



California Independent
System Operator Corporation

September 17, 2012

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

**Re: California Independent System Operator Corporation
Docket No. ER12-____-000
Amendment to Modify Scheduling Priority for Qualifying
Facilities and Combined Heat and Power Resources**

Dear Secretary Bose:

The California Independent System Operator Corporation (“ISO”) submits this filing to amend the California ISO tariff to accommodate changes in state and federal policies concerning qualifying facilities and combined heat and power resources (also known as cogeneration resources).¹ With certain exceptions noted below, the ISO proposes to end the existing blanket scheduling priority for qualifying facilities. The ISO is also proposing to allow combined heat and power resources to receive a scheduling priority for the capacity dedicated to their industrial hosts—regardless of whether the resources are qualifying facilities. This new scheduling priority ensures protection against the interruption in the hosts’ industrial process and maintains the energy efficiency benefits of combined heat and power resources while encouraging resources to make any incremental capacity available to the ISO through bids. The existing blanket scheduling priority will continue to apply to existing and new small qualifying facilities (20 MW or less) with a power purchase agreement pursuant to a mandatory purchase obligation under the Public Utility Regulatory Policies Act of 1978 (“PURPA”)² and other qualifying facilities with “grandfathered” power purchase agreements during the remaining term of the agreements.

¹ The ISO submits this filing pursuant to Section 205 of the Federal Power Act, 16 U.S.C. § 824d (2006), and Section 35.13 of the Commission’s regulations, 18 C.F.R. § 35.13 (2012).

² Pub. L. 95-117, 92 Stat. 3119 (1978).

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These amendments preserve the energy efficiency benefits of combined heat and power resources and recognize that these resources are primarily dedicated to economic activity of their industrial hosts. These amendments also encourage combined heat and power resources to make any additional capacity available to the ISO markets in the form of economic bids of energy and ancillary services. The ISO respectfully requests that the tariff changes contained in this filing become effective as of the December 12, 2012 trading day.

I. Background

Under PURPA, certain small generators and combined heat and power generators can obtain treatment as qualifying facilities, which exempts them from parts of the Federal Power Act. PURPA also imposed on public utilities a mandatory purchase requirement for energy from qualifying facilities.³

Existing sections 4.6.3 and 4.6.3.2 of the ISO tariff⁴ require that the ISO honor the terms of certain PURPA power purchase agreements in effect prior to the ISO's operations ("Existing QF Contracts").⁵ Moreover, generating units with Existing QF Contracts have been exempt from compliance with the ISO tariff. Accordingly, such generating units have had no obligation to enter into ISO interconnection agreements, Participating Generator Agreements, or Meter Service Agreements. In the absence of a direct contractual relationship between these grandfathered qualifying facilities and the ISO, the purchasing public utility schedules the resources with the ISO as Regulatory Must-Take Generation as defined in the ISO tariff. Regulatory must-take resources receive a higher level of protection from curtailment in the ISO market optimization than that given to resources with self-schedules and economic bids.⁶ Specifically, in the event of over-generation or congestion, the ISO curtails resources with economic bids and self-schedules before regulatory must-take schedules.

If its Existing QF Contract terminates, a qualifying facility is no longer eligible for the exemption from compliance with the ISO tariff pursuant to sections 4.6.3 and 4.6.3.2. For those qualifying facilities that are no longer exempt from the ISO tariff or have chosen to participate in the ISO markets, the ISO tariff includes provisions that recognize the special characteristics of qualifying

³ PURPA, § 210, 16 U.S.C. § 824a-3 (2006).

⁴ Except where otherwise noted herein, references to section numbers are references to sections of the tariff.

⁵ Existing QF Contracts must have been executed on or before December 20, 1995, or, in the case of qualifying facilities using landfill gas technology, December 31, 1996. Capitalized terms have the meaning given them in the ISO tariff.

⁶ The scheduling priority given Regulatory Must-Take Generation and certain other bids and self-schedules is set forth in sections 31.4 and 34.10 of the ISO tariff.

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facilities, particularly those that are combined heat and power resources. Section 4.6.3 provides for net metering and telemetry for qualifying facilities and allows qualifying facilities to enter a special form of Participating Generator Agreement, the “QF PGA,” which provides qualifying facilities that are combined heat and power resources additional protection from ISO operating orders and dispatches below their specified minimum operating limits, *i.e.*, from curtailments except in emergency conditions.⁷

As another example, qualifying facilities under Existing QF Contracts are exempt from the standard capacity product availability standard reporting requirements. The Commission approved this exemption for scheduling coordinators for certain qualifying facilities that provide resource adequacy capacity because the contractual provisions of the Existing QF Contract prevented them from obtaining the information necessary in order to demonstrate compliance with the availability standard reporting requirements.⁸

II. New Tariff Provisions Recognizing Operational Requirements of Combined Heat and Power Resources

In 2005, Congress amended PURPA to allow public utilities to request that the Commission grant relief from the mandatory purchase requirement.⁹ The three investor-owned participating transmission owners of the ISO – Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company – have sought and received this relief resulting in the end of the mandatory PURPA purchase obligation for qualifying facilities greater than 20 MW.¹⁰

In 2007, after many years of proceedings regarding qualifying facilities issues, the California Public Utilities Commission issued a decision requiring qualifying facilities whose “grandfathered” power purchase agreements (*i.e.*, Existing QF Contracts under the ISO tariff) expire to enter into new standard forms of power purchase agreements that include, among other provisions, requirements to comply with the ISO tariff.¹¹ In 2010, the California Public Utilities Commission approved a global settlement intended to implement

⁷ The QF-PGA and the manner in which the ISO tariff accommodates the special needs of qualifying facilities were the result of litigation before the Commission in the early years of the ISO’s operations. See Order No. 464, *Cal. Indep. Sys. Operator Corp.*, 104 FERC ¶ 61,196 (2003).

⁸ *Cal. Indep. Sys. Operator Corp.*, 137 FERC ¶ 61,167 at P 11.

⁹ See Energy Policy Act of 2005, Pub. L. 109-58, 110 Stat. 594 at sec. 1253 (2005).

¹⁰ See *Pacific Gas & Elec., et al.* 135 FERC ¶ 61,234 (2011).

¹¹ Cal. Pub. Util. Comm’n, Decision D. 07-09-040 (September 25, 2007) available at http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/73181.PDF .

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alternative contractual arrangements for combined heat and power units to replace the program that had implemented PURPA.¹² The global settlement also provides options to qualifying facilities under existing contracts to enter into amendments that do not extend the term of the contract. Under the global settlement, combined heat and power resources must execute one of certain standard forms of new power purchase agreements by July 1, 2015, sell into the wholesale market, shut down, or cease to export to the ISO grid.¹³ Consistent with the 2007 decision, the new standard form power purchase agreements include, among other provisions, a requirement that the resource comply with the ISO tariff.

Among the stated objectives of the global settlement are to retain existing combined heat and power greenhouse gas emissions reduction benefits; to enhance reductions in greenhouse gas emissions from existing facilities and incrementally add new combined heat and power resources with the goal of reducing greenhouse gas emissions consistent with state law; to increase fuel efficiency through the use of a single fuel to produce two energy products, specifically thermal and electrical energy; to reduce criteria pollutant emissions from avoided combustion of fossil fuel; to enhance local area reliability, and to reduce distribution and transmission energy losses.

These objectives are consistent with California policy to increase generation provided by combined heat and power facilities. As the California Energy Commission has explained:

California has set targets for efficient combined heat and power . . . , which can reduce [greenhouse gas] emissions by jointly producing electricity and capturing waste heat to power industrial, commercial, and institutional processes (with less fuel than would be required separately). The [California Air Resources Board's] AB 32 Scoping Plan called for the development of 4,000 MW of new [combined heat and power] by 2020 as a strategy for reducing GHG emissions by 6.7 million-metric tons Governor Brown's Clean Energy Jobs Plan calls for the development of 6,500 MW of new [combined heat and power] by 2030.¹⁴

¹² Cal. Pub. Util. Comm'n, Decision D. 10-12-035 (December 16, 2010), as modified in Decision D.11-07-010 (July 15, 2011); see <http://docs.cpuc.ca.gov/PUBLISHED/GRAPHICS/124875.PDF>.

¹³ Certain other qualifying facilities may continue to operate under their Existing QF Contracts.

¹⁴ California Energy Commission, "2011 Integrated Energy Policy Report" (February 15, 2012), at 133 (footnotes omitted), available at <http://www.energy.ca.gov/2011publications/CEC-100-2011-001/CEC-100-2011-001-CMF.pdf>. The California Air Resource Board's plan is

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The California Energy Commission is in the midst of initiatives to further these goals and has been active in the ISO's stakeholder process in support of the ISO's objectives to recognize a higher scheduling priority to preserve the energy efficiency benefits of existing combined heat and power resources and to encourage new development.¹⁵

This objective is also consistent with federal policy goals. The President recently issued an executive order directing federal agencies to work toward an additional 40 gigawatts of new cost-effective combined heat and power production by 2020.¹⁶ In addition, the Commission has recognized the role that public utilities must play in furthering public policy objectives such as in Order No. 1000.

The ISO's proposed tariff amendments further the objectives of the global settlement and state and federal policy. Without the amendments proposed in this filing, the termination of Existing QF Contracts will cause combined heat and power resources to lose regulatory must-take scheduling priority that they currently enjoy under the ISO tariff, making curtailment of the resources more likely. Curtailments could adversely affect the operation of the related host industrial processes and potentially increase the costs of products produced by the facilities. The increased risk of curtailment would act as a disincentive to the expansion of the use of combined heat and power resources, a federal and state policy objective. In addition, curtailment would undermine the energy efficiency benefits of combined heat and power resources, while also undermining greenhouse gas reduction goals.

Revisions to the ISO tariff are also necessary to preserve existing tariff exemptions from the standard capacity product availability and standard reporting requirements for certain combined heat and power resources as a result of entering into one of the options under the global settlement. Currently, ISO tariff section 40.9.2(7) exempts certain qualifying facilities under existing PURPA contracts. The ISO is proposing a tariff amendment to allow resources that currently qualify for the exemption to retain the exemption in the event of the resource owner elects to amend its contract consistent with the options available under the global settlement and which do not extend the term or increase the

pursuant to Assembly Bill 32, the "Global Warming Solutions Act." See California Energy Commission Staff Report, "A New Generation of Combined Heat and Power: Policy Planning for 2020, available at <http://www.energy.ca.gov/2012publications/CEC-200-2012-005/CEC-200-2012-005.pdf>.

¹⁵ *Id.* at 134.

¹⁶ Executive Order – Accelerating Investment in Industrial Energy Efficiency, August 30, 2012, available at <http://www.whitehouse.gov/the-press-office/2012/08/30/executive-order-accelerating-investment-industrial-energy-efficiency>.

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capacity under contract even if the resource loses its status as a qualifying facility.

III. Stakeholder and Board Consideration

The ISO initiated a stakeholder process on Regulatory Must-Take Generation by posting a straw proposal on December 16, 2010. The straw proposal was the subject of a December 22, 2010, stakeholder teleconference. The ISO issued revised proposals on January 26, 2011, January 10, 2012, January 30, 2012, and April 30, 2012, and conducted stakeholder teleconferences on February 2, 2011, January 17, 2012, February 6 2012, and March 1, 2012. After each conference, the ISO received and considered stakeholder comments. The proposals, presentations, and stakeholder comments are all available on the ISO website at <http://www.caiso.com/informed/Pages/StakeholderProcesses/Regulatory-Generation.aspx>.

The ISO presented the proposal to the ISO Board of Governors on May 16, 2012. The Board unanimously approved the proposal. The memorandum to the Board and the matrix of stakeholder comments provided to the Board are included as Attachments C and D.

Following Board approval, the ISO posted proposed tariff language on May 10, 2012, May 22, 2012, June 8, 2012 and July 27, 2012. The ISO conducted web conferences regarding the draft tariff provisions on May 31, 2012, and June 28, 2012. The ISO also received and considered two rounds of stakeholder comments on the tariff language and worked directly with public utility and combined heat and power representatives to resolve all remaining issues. The ISO posted a final version of the tariff language on September 10, 2012.

Throughout the policy and tariff stakeholder processes, the ISO worked with the stakeholders and representatives from state energy agencies to resolve and/or compromise stakeholders' concerns. The resulting tariff language reflects agreed upon resolutions.

IV. Proposed Tariff Revisions

A. Net Scheduled PGA

The ISO proposes a number of tariff revisions in order to preserve the metering and operational arrangement currently available to combined heat and power resources based on their status as qualifying facilities. The proposal includes a new defined term, Combined Heat and Power Resource or CHP Resource, which means "A Generating Unit that produces electric energy and

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forms of useful thermal energy used by an industrial or commercial host for industrial, commercial, heating or cooling purposes or a Generating Unit that produces electricity from waste heat from an industrial or commercial host.” Under revised section 4.6.3.3, Combined Heat and Power Resources, as well as qualifying facilities, may enter a “Net Scheduled PGA” if the on-site load has standby service from a load-serving entity or is curtailed in the event of a failure of the related generating unit. The resource that executes a Net Scheduled PGA is a “Net Scheduled Generating Unit.” The Net Scheduled PGA is substantially the same as the current QF PGA, except that references to qualifying facilities are revised to refer to Net Scheduled Generating Unit.

Consistent with these changes, the proposal revises sections 4.6.3.4, 4.6.3.4.1, 4.6.3.4.2, 4.6.3.4.3, 4.6.3.4.4, and 10.1.3.3 to extend to Net Scheduled Resources the metering, scheduling, and operating requirements currently available to qualifying facilities. The proposal also revises a number of sections to replace the term “QF PGA” with the term “Net Scheduled PGA” and to refer to net scheduled generation where appropriate.¹⁷

B. Regulatory Must-Take Generation Scheduling Priority

Under the current tariff, “Regulatory Must-Take Generation,” which includes combined heat and power resources because of their status as qualifying facilities, has a scheduling priority under sections 31.4 and 34.10. Consistent with the goals of promoting combined heat and power generation discussed above, the ISO concluded that such resources should continue to enjoy this scheduling priority, but only to the extent that the output is necessary to serve their industrial hosts or to produce electricity from the heat that is a byproduct of the industrial process. Toward this end, the proposal redefines Regulatory Must-Take Generation as follows:

Generation from the following resources that the relevant Scheduling Coordinator schedules directly with the CAISO as Regulatory Must-Take Generation:

- (1) Generation from Generating Units subject to
 - (a) an Existing QF Contract or an Amended QF Contract, or
 - (b) a QF power purchase agreement for a QF 20 MW or smaller pursuant to a mandatory purchase obligation as defined by federal law;

¹⁷ See §§ 4.5.1.1.6.2, 4.6, 7.7.2.3, 9.3.5.2, 9.3.6, 11.23, and 43.5.2, and definitions of Eligible Intermittent Resource, Participating Generator, Point of Demarcation, and Self-Provided Load.

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- (2) Generation delivered from a CHP Resource needed to serve its host thermal requirements up to RMTMax in any hour; and
- (3) Generation from nuclear units.

Thus, although the proposal preserves the scheduling priority of combined heat and power resources, it limits that priority to the maximum amount of capacity necessary to serve the host and to preserve the efficient use of the “waste” thermal energy. For this purpose, the proposal introduces the new term “RMTMax” in the definition of Regulatory Must-Take Generation. The proposal defines RMTMax as follows:

For a Generating Unit that provides Regulatory Must-Take Generation from a CHP Resource, the minimum operating level at which the Generating Unit can safely and reliably meet host requirements as established under section 4.6.10, including the production of electricity from heat produced as a consequence of the industrial host’s operations.

Proposed section 4.6.10 provides for determining RMTMax (which may be different for on-peak and off-peak periods) through agreement between the CHP Resource’s owner and its scheduling coordinator, if the scheduling coordinator is a load serving entity and there is a power purchase agreement between the CHP Resource’s owner and its scheduling coordinator, or between the CHP Resource’s owner and the ISO if otherwise. If the parties cannot agree or there is insufficient evidence of agreement, a California-licensed certified engineer will determine the RMTMax. The RMTMax cannot be established at a level that conflicts with any power purchase agreement between the CHP Resource’s owner or operator and the load-serving entity.

