
24048	ELSEG4 G	4	41
24121	REDON5 G	5	41
24122	REDON6 G	6	41
24123	REDON7 G	7	41
24124	REDON8 G	8	41
24329	MOBGEN2	1	41
29209	BLY1ST1	1	40
29207	BLY1CT1	1	40
29208	BLY1CT2	1	40
24342	FEDGEN	1	39
29951	REFUSE	D1	37
24241	MALBRG3G	S3	37
24240	MALBRG2G	C2	37
24239	MALBRG1G	C1	37

29005	PASADNA1	1	29
29006	PASADNA2	1	29
29007	BRODWYSC	1	29
29308	CTRPKGEN	1	19

Valley Sub-Area:

The most critical contingency for the Valley sub-area is the loss of Palo Verde – Devers 500 kV line and Valley – Serrano 500 kV line or vice versa, which would result in voltage collapse. This limiting contingency establishes a LCR of 670 MW (includes 10 MW of QF generation) in 2013 as the generation capacity necessary for reliable load serving capability within this sub-area.

Effectiveness factors:

The generators inside the sub-area have the same effectiveness factors.

Western Sub-Area:

The most critical contingency for the Western sub-area is the loss of Serrano-Villa Park #2 230 kV line followed by the loss of the Serrano-Lewis 230 kV line or vice versa, which would result in thermal overload of the remaining Serrano-Villa Park 230 kV line. This limiting contingency establishes a LCR of 4,597 MW (includes 623 MW of QF, 6 MW of Wind and 582 MW of Muni generation) in 2013 as the generation capacity necessary for reliable load serving capability within this sub-area.

Effectiveness factors:

The following table has units that have at least 5% effectiveness to the above-mentioned constraint:

Gen Bus	Gen Name	Gen ID	MW Eff Fctr (%)
29309	BARPKGEN	1	29
25203	ANAHEIMG	1	28
25211	CanyonGT 1	1	27
25212	CanyonGT 2	2	27
25213	CanyonGT 3	3	27
25214	CanyonGT 4	4	27
24066	HUNT1 G	1	25

24067	HUNT2 G	2	25
24325	ORCOGEN	1	24
24005	ALAMT5 G	5	23
24161	ALAMT6 G	6	23
24001	ALAMT1 G	1	22
24002	ALAMT2 G	2	22
24003	ALAMT3 G	3	22
24004	ALAMT4 G	4	22
24133	SANTIAGO	1	18
24341	COYGEN	1	18
24011	ARCO 1G	1	17
24012	ARCO 2G	2	17
24013	ARCO 3G	3	17
24014	ARCO 4G	4	17
24018	BRIGEN	1	17
24020	CARBGEN1	1	17
24064	HINSON	1	17
24070	ICEGEN	D1	17
24170	LBEACH12	2	17
24171	LBEACH34	3	17
24062	HARBOR G	1	17
25510	HARBORG4	LP	17
24062	HARBOR G	HP	17
24139	SERRFGEN	D1	17
24170	LBEACH12	1	17
24171	LBEACH34	4	17
24173	LBEACH5G	R5	17
24174	LBEACH6G	R6	17
24327	THUMSGEN	1	17
24328	CARBGEN2	1	17
24079	LBEACH7G	R7	17
24080	LBEACH8G	R8	17
24081	LBEACH9G	R9	17
24163	ARCO 5G	5	17
24164	ARCO 6G	6	17
24094	MOBGEN1	1	16
29308	CTRPKGEN	1	16
24329	MOBGEN2	1	16
24330	OUTFALL1	1	16
24331	OUTFALL2	1	16
24332	PALOGEN	D1	16
24022	CHEVGEN1	1	15
24023	CHEVGEN2	2	15

24048	ELSEG4 G	4	15
24333	REDON1 G	R1	15
24334	REDON2 G	R2	15
24335	REDON3 G	R3	15
24336	REDON4 G	R4	15
24337	VENICE	1	15
29953	SIGGEN	D1	15
24047	ELSEG3 G	3	15
24121	REDON5 G	5	15
24122	REDON6 G	6	15
24123	REDON7 G	7	15
24124	REDON8 G	8	15
29951	REFUSE	D1	14
24342	FEDGEN	1	14
24241	MALBRG3G	S3	14
24240	MALBRG2G	C2	14
24239	MALBRG1G	C1	14
29005	PASADNA1	1	11
29006	PASADNA2	1	11
29007	BRODWYSC	1	11
24063	HILLGEN	D1	7
29201	EME WCG1	1	7
29203	EME WCG3	1	7
29204	EME WCG4	1	7
29205	EME WCG5	1	7
29202	EME WCG2	1	7

There are numerous other combinations of contingencies in the area that could overload a significant number of 230 kV lines in this sub-area but have less LCR need. As such, anyone of them (combination of contingencies) could become binding for any given set of procured resources. As a result, effectiveness factors may not be the best indicator towards informed procurement.

Ellis sub-area

The most critical contingency for Ellis sub-area is the loss of the Imperial Valley-North Gila 500 kV line followed by the loss of the Barre – Ellis #1 or #2 230 kV lines, which overload the remaining line. This limiting contingency establishes an LCR of 818 MW in 2013 (which includes 6 MW of QF generation as well as 360 MW of deficiency) as the

minimum capacity necessary for reliable load serving capability within this sub-area.

Effectiveness factors:

The generators inside the sub-area have the same effectiveness factors.

El Nido sub-area

The most critical contingency for the El Nido sub-area is the loss of the La Fresa – Hinson 230 kV line followed by the loss of the La Fresa – Redondo #1 and #2 230 kV lines, which would cause voltage collapse. This limiting contingency establishes an LCR of 386 MW in 2013 (which includes 47 MW of QF and 4 MW of MUNI generation) as the minimum capacity necessary for reliable load serving capability within this sub-area.

Effectiveness factors:

The generators inside the sub-area have the same effectiveness factors.

Changes to study results compared to SONGS being operational:

The load forecast is essentially the same. The total available capacity has decreased by 3,211 MW (2246 MW SONGS + 335 MW El Segundo # 3 + 630 MW El Segundo Repower). The Ellis sub-area LCR needs have increased significantly, by 818 MW, due to the additional flow through this sub-area required to serve San Diego load in absence of SONGS. The Western sub-area LCR needs have decreased by about 943 MW mainly due to the fact that there are other units in this sub-area with higher effectiveness factors than SONGS that are now required and that have not been previously accounted for, due to unit dispatch methodology (see final 2013 LCR manual for order in which units are turned on). The LA Basin single contingency need has decreased by a total of 550 MW, mainly due to the difference between P max of SONGS and Alamitos #5 (new worst-case resource outage) and due to higher LCR needs in the San Diego-Imperial Valley area and has partly (increased) due to the smaller effectiveness factors relative to South of Lugo path for units required to replace SONGS. The LA Basin has a new multiple contingency requirement due to voltage support issues that arise in the area, without SONGS, for outages in San Diego's system. For mitigation of new deficiencies please see chapter II.

LA Basin Overall Requirements:

2013	QF/Wind (MW)	Muni (MW)	Nuclear (MW)	Market (MW)	Max. Qualifying Capacity (MW)
Available generation	1040	1166	0	7710	9916

2013	Existing Generation Capacity Needed (MW)	Deficiency (MW)	Total MW LCR Need
Category B (Single) ⁴	9,745	0	9,745
Category C (Multiple) ⁵	9,916	1,241	11,157

2. San Diego-Imperial Valley Area**Area Definition**

The transmission tie lines forming a boundary around the Greater San Diego-Imperial Valley area include:

- 1) Imperial Valley – North Gila 500 kV Line
- 2) Otay Mesa – Tijuana 230 kV Line
- 3) San Onofre - San Luis Rey #1 230 kV Line
- 4) San Onofre - San Luis Rey #2 230 kV Line
- 5) San Onofre - San Luis Rey #3 230 kV Line
- 6) San Onofre – Talega #1 230 kV Line
- 7) San Onofre – Talega #2 230 kV Line
- 8) Imperial Valley – El Centro 230 kV Line
- 9) Imperial Valley – Dixieland 230 kV Line
- 10) Imperial Valley – La Rosita 230 kV Line

The substations that delineate the Greater San Diego-Imperial Valley area are:

- 1) Imperial Valley is in North Gila is out
- 2) Otay Mesa is in Tijuana is out
- 3) San Onofre is out San Luis Rey is in
- 4) San Onofre is out San Luis Rey is in
- 5) San Onofre is out San Luis Rey is in

⁴ A single contingency means that the system will be able to survive the loss of a single element, however the operators will not have any means (other than load drop) in order to bring the system within a safe operating zone and get prepared for the next contingency as required by NERC transmission operations standards.

⁵ Multiple contingencies means that the system will be able to survive the loss of a single element, and the operators will have enough generation (other operating procedures) in order to bring the system within a safe operating zone and get prepared for the next contingency as required by NERC transmission operations standards.

- 6) San Onofre is out Talega is in
- 7) San Onofre is out Talega is in
- 8) Imperial Valley is in El Centro is out
- 9) Imperial Valley is in Dixieland is out
- 10) Imperial Valley is in La Rosita is out

Study includes the new CEC adopted forecast that was posted in June 2012. The total 2013 busload within the defined area: 4990 MW with 134 MW of losses resulting in total load + losses of 5124 MW.