The RMTMax only establishes the *maximum* amount of energy to which the ISO may provide scheduling priority. Under section 30.5.2.2, the amount of energy that a scheduling coordinator for a CHP Resource may schedule as Regulatory Must Take Generation is limited to “the quantity necessary in any hour to meet the reasonably anticipated industrial host’s thermal requirements and shall not exceed any established RMTMax values.” The CHP Resource is responsible for providing accurate information regarding this quantity to the scheduling coordinator.

The ISO decided to limit scheduling priority to that necessary to meet the host’s thermal requirements or to produce energy from waste heat in response to the concerns of certain stakeholders that initially advocated elimination of scheduling priority for CHP Resources as no longer justified in light of the elimination of federal mandatory purchase requirements. The ISO concluded that completely eliminating the scheduling priority would risk interfering with

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industrial operations to a degree that would outweigh any economic savings that a potential host might expect from such facilities. This would create a significant disincentive to the construction or continued operation of combined heat and power facilities, contrary to state and federal energy efficiency and greenhouse gas reductions objectives. The proposed limited scheduling priority accommodates both sides of the debate; it recognizes the changed legal landscape while providing the necessary protections to the host. By allowing for both an on-peak and off-peak RMTMax and by limiting priority to the output actually required by the host, even if less than RMTMax, the proposal also responds to stakeholder concerns that basing priority on a single RMTMax would interfere with the ISO markets by providing an undue advantage to the CHP Resource over such resources as wind and hydropower.

Another concern of stakeholders was the need to avoid tariff provisions on scheduling priority that might override negotiated contract provisions allowing curtailment of energy that serves the industrial host. The proposed revision addresses this issue by providing in section 30.5.2.2 that the quantity scheduled as Regulatory Must-Take Generation must also be consistent with any contractual agreements between the CHP Resource and the scheduling coordinator regarding curtailments.

C. Existing Contracts

Under the global settlement, qualifying facilities with contracts that meet the current criteria for Existing Contracts – which the global settlement defines as Legacy Contracts – can select certain contractual amendments that do not extend the term of the contract, do not increase the capacity of the contract, and do not require the qualifying facility to comply with the ISO Tariff. Although these amendments would take the contract outside the parameters of the existing definition of Existing QF Contract, they do not change the fundamental nature of the contract from the ISO's perspective. The proposal therefore amends the definition of Existing QF Contract to include amended Legacy Contracts, as defined by the global settlement that meet these criteria.

As a result of the global settlement, there are likely to be a greater number of qualifying facilities that are no longer parties to Existing QF agreements and are under the obligation to comply with the ISO tariff. Under these circumstances, some of the ISO tariff exemptions provided for qualifying facilities or Regulatory Must-Take Generation in general would be broader than necessary. The proposal, therefore, amends those sections to limit the exemption to resources with Existing QF Contracts (or, as discussed below, Amended QF Contracts). The proposal makes such changes in sections 8.2.3.3 (Voltage Support), 10.2.12 (exemption from metering standards), and 40.8.1.7 (regarding geothermal units) and 40.9.2.

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In addition, the current tariff does not consistently use the term Existing QF Contract when referring to existing power purchase agreements between qualifying facilities and load-serving entities under PURPA. The proposal therefore revises a number of ISO tariff sections to make consistent use of the defined term.¹⁸

D. Amended QF Contract

As discussed above, as a result of the global settlement, it is possible that certain former qualifying facilities may no longer meet the criteria for a qualifying facility or may otherwise participate in the ISO markets and be subject to the ISO tariff, but may still be subject to contracts that limit their ability to comply with the ISO tariff, particularly with the standard capacity product availability standards. To address this issue, the proposal defines a new term, "Amended QF Contract" and allows resources with Amended QF Contracts¹⁹ to retain some of the same exemptions as resources with Existing QF Contracts, specifically 8.2.3.3 (Voltage Support), 9.3.5.2.1 (regarding outage communications), 10.2.12 (exemption from metering standards) and 40.9.2 (exemption from standard capacity product availability standards). The proposal defines the term as follows:

A Legacy PPA, as defined in the settlement approved by the CPUC in Decision D. 10-12-035 (December 16, 2010), as modified in Decision D.11-07-010 (July 15, 2011), that became effective on or prior to December 20, 1995 or, in the case of a Participating Generator employing landfill gas technology, on or prior to December 31, 1996, that has been amended to include terms that conform with a Legacy PPA Amendment or a Legacy PPA C1 Amendment, as defined by said settlement, but also in a manner that (a) requires compliance with the CAISO Tariff; (b) does not extend the term of the agreement or provide for an increase in the generating capacity of the resource; and (c) does not change the electrical characteristics of the resource.

The proposal thus both broadens and narrows these exemptions: qualifying facilities that are no longer subject to an Existing QF Contract or an Amended QF Contract will not be eligible for the exemptions, although they would have been under the current tariff; resources that are not qualifying facilities and are subject to Amended QF Contracts will be eligible for the exemptions, although they would not have been under the current tariff.

¹⁸ See §§ 7.7.2.3, 10.1.3.3, 40.8.1.2, 40.8.1.3, and 40.8.1.6.

¹⁹ The ISO recognizes that the term Amended QF Contract may at first appear somewhat a misnomer, because the resources with such contracts are no longer qualifying facilities. The ISO nonetheless believes the term appropriately reflects a resource's former status as a qualifying facility.

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E. Miscellaneous Revisions

The proposal also revises a few typographical errors and out-dated or imprecise provisions that came to light during the stakeholder process. The revisions are in sections 4.5.1.1.6.2, 4.6.3, 10.2.12, and 40.9.2.

V. Effective Date and Request for Commission Order

The ISO requests that the Commission make the tariff revisions contained in the instant filing effective as of the December 12, 2012 trading day.²⁰ The ISO has designed and developed the software changes to implement the new regulatory must take scheduling priority, which is scheduled for deployment on December 11, 2012. The ISO requests that the Commission issue an order by November 30, 2012, 74 days from the date of this filing, to ensure regulatory certainty and an orderly implementation.

VI. Communications

Communications regarding this filing should be addressed to the following individuals, whose names should be put on the official service list established by the Commission with respect to this submittal:

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VII. Service

The ISO has served copies of this transmittal letter, and all attachments, on the California Public Utilities Commission, the California Energy Commission, and all parties with effective Scheduling Coordinator Service Agreements under

²⁰ Trading day implementation means both the day-ahead market and the real-time market for the trading day. Accordingly, the new regulatory must-take scheduling priority will be in effect on December 11, 2012 for the December 12, 2012 trading day in addition to the real-time market for the December 12, trading day.

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the ISO Tariff. In addition, the ISO is posting this transmittal letter and all attachments on the ISO website.

VIII. Attachments

The following attachments, in addition to this transmittal letter, support the instant filing:

- A. Clean version of the proposed tariff amendments.
- B. Blacklined version of the proposed tariff amendments.
- C. Memorandum to the ISO Board of Governors.
- D. Matrix of stakeholder comments provided to the ISO Board of Governors.

IX. Conclusion

For the reasons stated above, the ISO respectfully requests that the Commission approve these tariff amendments, effective as of the December 12, 2012 trading day.

Respectfully submitted,

/s/ Sidney M. Davies
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Attachment A – Clean Tariff
Regulatory Must-Take Generation – Tariff Amendment
California Independent System Operator
Fifth Replacement FERC Electric Tariff
September 17, 2012

* * *

4.5.1.1.6.2 Scheduling Coordinator Applicant's Obligation for Contracts

A Scheduling Coordinator Applicant must certify that it is duly authorized to represent the Generators and Loads that are its Scheduling Coordinator Customers and must further certify that:

- (a) represented Generators or other suppliers have entered into Participating Generator Agreements, Net Scheduled Participating Generator Agreements, or Pseudo Tie Participating Generator Agreements as provided in Appendices B.2, B.3, and B.16, respectively with the CAISO or other contracts that obligate the supplier to comply with the terms of the CAISO Tariff, as applicable;
- (b) represented UDCs have entered into UDC Operating Agreements as provided in Appendix B.8 with the CAISO;
- (c) represented CAISO Metered Entities have entered into Meter Service Agreements for CAISO Metered Entities as provided in Appendix B.6 with the CAISO;
- (d) none of the Wholesale Customers it will represent are ineligible for wholesale transmission service pursuant to the provisions of the FPA Section 212(h); and
- (e) each End-Use Customer it will represent is eligible for service as a Direct Access End User pursuant to an established program approved by the California Public Utilities Commission or a Local Regulatory Authority.

A Scheduling Coordinator Applicant that seeks to serve as Scheduling Coordinator for one or more Convergence Bidding Entities must certify that it is duly authorized to represent those Convergence Bidding Entities and to submit and settle Virtual Bids on their behalf.

* * *

4.6 Relationship Between CAISO And Generators

The CAISO shall not accept Bids for any Generating Unit interconnected to the electric grid within the CAISO Balancing Authority Area (which includes a Pseudo-Tie of a Generating Unit to the CAISO Balancing Authority Area) otherwise than through a Scheduling Coordinator. The CAISO shall further not be obligated to accept Bids from Scheduling Coordinators relating to Generation from any Generating Unit interconnected to the electric grid within the CAISO Balancing Authority Area (which includes a Pseudo-Tie of a Generating Unit to the CAISO Balancing Authority Area) unless the relevant Generator undertakes in writing, by entering into a Participating Generator Agreement or, if eligible to enter such an agreement under the applicable terms of the CAISO tariff, a Net Scheduled PGA, Pseudo-Tie Participating Generator Agreement, or Metered Subsystem Agreement, with the CAISO to comply with all applicable provisions of this CAISO Tariff as they may be amended from time to time, including, without limitation, the applicable provisions of this Section 4.6 and Section 7.7.

* * *

4.6.3 Requirements for Certain Participating Generators

4.6.3.1 Participating Generators Directly Connected to a Distribution System

With regard to any Generating Unit directly connected to a Distribution System, a Participating Generator shall comply with applicable UDC tariffs, requirements of the Local Regulatory Authority, interconnection requirements and generation agreements. With regard to a Participating Generator's Generating Units directly connected to a Distribution System, the CAISO and the UDC or MSS, as applicable, will coordinate to develop procedures to avoid conflicting CAISO and UDC or MSS, as applicable, operational directives. .

4.6.3.2 Exemption for Generating Units Less Than One (1) MW

A Generator with a Generating Unit directly connected to a Distribution System will be exempt from compliance with this Section 4.6 and Section 10.1.3 in relation to that Generating Unit provided that (i) the rated capacity of the Generating Unit is less than one (1) MW, and (ii) the Generator does not use the Generating Unit to participate in the CAISO Markets. This exemption in no way affects the calculation of or any obligation to pay the appropriate charges or to comply

with all the other applicable Sections of this CAISO Tariff. A Generating Unit with a rated capacity of less than 500 kW, unless the Generating Unit is participating in an aggregation agreement approved by the CAISO, is not eligible to participate in the CAISO Markets and the Generator is not a Participating Generator for that Generating Unit.

* * *

4.6.3.3 Qualifying Facilities and Combined Heat and Power Resources

The owner or operator of (1) a Qualifying Facility, (2) a resource that is subject to an Amended QF Contract, or (3) a Combined Heat and Power Resource may satisfy the requirements of Section 4.6, to the extent applicable, by entering into Net Scheduled Participating Generator Agreement (Net Scheduled PGA) with the CAISO, in which case it shall comply with the provisions of the Net Scheduled PGA and Section 4.6.3.4. In order to be eligible to enter into the Net Scheduled PGA, a Participating Generator must demonstrate to the CAISO (a) that its Generating Unit (1) has established QF status pursuant to PURPA, (2) is a party to an Amended QF Contract; or (3) is a CHP Resource and (b) that the Self-provided Load of the Participating Generator that is served by the resource either (1) has and continues through the term of the Net Scheduled PGA to have, standby service from a UDC or MSS Operator under terms approved by the Local Regulatory Authority or FERC, as applicable, or (2) is curtailed concurrently with any Outage of the Generation serving that Self-provided Load in an amount sufficient to cover that Outage.

4.6.3.4 Participating Generator with a Net Scheduled PGA

A Participating Generator that is eligible for and has entered into a Net Scheduled Participating Generator Agreement shall be subject to the provisions of this Section 4.6.3.4, as reflected in the terms of the Net Scheduled PGA.

4.6.3.4.1 Revenue Metering for a Net Scheduled Generating Unit

In accordance with the terms of the Net Scheduled PGA and Section 10.1.3.3, a Participating Generator that has entered into a Net Scheduled PGA may net the revenue metering value for the Generation produced by each Net Scheduled Generating Unit listed in the Net Scheduled PGA and the revenue metering value for the Demand of the Self-provided Load that is (i) served

by the Net Scheduled Generating Unit and (ii) electrically located on the same side of the Point of Demarcation.

4.6.3.4.2 Telemetry for a Net Scheduled Generating Unit

A Participating Generator that has entered into a Net Scheduled PGA may satisfy the provisions of Section 7.6.1(d) for the installation of telemetry by installing telemetry at the Point of Demarcation for the purpose of recording the net impact of the Net Scheduled Generating Unit upon the CAISO Controlled Grid; provided that the installed telemetry satisfies the technical, functional, and performance requirements for telemetry set forth in the CAISO Tariff and the applicable Business Practice Manual.

4.6.3.4.3 Market and Settlement Processes for a Net Scheduled Generating Unit

For bidding, scheduling, billing, and Settlement purposes regarding the Net Scheduled Generating Unit Self-provided Load of a Participating Generator that has entered into a Net Scheduled PGA, measurements of Generation or Demand of the Net Scheduled Generating Unit shall be made at the Point of Demarcation. In all other respects, the Generation and Load of the Net Scheduled Generating Unit shall be subject to the applicable provisions of the CAISO Tariff regarding bidding, scheduling, billing, and Settlements.

4.6.3.4.4 Operating Requirements for a Net Scheduled Generating Unit

A Participating Generator that has entered into a Net Scheduled PGA shall abide by CAISO Tariff provisions regarding the CAISO's ability to dispatch or curtail Generation from the Net Scheduled Generating Units listed in its Net Scheduled PGA. The CAISO shall only dispatch or curtail a Net Scheduled Generating Unit of the Participating Generator: (a) to the extent the Participating Generator bids Energy or Ancillary Services from the Net Scheduled Generating Unit into the CAISO Markets or the Energy is otherwise available to the CAISO under Section 40, subject to the restrictions on operating orders set forth below; or (b) if the CAISO must dispatch or curtail the Net Scheduled Generating Unit in order to respond to an existing or imminent System Emergency or condition that would compromise CAISO Balancing Authority Area integrity or reliability as provided in Sections 7 and 7.6.1.

The CAISO will not knowingly issue an operating order to a Participating Generator that has entered into a Net Scheduled PGA that: (1) requires a Participating Generator to reduce its Generation below the delineated minimum operating limit, other than in a System Emergency; (2) conflicts with operating instructions provided to the CAISO by the Participating Generator; or (3) results in damage to the Participating Generator's equipment, provided that any such equipment limitation has been provided to the CAISO and incorporated in the Participating Generator's operating instructions provided to the CAISO. If the Participating Generator: (1) receives a Schedule which requires operation below the minimum operating limit, and (2) deviates from that Schedule to continue to operate at the minimum operating limit, it will not be subject to any penalties or sanctions as a result of operating at the minimum operating limit. The Participating Generator's consequences for deviating from Schedules in Real-Time will be governed by the CAISO Tariff.

The CAISO shall have the authority to coordinate and approve Generation Outage schedules for the Generating Unit(s) listed in a Net Scheduled PGA, in accordance with the provisions of Section 9.

* * *

4.6.10 RMTMax for CHP Resources

4.6.10.1 Initial Determination

Each Generating Unit that provides Regulatory Must-Take Generation from a CHP Resource must establish an RMTMax, which is determined as follows:

- (a) If the Generating Unit's Scheduling Coordinator is a UDC or MSS and there is a power purchase agreement between the Generating Unit's owner or operator and its Scheduling Coordinator, by agreement of the two entities, or if not, by agreement of the Generating Unit's owner or operator and the CAISO, subject to subsection (d) below,
- (b) In the event agreement cannot be reached or there is insufficient evidence of any agreement, by affidavit of an independent California-licensed certified engineer

based on the engineer's assessment of the annual and seasonal requirements of the host and the resulting electrical output. Unless otherwise agreed upon, the cost of the engineer will be evenly shared by the Generating Unit's owner or operator and its Scheduling Coordinator if the Scheduling Coordinator is a UDC or MSS and there is a power purchase agreement between the Generating Unit's owner or operator and the Scheduling Coordinator, or paid entirely by the Generating Unit's owner or operator, if the Scheduling Coordinator is not a UDC or MSS.

- (c) Based on an agreement between the Generating Unit owner or operator and the Scheduling Coordinator, if it is a UDC or MSS and there is a power purchase agreement between the Generating Unit's owner or operator and the Scheduling Coordinator, or, otherwise, between the Generating Unit owner or operator and the CAISO, two daily RMTMax values may be established, one for off-peak and one for on-peak, as those terms are defined by NERC.
- (d) RMTMax may not be established at a level that will conflict with the terms and conditions of a power purchase agreement negotiated by the Generating Unit owner or operator and the UDC or MSS.

4.6.10.2 Redetermination

The RMTMax must be reestablished on an annual basis using the methodologies described in section 4.6.10.1. It may be reestablished more frequently than once a year subject to the Master File change process if agreed by the Generating Unit's owner or operator and its Scheduling Coordinator, if the Scheduling Coordinator is a UDC or MSS, or by agreement of the Generating Unit's owner or operator and the CAISO.

4.6.10.3 Usage Profile

As part of the initial and annual recertification process, the Generating Unit owner or operator must provide the CAISO and its Scheduling Coordinator, if the Scheduling Coordinator is a UDC or MSS, with an annual non-binding indicative Regulatory Must-Take Generation usage profile.

7.7.2.3 Responsibilities of Generating Units, System Units and System Resources During System Emergencies

All Generating Units and System Units that are owned or controlled by a Participating Generator are (without limitation to the CAISO's other rights under this CAISO Tariff) subject to control by the CAISO during a System Emergency and in circumstances in which the CAISO considers that a System Emergency is imminent or threatened. The CAISO shall, subject to this Section 7, have the authority to instruct a Participating Generator to bring its Generating Unit on-line, off-line, or increase or curtail the output of the Generating Unit and to alter scheduled deliveries of Energy and Ancillary Services into or out of the CAISO Controlled Grid, if such an instruction is reasonably necessary to prevent an imminent or threatened System Emergency or to retain Operational Control over the CAISO Controlled Grid during an actual System Emergency. The CAISO shall have the authority to instruct an RMR Unit whose owner has selected Condition 2 of its RMR Contract to start-up and change its output if the CAISO has reasonably used all other available and effective resources to prevent a threatened System Emergency without declaring that a System Emergency exists. If the CAISO so instructs a Condition 2 RMR Unit, it shall compensate that unit in accordance with Section 11.5.6.3 and allocate the costs in accordance with Section 11.5.6.3.2. Each QF subject to an Existing QF Contract and not subject to a PGA or Net Scheduled PGA will make reasonable efforts to comply with the CAISO's instructions during a System Emergency without penalty for failure to do so.

* * *

8.2.3.3 Voltage Support

The CAISO shall determine on an hourly basis for each day the quantity and location of Voltage Support required to maintain voltage levels and reactive margins within NERC and WECC reliability standards, and any requirements of the NRC using a power flow study based on the quantity and location of scheduled Demand. The CAISO shall issue daily voltage schedules (Dispatch Instructions) to Participating Generators, Participating TOs and UDCs, which are required to be maintained for CAISO Controlled Grid reliability. All other Generating Units shall comply with the power factor requirements set forth in contractual arrangements in effect on the

CAISO Operations Date, or, if no such contractual arrangements exist and the Generating Unit exists within the system of a Participating TO, the power factor requirements applicable under the Participating TO's TO Tariff or other tariff on file with the FERC.

All Participating Generators that operate Asynchronous Generating Facilities subject to the Large Generator Interconnection Agreement set forth in Appendix BB or CC shall maintain the CAISO specified voltage schedule if required under Appendix H of the Large Generator Interconnection Agreement, while operating within the power factor range specified in their interconnection agreements. For all other Generating Units, Participating Generators shall maintain the CAISO specified voltage schedule at the Generating Unit terminals to the extent possible, while operating within the power factor range specified in their interconnection agreements, or, for Regulatory Must-Take Generation with Existing QF Contracts or Amended QF Contracts, Regulatory Must-Run Generation and Reliability Must-Run Generation, consistent with existing obligations. For Generating Units that do not operate under one of these agreements, the minimum power factor range will be within a band of 0.90 lag (producing VARs) and 0.95 lead (absorbing VARs) power factors. Participating Generators with Generating Units existing at the CAISO Operations Date that are unable to meet this operating power factor requirement may apply to the CAISO for an exemption. Prior to granting such an exemption, the CAISO shall require the Participating TO, UDC or other utility to whose system the relevant Generating Units are interconnected to notify it of the existing contractual requirements for Voltage Support established prior to the CAISO Operations Date for such Generating Units. Such requirements may be contained in CPUC Electric Rule 21 or the Interconnection Agreement with the Participating TO, UDC or other utility. The CAISO shall not grant any exemption under this Section from such existing contractual requirements. The CAISO shall be entitled to instruct Participating Generators to operate their Generating Units at specified points within their power factor ranges. Participating Generators shall receive no compensation for operating within these specified ranges.

If the CAISO requires additional Voltage Support, it shall procure this either through Reliability Must-Run Contracts or, if no other more economic sources are available, by instructing a Generating Unit to move its MVar output outside its mandatory range. Only if the Generating Unit

must reduce its MW output in order to comply with such an instruction will it be eligible to recover its opportunity cost in accordance with Section 11.10.1.4.

All Loads directly connected to the CAISO Controlled Grid shall maintain reactive flow at grid interface points within a specified power factor band of 0.97 lag to 0.99 lead. Loads shall not be compensated for the service of maintaining the power factor at required levels within the bandwidth. A UDC interconnecting with the CAISO Controlled Grid at any point other than a Scheduling Point shall be subject to the same power factor requirement.

The CAISO will establish voltage control standards with UDCs and the operators of other Balancing Authority Areas and will enter into operational agreements providing for the coordination of actions in the event of a voltage problem occurring.

* * *

9.3.5.2 Communication of Approval or Rejection

The CAISO shall use the same methods in communicating the approval or rejection of an Outage request or approval of a request to change an Approved Maintenance Outage to the relevant Operator.

9.3.5.2.1 Information regarding planned Outages for resources with an Existing QF Contract or an Amended QF Contract shall be provided to the CAISO Outage Coordination Office by the Participating TO or UDC that is a party to the Existing QF Contract or an Amended QF Contract or by a Participating Generator. Information provided will be that obtained by the Participating TO, UDC or a Participating Generator pursuant to the terms of Existing QF Contract or an Amended QF Contract or as requested by the CAISO. Scheduling and approvals of Maintenance Outages for resources with an Existing QF Contract or an Amended QF Contract shall continue to be coordinated as detailed in the applicable contract with the Participating TO or UDC, provided the owner of the Regulatory Must-Take Generation resource has not executed a Participating Generator Agreement or Net Scheduled PGA. If the owner of a resource has executed a Participating Generator Agreement or Net Scheduled PGA, it shall comply with Section 9.3.5 and other provisions applicable to Participating Generators.

9.3.6 Maintenance Outage Planning

Each Operator shall, by not later than October 15 each year, provide the CAISO with a proposed schedule of all Maintenance Outages it wishes to undertake in the following year. The proposed schedule shall include all of the Operator's transmission facilities that comprise the CAISO Controlled Grid and Generating Units subject to a Participating Generator Agreement, Net Scheduled PGA, or Pseudo-Tie Participating Generator Agreement (including its Reliability Must-Run Units). In the case of a Participating TO's transmission facilities, that proposed schedule shall be developed in consultation with the UDCs interconnected with that Participating TO's system and shall take account of each UDC's planned maintenance requirements. The nature of the information to be provided and the detailed Maintenance Outage planning procedure shall be established by the CAISO. This information shall include:

The following information is required for each Generating Unit of a Participating Generator:

- (a) the Generating Unit name and Location Code;
- (b) the MW capacity unavailable;
- (c) the scheduled start and finish date for each Outage; and
- (d) where there is a possibility of flexibility, the earliest start date and the latest finish date, along with the actual duration of the Outage once it commences.

The following information is required for each transmission facility:

- (a) the identification of the facility and location;
- (b) the nature of the proposed Maintenance Outage;
- (c) the preferred start and finish date for each Maintenance Outage; and
- (d) where there is a possibility of flexibility, the earliest start date and the latest finish date, along with the actual duration of the Outage once it commences.

Either the CAISO, pursuant to Section 9.3.7, or an Operator, subject to Section 9.3.6.11, may at any time request a change to an Approved Maintenance Outage. An Operator may, as provided in Section 9.3.6.3, schedule with the CAISO Outage Coordination Office a Maintenance Outage on its system, subject to the conditions of Sections 9.3.6.4.1, 9.3.6.8, and 9.3.6.9.

* * *

10.1.3.3 Permitted Netting for a Net Scheduled Generating Unit or a QF

A Generating Unit that is a QF subject to an Existing QF Contract is subject to the revenue metering requirements set forth in the Existing QF Contract for the QF and is not subject to the revenue metering requirements of Section 10. A QF Generating Unit that is not operating under the terms of an Existing QF Contract is subject to the metering requirements of Section 10 prohibiting the net metering of Generation and Load, except if it is subject to a Net Scheduled PGA. A Generating Unit that is a QF or a CHP Resource and that operates under the terms of a Net Scheduled PGA is eligible for net metering treatment. Notwithstanding Section 10.1.3.2, a Participating Generator with a Net Scheduled PGA may net the value for the Generation produced by each Net Scheduled Generating Unit listed in its Net Scheduled PGA and the value for the Demand of the Self-provided Load that is (i) served by the Net Scheduled Generating Unit and (ii) electrically located on the same side of the Point of Demarcation. The Participating Generator with a Net Scheduled PGA may satisfy the provisions of Section 10 for the installation of revenue metering by installing Metering Facilities at the Point of Demarcation; provided that the installed Metering Facilities satisfy the technical, functional, and performance requirements for Metering Facilities set forth in Section 10 and the applicable Business Practice Manual.

* * *

10.2.12 Exemptions

The CAISO has the authority to grant exemptions from certain CAISO metering standards for a CAISO Metered Entity, as set forth in Section 10.4. A CAISO Metered Entity with a temporary exemption shall provide site specific Revenue Quality Meter Data to the CAISO in accordance with its Meter Service Agreement for CAISO Metered Entities and the CAISO Tariff. A Generating Unit that provides Regulatory Must-Take Generation with an Existing QF Contract or an Amended QF Contract that is connected directly to a Distribution System and that sells its entire output to the UDC or in the MSS in which the Generating Unit is located is not subject to the audit, testing or certification requirements of the CAISO.

* * *

11.23 Penalties For Uninstructed Imbalance Energy

Effective December 1, 2004, the CAISO shall not charge any Uninstructed Deviation Penalties pursuant to this Section 11.23 until FERC issues an order authorizing the CAISO to charge Uninstructed Deviation Penalties pursuant to this section. Beginning with Settlement Statements for the first Trading Day for which FERC authorizes the CAISO to charge Uninstructed Deviation Penalties pursuant to this section, the CAISO shall charge Scheduling Coordinators Uninstructed Deviation Penalties for Uninstructed Imbalance Energy resulting from resource deviations outside a Tolerance Band from their Dispatch Operating Point, for dispatched resources, or their Day-Ahead Schedule otherwise. Publishing of Uninstructed Deviation Penalty results will not occur on the Initial Settlement Statement T+3B but rather will occur on the Recalculation Settlement Statement T+12B. The Uninstructed Deviation Penalty will be applied as follows:

- (a) The Uninstructed Deviation Penalty for negative Uninstructed Imbalance Energy will be calculated and assessed in each Settlement Interval. The Uninstructed Deviation Penalty for positive Uninstructed Imbalance Energy will be calculated and assessed in each Settlement Interval in which the CAISO has not declared a staged System Emergency;
- (b) The Uninstructed Deviation Penalty will apply to pre-Dispatched Bids from Non-Dynamic System Resources identified, when such a pre-Dispatch Instruction is issued more than forty (40) minutes prior to the relevant Operating Hour, subject to the following conditions: (i) the Uninstructed Deviation Penalty will only apply to the pre-Dispatched amount of the Bid that is declined or not delivered, (ii) the Uninstructed Deviation Penalty will not apply to a portion of a pre-Dispatched Bid that is subsequently not delivered at the direction of a Balancing Authority, including the CAISO, due to a curtailment of transmission capability or to prevent curtailment of native firm load occurring subsequent to issuing the pre-Dispatch Instruction, (iii) the Uninstructed Deviation Penalty will not apply to Uninstructed Imbalance Energy resulting from declining

subsequent intra-hour Dispatch Instructions. Dynamically scheduled Dynamic System Resources, to the extent they deviate from their Day-Ahead Schedule plus any Dispatch Instructions, will be subject to the Uninstructed Deviation Penalty.

- (c) The Uninstructed Deviation Penalty will not apply to Load, Curtailable Demand, or Demand Response Services.
- (d) **[NOT USED]**
- (e) The Uninstructed Deviation Penalty will not apply to Regulatory Must-Run Generation or Participating Intermittent Resources that meet the scheduling obligations established in the Eligible Intermittent Resources Protocol in Appendix Q. No other applicable charges will be affected by this exemption. The Uninstructed Deviation Penalty also will not apply to Qualifying Facilities (QFs), including those that are dynamically scheduled, that have not executed and are not required pursuant to this CAISO Tariff to execute a Participating Generator Agreement (PGA) or Net Scheduled Participating Generator Agreement.
- (f) All MSS resources designated as Load-following resources pursuant to Section 4.9.13.2 (regardless of gross or net settlement election) are exempt from Uninstructed Deviation Penalties in this Section 11.23. All MSS resources not designated as Load-following resources pursuant to Section 4.9.13.2 (regardless of gross or net Settlement election) are subject to Uninstructed Deviation Penalties in this Section 11.23.
- (g) The Uninstructed Deviation Penalty will apply to Generating Units providing Regulation and dynamically scheduled Dynamic System Resources providing Regulation to the extent that Uninstructed Deviations from such resources exceed each resource's actual Regulation range plus the applicable Tolerance Band. Resources providing Regulation and generating within their relevant Regulating

range (or outside their relevant Regulating range as a direct result of CAISO control or instruction) will be deemed to have zero (0) deviations for purposes of the Uninstructed Deviation Penalty.

- (h) The Uninstructed Deviation Penalty will be calculated and assessed for each resource individually, except as specified in Appendix R, which specifies when Uninstructed Deviations from individual resources may be aggregated.
- (i) The Uninstructed Deviation Penalty shall not apply to any Uninstructed Imbalance Energy resulting from compliance with a directive by the CAISO or the Reliability Coordinator.
- (j) **[NOT USED]**
- (k) The Uninstructed Deviation Penalty will not apply when the applicable LMP is negative or zero.
- (l) The Uninstructed Deviation Penalty for positive Uninstructed Imbalance Energy will be the amount of the Uninstructed Imbalance Energy in excess of the Tolerance Band multiplied by a price equal to one hundred (100) percent of the corresponding LMP. The relevant LMP will be calculated for each UDP Location as the ten-minute weighted average price of two five-minute Dispatch Interval LMPs and the two five-minute optimal Instructed Imbalance Energy quantities. The net effect of the Uninstructed Deviation Penalty and the Settlement for positive Uninstructed Imbalance Energy beyond the Tolerance Band will be that the CAISO will not pay for such Energy.
- (m) The Uninstructed Deviation Penalty for negative Uninstructed Imbalance Energy will be the amount of the Uninstructed Imbalance Energy in excess of the Tolerance Band multiplied by a price equal to fifty (50) percent of the corresponding Resource-Specific Settlement Interval LMP

or, in the case of aggregated resources, the Settlement Interval Penalty Location Real-Time LMP.