Total units and qualifying capacity available in this area:

MKT/SCHED RESOURCE ID	BUS #	BUS NAME	kV	NQC	UNIT ID	LCR SUB-AREA NAME	NQC Comments	CAISO Tag
BORDER_6_UNITA1	22149	CALPK_BD	13.8	48.98	1	San Diego		Market
CBRLLO_6_PLSTP1	22092	CABRILLO	69	2.23	1	San Diego	Aug NQC	QF/Selfgen
CCRITA_7_RPPCHF	22124	CHCARITA	138	3.69	1	San Diego	Aug NQC	QF/Selfgen
CHILLS_1_SYCENG	22120	CARLTNHS	138	0.26	1	San Diego	Aug NQC	QF/Selfgen
CHILLS_7_UNITA1	22120	CARLTNHS	138	1.31	2	San Diego	Aug NQC	QF/Selfgen
CPSTNO_7_PRMADS	22112	CAPSTRNO	138	4.73	1	San Diego	Aug NQC	QF/Selfgen
CRSTWD_6_KUMYAY	22915	KUMEYAAY	34.5	6.70	1	San Diego	Aug NQC	Wind
DIVSON_6_NSQF	22172	DIVISION	69	34.41	1	San Diego	Aug NQC	QF/Selfgen
EGATE_7_NOCITY	22204	EASTGATE	69	0.21	1	San Diego	Aug NQC	QF/Selfgen
ELCAJN_6_LM6K	23320	EC GEN2	13.8	48.10	1	San Diego, El Cajon		Market
ELCAJN_6_UNITA1	22150	CALPK_EC	13.8	45.42	1	San Diego, El Cajon		Market
ELCAJN_7_GT1	22212	ELCAJNGT	12.5	16.00	1	San Diego, El Cajon		Market
ENCINA_7_EA1	22233	ENCINA 1	14.4	106.00	1	San Diego		Market
ENCINA_7_EA2	22234	ENCINA 2	14.4	104.00	1	San Diego		Market
ENCINA_7_EA3	22236	ENCINA 3	14.4	110.00	1	San Diego		Market
ENCINA_7_EA4	22240	ENCINA 4	22	300.00	1	San Diego		Market
ENCINA_7_EA5	22244	ENCINA 5	24	330.00	1	San Diego		Market
ENCINA_7_GT1	22248	ENCINAGT	12.5	14.50	1	San Diego		Market
ESCNDO_6_PL1X2	22257	ESGEN	13.8	35.50	1	San Diego		Market
ESCNDO_6_UNITB1	22153	CALPK_ES	13.8	48.04	1	San Diego		Market
ESCO_6_GLMQF	22332	GOALLINE	69	39.92	1	San Diego, Esco	Aug NQC	QF/Selfgen
KEARNY_7_KY1	22377	KEARNGT1	12.5	16.00	1	San Diego, Mission		Market
KEARNY_7_KY2	22373	KEARN2AB	12.5	15.02	1	San Diego, Mission		Market
KEARNY_7_KY2	22373	KEARN2AB	12.5	15.02	2	San Diego, Mission		Market
KEARNY_7_KY2	22374	KEARN2CD	12.5	15.02	1	San Diego, Mission		Market
KEARNY_7_KY2	22374	KEARN2CD	12.5	13.95	2	San Diego, Mission		Market
KEARNY_7_KY3	22375	KEARN3AB	12.5	14.98	1	San Diego, Mission		Market
KEARNY_7_KY3	22375	KEARN3AB	12.5	16.05	2	San Diego,		Market

						Mission		
KEARNY_7_KY3	22376	KEARN3CD	12.5	14.98	1	San Diego, Mission		Market
KEARNY_7_KY3	22376	KEARN3CD	12.5	14.98	2	San Diego, Mission		Market
LAKHDG_6_UNIT 1	22625	LKHODG1	13.8	20.00	1	San Diego, Bernardo		Market
LARKSP_6_UNIT 1	22074	LRKSPBD1	13.8	46.00	1	San Diego		Market
LARKSP_6_UNIT 2	22075	LRKSPBD2	13.8	46.00	1	San Diego		Market
LAROA1_2_UNITA1	20187	LRP-U1	16	165	1	None		Market
LAROA2_2_UNITA1	22996	INTBST	18	157	1	None		Market
LAROA2_2_UNITA1	22997	INTBCT	16	165	1	None		Market
MRGT_6_MEF2	22487	MFE_MR2	13.8	47.90	1	San Diego, Mission, Miramar		Market
MRGT_6_MMAREF	22486	MFE_MR1	13.8	48.00	1	San Diego, Mission, Miramar		Market
MRGT_7_UNITS	22488	MIRAMRGT	12.5	18.55	1	San Diego, Mission, Miramar		Market
MRGT_7_UNITS	22488	MIRAMRGT	12.5	17.45	2	San Diego, Mission, Miramar		Market
MSHGTS_6_MMARLF	22448	MESAHGTS	69	3.19	1	San Diego, Mission	Aug NQC	QF/Selfgen
MSSION_2_QF	22496	MISSION	69	0.74	1	San Diego	Aug NQC	QF/Selfgen
NIMTG_6_NIQF	22576	NOISLMTR	69	35.59	1	San Diego	Aug NQC	QF/Selfgen
OGROVE_6_PL1X2	22628	PA99MWQ1	13.8	49.95	1	San Diego, Pala		Market
OGROVE_6_PL1X2	22629	PA99MWQ2	13.8	49.95	2	San Diego, Pala		Market
OTAY_6_PL1X2	22617	OYGEN	13.8	35.50	1	San Diego		Market
OTAY_6_UNITB1	22604	OTAY	69	2.80	1	San Diego	Aug NQC	QF/Selfgen
OTAY_7_UNITC1	22604	OTAY	69	2.65	3	San Diego	Aug NQC	QF/Selfgen
OTMESA_2_PL1X3	22605	OTAYMGT1	18	185.06	1	San Diego		Market
OTMESA_2_PL1X3	22606	OTAYMGT2	18	185.06	1	San Diego		Market
OTMESA_2_PL1X3	22607	OTAYMST1	16	233.48	1	San Diego		Market
PALOMR_2_PL1X3	22262	PEN_CT1	18	162.39	1	San Diego		Market
PALOMR_2_PL1X3	22263	PEN_CT2	18	162.39	1	San Diego		Market
PALOMR_2_PL1X3	22265	PEN_ST	18	240.83	1	San Diego		Market
PTLOMA_6_NTCCGN	22660	POINTLMA	69	1.65	2	San Diego	Aug NQC	QF/Selfgen
PTLOMA_6_NTCQF	22660	POINTLMA	69	16.70	1	San Diego	Aug NQC	QF/Selfgen
SAMPSN_6_KELCO1	22704	SAMPSON	12.5	0.72	1	San Diego	Aug NQC	QF/Selfgen
SMRCOS_6_UNIT 1	22724	SANMRCOS	69	0.47	1	San Diego	Aug NQC	QF/Selfgen
TERMEX_2_PL1X3	22981	IV GEN1	18	281	1	None		Market
TERMEX_2_PL1X3	22982	IV GEN2	18	156	1	None		Market
TERMEX_2_PL1X3	22983	IVGEN3	18	156	1	None		Market
NA	22444	MESA RIM	69	0.00	1	San Diego	No NQC - hist. data	QF/Selfgen
NA	22592	OLD TOWN	69	0.00	1	San Diego	No NQC - hist. data	QF/Selfgen
NA	22602	OMWD	69	0.00	1	San Diego	No NQC - hist. data	QF/Selfgen
NA	22708	SANLUSRY	69	0.00	1	San Diego	No NQC - hist. data	QF/Selfgen
NA	22916	PFC-AVC	0.6	0.00	1	San Diego	No NQC - hist. data	QF/Selfgen
LAKHDG_6_UNIT 2	22626	LKHODG2	13.8	20.00	2	San Diego, Bernardo	No NQC - Pmax	Market

Major new projects modeled:

1. Sunrise Power Link Project (Southern Route)
2. Eastgate – Rose Canyon 69kV (TL6927) reconductor
3. New Imperial Valley-Dixieland 230 kV line
4. East County 500 kV substation (ECO)
5. Lake Hodges unit # 2

Critical Contingency Analysis Summary

El Cajon Sub-area:

The most critical contingency for the El Cajon sub-area is the loss of the El Cajon-Jamacha 69 kV line (TL624) followed by the loss of Miguel-Granite-Los Coches 69 kV line (TL632), which would thermally overload the El Cajon – Los Coches 69 kV line (TL631). This limiting contingency establishes a LCR of 83 MW (including 0 MW of QF generation) in 2013 as the minimum generation capacity necessary for reliable load serving capability within this sub-area.

The most critical single contingency for this sub-area is the loss of Miguel-Granite-Los Coches 69 kV line (TL632) with El Cajon Energy Center already out of service, which would thermally overload the El Cajon – Los Coches 69 kV line (TL631). This limiting contingency establishes a LCR of 53 MW (including 0 MW of QF generation) in 2013.

Effectiveness factors:

All units within this sub-area (El Cajon Peaker, El Cajon GT and El Cajon Energy Center) have the same effectiveness factor.

Rose Canyon Sub-area

This sub-area has been eliminated due to TL6927, Eastgate-Rose Canyon 69 kV reconductor which is already in-service.

Mission Sub-area

The most critical contingency for the Mission sub-area is the loss of Mission - Kearny 69 kV line (TL663) followed by the loss of Mission – Mesa Heights 69kV line (TL676), which would thermally overload the Mission - Clairmont 69kV line (TL670). This limiting contingency establishes a local capacity need of 126 MW (including 3 MW of QF generation) in 2013 as the minimum generation capacity necessary for reliable load serving capability within this sub-area.

Effectiveness factors:

Miramar Energy Facility units and Miramar GTs (Cabrillo Power II) are 8% effective, Miramar Landfill unit and all Kearny peakers are 32% effective.

Bernardo Sub-area:

The most critical contingency for the Bernardo sub-area is the loss of Artesian - Sycamore 69 kV line followed by the loss of Poway-Rancho Carmel 69 kV line, which would thermally overload the Felicita Tap-Bernardo 69 kV line (TL689). This limiting contingency establishes a LCR of 110 MW (including 0 MW of QF generation and 70 MW of deficiency) in 2013 as the minimum generation capacity necessary for reliable load serving capability within this sub-area.

Effectiveness factors:

All units within this sub-area (Lake Hodges) are needed so there is no effectiveness factor required.

Esco Sub-area

The most critical contingency for the Esco sub-area is the loss of Poway-Pomerado 69 kV line (TL6913) followed by the loss of Esco - Escondido 69kV line (TL6908) which would thermally overload the Bernardo – Rancho Carmel 69 kV line (TL633). This limiting contingency establishes a LCR of 114 MW (including 40 MW of QF generation and 74 MW of deficiency) in 2013 as the minimum generation capacity necessary for reliable load serving capability within this sub-area.