- (n) The Uninstructed Deviation Penalty will not apply to deviations from Energy delivered as part of a scheduled test so long as the test has been scheduled by the Scheduling Coordinator with the CAISO or the CAISO has initiated the test for the purposes of validating unit performance.
- (o) The Uninstructed Deviation Penalty shall not apply to any excess Energy delivered from or any shortfall of Energy not delivered from an Exceptional Dispatch, involving a Generating Unit or a System Unit unless the CAISO and the supplier have agreed upon the time of, duration of, and amount of Energy to be delivered in the out-of-market transaction and the CAISO reflects the out-of-market transaction in its Real-Time Expected Energy calculations. The Uninstructed Deviation Penalty shall apply to Energy outside the Tolerance Band from out-of-market transactions with dynamically scheduled Dynamic System Resources to the extent the agreed-to Energy is not delivered or over-delivered, and to any Energy from Non-Dynamic System Resources to the extent the agreed-to Energy is not delivered if that over- or under-delivery was due to action taken by or not taken by the System Resource and not the result of action taken by a Balancing Authority due to a curtailment of firm transmission capability or to prevent curtailment of native firm load occurring subsequent to the out-of-market transaction.
- (p) The Uninstructed Deviation Penalty shall not apply to Generating Units and dynamically scheduled Dynamic System Resources with Uninstructed Imbalance Energy if the Generating Unit or dynamically scheduled Dynamic System Resource was physically incapable of delivering the expected Energy or if systems malfunctions prevent receipt of Dispatch Instructions, provided that the Generating Unit or

dynamically scheduled Dynamic System Resource had notified the CAISO within thirty (30) minutes of the onset of an event that prevents the resource from performing its obligations. A Generating Unit or dynamically scheduled Dynamic System Resource must notify CAISO operations staff of its reasons for failing to deliver the Expected Energy in accordance with Section 9.3.10.6 and must provide information to the CAISO that verifies the reason the resource failed to comply with the Dispatch Instruction within forty-eight (48) hours of the Operating Hour in which the instruction is issued.

- (q) Adjustments to any Generating Unit, Curtailable Demand and System Resource Day-Ahead Schedules or HASP Intertie Schedules made in accordance with the terms of TRTC Instructions for Existing Contracts or TORs shall not be subject to Uninstructed Deviation Penalties. Valid changes to ETC Self-Schedules or TOR Self-Schedules submitted after the close of the HASP or the RTM shall not be subject to Uninstructed Deviation Penalties.
- (r) Any changes made to Schedules prior to the CAISO issuing HASP Intertie Schedules shall not be subject to Uninstructed Deviation Penalties.
- (s) Uninstructed Deviation Penalties shall not be charged to any deviation from a Dispatch Instruction that does not comply with the requirements set forth in this CAISO Tariff.
- (t) Amounts collected as Uninstructed Deviation Penalties shall first be assigned to reduce the portion of above-LMP costs that would otherwise be assigned pro rata to all Scheduling Coordinators in that Settlement Interval. Any remaining portion of amounts collected as Uninstructed Deviation Penalties after satisfying these sequential commitments shall be treated in accordance with Section 11.29.9.6.3.

- (u) Condition 2 RMR Units shall be exempt from Uninstructed Deviation Penalties.
- (v) The Uninstructed Deviation Penalty shall not apply to positive Uninstructed Imbalance Energy attributable to operation below the Generating Unit's Minimum Operating Limit from the time the Generating Unit synchronizes to the grid to the earlier of (1) the Settlement Interval in which the Generating Unit produces a quantity of Energy that represents an average rate of delivery over such Settlement Interval in excess of the Generating Unit's Minimum Operating Limit plus the applicable Tolerance Band, or (2) the first Settlement Interval after the expiration of a period of time that begins at the end of the Settlement Interval in which the Generating Unit synchronizes to the grid and ends after the Generating Unit's maximum Start-Up Time as specified in the Master File. The Uninstructed Deviation Penalty shall not apply to any positive Uninstructed Imbalance Energy attributable to operation below the Generating Unit's Minimum Operating Limit for a duration equal to the minimum of two Settlement Intervals or the time specified in the Master File for the Generating Unit to disconnect from the grid after reaching its Minimum Operating Limit following either (1) the last Settlement Interval of an hour in which the Generating Unit had a non-zero Day-Ahead Schedule or (2) the Settlement Interval in which the Generating Unit is expected to reach its Minimum Operating Limit based on the applicable Ramp Rate when the CAISO instructed the Generating Unit to Shut-Down. The amount of Uninstructed Imbalance Energy exempted from the Uninstructed Deviation Penalty shall not exceed the amount of the Generating Unit's Minimum Operating Limit plus the applicable Tolerance Band. This exception from the application of the

Uninstructed Deviation Penalty does not apply to Dynamic System Resources.

- (w) UDP shall not apply to deviations by a Generating Unit that are attributable to any automatic response to a system disturbance, including a response to correct frequency decay, in accordance with Applicable Reliability Criteria for the duration of the system disturbance, and for an additional five (5) minutes when a Generating Unit's deviation is in the same direction as the mitigating frequency response.
- (x) The Uninstructed Deviation Penalty shall not apply in the event that a malfunction in a CAISO system application causes an infeasible Dispatch Instruction to be communicated or prevents timely communication of a Dispatch Instruction or a SLIC malfunction prevents a resource from reporting an event that affects the resource's ability to deliver Energy.
- (y) The Uninstructed Deviation Penalty shall not apply to a failure to comply with a manual Dispatch Instruction that is not confirmed by a Dispatch Instruction transmitted through the CAISO's Automated Dispatch System.
- (z) The Uninstructed Deviation Penalty shall not apply if a Dispatch Instruction is validated after the start time of the instruction from the Settlement Interval in which the Dispatch Instruction was first effective to the earliest Settlement Interval, inclusive, in which the resource is able to respond to the Dispatch Instruction.

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30.5.2.2 Supply Bids for Participating Generators

In addition to the common elements listed in Section 30.5.2.1, Supply Bids for Participating Generators shall contain the following components as applicable: Start-Up Bid, Minimum Load Bid, Ramp Rate, Minimum and Maximum Operating Limits; Energy Limit, Regulatory Must-

Take/Must-Run Generation; Contingency Flag; and Contract Reference Number (if any). Scheduling Coordinators submitting these Bid components for a Multi-Stage Generating Resource must do so for the submitted MSG Configuration. Scheduling quantities that a Scheduling Coordinator schedules as Regulatory Must-Take Generation for a CHP Resource shall be limited to the quantity necessary in any hour to meet the reasonably anticipated industrial host's thermal requirements and shall not exceed any established RMTMax values. The CHP Resource owner or operator shall provide its Scheduling Coordinator with the Regulatory Must-Take Generation values and is solely responsible for the accuracy of the information. The Scheduling Coordinator for the CHP Resource will schedule the quantities consistent with information provided subject to any contract rights between the CHP Resource Generating Unit owner or operator and its counter-party to any power purchase agreement regarding curtailment or dispatchability of the CHP Resource. If the CHP Resource Generating Unit has a power purchase agreement and its counter-party is not the Scheduling Coordinator for the resource, the parties to the agreement share the responsibility for ensuring that the Scheduling Coordinator schedules the resource consistent with contractual rights of the counter-parties. A Scheduling Coordinator for a Physical Scheduling Plant or a System Unit may include Generation Distribution Factors as part of its Supply Bid. If the Scheduling Coordinator has not submitted the Generation Distribution Factors applicable for the Bid, the CAISO will use default Generation Distribution Factors stored in the Master File. All Generation Distribution Factors used by the CAISO will be normalized based on Outage data that is available to the automated market systems. A Multi-Stage Generating Resource and its MSG Configurations are registered under a single Resource ID and Scheduling Coordinator for the Multi-Stage Generating Resource must submit all Bids for the resource's MSG Configurations under the same Resource ID. For a Multi-Stage Generating Resources Scheduling Coordinators may submit bid curves for up to ten individual MSG Configurations of their Multi-Stage Generating Resources into the Day-Ahead Market and up to three individual MSG Configurations into the Real-Time Market. Scheduling Coordinators for Multi-Stage Generating Resources must submit a single Operational Ramp Rate for each MSG Configuration for which it submits a supply Bid either in the Day-Ahead Market or Real-Time

Market. For Multi-Stage Generating Resources the Scheduling Coordinator may submit the Transition Times, which cannot be greater than the maximum Transition Time registered in the Master File. To the extent the Scheduling Coordinator does not submit the Transition Time that is a registered feasible transition the CAISO will use the registered maximum Transition Time for that MSG Transition for the specific Multi-Stage Generating Resource.

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40.8.1.2 Nuclear and Thermal

Nuclear and thermal Generating Units, other than Qualifying Facilities with Existing QF Contracts addressed in Section 40.8.1.8 below, must be a Participating Generator or a System Unit. The Qualifying Capacity of nuclear and thermal units, other than Qualifying Facilities addressed in Section 40.8.1.8, will be based on net dependable capacity defined by NERC Generating Availability Data System information.

40.8.1.3 Hydro

Hydroelectric Generating Units, other than Qualifying Facilities with Existing QF Contracts, must be either Participating Generators or System Units. The Qualifying Capacity of a pond or Pumped-Storage Hydro Unit, other than a QF, will be determined based on net dependable capacity defined by NERC GADS minus variable head derate based on an average dry year reservoir level. The Qualifying Capacity of a pond or Pumped-Storage Hydro Unit that is a QF will be determined based on historic performance during the hours of noon to 6:00 p.m., using a three-year rolling average.

The Qualifying Capacity of all run-of-river hydro units, including Qualifying Facilities, will be based on net dependable capacity defined by NERC GADS minus an average dry year conveyance flow, stream flow, or canal head derate. As used in this section, average dry year reflects a one-in-five year dry hydro scenario (for example, using the 4th driest year from the last 20 years on record).

* * *

40.8.1.6 Wind and Solar

As used in this Section, wind units are those wind Generating Units without backup sources of Generation and solar units are those solar Generating Units without backup sources of Generation. Wind and solar units, other than Qualifying Facilities with Existing QF Contracts, must be Participating Intermittent Resources or subject to availability provisions of Section 40.6.4.3.4.

The Qualifying Capacity of all wind or solar units, including Qualifying Facilities, for each month will be based on their monthly historic performance during that same month during the hours of noon to 6:00 p.m., using a three-year rolling average. For wind or solar units with less than three years operating history, all months for which there is no historic performance data will utilize the monthly average production factor of all units (wind or solar, as applicable) within the TAC Area, or other production data from another area determined by the CAISO to be appropriate if the unit is not within a TAC Area, in which the Generating Unit is located.

40.8.1.7 Geothermal

Geothermal Generating Units, other than Qualifying Facilities with Existing QF Contracts addressed in Section 40.8.1.8, must be Participating Generators or System Units. The Qualifying Capacity of geothermal units, other than Qualifying Facilities addressed in Section 40.8.1.8, will be based on NERC GADS net dependable capacity minus a derate for steam field degradation.

40.8.1.8 Treatment of Qualifying Capacity for Qualifying Facilities

Qualifying Facilities must be subject to an effective Participating Generator Agreement or Net Scheduled Participating Generator Agreement or must be System Units, unless they have an Existing QF Contract. Except for hydro, wind, and solar Qualifying Facilities addressed pursuant to Sections 40.8.1.3 and 40.8.1.6, the Qualifying Capacity of Qualifying Facilities under Existing QF Contracts, will be based on historic monthly Generation output during the hours of noon to 6:00 p.m. (net of Self-provided Load) during a three-year rolling average.

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40.9.2 Exemptions

The following exemptions apply to the CAISO's Availability Standards program of this Section 40.9:

- (1) Resources with a PMax less than one (1.0) MW will not be used to determine Availability Standards, will not be subject to Non-Availability Charges or Availability Incentive Payments, and will not be subject to the additional Outage reporting requirements of this Section 40.9.
- (2) Capacity under a resource specific power supply contract that existed prior to June 28, 2009 and Resource Adequacy Capacity that was procured under a contract that was either executed or submitted to the applicable Local Regulatory Authority for approval prior to June 28, 2009, and is associated with specific Generating Units or System Resources, will not be subject to Non-Availability Charges or Availability Incentive Payments. Such contracted Resource Adequacy Capacity, except for non Resource-Specific System Resources, will be included in the development of Availability Standards and will be subject to any Outage reporting requirements necessary for this purpose. The exemption will apply only for the initial term of the contract and to the MW capacity quantity and Resource Adequacy Resources specified in the contract prior to June 28, 2009. The exemption shall terminate upon the conclusion of the initial contract term. Exempt contracts may be re-assigned or undergo novation on or after June 28, 2009, but the exemption shall not apply for any extended contract term, increased capacity quantity or additional resource(s) beyond those specified in the contract prior to June 28, 2009, except as provided in Section 40.9.2(7) or 40.9.2(8). Scheduling Coordinators for Resource Adequacy Resources subject to these contracts will be required to certify the start date of the contract, the expiration date, the Resource ID(s), and the amount of Resource Adequacy Capacity associated with each Resource ID included in the contract. For Resource Adequacy Resources whose Qualifying Capacity value is determined

by historical output, the capacity under a resource specific power supply contract or Resource Adequacy Capacity that was procured under a contract that was either executed or submitted to the applicable Local Regulatory Authority for approval that meets the requirements in this subsection (2) will not be subject to Non-Availability Charges or Availability Incentive Payments, except that the deadline date for either type of contract shall be August 22, 2010 instead of June 28, 2009.

- (3) For a contract entered into prior to June 28, 2009 that provides for the amount of Resource Adequacy Capacity to increase during the original term of the contract, based on a ratio of the Resource Adequacy Resource's output or due to an addition of capacity, the exemption provided in subsection (2) of this Section 40.9.2 will apply to the additional capacity allowed under the contract; provided that the capacity increase (i) is expressly contained in the provisions of the contract, (ii) occurs during the primary term of the contract; and (iii) does not result from contract extensions or other amendments to the original terms and conditions of the contract, except as provided in Section 40.9.2(7) or 40.9.2(8). Scheduling Coordinators for Resource Adequacy Resources subject to contracts that provide for such capacity increases or additions must include in their certification, in addition to the requirements of subsection (2) of this Section 40.9.2, (i) the citation to any contract provisions that might entitle them to increased exempt Resource Adequacy Capacity from the contracted resources during the primary term of the contract; (ii) the amount of additional capacity to which they might be entitled; and (iii) the actual effective date of the capacity increase. If the actual amount of capacity and/or the actual effective date of the capacity increase is not known at the time of the initial certification, the Scheduling Coordinator shall provide a supplemental certification(s) when this information becomes known. For Resource Adequacy Resources whose Qualifying Capacity value is determined by historical output the exemption

provided in subsection (2) of this Section 40.9.2 will apply to an increase in the capacity under a resource specific power supply contract or Resource Adequacy Capacity that was procured under a contract that was either executed or submitted to the applicable Local Regulatory Authority for approval that meets the requirements in this subsection (3), except that the deadline date for either type of contract to be exempt shall be August 22, 2010 instead of June 28, 2009.

- (4) Demand response resources will not be used to determine Availability Standards, will not be subject to Non-Availability Charges or Availability Incentive Payments, and will not be subject to the additional Outage reporting requirements of this Section 40.9.
- (5) Resource Adequacy Capacity provided through contracts for Energy from non-specified resources delivered within the CAISO Balancing Authority Area will not be used to determine Availability Standards, will not be subject to Non-Availability Charges or Availability Incentive Payments, and will not be subject to the additional Outage reporting requirements of this Section 40.9.
- (6) Resource Adequacy Resources of a Modified Reserve Sharing LSE or a Load following MSS will be used to determine the Availability Standards and will be subject to any Outage reporting requirements necessary for this purpose. Non-Local Capacity Area Resource Adequacy Resources of a Modified Reserve Sharing LSE or a Load following MSS will not be subject to Non-Availability Charges or Availability Incentive Payments, but those entities shall remain responsible for any other applicable deficiency payments under this CAISO Tariff or the applicable MSS Agreement.
- (7) Scheduling Coordinators for resources with Existing QF Contracts or Amended QF Contracts that are Resource Adequacy Resources shall be exempt from the Outage reporting requirements of Section 40.9 if the resource previously provided Resource Adequacy Capacity under an Existing QF Contract that was exempt from the application of Non-Availability Charges and Availability Incentive

Payments pursuant to Section 40.9.2(2) or 40.9.2(3). This exemption from the Outage reporting requirements of Section 40.9 shall end for each resource when the Existing QF Contract or Amended QF Contract terminates or it is no longer eligible for exemption under Section 40.9.2(2) or 40.9.2(3), or if requested by the Scheduling Coordinator for the resource, whichever is earlier.