Effectiveness factors:

Only unit within this sub-area (Goal line) is needed so no effectiveness factor is required.

Pala Sub-area

The most critical contingency for the Pala sub-area is the loss of Pendleton – San Luis Rey 69 kV line (TL6912) followed by the loss of Lilac - Pala 69kV line (TL6932) which would thermally overload the Melrose – Morro Hill Tap 69 kV line. This limiting contingency establishes a LCR of 43 MW (including 0 MW of QF generation) in 2013 as the minimum generation capacity necessary for reliable load serving capability within this sub-area.

Effectiveness factors:

All units within this sub-area (Orange Grove) have the same effectiveness factor.

Miramar Sub-area

The most critical contingency for the Miramar sub-area is the loss of Otay Mesa – Miguel Tap – Silvergate 230kV line (TL23042) followed by the loss of Sycamore 230/138 kV Bank #60, which would thermally overload the Sycamore - Scripps 69 kV line (TL6916). This limiting contingency establishes a LCR of 97 MW (including 0 MW of QF generation) in 2013 as the minimum generation capacity necessary for reliable load serving capability within this sub-area.

The most critical single contingency for this sub-area is the loss of Otay Mesa – Miguel Tap – Silvergate 230kV line (TL23042) with Miramar Energy Facility #1 or #2 out of service, which would thermally overload the Sycamore - Scripps 69 kV line (TL6916). This limiting contingency establishes a LCR of 86 MW (including 0 MW of QF generation) in 2013.

Effectiveness factors:

All units within this sub-area (Miramar Energy Facility and Miramar GTs) have the same

effectiveness factor.

San Diego Sub-area:

The most limiting contingency for San Diego sub-area is the loss of Imperial Valley-Suncrest 500 kV line followed by the loss of ECO-Miguel 500 kV line. The limiting constraint is the post-transient voltage instability. This contingency establishes an LCR of 3,536 MW in 2013 (includes 151 MW of QF generation and 7 MW of Wind as well as 467 MW of deficiency) as the minimum generation capacity necessary for reliable load serving capability within this sub-area.

The most limiting single contingency in the San Diego sub-area is a (G-1/N-1) contingency described by the outage of ECO-Miguel 500 kV line with Otay Mesa Combined-Cycle Power Plant (603 MW) already out of service. The limiting constraint is post-transient voltage instability. This contingency establishes an LCR of 2,462 MW in 2013 (includes 151 MW of QF generation and 7 MW of Wind).

Effectiveness factors:

All units within this area have the same effectiveness factor. Units outside of this area are not effective.

San Diego Sub-area Requirements:

2013	QF (MW)	Wind (MW)	Market (MW)	Max. Qualifying Capacity (MW)
Available generation	151	7	2911	3069

2013	Existing Generation Capacity Needed (MW)	Deficiency (MW)	Total MW LCR Need
Category B (Single) ⁶	2,462	0	2,462
Category C (Multiple) ⁷	3,069	467	3,536

⁶ A single contingency means that the system will be able to survive the loss of a single element, however the operators will not have any means (other than load drop) in order to bring the system within a safe operating zone and get prepared for the next contingency as required by NERC transmission operations standards.

⁷ Multiple contingencies means that the system will be able to survive the loss of a single element, and the operators will have enough generation (other operating procedures) in order to bring the system within a safe operating zone and get prepared for the next contingency as required by NERC

San Diego-Imperial Valley Area Overall:

The most limiting contingency in the San Diego-Imperial Valley area is described by the outage of 500 kV Southwest Power Link (SWPL) between Imperial Valley and North Gila Substations over-lapping with an outage of the Otay Mesa Combined-Cycle Power plant (603 MW) while maintaining post-transient voltage stability. This limiting contingency establishes a local capacity need of 3,385 MW in 2013 (includes 151 MW of QF generation and 7 MW of Wind) as the minimum capacity necessary for reliable load serving capability within this area.

It is worth mentioning that Imperial Valley – Dixieland 230kV line was modeled between IID and ISO. There were no additional upgrades modeled between CFE and ISO control areas at Imperial Valley 230 kV bus in 2013 base case. The ISO acknowledges that the LCR needs for the San Diego-Imperial Valley area will decrease as additional transmission is constructed between the IID/CFE systems and Imperial Valley and more power is flowing in real-time from these control areas into the ISO control area.

Effectiveness factors:

All units within this area have the same effectiveness factor. Units outside of this area are not effective.

Changes to study results compared to SONGS being operational:

The load forecast went up by 10 MW. The total available capacity is the same. The San Diego sub-area requirements have increased significantly, by 966 MW, due to the voltage support issues that arise in the area without SONGS for outages in San Diego's system. The San Diego-Imperial Valley area requirements have increased also, by 447 MW, due to the same voltage support issues. For mitigation of new deficiencies and potential reduction in the San Diego-Imperial Valley area LCR, in the absence of SONGS, please see chapter II.

transmission operations standards.

San Diego-Imperial Valley Area Overall Requirements:

2013	QF (MW)	Wind (MW)	Market (MW)	Max. Qualifying Capacity (MW)
Available generation	151	7	3991	4149

2013	Existing Generation Capacity Needed (MW)	Deficiency (MW)	Total MW LCR Need
Category B (Single) ⁸	3,385	0	3,385
Category C (Multiple) ⁹	3,385	467 ¹⁰	3,852

⁸ A single contingency means that the system will be able to survive the loss of a single element, however the operators will not have any means (other than load drop) in order to bring the system within a safe operating zone and get prepared for the next contingency as required by NERC transmission operations standards.

⁹ Multiple contingencies means that the system will be able to survive the loss of a single element, and the operators will have enough generation (other operating procedures) in order to bring the system within a safe operating zone and get prepared for the next contingency as required by NERC transmission operations standards.

¹⁰ San Diego-Imperial Valley area is not "overall deficient". Resource deficiency values result from a few deficient sub-areas; and since there are no resources that can mitigate this deficiency the numbers are carried forward into the total area needs.

ATTACHMENT D

**ISO Memorandum Decision on Conditional Approval
to Extend Certain Existing Reliability Must-Run
Contracts for 2013 and New Reliability Must-Run
Designation for Huntington Beach Units 3 and 4 for
Voltage Support**



Memorandum

To: ISO Board of Governors
From: Keith Casey, Vice President of Market & Infrastructure Development
Date: September 7, 2012
Re: **Decision on Conditional Approval to Extend Certain Existing Reliability Must-Run Contracts for 2013 and New Reliability Must-Run Designation for Huntington Beach Units 3 and 4 for Voltage Support**

This memorandum requires Board action.

EXECUTIVE SUMMARY

Although total capacity and the number of resources under reliability must-run contracts with the California ISO has been significantly reduced since the implementation of the state's resource adequacy program and the addition of new grid facilities, reliability must-run contracts remain an important backstop instrument to ensure reliability when other alternatives are not viable. This year, the ISO requests that the Board grant Management the authority to extend, through calendar year 2013, the reliability must-run contract for the Dynegy Oakland, LLC generating units listed in *Attachment 1*, and enter into a new reliability must-run contract for the Huntington Beach Units 3 and 4 for voltage support.

Management will exercise this authority to extend a reliability must-run contract or designate a reliability must-run resource under the following conditions.

- A load serving entity does not purchase the capacity needed to satisfy local reliability criteria in the ISO 2013 *Local Capacity Technical Analysis* through a resource adequacy contract; or
- The load serving entity purchases the necessary local reliability capacity under a resource adequacy contract, but Management needs a reliability must-run contract to:
 1. Obtain from the unit a reliability service, such as voltage support, black start or dual fuel capability; or
 2. Mitigate local market power; or
 3. Protect availability of a given resource that could be jeopardized or reduced without a reliability must-run contract.
- A resource is otherwise needed to meet local reliability service including voltage support, black start or dual fuel capability and is not under a resource adequacy contract.

Where a reliability must-run contract augments a resource adequacy contract, Management will ensure that any fixed cost recovery payment will compensate the unit owner only for the incremental costs of providing reliability must-run services. This will guarantee the owner is not paid twice for its capacity.

Without the San Onofre Nuclear Generating Station (SONGS) units 2 and 3, currently on an extended forced outage with an unknown return to service date, the Los Angeles Basin and San Diego local areas could experience a high level of resource deficiencies, even if all required available resources are purchased under resource adequacy (RA) contracts, mainly due to voltage support needs in the southern Orange County and San Diego areas. In order to increase voltage support, the ISO is seeking Board authorization to enter into a reliability must-run contract for Huntington Beach units 3 and 4 for the 2013 contract year. Although these units may not be available for generation purposes after November 1, 2012 due to the transfer of air emission credits to Edison Mission Energy's 500 MW Walnut Creek Energy Park, the units can provide necessary voltage support by converting them to synchronous condensers. Synchronous condensers do not require air permits as they do not emit pollutants. The ISO requests that the Board of Governors grant Management the authority to enter into a new reliability must-run contract with Huntington Beach units 3 and 4, wherein both Southern California Edison Company and San Diego Gas and Electric Company will be identified as responsible utilities. The conversion to synchronous condensers can be accomplished under the contract.

Moved, that the ISO Board of Governors authorizes Management to extend reliability must-run contracts for any of the reliability must-run units listed on Attachment 1, consistent with the criteria described in the memorandum dated September 7, 2012; and

Moved, that the ISO Board of Governors authorizes Management to designate Huntington Beach units 3 and 4 for reliability must-run service contingent upon execution of a reliability must-run contract with rates, terms and conditions acceptable to Management, as described in the memorandum dated September 7, 2012.

DISCUSSION AND ANALYSIS

Management requests authority to extend the existing reliability must-run contracts (up to 165 MW of capacity) listed in *Attachment 1*. Management also seeks approval to enter into a reliability must-run contract for voltage support from Huntington Beach units 3 and 4. If Management later determines additional resources are needed for reliability must-run service, we will seek further Board approval to enter into additional reliability must-run contracts to ensure all local capacity and reliability requirements are met. The attachment also identifies resources that currently have agreements for black start (1835 MW of capacity) and dual fuel (163 MW of capacity) at zero capacity cost¹, which the ISO may also extend for the 2013 contract year.