- (8) Scheduling Coordinators for resources with Existing QF Contracts or Amended QF Contracts that are Resource Adequacy Resources shall be exempt from the Outage reporting requirements of Section 40.9, and will not be subject to Non-Availability Charges or Availability Incentive Payments, if the QF resource previously provided Resource Adequacy Capacity pursuant to an Existing QF Contract that was executed prior to the August 22, 2010 deadline for exemption under Section 40.9.2(2), and remained in effect pursuant to California Public Utilities Commission Decision 07-09-040 that extended the term of expiring contracts until such time as the new contracts resulting from that decision are available. This exemption from the Outage reporting requirements of Section 40.9, and the Availability Incentive Payments and Non-Availability Charges, shall end for each resource when its Existing QF Contract or Amended QF Contract terminates or if requested by the Scheduling Coordinator for the resource, whichever is earlier.

Exclusions from the Availability Standards and Outage reporting requirements established in this Section 40.9 are for this Section 40.9 alone and do not affect any other obligation arising under the CAISO Tariff.

* * *

43.5.2 Obligation To Provide Capacity And Termination

The decision to accept an CPM designation shall be voluntary for the Scheduling Coordinator for any resource. If the Scheduling Coordinator for a resource accepts an CPM designation, it shall be obligated to perform for the full quantity and full period of the designation with respect to the amount of CPM Capacity for which it has accepted an CPM designation. If a Participating

Generator's or Participating Load's Eligible Capacity is designated under the CPM after the Participating Generator or Participating Load has filed notice to terminate its Participating Generator Agreement, Net Scheduled PGA, Pseudo-Tie Participating Generator Agreement, or Participating Load Agreement or withdraw the Eligible Capacity from its Participating Generator Agreement, Net Scheduled PGA, Pseudo-Tie Participating Generator Agreement, or Participating Load Agreement, and the Scheduling Coordinator for the resource agrees to provide service under the CPM, then the Scheduling Coordinator shall enter into a new Participating Generator Agreement, Net Scheduled PGA, Pseudo-Tie Participating Generator Agreement, or Participating Load Agreement, as applicable, with the CAISO.

* * *

Appendix A

Master Definition Supplement

* * *

- Amended QF Contract

A Legacy PPA, as defined in the settlement approved by the CPUC in Decision D. 10-12-035 (December 16, 2010), as modified in Decision D.11-07-010 (July 15, 2011), that became effective on or prior to December 20, 1995 or, in the case of a Participating Generator employing landfill gas technology, on or prior to December 31, 1996, that has been amended to include terms that conform with a Legacy PPA Amendment or a Legacy PPA C1 Amendment, as defined by said settlement, but also in a manner that (a) requires compliance with the CAISO Tariff; (b) does not extend the term of the agreement or provide for an increase in the generating capacity of the resource; and (c) does not change the electrical characteristics of the resource.

* * *

- CHP Resource

A Combined Heat and Power Resource.

* * *

- Combined Heat and Power Resource

A Generating Unit that produces electric energy and forms of useful thermal energy used by an industrial or commercial host for industrial, commercial, heating or cooling purposes or a Generating Unit that produces electricity from waste heat from an industrial or commercial host.

* * *

- Eligible Intermittent Resource

A Generating Unit or Dynamic System Resource 1 MW or larger subject to a Participating Generator Agreement, Net Scheduled PGA, Dynamic Scheduling Agreement for Scheduling Coordinators, or Pseudo-Tie Participating Generator Agreement that is powered by wind or solar energy, except for a de minimis amount of Energy from other sources.

* * *

- Existing QF Contract

A Legacy PPA, as defined in the settlement approved by the CPUC in Decision D. 10-12-035 (December 16, 2010), as modified in Decision D.11-07-010 (July 15, 2011), that became effective on or prior to December 20, 1995 or, in the case of a Generator employing landfill gas technology, on or prior to December 31, 1996, and (1) has not been amended subsequent to November 23, 2011 or (2) has been amended in a manner that (a) does not extend the term of the Legacy Contract, (b) does not increase the capacity subject to the PPA, and (c) does not require compliance with the CAISO Tariff.

* * *

- Net Scheduled Generating Unit

A Generating Unit identified in a Net Scheduled PGA operated as a single unit such that the Energy bid or self-scheduled with the CAISO is the net value of the aggregate electrical net output of the Generating Unit and the Self-provided Load.

Net Scheduled Participating Generator Agreement

An agreement between the CAISO and a Generator eligible to execute such an agreement under Section 4.6.3.3, a pro forma version of which is set forth in Appendix B.3.

Net Scheduled PGA

A Net Scheduled Participating Generator Agreement.

* * *

- Participating Generator

A Generator or other seller of Energy or Ancillary Services through a Scheduling Coordinator over the CAISO Controlled Grid (1) from a Generating Unit with a rated capacity of 1 MW or greater, (2) from a Generating Unit with a rated capacity of from 500 kW up to 1 MW for which the Generator elects to be a Participating Generator, or (3) from a Generating Unit providing Ancillary Services or submitting Energy Bids through an aggregation arrangement approved by the CAISO, which has undertaken to be bound by the terms of the CAISO Tariff, in the case of a Generator through a Participating Generator Agreement, Net Scheduled PGA, or Pseudo-Tie Participating Generator Agreement.

* * *

- Point Of Demarcation

For a Net Scheduled Generating Unit, the point (1) where the electrical conductors from the Net Scheduled Generating Unit contact an electric utility system or the CAISO Controlled Grid; or (2) if dedicated utility distribution facilities are employed, where the dedicated facilities contact the electric utility system or the CAISO Controlled Grid.

* * *

- Regulatory Must-Take Generation

Generation from the following resources that the relevant Scheduling Coordinator schedules directly with the CAISO as Regulatory Must-Take Generation:

- (1) Generation from Generating Units subject to
 - (a) an Existing QF Contract or an Amended QF Contract, or
 - (b) a QF power purchase agreement for a QF 20 MW or smaller pursuant to a mandatory purchase obligation as defined by federal law;
- (2) Generation delivered from a CHP Resource needed to serve its host thermal requirements up to RMTMax in any hour; and
- (3) Generation from nuclear units.

* * *

- RMTMax

For a Generating Unit that provides Regulatory Must-Take Generation from a CHP Resource, the minimum operating level at which the Generating Unit can safely and reliably meet host requirements as established under section 4.6.10, including the production of electricity from heat produced as a consequence of the industrial host's operations.

* * *

- Self-Provided Load

The portion of Load that is served by a Net Scheduled Generating Unit listed in a Net Scheduled PGA, consistent with Section 218(b) of the California Public Utilities Code.

* * *

**Appendix B
Pro Forma Agreements**

* * *

**Appendix B.2
Participating Generator Agreement**

* * *

2.2.1 Exemption for Certain Generators. A Generator with an Existing QF Contract with a UDC is not required to sign a Participating Generator Agreement if: (a) the Generator sells all of its Energy (excluding any Energy consumed by auxiliary Load equipment electrically connected to that Generator's Generating Unit at the same point) and Ancillary Services to the UDC; (b) the Generator sells any Energy through "over the fence" arrangements as authorized under Section 218(b) of the California Public Utilities Code; or (c) the Generator employs landfill gas technology for the generation of electricity as authorized under 218(c) of the California Public Utilities Code.

* * *

Appendix B.3

Net Scheduled Participating Generator Agreement

THIS AGREEMENT is dated this ____ day of _____, ____ and is entered into, by and between:

(1) **[Full Legal Name]**, having its registered and principal place of business located at **[Address]** (the "Participating Generator");

and

(2) **California Independent System Operator Corporation**, a California nonprofit public benefit corporation having a principal executive office located at such place in the State of California as the CAISO Governing Board may from time to time designate (the "CAISO").

The Participating Generator and the CAISO are hereinafter referred to as the "Parties".

Whereas:

- A.** The CAISO Tariff provides that the CAISO shall not accept Bids for Energy or Ancillary Services generated by any Generating Unit interconnected to the CAISO Controlled Grid, or to the Distribution System of a Participating TO or of a UDC or MSS Operator otherwise than through a Scheduling Coordinator.
- B.** The CAISO Tariff further provides that the CAISO shall not be obliged to accept Bids relating to Generation from any Generating Unit interconnected to the CAISO Controlled Grid unless the relevant Generator undertakes in writing to the CAISO to comply with all applicable provisions of the CAISO Tariff.
- C.** The Participating Generator wishes to be able to submit Bids, from a Net Scheduled Generating Unit to the CAISO through a Scheduling Coordinator and, therefore, wishes to undertake to the CAISO that it will comply with the applicable provisions of the CAISO Tariff, except as otherwise specified in this Agreement.
- D.** It is the intent of the Parties that this Agreement will harmonize the special operational characteristics of the Participating Generator's Net Scheduled Generating Unit with the CAISO's grid operation function. Nothing in this Agreement is intended to limit or restrict the rights of the Participating Generator under Section 4.6.3.2 of the CAISO Tariff.
- E.** The Parties are entering into this Agreement in order to establish the terms and conditions on which the CAISO and the Participating Generator will discharge their respective duties and responsibilities under the CAISO Tariff.

NOW THEREFORE, in consideration of the mutual covenants set forth herein, **THE PARTIES AGREE** as follows:

ARTICLE I

DEFINITIONS AND INTERPRETATION

1.1 Master Definitions Supplement. Unless defined in this Agreement, all capitalized terms and expressions used in this Agreement shall have the same meaning as those contained in the Master Definitions Supplement to the CAISO Tariff.

1.2 Rules of Interpretation. The following rules of interpretation and conventions shall apply to this Agreement:

- (a) if there is any inconsistency between this Agreement and the CAISO Tariff, the CAISO Tariff will prevail to the extent of the inconsistency, except as expressly provided otherwise in this Agreement;
- (b) the singular shall include the plural and vice versa;
- (c) the masculine shall include the feminine and neutral and vice versa;
- (d) "includes" or "including" shall mean "including without limitation";
- (e) references to a Section, Article or Schedule shall mean a Section, Article or a Schedule of this Agreement, as the case may be, unless the context otherwise requires;
- (f) a reference to a given agreement or instrument shall be a reference to that agreement or instrument as modified, amended, supplemented or restated through the date as of which such reference is made;
- (g) unless the context otherwise requires, references to any law shall be deemed references to such law as it may be amended, replaced or restated from time to time;
- (h) 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 personality;
- (i) unless the context otherwise requires, any reference to a Party includes a reference to its permitted successors and assigns;
- (j) any reference to a day, week, month or year is to a calendar day, week, month or year; and
- (k) the captions and headings in this Agreement are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Agreement.

ARTICLE II

ACKNOWLEDGEMENTS OF PARTICIPATING GENERATOR AND CAISO

- 2.1 CAISO Responsibility.** The Parties acknowledge that the CAISO is responsible for the efficient use and reliable operation of the CAISO Controlled Grid consistent with achievement of planning and Operating Reserve criteria no less stringent than those established by the Western Electricity Coordinating Council and the North American Electric Reliability Corporation and further acknowledges that the CAISO may not be able to satisfy fully these responsibilities if the Participating Generator fails to fully comply with all of its obligations under this Agreement.
- 2.2 Scope of Application to Parties.** The Participating Generator and CAISO acknowledge that all Qualifying Facility Generators (except those specified in Section 2.2.1 of this Agreement) and CHP Resources wishing to submit Bids to the CAISO through a Scheduling Coordinator shall first execute this Agreement or the standard Participating Generator Agreement applicable to any Generator. The Parties acknowledge that execution of this Agreement by the Participating Generator satisfies the requirement set forth in Section 4.6 of the CAISO Tariff.
- 2.2.1 Exemption for Certain Generators.** A Generator with an Existing QF Contract with a UDC is not required to sign a Net Scheduled Participating Generator Agreement if: (a) the Generator sells all of its Energy (excluding any Energy consumed by auxiliary Load equipment electrically connected to the QF at the same point) and Ancillary Services to the UDC; (b) the Generator sells any Energy through "over the fence" arrangements as authorized under Section 218(b) of the California Public Utilities Code; or (c) the Generator employs landfill gas technology for the generation of electricity as authorized under 218(c) of the California Public Utilities Code.

ARTICLE III

TERM AND TERMINATION

- 3.1 Effective Date.** This Agreement shall remain in full force and effect until terminated pursuant to Section 3.2 of this Agreement and shall be effective as of the later of: (1) the date the Agreement is executed by the Parties; or (2) where the Participating Generator is a party to an existing Participating Generator Agreement, the date upon which termination of the existing Participating Generator Agreement is accepted for filing and made effective by FERC, if such FERC filing is required; or (3) where the Participating Generator is a party to an existing Participating Generator Agreement and this Agreement is required to be filed with FERC for acceptance, the later of the date upon which termination of the existing Participating Generator Agreement is accepted for filing and made effective by FERC, or the date this Agreement is accepted for filing and made effective by FERC.
- 3.2 Termination**
- 3.2.1 Termination by CAISO.** Subject to Section 5.2, the CAISO may terminate this Agreement by giving written notice of termination in the event that the Participating Generator commits any material default under this Agreement and/or the CAISO Tariff which, if capable of being remedied, is not remedied within thirty (30) days after the CAISO has given, to the Participating Generator, written notice of the default, unless excused by reason of Uncontrollable Forces in accordance with Article X of this Agreement. With respect to any notice of termination given pursuant to this Section, the CAISO must file a timely notice of termination with FERC, if this Agreement was filed with FERC, or must otherwise comply with the requirements of FERC Order No. 2001 and related FERC orders. The filing of the notice of termination by the CAISO with FERC will be considered timely if: (1) the filing of the notice of termination is made after the

preconditions for termination have been met, and the CAISO files the notice of termination within sixty (60) days after issuance of the notice of default; or (2) the CAISO files the notice of termination in accordance with the requirements of FERC Order No. 2001. This Agreement shall terminate upon acceptance by FERC of such a notice of termination, if filed with FERC, or thirty (30) days after the date of the CAISO's notice of default, if terminated in accordance with the requirements of FERC Order No. 2001 and related FERC orders.

- 3.2.2 Termination by Participating Generator.** In the event that the Participating Generator no longer wishes to submit Bids and transmit Energy or provide Ancillary Services through a Scheduling Coordinator over the CAISO Controlled Grid, it may terminate this Agreement, on giving the CAISO not less than ninety (90) days written notice, provided, however, that in accordance with Section 4.1.3, the Participating Generator may modify Schedule 1 to eliminate generating resources which it no longer owns or no longer has contractual entitlement to and such modification shall be effective upon receipt by the CAISO. With respect to any notice of termination given pursuant to this Section, the CAISO must file a timely notice of termination with FERC, if this Agreement has been filed with FERC, or must otherwise comply with the requirements of FERC Order No. 2001 and related FERC orders. The filing of the notice of termination by the CAISO with FERC will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and the CAISO files the notice of termination within thirty (30) days of receipt of such request; or (2) the CAISO files the notice of termination in accordance with the requirements of FERC Order No. 2001. This Agreement shall terminate upon acceptance by FERC of such a notice of termination, if such notice is required to be filed with FERC, or upon ninety (90) days after the CAISO's receipt of the Participating Generator's notice of termination, if terminated in accordance with the requirements of FERC Order No. 2001 and related FERC orders.