Under long-established provisions of the existing *pro forma* reliability must-run contract, by October 1, the ISO must notify a reliability must-run unit owner that the ISO will extend the existing contract from January 1 through December 31 of the following year. If the notice is not provided by October 1, the reliability must-run unit may not be designated again for one full year unless:

- The unit is needed due to an extended outage of another unit or a transmission element not known at the time of the contract expiration; or
- The unit is selected through a competitive process in which the unit owner participated.

¹ Zero cost dual fuel and black start agreements are within Management's authority.

Because the California Public Utilities Commission aims to coordinate and reduce the number of ISO reliability must-run designations, it requires its jurisdictional load serving entities to provide, by September 17, 2012, a *preliminary resource adequacy* showing to the ISO for any reliability must-run contract potentially avoiding an unnecessary contract extension. These showings are preliminary because the CPUC jurisdictional load serving entities have until October 31 to submit their final year-ahead resource adequacy showings. The final showings must demonstrate compliance with all CPUC imposed year-ahead procurement targets (i.e., 100% local capacity area resources and 90% of the load serving entities demand forecast and reserve margin for the months of May through September).

Due to the timing required for extension of the reliability must-run contracts, Management requests Board authorization to extend the term of the contracts for an additional year and to delegate to Management the discretion to do so based on review of the preliminary resource adequacy showings. Management will brief the Board as to the results of reliability must-run contract extension at the November Board meeting.

The Need for Huntington Beach Units 3 and 4 for Voltage Support

The ISO has undertaken a detailed study of the reliability impacts in anticipation of San Onofre Nuclear Generating Station (SONGS) units 2 and 3 being unavailable for the summer of 2013. The results of this study have been communicated to stakeholders through an Addendum to the 2013 Local Capacity Technical (LCT) analysis report² and the ISO's 2012-2013 Preliminary Reliability Results³. Furthermore the ISO conducted a stakeholder conference call on August 29, 2012, to inform stakeholders of the study results.

In the Addendum to the 2013 Local Capacity Technical analysis report, the ISO evaluated the need for local capacity in the San Diego sub-area and LA Basin. Based on the post-transient voltage stability analysis, the San Diego sub-area and LA Basin were found to have deficient local generating resources to mitigate identified post-transient voltage stability concerns in San Diego and low voltage at San Onofre switchyard⁴ under a critical overlapping outage of the loss of the Imperial Valley – Suncrest 500 kV line, system readjusted, followed by the loss of the Imperial Valley-Miguel 500 kV line, or vice versa. Currently, Huntington Beach units 3 and 4 have provided voltage support. Although the units are currently scheduled to lose their air emission permits by November 2012, the units can be converted to synchronous condensers and continue to provide substantial dynamic voltage support. However, an additional 320 MVAR of static reactive support is also required to meet applicable reliability standards by the summer 2013 time frame in lieu of relying on load shedding. If Huntington Beach units 3 and 4 are converted to synchronous condensers,⁵ the resources will be able to meet the South Coast Air Basin's emission standards as the operation of synchronous condensers for voltage support does not require air emission credits.

² http://www.caiso.com/Documents/Addendum-Final2013LocalCapacityTechnicalStudyReportAug20_2012.pdf

³ <http://www.caiso.com/planning/Pages/TransmissionPlanning/2012-2013TransmissionPlanningProcess.aspx>

⁴ NERC NUC-001 Standards require a minimum voltage of 218 kV at San Onofre switchyard be maintained after a major disturbance; if the voltage falls below 213 kV after a major disturbance, it must recover to a voltage greater than 216 kV within 80 seconds.

⁵ Conversion of an existing generating unit to a synchronous condenser will require the turbine to be decoupled from the generator and the generator rotor to operate as a synchronous motor to provide reactive (i.e., voltage) support to the grid.



**Attachment 1:
2013 Reliability Must-Run, Black Start and Dual Fuel Contract Status**

RMR Units Extension Status				
<i>Any Extended RMR Contracts will be effective January 1, 2013 thru December 31, 2013</i>				
<i>Any Released RMR Contracts will be terminated effective Midnight on December 31, 2012</i>				
Owner	RMR Contract	Unit	MW⁶	Status
Dynergy Oakland, LLC	Oakland	Oakland, Unit 1	55	TBD
		Oakland, Unit 2	55	
		Oakland, Unit 3	55	
Black Start Units Extension Status				
<i>Any Extended Black Start Contracts will be effective January 1, 2013 thru December 31, 2013</i>				
<i>Any Released Black Start Contracts will be terminated effective Midnight on December 31, 2012</i>				
Owner	Contract	Unit	MW⁷	Status
Pacific Gas and Electric Company		Humboldt Bay, Unit 3	32.6	TBD
		Kings River Watershed II Units	298.6	TBD
		San Joaquin Watershed Units	140.0	TBD
Southern California Edison		Hoover	525	TBD
		Big Creek Physical Scheduling Plant	368.9	
		Barre Peaker	47	
		Center Peaker	47	
		Grapeland Peaker	46	
San Diego Gas & Electric		Miramar Energy Facility Unit 1	47.6	TBD
		Miramar Energy Facility Unit 2	48.6	TBD
Orange Grove Energy, L.P.		Orange Grove Unit 1	49.85	TBD
		Orange Grove Unit 2	49.85	TBD
Cabrillo Power I, LLC	Cabrillo I	Encina CT	14	TBD
Cabrillo Power II, LLC	Cabrillo II	Kearney 2A CT	14	TBD
		Kearney 2C CT	14	
		Kearney 3A CT	15	
		Kearney 3C CT	14	
		Miramar 1A	17	
Dual Fuel Agreement Units Extension Status				
<i>Any Extended Dual Fuel Contracts will be effective January 1, 2013 thru December 31, 2013</i>				
<i>Any Released Dual Fuel Contracts will be terminated effective Midnight on December 31, 2012</i>				
Owner	Contract	Unit	MW	Status
Pacific Gas and Electric Company	Humboldt Bay	Humboldt Bay, Unit 1	48.8	TBD
		Humboldt Bay, Unit 2	48.8	
		Humboldt Bay, Unit 3	65.1	

⁶ Capacity values shown indicate the summer maximum net dependable capacity values for the combustion turbines.

⁷ Capacity values shown indicate the summer maximum net dependable capacity values for the combustion turbines with both summer and winter maximum net dependable capacity values specified in the Cabrillo I and Cabrillo II contracts.

ATTACHMENT E

ISO Board of Governors Authorization to ISO to Designate Huntington Beach 3 & 4 for RMR Service, “Decision on Conditional Approval to Extend Certain Reliability Must-Run Contracts for 2013 and New Reliability Must-Run Designation for Huntington Beach Units 3 and 4 for Voltage Support”



Board of Governors

September 13-14

Decision on Conditional Approval to Extend Certain Reliability Must-Run Contracts for 2013 and New Reliability Must-Run Designation for Huntington Beach Units 3 and 4 for Voltage Support

Motion

Moved, that the ISO Board of Governors authorizes Management to extend reliability must-run contracts for any of the reliability must-run units listed on Attachment 1, consistent with the criteria described in the memorandum dated September 7, 2012; and

Moved, that the ISO Board of Governors authorizes Management to designate Huntington Beach units 3 and 4 for reliability must-run service contingent upon execution of a reliability must-run contract with rates, terms and conditions acceptable to Management, as described in the memorandum dated September 7, 2012. The Board reserves the right to withdraw approval if Management is not satisfied with the commercial terms of the agreement.

Moved: Maullin Second: Olsen

Board Action:	Passed	Vote Count:	5-0-0
Bhagwat	Y		
Foster	Y		
Galiteva	Y		
Maullin	Y		
Olsen	Y		

Motion Number: 2012-09-G1

ATTACHMENT F

**Letter of Robert P. Oglesby, Executive Director,
California Energy Commission to ISO on September
12, 2012**

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov



September 12, 2012

Chairman Robert Foster
California ISO Board of Governors
250 Outcropping Way
Folsom, CA 95630

Dear Chairman Foster and the Board of Governors:

California needs a worst case contingency plan for the summers of 2013 and 2014 that assumes neither unit of San Onofre Nuclear Generation Station (San Onofre) is available to operate. Southern California Edison (SCE) expects this fall to file a demonstration with the Nuclear Regulatory Commission (NRC) that it would be safe to return the San Onofre Unit 2 to service, albeit at a reduced operating level and for a limited period of time before checking on the steam generator wear patterns. Even if it were likely that Unit 2 will be returned to service and not have excessive steam generator wear patterns, there are no guarantees. According to the NRC, SCE is removing the fuel core on Unit 3. This is a sign that San Onofre Unit 3 is unlikely to be operational for at least the next few years. Without San Onofre Units 2 and 3, there are potential resource adequacy and voltage support issue, which may lead to reliability risks.

In a memorandum dated September 7, 2012, from Keith Casey of the California Independent System Operator (CAISO) to the ISO Board of Governors, Mr. Casey identifies the southern Orange County and San Diego areas as being at risk for reliability disruptions. For the summer of 2012, the California Energy Commission (Energy Commission), CAISO, and the California Public Utilities Commission worked with the Environmental Protection Agency and South Coast Air Quality Management District (SCAQMD) to restart Huntington Beach Units 3 and 4, which were set for retirement after January 2012. These units are providing the voltage support necessary to maintain reliability in the southern Orange County and San Diego areas. However, the Huntington Beach Units 3 and 4 emission credits are set to be transferred to the Walnut Creek Energy Park after November 1, 2012, at which point Huntington Beach Units 3 and 4 can no longer run.

Moreover, the 2012/2013 ISO Reliability Assessment Study Results (2013 without SONGS scenario) show voltage deviations at all substations in the southern Orange County and San Diego areas.¹ It further indicates that these issues can be alleviated by mitigation measures that include providing 280 MVAR of dynamic reactive support in southern Orange County. The conversion of Huntington Beach Units 3 and 4 to

¹ <http://www.caiso.com/planning/Pages/TransmissionPlanning/2012-2013TransmissionPlanningProcess.aspx>

CAISO Board of Directors
September 12, 2012
Page 2

synchronous condensers could provide 280 MVAR in southern Orange County, while complying with SCAQMD air emission rules.

Mr. Casey requests that

“... the ISO Board of Governors authorizes [CAISO] Management to designate Huntington Beach units 3 and 4 for reliability must-run services contingent upon execution of a reliability must-run contract with rates, terms and conditions acceptable to Management, *as described in the memorandum dated September 7, 2012.*”

The Energy Commission is anticipating a request from Huntington Beach Units 3 and 4 to amend their current license to allow them to install the synchronous condensers. While the Energy Commission has not yet completed its environmental analysis of the request, we anticipate that staff will move quickly to complete its analysis and request Energy Commission approval in order to ensure that this important project can be completed by next summer.

Therefore, we support CAISO's staff assessment and request that the Board of Governors approve the reliability must-run contracts for Huntington Beach Units 3 and 4 synchronous condensers.

Sincerely,



Robert P. Oglesby
Executive Director
California Energy Commission

cc:

Robert Weisenmiller
robert.weisenmiller@energy.ca.gov
Karen Edson, CAISO
Kedson@caiso.com
Mary Nichols, Cal EPA
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Michael R. Peevey, CPUC
Mp1@cpuc.ca.gov
Barry R. Wallerstein, SCAQMD
bwallerstein@AQMD.gov

ATTACHMENT G

**Term Sheet Agreement entered into among AESHB,
ISO, SDG&E and SCE on October 15, 2012**

Execution Version

TERM SHEET AGREEMENT

AES Huntington Beach LLC ("AESHB" or "Owner"), the California Independent System Operator Corporation ("California ISO" or "CAISO"), Southern California Edison Company ("SCE") and San Diego Gas & Electric Company ("SDG&E") (collectively the "Parties") have agreed that the terms and conditions set forth in Attachment A hereto will be reflected in any Must-Run Service Agreement ("MRSA") between Owner and the California ISO for Huntington Beach Units 3 and 4 for contract year 2013. This agreement, however, does not represent a commitment by the Owner or the California ISO to enter into an MRSA.

WHEREAS, the California ISO has determined that the conversion by AESHB of Huntington Beach Generating Station Units 3 and 4 to synchronous condensers (the "Synchronous Condensers") could, among other things, provide system reliability benefits under certain contingencies;

WHEREAS, on September 13, 2012, the California ISO governing board designated Huntington Beach Units 3 and 4 for reliability must-run service contingent upon execution of a MRSA containing rates, terms and conditions acceptable to California ISO management;

WHEREAS, AESHB's ability to enter into a MRSA with the California ISO on the terms and conditions set forth in Attachment A hereto is subject to AESHB's receipt of consent or confirmation from the counterparties under certain of its existing contracts, including its lenders and its tolling agreement counterparty;

WHEREAS, AESHB or its affiliate must make commitments to its vendor Siemens Energy, Inc. ("Siemens") by October 15, 2012 to ensure that the conversion of Units 3 and 4 to synchronous condensers will be capable of being completed by June 1, 2013, when the California ISO anticipates that Units 3 and 4 may be needed for local reliability, and AESHB requires assurance concerning the cost recovery it will receive under the MRSA in the event the Owner and the California ISO enter into a MRSA;

WHEREAS, SCE and SDG&E would be the responsible utilities under any MRSA, respectively, on an 80% allocated basis to SCE and a 20% allocated basis to SDG&E;

WHEREAS, SCE and SDG&E are negotiating with AESHB a reimbursement agreement to cover certain costs AESHB or its affiliate incurs to Siemens in connection with the conversion of Units 3 and 4 into synchronous condensers in the event the Owner and the California ISO do not enter into an MRSA or the FERC fails to approve such agreed-upon MRSA, which reimbursement agreement(s) will need to be in effect before AESHB or its affiliate will be in a position to make the vendor commitments;

NOW THEREFORE, the Parties are entering into this term sheet agreement to provide the Parties with certainty that the terms contained in Attachment A will be included in any MRSA entered into for the 2013 contract year, subject to (i) the above-referenced reimbursement agreement(s) being executed and delivered as of October 15, 2012 and AESHB's affiliate

entering into the vendor commitments with Siemens on October 15, 2012 in accordance with the provisions of such reimbursement agreement(s), and (ii) AESHB receiving the required consents or confirmations from its existing contractual counterparties (other than its lenders) prior to January 7, 2013 and receiving the required consent from its lenders prior to February 1, 2013, in each case on terms and conditions acceptable to AESHB in its reasonable discretion. In the event that (x) AESHB's affiliate does not enter into the vendor commitments with Siemens on October 15, 2012 (at the request of and in accordance with the agreement of each of AESHB, the California ISO, SCE and SDG&E) or (y) the required consents and confirmations have not been received by January 7, 2013 (with respect to all such required consents and confirmations other than the consent of AESHB's lenders) or the required consent from AESHB's lenders has not been received by February 1, 2013, as the case may be, and AESHB or its affiliate, as the case may be, at the request of the California ISO, SCE and SDG&E, agrees to suspend Siemens' performance under the above-referenced vendor commitment (and to also suspend any delivery under the above-referenced reimbursement agreement of a notice of discontinuance), the terms of Attachment A hereto will be revised in such a manner as to keep AESHB whole for any additional costs or foregone 2013 revenues under the MRSA that it reasonably incurs or suffers as a result of such delayed execution or such suspension and associated delay in achieving Commercial Operation of the Synchronous Condensers. In addition, the Parties are hereby agreeing that the terms contained in Attachment A will be included in any renewal or successor MRSA for the Units 3 and 4 synchronous condensers entered into between AESHB and the California ISO for any year after the 2013 contract year.

Upon payment of the Termination Fee in accordance with Section 2.5 of the MRSA, SCE and SDG&E shall have the option to take over all of AESHB's (or, if applicable, its affiliate's) rights and interests to own and possess any equipment or material procured or otherwise provided by Siemens pursuant to the above-referenced commitments with AESHB or its affiliate, including related design and engineering documentation to the extent assignable under the Siemens commitment, with respect to the Synchronous Condensers (the "Salvage Option"); provided, however, that (i) for the avoidance of doubt, the Salvage Option shall not apply with respect to the generators or any other facilities contributed to or otherwise made available for the Synchronous Condensers by AESHB, and (ii) SCE and SDG&E shall not enter AESHB's property to remove any such equipment and materials subject to the Salvage Option, but rather at their written request AESHB shall remove such equipment and materials from the Synchronous Condensers in a reasonably expeditious manner and make such equipment and materials available to SCE and/or SDG&E, on an "as is" basis with no representations or warranties of any kind whatsoever other than that such equipment and materials shall be free of any liens arising through AESHB, at a mutually agreed upon location at AESHB site for loading onto trucks to be provided by SCE and/or SDG&E (with such loading and transportation to be performed by or on behalf of SCE and/or SDG&E at their sole cost and risk). SCE and SDG&E shall not be obligated to pay any additional funds for the Salvage Option, except that SCE and SDG&E shall pay AESHB for all costs reasonably incurred by AESHB in removing such equipment or material. The Salvage Option shall be included in either the MRSA or a separate agreement to be entered into among SCE, SDG&E and AESHB.

Each of the California ISO, SCE and SDG&E hereby agrees that, in any FERC or other regulatory proceeding relating to the review or approval of the MRSA between AESHB and the

California ISO (including without limitation any settlement discussions or proceedings and any informal or ex parte discussions with the FERC or its staff or any potential or actual intervenors or protesters), it will support the MRSA in all respects with respect to the terms and conditions set forth in Attachment A hereto (as such Attachment A may be revised from time to time in accordance with the terms hereof), both in respect of the initial MRSA for 2013 and any renewal or successor MRSAs for all future years thereafter for which the California ISO determines the Units 3 and 4 synchronous condensers are required to provide system reliability benefits.

In addition, the California ISO hereby agrees that (i) it will not file with the FERC any unexecuted MRSA relating to AESHB or the Units 3 and 4 synchronous condensers on terms and conditions that are not consistent with the terms and conditions set forth in Attachment A hereto (as such Attachment A may be revised from time to time in accordance with the terms hereof), (ii) in the event that it shall have already filed an MRSA with the FERC (whether executed or unexecuted) at such time as a revision to Attachment D is required to be made pursuant to the terms of this Term Sheet, it shall file (or, if such filing is to be made by AESHB, support) such corresponding revision to the MRSA filed with the FERC, and (iii) it will not file with the FERC any unexecuted MRSA (whether or not on the terms and conditions set forth in Attachment A hereto) or any other filing or petition in any way relating to AESHB or the Units 3 and 4 synchronous condensers other than in accordance with the applicable terms of the reimbursement agreement(s).

[signature page follows]

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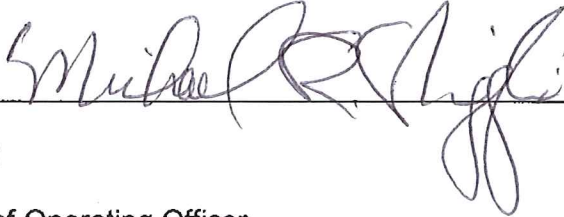
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This agreement may be executed in counterparts by each party, each of which shall be deemed to be an original, but which together shall constitute one and the same agreement.

Signature: 

Name: Michael R. Niggli

Title: President and Chief Operating Officer

Responsible Utility: San Diego Gas & Electric Company

Address: 8326 Century Park Court, San Diego

Telephone: (858) 650-6175

Date: October 15, 2012

Signature: 

Name: Kevin M. Payne

Title: Vice President

Responsible Utility: Southern California Edison

Address: 1 Innovation Way, Pomona California 91768

Telephone: (909) 274-1801

Date: October 15, 2012

Signature: _____

Name: Eric Pendergraft

Title: President, AES Southland

Owner: AES Huntington Beach, LLC

Address: 21730 Newland Street, Huntington Beach, CA 92646

Telephone: (714) 374-1476

Date: _____

Additional signature on following page.

This agreement may be executed in counterparts by each party, each of which shall be deemed to be an original, but which together shall constitute one and the same agreement.