ARTICLE IV

GENERAL TERMS AND CONDITIONS

4.1 Net Scheduled Generating Units

- 4.1.1 Identification of Net Scheduled Net Scheduled Generating Unit.** The Participating Generator has identified the Net Scheduled Generating Unit that it owns, operates or has a contractual entitlement to, in Schedule 1, as required by Section 4.6.4 of the CAISO Tariff.
- 4.1.2 Technical Characteristics.** The Participating Generator shall provide to the CAISO the required information regarding operating contacts, rated capacity, and operating characteristics of the Net Scheduled Generating Unit. Pursuant to Sections 8.9 and 8.10 of the CAISO Tariff, and the Existing QF Contract or Amended QF Contract, if any, associated with that Net Scheduled Generating Unit, the CAISO may verify, inspect and test the capacity and operating characteristics of the Net Scheduled Generating Unit. The performance of such inspection or test shall be conducted at a time mutually agreed upon by the Parties, which agreement shall not unreasonably be withheld.
- 4.1.3 Notification of Changes.** Sixty (60) days prior to changing any technical information in Schedule 1, the Participating Generator shall notify the CAISO of the proposed changes. Pursuant to Sections 8.9 and 8.10 of the CAISO Tariff, the CAISO may verify, inspect and test the capacity and operating characteristics; provided that the performance of such inspection or test is conducted at a time mutually agreed upon by the Parties, which agreement shall not unreasonably be withheld. The CAISO shall post on the CAISO Website a schedule showing, for at least one year in advance: (i) the proposed dates on which the CAISO's Master File will be updated, which dates shall occur at least every

three months; (ii) the dates on which the information contained in the revised Master File will become effective; and (iii) the deadlines by which changed technical information must be submitted to the CAISO in order to be tested and included in the next scheduled update of the CAISO's Master File. Unless the Participating Generator fails to test at the values in the proposed change(s), the change will become effective upon the effective date for the next scheduled update of the Master File, provided the Participating Generator submits the changed information by the applicable deadline. Subject to such notification this Agreement shall not apply to any Net Scheduled Generating Unit identified in Schedule 1 which the Participating Generator no longer owns nor has contractual entitlement.

- 4.2 Agreement Subject to CAISO Tariff.** The Parties will comply with all applicable provisions of the CAISO Tariff except as expressly provided in Sections 4.2.1 through 4.2.5 of this Agreement.
- 4.2.1 Net Generation Metering.** Notwithstanding Section 10.1.3 of the CAISO Tariff, the Participating Generator may net the value for the Generation produced by each Net Scheduled Generating Unit listed in Schedule 1 and the value for the Demand of the Self-provided Load that is (i) served by the Net Scheduled Generating Unit and (ii) electrically located on the same side of the Point of Demarcation.
- 4.2.2 Meter and Telemetry Location.** The Participating Generator may satisfy the provisions of the CAISO Tariff for the installation of meters and telemetry by installing at the Point of Demarcation meters and telemetry for the purpose of recording the net impact of the Net Scheduled Generating Unit upon the CAISO Controlled Grid; provided that the installed meters and telemetry satisfy the technical functional and performance requirements for meters and telemetry set forth in the CAISO Tariff.
- 4.2.3 Scheduling, Billing and Settlement.** For scheduling, billing, and settlement purposes regarding Net Scheduled Generating Unit Self-provided Load, measurements shall be made at the Point of Demarcation.
- 4.2.4 Operating Limitations.** Net Scheduled Generating Unit operating limitations shall be set forth in Schedule 1 of this Agreement, the resource data template used for transmittal of Participating Generator technical data to the CAISO pursuant to the CAISO Tariff, or as otherwise mutually agreed to by the Parties.
- 4.2.5 Limitations on CAISO Operating Orders.** The CAISO will not knowingly issue an operating order that: (1) requires the Participating Generator to reduce its Generation below the delineated minimum operating limit, other than in a System Emergency; (2) conflicts with operating instructions provided by the Participating Generator; or (3) results in damage to the Participating Generator's equipment, provided that any such equipment limitation has been provided to the CAISO and incorporated in the Participating Generator's operating instructions to the CAISO. If the Participating Generator: (1) receives a Schedule which requires operation below the minimum operating limit, and (2) deviates from that Schedule to continue to operate at the minimum operating limit, it will not be subject to any penalties or sanctions as a result of operating at the minimum operating limit. The Participating Generator's consequences for deviating from Schedules in Real-Time will be governed by the CAISO Tariff.
- 4.3 Obligations Relating to Ancillary Services**
- 4.3.1 Submission of Bids.** When the Scheduling Coordinator on behalf of the Participating Generator submits a Bid for Ancillary Services, the Participating Generator will, by the operation of this Section 4.3.1, warrant to the CAISO that it has the capability to provide

that service in accordance with the CAISO Tariff and that it will comply with CAISO Dispatch Instructions for the provision of the service in accordance with the CAISO Tariff.

- 4.3.2 Certification.** The Participating Generator shall not use a Scheduling Coordinator to submit a Bid for the provision of an Ancillary Service or submit a Submission to Self-Provide an Ancillary Service unless the Scheduling Coordinator serving that Participating Generator is in possession of a current certificate pursuant to Sections 8.3.4 and 8.4 of the CAISO Tariff.
- 4.4 Obligations relating to Major Incidents**
- 4.4.1 Major Incident Reports.** The Participating Generator shall promptly provide such information as the CAISO may reasonably request in relation to major incidents, in accordance with Section 4.6.7.3 of the CAISO Tariff.
- 4.5 Dispatch and Curtailment.** The CAISO shall only dispatch or curtail a Net Scheduled Generating Unit of the Participating Generator: (a) to the extent the Participating Generator bids Energy or Ancillary Services from the Net Scheduled Generating Unit into the CAISO's markets or the Energy is otherwise available to the CAISO under Section 40 or 43 of the CAISO Tariff; or (b) if the CAISO must dispatch or curtail the Net Scheduled Generating Unit in order to respond to an existing or imminent System Emergency or condition that would compromise CAISO Balancing Authority Area integrity or reliability as provided in Sections 7 and 7.6.1 of the CAISO Tariff.
- 4.6 Information to Be Provided by Participating Generator.** The Participating Generator shall provide to the CAISO (a) a copy of any existing power purchase agreement, if any, with a UDC or MSS for the Net Scheduled Generating Unit listed in Schedule 1, and (b) a copy or a summary of the primary terms of any agreement for standby service with a UDC or MSS Operator, a statement that the Net Scheduled Generating Unit is taking standby service pursuant to UDC tariff, or a statement that the Self-provided Load shall be curtailed concurrently with any Outage of the Generation serving that Self-provided Load in an amount sufficient to cover that Outage. The Participating Generator shall notify the CAISO promptly of any change in the status of any of the foregoing.

ARTICLE V

PENALTIES AND SANCTIONS

- 5.1 Penalties.** If the Participating Generator fails to comply with any provisions of this Agreement, the CAISO shall be entitled to impose penalties and sanctions on the Participating Generator. No penalties or sanctions may be imposed under this Agreement unless a Schedule or CAISO Tariff provision providing for such penalties or sanctions has first been filed with and made effective by FERC. Nothing in the Agreement, with the exception of the provisions relating to the CAISO ADR Procedures, shall be construed as waiving the rights of the Participating Generator to oppose or protest any penalty proposed by the CAISO to the FERC or the specific imposition by the CAISO of any FERC-approved penalty on the Participating Generator.
- 5.2 Corrective Measures.** If the Participating Generator fails to meet or maintain the requirements set forth in this Agreement and/or in the CAISO Tariff as limited by the provisions of this Agreement, the CAISO shall be permitted to take any of the measures, contained or referenced in the CAISO Tariff, which the CAISO deems to be necessary to correct the situation.

ARTICLE VI

COSTS

- 6.1 Operating and Maintenance Costs.** The Participating Generator shall be responsible for all its costs incurred in connection with operating and maintaining the Net Scheduled QF identified in Schedule 1 for the purpose of meeting its obligations under this Agreement.

ARTICLE VII

DISPUTE RESOLUTION

- 7.1 Dispute Resolution.** The Parties shall make reasonable efforts to settle all disputes arising out of or in connection with this Agreement. In the event any dispute is not settled, the Parties shall adhere to the CAISO ADR Procedures set forth in Section 13 of the CAISO Tariff, which is incorporated by reference, except that any reference in Section 13 of the CAISO Tariff to Market Participants shall be read as a reference to the Participating Generator and references to the CAISO Tariff shall be read as references to this Agreement.

ARTICLE VIII

REPRESENTATIONS AND WARRANTIES

- 8.1 Representation and Warranties.** Each Party represents and warrants that the execution, delivery and performance of this Agreement by it has been duly authorized by all necessary corporate and/or governmental actions, to the extent authorized by law.
- 8.2 Necessary Approvals.** The Participating Generator represents that all necessary leases, approvals, permits, licenses, easements, rights of way or access to install, own and/or operate its Net Scheduled QF have been or will be obtained by the Participating Generator prior to the effective date of this Agreement.
- 8.3 Specific Warranty.** The Participating Generator represents and warrants that: (1) the Net Scheduled Generating Unit listed in Schedule 1 is (a) a Qualifying Facility or is operated as an integral part of a Qualifying Facility, or (b) is a CHP Resource, and (2) (a) the Self-provided Load of the Participating Generator that is served by the Net Scheduling QF either has, and continues to have through the term of this Agreement, standby service from a UDC or MSS Operator under terms approved by the Local Regulatory Authority or the Federal Energy Regulatory Commission, as applicable, or (b) the Self-provided Load shall be curtailed concurrently with any Outage of the Generation serving that Self-provided Load in an amount sufficient to cover that Outage.

ARTICLE IX

LIABILITY

- 9.1 Liability.** The provisions of Section 14 of the CAISO Tariff will apply to liability arising under this Agreement, except that all references in Section 14 of the CAISO Tariff to Market Participants shall be read as references to the Participating Generator and references to the CAISO Tariff shall be read as references to this Agreement.

ARTICLE X

UNCONTROLLABLE FORCES

- 10.1 Uncontrollable Forces Tariff Provisions.** Section 14.1 of the CAISO Tariff shall be incorporated by reference into this Agreement except that all references in Section 14.1 of the CAISO Tariff to Market Participants shall be read as a reference to the Participating Generator and references to the CAISO Tariff shall be read as references to this Agreement.

ARTICLE XI

MISCELLANEOUS

- 11.1 Assignments.** Either Party may assign or transfer any or all of its rights and/or obligations under this Agreement with the other Party's prior written consent in accordance with Section 22.2 of the CAISO Tariff. Such consent shall not be unreasonably withheld. Any such transfer or assignment shall be conditioned upon the successor in interest accepting the rights and/or obligations under this Agreement as if said successor in interest was an original Party to this Agreement.
- 11.2 Notices.** Any notice, demand or request which may be given to or made upon either Party regarding this Agreement shall be made in accordance with Section 22.4 of the CAISO Tariff, provided that all references in Section 22.4 of the CAISO Tariff to Market Participants shall be read as a reference to the Participating Generator and references to the CAISO Tariff shall be read as references to this Agreement, and unless otherwise stated or agreed shall be made to the representative of the other Party indicated in Schedule 3. A Party must update the information in Schedule 3 of this Agreement as information changes. Such changes shall not constitute an amendment to this Agreement.
- 11.3 Waivers.** Any waiver at any time by either Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- 11.4 Governing Law and Forum.** This Agreement shall be deemed to be a contract made under, and for all purposes shall be governed by and construed in accordance with, the laws of the State of California, except its conflict of law provisions. The Parties irrevocably consent that any legal action or proceeding arising under or relating to this Agreement to which the CAISO ADR Procedures do not apply, shall be brought in any of the following forums, as appropriate: any court of the State of California, any federal

court of the United States of America located in the State of California, or, where subject to its jurisdiction, before the Federal Energy Regulatory Commission.

- 11.5 Consistency with Federal Laws and Regulations.** This Agreement shall incorporate by reference Section 22.9 of the CAISO Tariff as if the references to the CAISO Tariff were referring to this Agreement.
- 11.6 Merger.** This Agreement constitutes the complete and final agreement of the Parties with respect to the subject matter hereof and supersedes all prior agreements, whether written or oral, with respect to such subject matter.
- 11.7 Severability.** If any term, covenant, or condition of this Agreement or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Agreement and their application shall not be affected thereby, but shall remain in force and effect and the Parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination unless a court or governmental agency of competent jurisdiction holds that such provisions are not separable from all other provisions of this Agreement.
- 11.8 [NOT USED]**
- 11.9 Amendments.** This Agreement and the Schedules attached hereto may be amended from time to time by the mutual agreement of the Parties in writing. Amendments that require FERC approval shall not take effect until FERC has accepted such amendments for filing and made them effective. If the amendment does not require FERC approval, the amendment will be filed with FERC for information. Nothing contained herein shall be construed as affecting in any way the right of the CAISO to unilaterally make application to FERC for a change in the rates, terms and conditions of this Agreement under Section 205 of the FPA and pursuant to FERC's rules and regulations promulgated thereunder, and the Participating Generator shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the FPA and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the FPA and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 11.10 Counterparts.** This Agreement may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same Agreement.
- 11.11 Rights Reserved.** Execution of this Agreement does not deprive the Participating Generator of any unexpressed legal right, either under law or under an existing power purchase agreement.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be duly executed on behalf of each by and through their authorized representatives as of the date hereinabove written.

California Independent System Operator Corporation

By: _____

Name: _____

Title: _____

Date: _____

[NAME OF PARTICIPATING GENERATOR]

By: _____

Name: _____

Title: _____

Date: _____

[The following page is a placeholder for Schedule 1, Section 1.]

SCHEDULE 2

CAISO IMPOSED PENALTIES AND SANCTIONS

[Section 5.1]

TO BE INSERTED UPON FERC APPROVAL

SCHEDULE 3

NOTICES
(Section 11.2)

Participating Generator

Name of Primary

Representative: _____

Title: _____

Address: _____

City/State/Zip Code: _____

Email Address: _____

Phone: _____

Fax No: _____

Name of Alternative

Representative: _____

Title: _____

Address: _____

City/State/Zip Code: _____

Email Address: _____

Phone: _____

Fax No: _____

CAISO

Name of Primary

Representative: _____

Title: _____

Address: _____

City/State/Zip Code: _____

Email Address: _____

Phone: _____

Fax No: _____

Name of Alternative

Representative: _____

Title: _____

Address: _____

City/State/Zip Code: _____

Email Address: _____

Phone: _____

Fax No: _____

* * *

Appendix F

Rate Schedules

* * *

Schedule 4

Eligible Intermittent Resources Forecast Fee

A charge up to \$.10 per MWh shall be assessed on the metered Energy from Eligible Intermittent Resources as a Forecast Fee, provided that Eligible Intermittent Resources smaller than 10 MW that are not Participating Intermittent Resources and that sold power pursuant to a power purchase agreement

entered into pursuant to PURPA prior to entering into a PGA or Net Scheduled PGA shall be exempt from the Forecast Fee.

The rate of the Forecast Fee shall be determined so as to recover the projected annual costs related to developing Energy forecasting systems, generating forecasts, validating forecasts, and monitoring forecast performance, that are incurred by the CAISO as a direct result of participation by Eligible Intermittent Resources in CAISO Markets, divided by the projected annual Energy production by all Eligible Intermittent Resources.

The initial Forecast Fee, and all subsequent changes as may be necessary from time to time to recover costs incurred by the CAISO for the forecasting conducted on the behalf of Eligible Intermittent Resources pursuant to the foregoing rate formula, shall be set forth in a Business Practice Manual.

Participating Intermittent Resources Export Fee

A Participating Intermittent Resources Export Fee shall be assessed to Exporting Participating Intermittent Resources each calendar month. The Participating Intermittent Resources Export Fee shall be calculated as the product of (1) the sum of all Settlement costs avoided by Participating Intermittent Resources for the preceding calendar month, or portion thereof, consisting of Charge Codes 6486 [Real Time Excess Cost For Instructed] and 1487 [Energy Exchange Program Neutrality], but excluding charges for Uninstructed Energy associated with Charge Code 6475, (2) by the ratio of the total MW/h generated by an Exporting Participating Intermittent Resource during the calendar month, or portion thereof (based on metered output), by the total MW/h generated by all Participating Intermittent Resources during the calendar month, or portion thereof (based on metered output), and (3) by the percentage of the Exporting Participating Intermittent Resource's capacity deemed exporting under Section 5.3 of the EIRP or PIR Export Percentage.

Participating Intermittent Resources Export Fee per Participating Intermittent Resource =

Program Costs x (MW/h individual Participating Intermittent Resource/MW/h all Participating Intermittent Resources) x PIR Export Percentage

* * *

Appendix I Station Power Protocol

* * *

1.2 Eligibility

1.2.1 Only Station Power Loads associated with Generating Units in the CAISO Balancing Authority Area that are part of an approved Station Power Portfolio may be self-supplied in accordance with this SPP. Each Generating Unit must be subject to a PGA, Net Scheduled PGA, or MSS Agreement. Any generating facility outside the CAISO Balancing Authority Area owned by the same entity is eligible to provide Remote Self-Supply to Station Power Loads, subject to the terms of this SPP. Generating Units wishing to self-supply Station Power, by means other than netting permitted under Section 10.1.3 of the CAISO Tariff, shall complete the application process specified in Section 2 of this SPP.

* * *

2 Station Power Requirements and Review

2.1 Applications to Self-Supply Station Power

2.1.1 An application to establish a Station Power Portfolio or to modify the configuration of Station Power meters or the generating facilities included in a Station Power Portfolio must be submitted according to the process specified by the CAISO and posted on the CAISO Website, and shall include the following information:

- (a) One-line diagrams clearly showing the location and ownership of all Generating Units and Station Power meters, their connection to the CAISO Controlled Grid or distribution system, and the status of breakers and switchgear for normal system operation.
- (b) Identification of any generating facilities outside the CAISO Balancing Authority Area, to be used to provide Remote Self-Supply of Station Power within the proposed Station Power Portfolio. No loads associated with generating facilities outside the CAISO Balancing Authority Area may be supplied under this SPP.
- (c) Certification that the applicant is the sole owner of all generating facilities proposed to be included in the Station Power Portfolio, and that the applicant has the right to call on Energy for its own use from its ownership share of any jointly owned facilities that are proposed to be used to self-supply Station Power.
- (d) Demonstration that each Station Power meter is certified in accordance with the CAISO Tariff.
- (e) Verification that each Station Power meter is subject to a Meter Service Agreement for CAISO Metered Entities, and that each Generating Unit is bound to the CAISO Tariff by a PGA, Net Scheduled PGA, or MSS Agreement.
- (f) Verification that the applicant has arranged for terms of service with the responsible UDC or MSS Operator for the use of any distribution facilities required to self-supply Station Power.

* * *

Appendix Q
Eligible Intermittent Resources Protocol (EIRP)

* * *

2.2.1 Agreements

The following agreements must be executed by the owner or operator of any Eligible Intermittent Resource, unless that resource is not subject to any of these agreements pursuant to the CAISO Tariff, such as an Eligible Intermittent Resource of an MSS Operator:

- (a) A Participating Generator Agreement, Net Scheduled PGA, Dynamic Scheduling Agreement for Scheduling Coordinators, or Pseudo-Tie Participating Generator Agreement that, among other things, binds the Eligible Intermittent Resource to comply with the CAISO Tariff; and
- (b) A Meter Service Agreement for CAISO Metered Entities, for all Eligible Intermittent Resources other than Dynamic System Resources.

If an Eligible Intermittent Resource intends to become a Participating Intermittent Resource, it must also execute a letter of intent, which when executed and delivered to the CAISO shall initiate the process of certifying the Participating Intermittent Resource. The form of the letter of intent shall be specified by the CAISO in a Business Practice Manual.

* * *

Attachment B – Marked Tariff
Regulatory Must-Take Generation – Tariff Amendment
California Independent System Operator
Fifth Replacement FERC Electric Tariff
September 17, 2012

* * *

4.5.1.1.6.2 Scheduling Coordinator Applicant's Obligation for Contracts

A Scheduling Coordinator Applicant must certify that it is duly authorized to represent the Generators and Loads that are its Scheduling Coordinator Customers and must further certify that:

- (a) represented Generators or other suppliers have entered into Participating Generator Agreements, ~~Qualifying Facility~~Net Scheduled Participating Generator Agreements, or Pseudo Tie Participating Generator Agreements as provided in Appendices B.2, B.3, and B.16, respectively with the CAISO or other contracts that obligate the supplier to comply with the terms of the CAISO Tariff, as applicable;
- (b) represented UDCs have entered into UDC Operating Agreements as provided in Appendix B.8 with the CAISO;
- (c) represented CAISO Metered Entities have entered into Meter Service Agreements for CAISO Metered Entities as provided in Appendix B.6 with the CAISO;
- (d) none of the Wholesale Customers it will represent are ineligible for wholesale transmission service pursuant to the provisions of the FPA Section 212(h); and
- (e) each End-Use Customer it will represent is eligible for service as a Direct Access End User pursuant to an established program approved by the California Public Utilities Commission or a Local Regulatory Authority.

A Scheduling Coordinator Applicant that seeks to serve as Scheduling Coordinator for one or more Convergence Bidding Entities must certify that it is duly authorized to represent those Convergence Bidding Entities and to submit and settle Virtual Bids on their behalf.

* * *

4.6 Relationship Between CAISO And Generators

The CAISO shall not accept Bids for any Generating Unit interconnected to the electric grid within the CAISO Balancing Authority Area (which includes a Pseudo-Tie of a Generating Unit to the CAISO Balancing Authority Area) otherwise than through a Scheduling Coordinator. The CAISO shall further not be obligated to accept Bids from Scheduling Coordinators relating to Generation from any Generating Unit interconnected to the electric grid within the CAISO Balancing Authority Area (which includes a Pseudo-Tie of a Generating Unit to the CAISO Balancing Authority Area) unless the relevant Generator undertakes in writing, by entering into a Participating Generator Agreement or, if eligible to enter such an agreement under the applicable terms of the CAISO tariff, QF a Net Scheduled PGA, Pseudo-Tie Participating Generator Agreement, or Metered Subsystem Agreement, with the CAISO, to comply with all applicable provisions of this CAISO Tariff as they may be amended from time to time, including, without limitation, the applicable provisions of this Section 4.6 and Section 7.7.

* * *

4.6.3 ~~Participating Generators, Must-Take Generation And~~ Requirements for Certain Participating Generators ~~QFs~~

4.6.3.1 Participating Generators Directly Connected to a Distribution System

With regard to any Generating Unit directly connected to a ~~UDC~~Distribution ~~s~~System, a Participating Generator shall comply with applicable UDC tariffs, requirements of the Local Regulatory Authority, interconnection requirements and generation agreements. With regard to a Participating Generator's Generating Units directly connected to a ~~UDC s~~Distribution System, the CAISO and the UDC or MSS, as applicable, will coordinate to develop procedures to avoid conflicting CAISO and UDC or MSS, as applicable, operational directives. ~~With regard to Regulatory Must-Take Generation, the CAISO will honor applicable terms and conditions of existing agreements, including Existing QF Contracts, as specified in Section 4.6.3.2. Qualifying Facilities that are not Regulatory Must-Take Generation subject to an Existing QF Contract shall comply with the requirements applicable to Participating Generators, as specified in Section~~

4.6.3.3.

4.6.3.12 Exemption for Generating Units Less Than One (1) MW

A Generator with a Generating Unit directly connected to a ~~UDC~~Distribution System will be exempt from compliance with this Section 4.6 and Section 10.1.3 in relation to that Generating Unit provided that (i) the rated capacity of the Generating Unit is less than one (1) MW, and (ii) the Generator does not use the Generating Unit to participate in the CAISO Markets. This exemption in no way affects the calculation of or any obligation to pay the appropriate charges or to comply with all the other applicable Sections of this CAISO Tariff. A Generating Unit with a rated capacity of less than 500 kW, unless the Generating Unit is participating in an aggregation agreement approved by the CAISO, is not eligible to participate in the CAISO Markets and the Generator is not a Participating Generator for that Generating Unit.

* * *

4.6.3.3 Qualifying Facilities ~~without Existing QF Contracts~~ and Combined Heat and Power Resources

The owner or operator of (1) a Qualifying Facility ~~that is not subject to an Existing QF Contract,~~ (2) a resource that is subject to an Amended QF Contract, or (3) a Combined Heat and Power Resource ~~that the CAISO is required to honor pursuant to Section 4.6.3.2~~ shall be subject to all requirements applicable to Participating Generators pursuant to Section 4.6. ~~The owner or operator of the Qualifying Facility~~ may satisfy the requirements of ~~this~~ Section 4.6, to the extent applicable, ~~3.3~~ by entering into a Qualifying Facility Net Scheduled Participating Generator Agreement (QF Net Scheduled PGA) with the CAISO, in which case it shall comply with the provisions of the QF Net Scheduled PGA and Section 4.6.3.4. In order to be eligible to enter into the Net Scheduled QF PGA, a Participating Generator must demonstrate to the CAISO (a) that its Generating Unit (1) has established QF status pursuant to PURPA, (2) is a party to an Amended QF Contract; or (3) is a CHP Resource and ~~that~~ (ab) that the Self-provided Load of the Participating Generator that is served by the QF resource either (1) has ~~contracted for~~ and continues through the term of the Net Scheduled QF PGA to have, ~~secured~~ standby service from a UDC or MSS Operator under terms approved by the Local Regulatory Authority or FERC, as

applicable, or (2b) ~~the Self-provided Load~~ is curtailed concurrently with any Outage of the Generation serving that Self-provided Load in an amount sufficient to cover that Outage.

4.6.3.4 Participating Generator with a QFNet Scheduled PGA

A Participating Generator that is eligible for and has entered into a Qualifying-FacilityNet Scheduled Participating Generator Agreement shall be subject to the provisions of this Section 4.6.3.4, as reflected in the terms of the Net ScheduledQF PGA.

4.6.3.4.1 Revenue Metering for a QF-Net Scheduled Generating Unit-Subject to a QF PGA

In accordance with the terms of the Net ScheduledQF PGA and Section 10.1.3.3, a Participating Generator that has entered into a Net ScheduledQF PGA may net the revenue metering value for the Generation produced by each Net Scheduled QF-Generating Unit listed in the QFNet Scheduled PGA and the revenue metering value for the Demand of the Self-provided Load that is (i) served by the Net Scheduled QF-Generating Unit and (ii) electrically located on the same side of the Point of Demarcation.

4.6.3.4.2 Telemetry for a QF-Net Scheduled Generating Unit-Subject to a QF PGA

A Participating Generator that has entered into a Net ScheduledQF PGA may satisfy the provisions of Section 7.6.1(d) for the installation of telemetry by installing telemetry at the Point of Demarcation for the purpose of recording the net impact of the Net Scheduled QF-Generating Unit upon the CAISO Controlled Grid; provided that the installed telemetry satisfies the technical, functional, and performance requirements for telemetry set forth in the CAISO Tariff and the applicable Business Practice Manual.

4.6.3.4.3 Market and Settlement Processes for a QF-Net Scheduled Generating Unit Subject to a QF PGA

For bidding, scheduling, billing, and Settlement purposes regarding the Net Scheduled QF Generating Unit Self-provided Load of a Participating Generator that has entered into a Net ScheduledQF PGA, measurements of Generation or Demand of the Net Scheduled QF Generating Unit shall be made at the Point of Demarcation. In all other respects, the Generation

and Load of the Net Scheduled QF-Generating Unit shall be subject to the applicable provisions of the CAISO Tariff regarding bidding, scheduling, billing, and Settlements.

4.6.3.4.4 Operating Requirements for a QF-Net Scheduled Generating Unit-Subject to a QF-PGA

A Participating Generator that has entered into a Net Scheduled QF PGA shall abide by CAISO Tariff provisions regarding the CAISO's ability to dispatch or curtail Generation from the Net Scheduled QF(s)-Generating Units listed in its Net Scheduled QF PGA. The CAISO shall only dispatch or curtail a Net Scheduled QF-Generating Unit of the Participating Generator: (a) to the extent the Participating Generator bids Energy or Ancillary Services from the Net Scheduled QF-Generating Unit into the CAISO Markets or the Energy is otherwise available to the CAISO under Section 40, subject to the restrictions on operating orders set forth below; or (b) if the CAISO must dispatch or curtail the Net Scheduled QF-Generating Unit in order to respond to an existing or imminent System Emergency or condition that would compromise CAISO Balancing Authority Area integrity or reliability as provided in Sections 7 and 7.6.1.

The CAISO will not knowingly issue an operating order to a Participating Generator that has entered into a Net Scheduled QF PGA that: (1) requires a Participating Generator to reduce its Generation below the delineated minimum operating limit, other than in a System Emergency; (2) conflicts with operating instructions provided to the CAISO by the Participating Generator; or (3) results in damage to the Participating Generator's equipment, provided that any such equipment limitation has been provided to the CAISO and incorporated in the Participating Generator's operating instructions provided to the CAISO. If the Participating Generator: (1) receives a Schedule which requires operation below the minimum operating limit, and (2) deviates from that Schedule to continue to operate at the minimum operating limit, it will not be subject to any penalties or sanctions as a result of operating at the minimum operating limit. The Participating Generator's consequences for deviating from Schedules in Real-Time will be governed by the CAISO Tariff.

The CAISO shall have the authority to coordinate and approve Generation Outage schedules for the Generating Unit(s) listed in a Net Scheduled QF PGA, in accordance with the provisions of Section 9.

* * *

4.6.10 RMTMax for CHP Resources

4.6.10.1 Initial Determination

Each Generating Unit that provides Regulatory Must-Take Generation from a CHP Resource must establish an RMTMax, which is determined as follows:

- (a) If the Generating Unit's Scheduling Coordinator is a UDC or MSS and there is a power purchase agreement between the Generating Unit's owner or operator and its Scheduling Coordinator, by agreement of the two entities, or if not, by agreement of the Generating Unit's owner or operator and the CAISO, subject to subsection (d) below,
- (b) In the event agreement cannot be reached or there is insufficient evidence of any agreement, by affidavit of an independent California-licensed certified engineer based on the engineer's assessment of the annual and seasonal requirements of the host and the resulting electrical output. Unless otherwise agreed upon, the cost of the engineer will be evenly shared by the Generating Unit's owner or operator and its Scheduling Coordinator if the Scheduling Coordinator is a UDC or MSS and there is a power purchase agreement between the Generating Unit's owner or operator and the Scheduling Coordinator, or paid entirely by the Generating Unit's owner or operator, if the Scheduling Coordinator is not a UDC or MSS.
- (c) Based on an agreement between the Generating Unit owner or operator and the Scheduling Coordinator, if it is a UDC or MSS and there is a power purchase agreement between the Generating Unit's owner or operator and the Scheduling Coordinator, or, otherwise, between the Generating Unit owner or operator and the CAISO, two daily RMTMax values may be established, one for off-peak and one for

on-peak, as those terms are defined by NERC.

(d) RMTMax may not be established at a level that will conflict with the terms and conditions of a power purchase agreement negotiated by the Generating Unit owner or operator and the UDC or MSS.

4.6.10.2 Redetermination

The RMTMax must be reestablished on an annual basis using the methodologies described in section 4.6.10.1. It may be reestablished more frequently than once a year subject to the Master File change process if agreed by the Generating Unit's owner or operator and its Scheduling Coordinator, if the Scheduling Coordinator is a UDC or MSS, or by agreement of the Generating Unit's owner or operator and the CAISO.

4.6.10.3 Usage Profile

As part of the initial and annual recertification process, the Generating Unit owner or operator must provide the CAISO and its Scheduling Coordinator, if the Scheduling Coordinator is a UDC or MSS, with an annual non-binding indicative Regulatory Must-Take Generation usage profile.

* * *

7.7.2.3 Responsibilities of Generating Units, System Units and System Resources During System Emergencies

All Generating Units and System Units that are owned or controlled by a Participating Generator are (without limitation to the CAISO's other rights under this CAISO Tariff) subject to control by the CAISO during a System Emergency and in circumstances in which the CAISO considers that a System Emergency is imminent or threatened. The CAISO shall, subject to this Section 7, have the authority to instruct a Participating Generator to bring its Generating Unit on-line, off-line, or increase or curtail the output of the Generating Unit and to alter scheduled deliveries of Energy and Ancillary Services into or out of the CAISO Controlled Grid, if such an instruction is reasonably necessary to prevent an imminent or threatened System Emergency or to retain Operational Control over the CAISO Controlled Grid during an actual System Emergency. The CAISO shall have the authority to instruct an RMR Unit whose owner has selected Condition 2 of

its RMR Contract to start-up and change its output if the CAISO has reasonably used all other available and effective resources to prevent a threatened System Emergency without declaring that a System Emergency exists. If the CAISO so instructs a Condition 2 RMR Unit, it shall compensate that unit in accordance with Section 11.5.6.3 and allocate the costs in accordance with Section 11.5.6.3.2. Each QF subject to an Existing QF Contract ~~existing agreement with a Participating TO for the supply of Energy to the Participating TO~~ and not subject to a PGA or Net Scheduled QF PGA will make reasonable efforts to comply with the CAISO's instructions during a System Emergency without penalty for failure to do so.