Signature: _____

Name: Michael R. Niggli

Title: President and Chief Operating Officer

Responsible Utility: San Diego Gas & Electric Company

Address: 8326 Century Park Court, San Diego

Telephone: (858) 650-6175

Date: October 15, 2012

Signature: _____

Name:

Title:

Responsible Utility: Southern California Edison

Address:

Telephone:

Date: _____

Signature:  _____

Name: Eric Pendergraft

Title: President, AES Southland

Owner: AES Huntington Beach, LLC

Address: 21730 Newland Street, Huntington Beach, CA 92646

Telephone: (714) 374-1476

Date: Oct. 15, 2015

Additional signature on following page.

AES Huntington Beach Unit 3&4 Synchronous Condenser Must-Run Service Project

ATTACHMENT A

Amendment to Section 2.5 of Must-Run Service Agreement

The parties agree to change the term of recovery referenced in Section 2.5 of the Must-Run Service Agreement for all capital items from 36 months to 12 months.

Reimbursement of Upfront Costs

California ISO agrees to reimburse AESHB for out of pocket costs incurred by AESHB and its affiliates in connection with the implementation of the Project through Section 7.5 – Unplanned Repairs. Once the MRSA is effective, AESHB will submit reimbursement for the actual costs incurred. Upfront Costs shall not exceed the values documented below:

Up Front Costs To Be Recovered Under Section 7.5	
MRSA legal support/SL Lender consent cost/Independent Engineer Review	700,000
GE proposal (engineering)	50,000
Initial AFC modification	75,000
CEC License	50,000
Totals	Not to exceed \$875,000

Termination Fee Inputs

Huntington Beach Unit 3				
END OF YEAR:	2013	2014	2015	2016
Undepreciated CapAdd Items ("NCI")	5,360,983	3,573,989	1,786,994	N/A
("CWIP")	-	-	-	N/A
Salvage ("S")	-	-	-	N/A

**AES Huntington Beach Unit 3&4 Synchronous Condenser
Must-Run Service Project**

Huntington Beach Unit 4				
END OF YEAR:	2013	2014	2015	2016
Undepreciated CapAdd Items ("NCI")	5,718,382	4,288,786	2,859,191	1,429,595
("CWIP")	-	-	-	-
Salvage ("S")	-	-	-	-

**Schedule A
Unit Characteristics, Limitations and Owner Commitments**

A (1). Description of Facility

Unit	RMR (Y/N)	Maximum Net Dependable Capacity (includes CAISO-paid Upgrade capacity)*	Fuel Type
Huntington Beach Unit 3	Y	N/A	N/A
Huntington Beach Unit 4	Y	N/A	N/A

* Maximum Net Dependable Capacity shall reflect any transformer or line loss to the Delivery Point (MW).

A (2). Description RMR Units

	Huntington Beach Unit 3	Huntington Beach Unit 4
Type (fossil, combustion turbine, etc.)	Synchronous Condenser	Synchronous Condenser
Synchronous Condenser Capability (Y/N)	Y	Y
Power Factor Range (lead to lag)	N/A	N/A
Maximum Reactive Power Leading, MVar	145	145

AES Huntington Beach Unit 3&4 Synchronous Condenser Must-Run Service Project

Maximum Reactive Power Lagging, MVar	145	145
Load at Maximum MVar Lagging, MW	N/A	N/A
Load at Maximum MVar Leading, MW	N/A	N/A
Black Start Capable (Y/N)	N	N
Automatic Start or Ramp (Y/N)*	N	N
Upgrade Capacity Paid by CAISO, MW	N/A	N/A

A (3). Operational and Regulatory Limitations of RMR Units

Air Emissions Limitations

None

Ambient Temperature Correction Factors for Availability Test

N/A

Other Limits (e.g., cooling water discharge)

N/A

A (4). Delivery Point

Unit	Transmission Node (Station Name)	Voltage
Huntington Beach Unit 3	SCE Ellis 230kV Bus	230kV
Huntington Beach Unit 4	SCE Ellis 230kV Bus	230kV

A (5). Metering and Related Arrangements

Unit	Meter Location	Meter (Manufacturer & Model No.)
Huntington Beach Unit 3	Huntington Beach Units 3 & 4 Control Room	Landis + Gyr; MAXsys 2510

AES Huntington Beach Unit 3&4 Synchronous Condenser Must-Run Service Project

Huntington Beach Unit 4	Huntington Beach Units 3 & 4 Control Room	Landis + Gyr; MAXsys 2510
-------------------------	----------------------------------------------	----------------------------------

A (6). Start-up Lead Times

Non-hydroelectric Units

Unit	Start-up Segment Number	Generating Unit Down Time (Minutes)	Generating Unit Start-up Time (Minutes)
Huntington Beach Unit 3	N/A	N/A	60
Huntington Beach Unit 4	N/A	N/A	60

A (7). Ramping Constraint

N/A

A (8). Ramp Rate

Unit	Ramp Rate Segment Number	Output of Point Range (MW)	Minimum Ramp Rate (MW/Minute)	Maximum Ramp Rate (MW/Minute)
Huntington Beach Unit 3	N/A	N/A	N/A	N/A
Huntington Beach Unit 4	N/A	N/A	N/A	N/A

A (9). Minimum Load

Unit	Manual (MW)	AGC (MW)
Huntington Beach Unit 3	N/A	N/A
Huntington Beach Unit 4	N/A	N/A

AES Huntington Beach Unit 3&4 Synchronous Condenser Must-Run Service Project

A (10). Minimum Run Time

Unit	Hours
Huntington Beach Unit 3	0
Huntington Beach Unit 4	0

A (11). Minimum Off Time

Unit	Hours
Huntington Beach Unit 3	0.5
Huntington Beach Unit 4	0.5

A (12). Contract Service Limits

Unit	Contract Year	Maximum Annual MWh	Maximum Annual Service Hrs	Maximum Annual Start-ups
Huntington Beach Unit 3	2013	N/A	2086	145
	2014-2016	N/A	2636	200
Huntington Beach Unit 4	2013	N/A	2086	145
	2014-2017	N/A	2636	200

A (13). Owner's Repair Cost Obligation

Owner's Repair Cost Obligation for the current Contract Year is:

	2013	2014	2015	2016	2017
Owner's Repair Cost Obligation	\$131,845	\$153,284	\$157,205	\$161,865	\$87,411

**AES Huntington Beach Unit 3&4 Synchronous Condenser
Must-Run Service Project**

A (14). Existing Contractual Limitations and Other Contract Restrictions on Market Transactions

N/A

A (15). Applicable UDC Tariff(s)

Schedule S – Standby

Schedule TOU-8 – Time of Use General Service - Large

**Schedule B
Monthly Option Payment**

Definitions Applicable to Schedule B

Summer Months: For the Contract Year 2013, this term shall mean July, August and September; while for the remaining Contract Years shall mean June, July, August and September.

Non-Summer Months: Shall mean other months in the Contract Year not defined as Summer Months.

B-0 Fixed Option Payment Factor

For Units under Condition 1, the Fixed Option Payment Factor is set forth in Table B-0 below:

Table B-0 - Condition 1 Fixed Option Payment Factor	
Unit	Fixed Option Payment Factor
Huntington Beach Unit 3	N/A
Huntington Beach Unit 4	N/A

B-1 Hourly Availability Charges

For Units under Condition 2, the Fixed Option Payment Factor is 1. The Hourly Availability Charges for the Contract Year are set forth in Table B-1 below. Payment of the Hourly Availability Charges will be effective upon the Commercial Operations Date.

**AES Huntington Beach Unit 3&4 Synchronous Condenser
Must-Run Service Project**

Table B-1 - Hourly Availability Charges					
Unit	Contract Year	Contract Month	Condition 1	Condition 2 (AFRR/TAH)	
Huntington Beach Unit 3	2013	Summer Months	N/A	\$2,020.87	
		Non-Summer Months	N/A	\$237.07	
	2014	Summer Months	N/A	\$1,368.32	
		Non-Summer Months	N/A	\$336.29	
	2015	Summer Months	N/A	\$1,339.58	
		Non-Summer Months	N/A	\$329.74	
	2016	Summer Months	N/A	\$1,313.53	
		Non-Summer Months	N/A	\$322.47	
	2017	Summer Months	N/A	N/A	
		Non-Summer Months	N/A	N/A	
	Huntington Beach Unit 4	2013	Summer Months	N/A	\$2,020.87
			Non-Summer Months	N/A	\$237.07
		2014	Summer Months	N/A	\$1,368.32
			Non-Summer Months	N/A	\$336.29
2015		Summer Months	N/A	\$1,339.58	
		Non-Summer Months	N/A	\$329.74	
2016		Summer Months	N/A	\$1,313.53	
		Non-Summer Months	N/A	\$322.47	
2017		Summer Months	N/A	\$1,357.45	
		Non-Summer Months	N/A	\$335.75	

AES Huntington Beach Unit 3&4 Synchronous Condenser Must-Run Service Project

B-2 Hourly Capital Item Charges

The Hourly Capital Item Charges for the Contract Year are set forth in Table B-2 below. Payment of the Hourly Capital Item Charges will be effective upon the Commercial Operations Date.

Table B-2 - Hourly Capital Item Charges					
Unit	Contract Year	Annual Capital Item Cost	Contract Month	Condition 2 Hourly Capital Item Charge	
Huntington Beach Unit 3	2013	\$ 3,367,606	Summer Months	\$1,316.24	
			Non-Summer Months	\$165.44	
	2014	\$ 3,102,664	Summer Months	\$711.29	
			Non-Summer Months	\$186.28	
	2015	\$ 2,806,725	Summer Months	\$643.45	
			Non-Summer Months	\$168.51	
	2016	\$ 2,513,263	Summer Months	\$576.17	
			Non-Summer Months	\$150.24	
	2017	N/A	Summer Months	N/A	
			Non-Summer Months	N/A	
	Huntington Beach Unit 4	2013	\$ 3,003,801	Summer Months	\$1,174.05
				Non-Summer Months	\$147.56
2014		\$ 2,779,702	Summer Months	\$637.25	
			Non-Summer Months	\$166.89	
2015		\$ 2,536,382	Summer Months	\$581.47	
			Non-Summer Months	\$152.28	
2016		\$ 2,295,539	Summer Months	\$526.26	
			Non-Summer Months	\$137.23	
2017		\$ 2,056,985	Summer Months	\$471.57	
			Non-Summer Months	\$123.50	

AES Huntington Beach Unit 3&4 Synchronous Condenser Must-Run Service Project

B-3 Hourly Penalty Rate

The Hourly Penalty Rate for the Contract Year are set forth in Table B-3 below. Payment of the Hourly Penalty Rate will be effective upon the Commercial Operations Date.

Table B-3 - Hourly Penalty Rate					
Unit	Contract Year	Contract Month	Condition 1	Condition 2	
Huntington Beach Unit 3	2013	Summer Months	N/A	\$2,020.87	
		Non-Summer Months	N/A	\$237.07	
	2014	Summer Months	N/A	\$1,368.32	
		Non-Summer Months	N/A	\$336.29	
	2015	Summer Months	N/A	\$1,339.58	
		Non-Summer Months	N/A	\$329.74	
	2016	Summer Months	N/A	\$1,313.53	
		Non-Summer Months	N/A	\$322.47	
	2017	Summer Months	N/A	N/A	
		Non-Summer Months	N/A	N/A	
	Huntington Beach Unit 4	2013	Summer Months	N/A	\$2,020.87
			Non-Summer Months	N/A	\$237.07
2014		Summer Months	N/A	\$1,368.32	
		Non-Summer Months	N/A	\$336.29	
2015		Summer Months	N/A	\$1,339.58	
		Non-Summer Months	N/A	\$329.74	
2016		Summer Months	N/A	\$1,313.53	
		Non-Summer Months	N/A	\$322.47	
2017		Summer Months	N/A	\$1,357.45	
		Non-Summer Months	N/A	\$335.75	

AES Huntington Beach Unit 3&4 Synchronous Condenser Must-Run Service Project

B-4 Hourly Surcharge Penalty Rate

The Hourly Surcharge Penalty Rate for the Contract Year are set forth in Table B-4 below. Payment of the Hourly Surcharge Penalty Rate will be effective upon the Commercial Operations Date.

Table B-4 - Hourly Surcharge Penalty Rate					
Unit	Contract Year	Contract Month	Hourly Capital Item Rate	Condition 1 Hourly Surcharge Penalty Rate	Condition 2 Hourly Surcharge Penalty Rate
Huntington Beach Unit 3	2013	Summer Months	\$1,316.24	N/A	\$1,316.24
		Non-Summer Months	\$165.44	N/A	\$165.44
	2014	Summer Months	\$711.29	N/A	\$711.29
		Non-Summer Months	\$186.28	N/A	\$186.28
	2015	Summer Months	\$643.45	N/A	\$643.45
		Non-Summer Months	\$168.51	N/A	\$168.51
	2016	Summer Months	\$576.17	N/A	\$576.17
		Non-Summer Months	\$150.24	N/A	\$150.24
	2017	Summer Months	N/A	N/A	N/A
		Non-Summer Months	N/A	N/A	N/A

**AES Huntington Beach Unit 3&4 Synchronous Condenser
Must-Run Service Project**

Table B-4 (cont'd) - Hourly Surcharge Penalty Rate					
Unit	Contract Year	Contract Month	Hourly Capital Item Rate	Condition 1 Hourly Surcharge Penalty Rate	Condition 2 Hourly Surcharge Penalty Rate
Huntington Beach Unit 4	2013	Summer Months	\$1,174.05	N/A	\$1,174.05
		Non-Summer Months	\$147.56	N/A	\$147.56
	2014	Summer Months	\$637.25	N/A	\$637.25
		Non-Summer Months	\$166.89	N/A	\$166.89
	2015	Summer Months	\$581.47	N/A	\$581.47
		Non-Summer Months	\$152.28	N/A	\$152.28
	2016	Summer Months	\$526.26	N/A	\$526.26
		Non-Summer Months	\$137.23	N/A	\$137.23
	2017	Summer Months	\$471.57	N/A	\$471.57
		Non-Summer Months	\$123.50	N/A	\$123.50

AES Huntington Beach Unit 3&4 Synchronous Condenser Must-Run Service Project

B-5 Target Available Hours

Table B-5 - Target Available Hours					
Unit	Contract Year	Contract Month	Average Other Outage Hours	Long-term Planned Outage Hours	TAH
Huntington Beach Unit 3	2013	Summer Months	15	0	2,193
		Non-Summer Months	20	3,624	2,908
		Full Year	35	3,624	5,101
	2014	Summer Months	20	0	2,908
		Non-Summer Months	280	0	5,552
		Full Year	300	0	8,460
	2015	Summer Months	20	0	2,908
		Non-Summer Months	280	0	5,552
		Full Year	300	0	8,460
	2016	Summer Months	20	0	2,908
		Non-Summer Months	280	0	5,576
		Full Year	300	0	8,484
	2017	Summer Months	N/A	N/A	N/A
		Non-Summer Months	N/A	N/A	N/A
		Full Year	N/A	N/A	N/A

**AES Huntington Beach Unit 3&4 Synchronous Condenser
Must-Run Service Project**

Table B-5 (cont'd) - Target Available Hours					
Unit	Contract Year	Contract Month	Average Other Outage Hours	Long-term Planned Outage Hours	TAH
Huntington Beach Unit 4	2013	Summer Months	15	0	2,193
		Non-Summer Months	20	3,624	2,908
		Full Year	35	3,624	5,101
	2014	Summer Months	20	0	2,908
		Non-Summer Months	280	0	5,552
		Full Year	300	0	8,460
	2015	Summer Months	20	0	2,908
		Non-Summer Months	280	0	5,552
		Full Year	300	0	8,460
	2016	Summer Months	20	0	2,908
		Non-Summer Months	280	0	5,576
		Full Year	300	0	8,484
	2017	Summer Months	20	0	2,908
		Non-Summer Months	280	0	5,552
		Full Year	300	0	8,460

AES Huntington Beach Unit 3&4 Synchronous Condenser Must-Run Service Project

B-6 Annual Fixed Revenue Requirement (AFRR)

Table B-6 - Annual Fixed Revenue Requirement (AFRR)			
Unit	Contract Year	Contract Month	Annual Fixed Revenue Requirement
Huntington Beach Unit 3	2013	Summer Months	\$4,431,758
		Non-Summer Months	\$689,412
		Full Year	\$5,121,171
	2014	Summer Months	\$3,979,089
		Non-Summer Months	\$1,867,102
		Full Year	\$5,846,191
	2015	Summer Months	\$3,895,490
		Non-Summer Months	\$1,830,731
		Full Year	\$5,726,221
	2016	Summer Months	\$3,819,742
		Non-Summer Months	\$1,798,090
		Full Year	\$5,617,832
	2017	Summer Months	N/A
		Non-Summer Months	N/A
		Full Year	N/A
Huntington Beach Unit 4	2013	Summer Months	\$4,431,758
		Non-Summer Months	\$689,412
		Full Year	\$5,121,171
	2014	Summer Months	\$3,979,089
		Non-Summer Months	\$1,867,102
		Full Year	\$5,846,191
	2015	Summer Months	\$3,895,490
		Non-Summer Months	\$1,830,731
		Full Year	\$5,726,221
	2016	Summer Months	\$3,819,742
		Non-Summer Months	\$1,798,090
		Full Year	\$5,617,832
	2017	Summer Months	\$3,947,477
		Non-Summer Months	\$1,864,099
		Full Year	\$5,811,576

**AES Huntington Beach Unit 3&4 Synchronous Condenser
Must-Run Service Project**

**SCHEDULE C
Variable Cost Payment**

Table C1-7a&b, N/A

Table C1-18, N/A

**SCHEDULE D
Part 2
Start-up Payment for Condition 2 Units**

Table D-0, N/A

Table D-1 – Start-up Costs						
	X_{max}	A	B	C	D	Shutdown Power Requirement
Unit	(Hrs)	(mmBtu)/hr	(mmBtu)	(MWh/hr)	(MWh)	(MWh)
3	N/A	N/A	N/A	N/A	3.0	0.2
4	N/A	N/A	N/A	N/A	3.0	0.2

**SCHEDULE E
Ancillary Services
Part 2 for Condition 2**

Motoring Charge

Unit	Power consumption rate (MWh/hour)	
	With Both Unit Dispatched Simultaneously	With Only One Unit Dispatched
Huntington Beach Unit 3	2.661	3.106
Huntington Beach Unit 4	2.608	3.053

AES Huntington Beach Unit 3&4 Synchronous Condenser Must-Run Service Project

Schedule G, Charge for Service in Excess of Contract Service Limits: Option A or Option B results in the same terms for Synchronous Condenser operation.

Schedules H, Fuel Oil Service: N/A

Schedule I, Insurance: Commercial general liability insurance covering personal injury and property damage to third parties in connection with the activities at the Facility. The coverage will have a limit of not less than \$20 million per occurrence, and will include coverage for sudden and accidental pollution losses. The CAISO will be added as an additional insured under the terms of this coverage to the per-occurrence limit above.

Schedule J, Notice Contacts: TBD

Schedule K, Dispute Resolution: TBD

Schedule L-1, Request for Approval of Capital Items or Repairs: Attached as appendix.

Schedule L-2, Capital Item/Repair Progress Report: AES to submit monthly progress reports on capital items after execution of the RMR agreement. Distribution TBD.

Schedule M, Mandatory Market Bid: N/A

Schedule N-1 and N-2, NDA: Completed

Schedule O, RMR Owner's Invoicing Process: no changes

Schedule P, Reserved Energy for Air Emissions Limitations: N/A

APPENDIX TO ATTACHMENT A

**SCHEDULE L-1
REQUEST FOR APPROVAL OF CAPITAL ITEMS OR REPAIRS**

This form should be used to request CAISO approval of Planned Capital Items, Unplanned Repairs or Unplanned Capital Items pursuant to Sections 7.4, 7.5 or 7.6 of the Agreement.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR
RELIABILITY MUST-RUN UNIT
CAPITAL ITEM AND REPAIR PROJECT REQUEST

Date:	October __, 2012	CAISO Project Number:	TBD
Facility:	AES Huntington Beach Generating Station	Unit:	Unit 3 and Unit 4
Owner:	AES Huntington Beach, LLC	Location:	Huntington Beach, California

This request covers:

- () Capital Items for the next Contract Year (preliminary)
- () Capital Items for the next Contract Year (final)
- () Unplanned Repairs
- () Unplanned Capital Items
- (X) Capital Items for the 2013 contract year (final)

If this request covers Capital Items for the next Contract Year, provide:

Small Project Estimate (reliability)

Not applicable

Small Project Estimate (other)

Identify separately each Capital Item included in a small project estimate projected to cost more than \$50,000.

Not applicable

If this request covers Unplanned Repairs, or Capital Items projected to cost more than \$500,000, provide the information in the remainder of this form for each project.

Project Description: (describe the project and its major scope items – materials, new systems, modifications to existing systems, etc.)

Capital Item request is required for the conversion of Units 3 & 4 to Synchronous Condensers. Siemens proposal for this project is attached as Exhibit I of this Schedule L1. The proposed solution utilizes a Pony Motor arrangement and a variable frequency drive (VFD) to accelerate the units to synchronous speed. Expected in-operation date is June 1st, 2013.

- One (1) Pony Motor package will be utilized for the Unit 3 HP generator.
- One (1) Pony Motor package will be utilized for the Unit 4 IP/LP generator.
- One (1) Thrust Bearing package will be utilized for the Unit 3 LP generator.
- One (1) Thrust Bearing package will be utilized for the Unit 4 HP/LP generator.
- Spare Parts (For details, refer to Section 4.1)
- Integration of Units 3 & 4 Synchronous Condensers into existing DCS (ABB) for Units 1 & 2.

Base Scope of Supply includes the following:

- Conversion of Units 3 & 4 STG into SC (For details, refer to Section 4.1)
- Spare Parts (For details, refer to Section 4.1)
- Integration of Units 3 & 4 SC into DCS (ABB) for Units 1 & 2

If the project is required because of loss or damage to a Unit, describe the cause and nature of the loss or damage and all repairs performed or required for all Units during the year:

Not applicable

Project Budget:

Option: Siemens	Cost excluding sales tax \$	Sales Tax \$	AES Total Cost \$
Unit 3	5,496,000	325,152	5,821,152
Unit 4	5,496,000	325,152	5,821,152
Project Manager	228,605	-	228,605
Controls upgrade	700,000	34,557	734,557
Parts	1,568,900	121,590	1,690,490
Total Costs	13,489,505	806,450	14,295,955

Describe any work or repairs performed relating to this project in the last five years:

Not applicable

As applicable, state the proposed depreciation life, Annual Capital Item Cost, Surcharge Payment Factor or Repair Payment Factor (percentage owed by CAISO) of the Capital Item or Repair:

Unit 3

			CapAdd Amount	\$7,147,977
Fiscal year	Contract year	Annual Surcharge	Annual Depreciation	
2013	1	3,367,606	25.00%	
2014	2	3,102,664	25.00%	
2015	3	2,806,725	25.00%	
2016	4	2,513,263	25.00%	
Total		\$11,790,258	100.00%	

Unit 4

			CapAdd Amount	\$7,147,977
Fiscal year	Contract year	Annual Surcharge	Annual Depreciation	
2013	1	3,003,801	20.00%	
2014	2	2,779,702	20.00%	
2015	3	2,536,382	20.00%	
2016	4	2,295,539	20.00%	
2017	5	2,056,985	20.00%	
Total		\$12,672,408	100.00%	

Describe why this project is required (justification):

With the unexpected outage of the San Onofre Nuclear Generating Station ("SONGS"), HB 3&4 are providing critical voltage support and local reliability services to the system. Given the uncertainty surrounding when SONGS will return to service, the CAISO has determined that the conversion of HB3&4 into synchronous condensers is a necessary project to provide the required voltage support in the absence of SONGS.

Is this project required to comply with any laws, regulations or permits? If so, please list them and explain requirement.

Yes. Modification to the existing CEC permit 2000 – AFC – 013 is in progress.

Provide a cost/benefit analysis summary for this project:

Include all assumptions including changes to unit performance [efficiency, aux. power loads, etc.], impact on Maximum Net Dependable Capacity, grid interconnection/metering impacts, etc.

Information and details have been previously provided and accepted by the parties.

Describe the impacts on the Unit's ability to perform its obligations under this Agreement if this project is not approved:

If this CapAdd project is not approved, the Units will not be able to perform its obligations under the RMR Agreement.

Describe alternatives to this project that were evaluated and the projected costs of those alternatives:

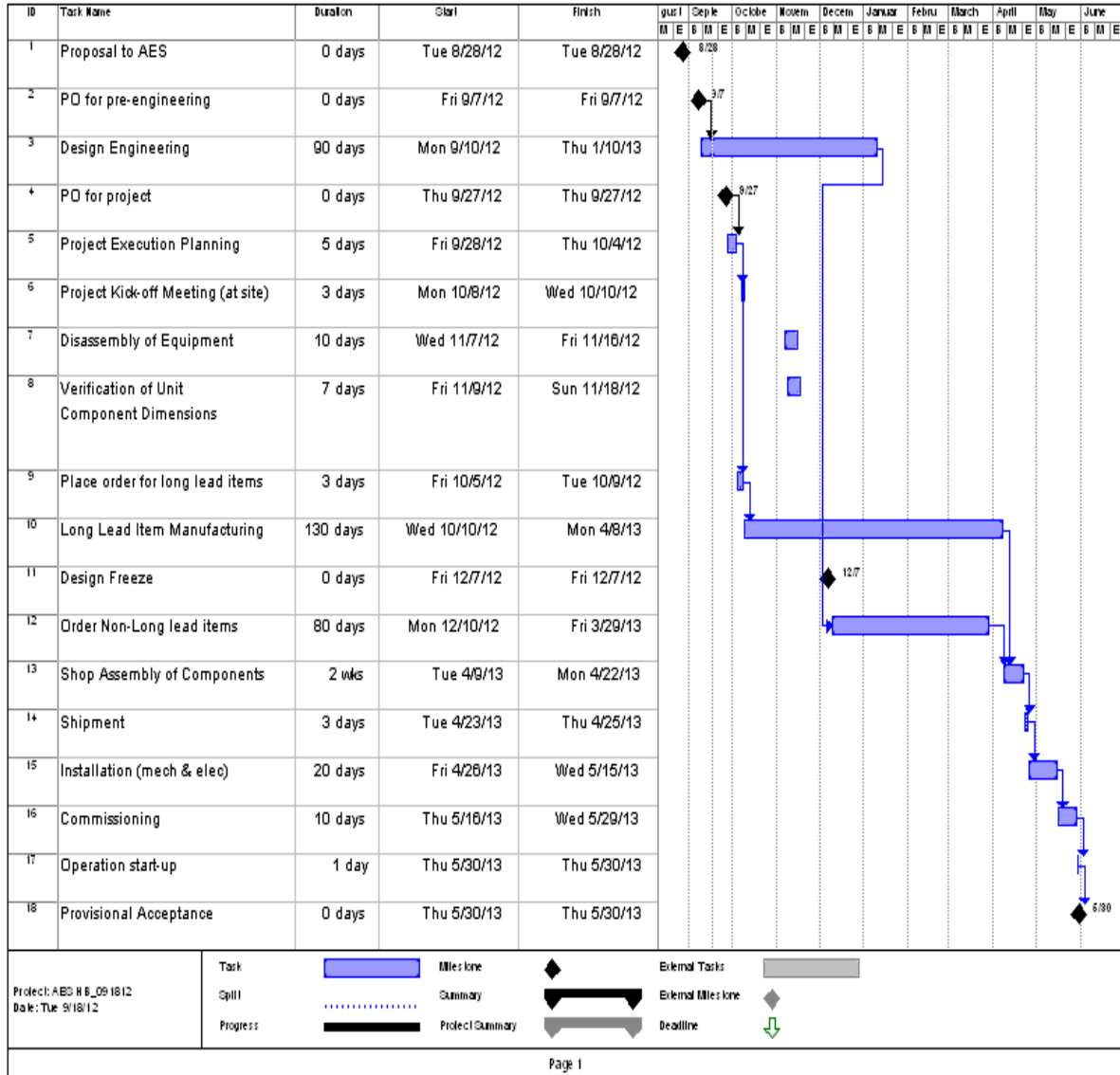
Describe alternatives along with their major scope items. Also, compare the projected cost of these alternatives with the selected alternative, and compare the unit performance impacts (efficiency, auxiliary power demands, Maximum Net Dependable Capacity effects, etc.) of these alternatives against the chosen alternative.

Information and details have been previously provided and accepted by the parties.

List any proceeds received or expected to be received by Owner from insurers or other third parties pursuant to applicable insurance, warranties and other contracts in connection with the project.

Performance warranty and liquidated damages provisions are included in Exhibit I – Siemens Proposal.

Provide the schedule for implementing this project:



Describe any outages required to implement this project:

From RMR contract effective date through May 31, 2013.

Other comments:

None

FERC rendition of the electronically filed tariff records in Docket No. ER13-00351-000

Filing Data:

CID: C001942

Filing Title: RMR Agreement between AES Huntington Beach, L.L.C. and ISO

Company Filing Identifier: 168

Type of Filing Code: 400

Associated Filing Identifier:

Tariff Title: Service Agreements

Tariff ID: 272

Payment Confirmation:

Suspension Motion:

Tariff Record Data:

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

Must-Run SA, AES Rate Schedule FERC No. 2, 0.0.0, A

Record Narrative Name:

Tariff Record ID: 1

Tariff Record Collation Value: 1000000 Tariff Record Parent Identifier: 0

Proposed Date: 2012-11-09

Priority Order: 500

Record Change Type: NEW

Record Content Type: 2

Associated Filing Identifier:

This is a PDF section and we cannot render PDF in a RTF document.

Document Content(s)

168-05f1c12b-4270-41ca-9cbd-13b3d6265413.PDF.....1-16

168-b8f39082-450f-4508-a7ac-2dfddd073ef.PDF.....17-486

FERC GENERATED TARIFF FILING.RTF.....487-487