* * *

8.2.3.3 Voltage Support

The CAISO shall determine on an hourly basis for each day the quantity and location of Voltage Support required to maintain voltage levels and reactive margins within NERC and WECC reliability standards, and any requirements of the NRC using a power flow study based on the quantity and location of scheduled Demand. The CAISO shall issue daily voltage schedules (Dispatch Instructions) to Participating Generators, Participating TOs and UDCs, which are required to be maintained for CAISO Controlled Grid reliability. All other Generating Units shall comply with the power factor requirements set forth in contractual arrangements in effect on the CAISO Operations Date, or, if no such contractual arrangements exist and the Generating Unit exists within the system of a Participating TO, the power factor requirements applicable under the Participating TO's TO Tariff or other tariff on file with the FERC.

All Participating Generators that operate Asynchronous Generating Facilities subject to the Large Generator Interconnection Agreement set forth in Appendix BB or CC shall maintain the CAISO specified voltage schedule if required under Appendix H of the Large Generator Interconnection Agreement, while operating within the power factor range specified in their interconnection agreements. For all other Generating Units, Participating Generators shall maintain the CAISO specified voltage schedule at the Generating Unit terminals to the extent possible, while operating within the power factor range specified in their interconnection agreements, or, for Regulatory Must-Take Generation with Existing QF Contracts or Amended QF Contracts, Regulatory Must-

Run Generation and Reliability Must-Run Generation, consistent with existing obligations. For Generating Units that do not operate under one of these agreements, the minimum power factor range will be within a band of 0.90 lag (producing VARs) and 0.95 lead (absorbing VARs) power factors. Participating Generators with Generating Units existing at the CAISO Operations Date that are unable to meet this operating power factor requirement may apply to the CAISO for an exemption. Prior to granting such an exemption, the CAISO shall require the Participating TO, UDC or other utility to whose system the relevant Generating Units are interconnected to notify it of the existing contractual requirements for Voltage Support established prior to the CAISO Operations Date for such Generating Units. Such requirements may be contained in CPUC Electric Rule 21 or the Interconnection Agreement with the Participating TO, UDC or other utility. The CAISO shall not grant any exemption under this Section from such existing contractual requirements. The CAISO shall be entitled to instruct Participating Generators to operate their Generating Units at specified points within their power factor ranges. Participating Generators shall receive no compensation for operating within these specified ranges.

If the CAISO requires additional Voltage Support, it shall procure this either through Reliability Must-Run Contracts or, if no other more economic sources are available, by instructing a Generating Unit to move its MVar output outside its mandatory range. Only if the Generating Unit must reduce its MW output in order to comply with such an instruction will it be eligible to recover its opportunity cost in accordance with Section 11.10.1.4.

All Loads directly connected to the CAISO Controlled Grid shall maintain reactive flow at grid interface points within a specified power factor band of 0.97 lag to 0.99 lead. Loads shall not be compensated for the service of maintaining the power factor at required levels within the bandwidth. A UDC interconnecting with the CAISO Controlled Grid at any point other than a Scheduling Point shall be subject to the same power factor requirement.

The CAISO will establish voltage control standards with UDCs and the operators of other Balancing Authority Areas and will enter into operational agreements providing for the coordination of actions in the event of a voltage problem occurring.

* * *

9.3.5.2 Communication of Approval or Rejection

The CAISO shall use the same methods in communicating the approval or rejection of an Outage request or approval of a request to change an Approved Maintenance Outage to the relevant Operator.

9.3.5.2.1 Information regarding planned Outages for resources with an Existing QF Contract or an Amended QF Contract providing Regulatory Must-Take Generation shall be provided to the CAISO Outage Coordination Office by the Participating TO or UDC that is a party to the Existing QF Contract or an Amended QF Contract having an existing contract with such resource or by a Participating Generator. Information provided will be that obtained by the Participating TO, UDC or a Participating Generator pursuant to the terms of Existing QF Contract or an Amended QF Contract the existing agreement with the Regulatory Must-Take Generation resource or as requested by the CAISO. Scheduling and approvals of Maintenance Outages for resources with an Existing QF Contract or an Amended QF Contract providing Regulatory Must-Take Generation shall continue to be coordinated as detailed in the applicable contract with the Participating TO or UDC, provided the owner of the Regulatory Must-Take Generation resource has not executed a Participating Generator Agreement or Net ScheduledQF PGA. If the owner of a Regulatory Must-Take Generation resource has executed a Participating Generator Agreement or Net ScheduledQF PGA, it shall comply with Section 9.3.5 and other provisions applicable to Participating Generators.

9.3.6 Maintenance Outage Planning

Each Operator shall, by not later than October 15 each year, provide the CAISO with a proposed schedule of all Maintenance Outages it wishes to undertake in the following year. The proposed schedule shall include all of the Operator's transmission facilities that comprise the CAISO Controlled Grid and Generating Units subject to a Participating Generator Agreement, Net ScheduledQF PGA, or Pseudo-Tie Participating Generator Agreement (including its Reliability Must-Run Units). In the case of a Participating TO's transmission facilities, that proposed schedule shall be developed in consultation with the UDCs interconnected with that Participating TO's system and shall take account of each UDC's planned maintenance requirements. The

nature of the information to be provided and the detailed Maintenance Outage planning procedure shall be established by the CAISO. This information shall include:

The following information is required for each Generating Unit of a Participating Generator:

- (a) the Generating Unit name and Location Code;
- (b) the MW capacity unavailable;
- (c) the scheduled start and finish date for each Outage; and
- (d) where there is a possibility of flexibility, the earliest start date and the latest finish date, along with the actual duration of the Outage once it commences.

The following information is required for each transmission facility:

- (a) the identification of the facility and location;
- (b) the nature of the proposed Maintenance Outage;
- (c) the preferred start and finish date for each Maintenance Outage; and
- (d) where there is a possibility of flexibility, the earliest start date and the latest finish date, along with the actual duration of the Outage once it commences.

Either the CAISO, pursuant to Section 9.3.7, or an Operator, subject to Section 9.3.6.11, may at any time request a change to an Approved Maintenance Outage. An Operator may, as provided in Section 9.3.6.3, schedule with the CAISO Outage Coordination Office a Maintenance Outage on its system, subject to the conditions of Sections 9.3.6.4.1, 9.3.6.8, and 9.3.6.9.

* * *

10.1.3.3 Permitted Netting for a Net Scheduled Generating Unit for a QF ~~with a QF~~ PGA and Other QF Metering Requirements

A Generating Unit that is a QF subject to an Existing QF Contract ~~and that qualifies as Regulatory Must-Take Generation~~ is subject to the revenue metering requirements set forth in the Existing QF Contract for the QF and is not subject to the revenue metering requirements of Section 10. A QF Generating Unit that is not operating under the terms of an Existing QF Contract is subject to the metering requirements of Section 10 prohibiting the net metering of Generation and Load, except if it is subject to a QF Net Scheduled PGA. A Generating Unit that is a QF or a CHP Resource and that operates under the terms of a QF-Net Scheduled PGA is eligible for net

metering treatment. Notwithstanding Section 10.1.3.2, a Participating Generator with a Net Scheduled~~QF~~ PGA may net the value for the Generation produced by each Net Scheduled ~~QF~~ Generating Unit listed in its ~~QF-Net Scheduled~~ PGA and the value for the Demand of the Self-provided Load that is (i) served by the Net Scheduled ~~QF-Generating Unit~~ and (ii) electrically located on the same side of the Point of Demarcation. The Participating Generator with a Net Scheduled ~~QF~~-PGA may satisfy the provisions of Section 10 for the installation of revenue metering by installing Metering Facilities at the Point of Demarcation; provided that the installed Metering Facilities satisfy the technical, functional, and performance requirements for Metering Facilities set forth in Section 10 and the applicable Business Practice Manual.

* * *

10.2.12 Exemptions

The CAISO has the authority to grant exemptions from certain CAISO metering standards for a CAISO Metered Entity, as set forth in Section 10.4. A CAISO Metered Entity with a temporary exemption shall provide site specific Revenue Quality Meter Data to the CAISO in accordance with its Meter Service Agreement for CAISO Metered Entities and the CAISO Tariff. A

Generating Unit that provides Regulatory Must-Take Generation with an Existing QF Contract or an Amended QF Contract that is connected directly to a ~~UDC~~-Distribution System and that sells its entire output to the UDC or in the MSS in which the Generating Unit is located is not subject to the audit, testing or certification requirements of the CAISO.

* * *

11.23 Penalties For Uninstructed Imbalance Energy

Effective December 1, 2004, the CAISO shall not charge any Uninstructed Deviation Penalties pursuant to this Section 11.23 until FERC issues an order authorizing the CAISO to charge Uninstructed Deviation Penalties pursuant to this section. Beginning with Settlement Statements for the first Trading Day for which FERC authorizes the CAISO to charge Uninstructed Deviation Penalties pursuant to this section, the CAISO shall charge Scheduling Coordinators Uninstructed Deviation Penalties for Uninstructed Imbalance Energy resulting from resource deviations outside a Tolerance Band from their Dispatch Operating Point, for dispatched resources, or their Day-

Ahead Schedule otherwise. Publishing of Uninstructed Deviation Penalty results will not occur on the Initial Settlement Statement T+3B but rather will occur on the Recalculation Settlement Statement T+12B. The Uninstructed Deviation Penalty will be applied as follows:

- (a) The Uninstructed Deviation Penalty for negative Uninstructed Imbalance Energy will be calculated and assessed in each Settlement Interval. The Uninstructed Deviation Penalty for positive Uninstructed Imbalance Energy will be calculated and assessed in each Settlement Interval in which the CAISO has not declared a staged System Emergency;
- (b) The Uninstructed Deviation Penalty will apply to pre-Dispatched Bids from Non-Dynamic System Resources identified, when such a pre-Dispatch Instruction is issued more than forty (40) minutes prior to the relevant Operating Hour, subject to the following conditions: (i) the Uninstructed Deviation Penalty will only apply to the pre-Dispatched amount of the Bid that is declined or not delivered, (ii) the Uninstructed Deviation Penalty will not apply to a portion of a pre-Dispatched Bid that is subsequently not delivered at the direction of a Balancing Authority, including the CAISO, due to a curtailment of transmission capability or to prevent curtailment of native firm load occurring subsequent to issuing the pre-Dispatch Instruction, (iii) the Uninstructed Deviation Penalty will not apply to Uninstructed Imbalance Energy resulting from declining subsequent intra-hour Dispatch Instructions. Dynamically scheduled Dynamic System Resources, to the extent they deviate from their Day-Ahead Schedule plus any Dispatch Instructions, will be subject to the Uninstructed Deviation Penalty.
- (c) The Uninstructed Deviation Penalty will not apply to Load, Curtailable Demand, or Demand Response Services.
- (d) **[NOT USED]**

- (e) The Uninstructed Deviation Penalty will not apply to Regulatory Must-Run Generation or Participating Intermittent Resources that meet the scheduling obligations established in the Eligible Intermittent Resources Protocol in Appendix Q. No other applicable charges will be affected by this exemption. The Uninstructed Deviation Penalty also will not apply to Qualifying Facilities (QFs), including those that are dynamically scheduled, that have not executed and are not required pursuant to this CAISO Tariff to execute a Participating Generator Agreement (PGA) or ~~Qualifying Facility~~Net Scheduled Participating Generator Agreement.
- (f) All MSS resources designated as Load-following resources pursuant to Section 4.9.13.2 (regardless of gross or net settlement election) are exempt from Uninstructed Deviation Penalties in this Section 11.23. All MSS resources not designated as Load-following resources pursuant to Section 4.9.13.2 (regardless of gross or net Settlement election) are subject to Uninstructed Deviation Penalties in this Section 11.23.
- (g) The Uninstructed Deviation Penalty will apply to Generating Units providing Regulation and dynamically scheduled Dynamic System Resources providing Regulation to the extent that Uninstructed Deviations from such resources exceed each resource's actual Regulation range plus the applicable Tolerance Band. Resources providing Regulation and generating within their relevant Regulating range (or outside their relevant Regulating range as a direct result of CAISO control or instruction) will be deemed to have zero (0) deviations for purposes of the Uninstructed Deviation Penalty.
- (h) The Uninstructed Deviation Penalty will be calculated and assessed for each resource individually, except as specified in Appendix R, which specifies when Uninstructed Deviations from individual resources may be aggregated.

- (i) The Uninstructed Deviation Penalty shall not apply to any Uninstructed Imbalance Energy resulting from compliance with a directive by the CAISO or the Reliability Coordinator.
- (j) **[NOT USED]**
- (k) The Uninstructed Deviation Penalty will not apply when the applicable LMP is negative or zero.
- (l) The Uninstructed Deviation Penalty for positive Uninstructed Imbalance Energy will be the amount of the Uninstructed Imbalance Energy in excess of the Tolerance Band multiplied by a price equal to one hundred (100) percent of the corresponding LMP. The relevant LMP will be calculated for each UDP Location as the ten-minute weighted average price of two five-minute Dispatch Interval LMPs and the two five-minute optimal Instructed Imbalance Energy quantities. The net effect of the Uninstructed Deviation Penalty and the Settlement for positive Uninstructed Imbalance Energy beyond the Tolerance Band will be that the CAISO will not pay for such Energy.
- (m) The Uninstructed Deviation Penalty for negative Uninstructed Imbalance Energy will be the amount of the Uninstructed Imbalance Energy in excess of the Tolerance Band multiplied by a price equal to fifty (50) percent of the corresponding Resource-Specific Settlement Interval LMP or, in the case of aggregated resources, the Settlement Interval Penalty Location Real-Time LMP.
- (n) The Uninstructed Deviation Penalty will not apply to deviations from Energy delivered as part of a scheduled test so long as the test has been scheduled by the Scheduling Coordinator with the CAISO or the CAISO has initiated the test for the purposes of validating unit performance.
- (o) The Uninstructed Deviation Penalty shall not apply to any excess Energy delivered from or any shortfall of Energy not delivered from an

Exceptional Dispatch, involving a Generating Unit or a System Unit unless the CAISO and the supplier have agreed upon the time of, duration of, and amount of Energy to be delivered in the out-of-market transaction and the CAISO reflects the out-of-market transaction in its Real-Time Expected Energy calculations. The Uninstructed Deviation Penalty shall apply to Energy outside the Tolerance Band from out-of-market transactions with dynamically scheduled Dynamic System Resources to the extent the agreed-to Energy is not delivered or over-delivered, and to any Energy from Non-Dynamic System Resources to the extent the agreed-to Energy is not delivered if that over- or under-delivery was due to action taken by or not taken by the System Resource and not the result of action taken by a Balancing Authority due to a curtailment of firm transmission capability or to prevent curtailment of native firm load occurring subsequent to the out-of-market transaction.

- (p) The Uninstructed Deviation Penalty shall not apply to Generating Units and dynamically scheduled Dynamic System Resources with Uninstructed Imbalance Energy if the Generating Unit or dynamically scheduled Dynamic System Resource was physically incapable of delivering the expected Energy or if systems malfunctions prevent receipt of Dispatch Instructions, provided that the Generating Unit or dynamically scheduled Dynamic System Resource had notified the CAISO within thirty (30) minutes of the onset of an event that prevents the resource from performing its obligations. A Generating Unit or dynamically scheduled Dynamic System Resource must notify CAISO operations staff of its reasons for failing to deliver the Expected Energy in accordance with Section 9.3.10.6 and must provide information to the CAISO that verifies the reason the resource failed to comply with the

Dispatch Instruction within forty-eight (48) hours of the Operating Hour in which the instruction is issued.

- (q) Adjustments to any Generating Unit, Curtailable Demand and System Resource Day-Ahead Schedules or HASP Intertie Schedules made in accordance with the terms of TRTC Instructions for Existing Contracts or TORs shall not be subject to Uninstructed Deviation Penalties. Valid changes to ETC Self-Schedules or TOR Self-Schedules submitted after the close of the HASP or the RTM shall not be subject to Uninstructed Deviation Penalties.
- (r) Any changes made to Schedules prior to the CAISO issuing HASP Intertie Schedules shall not be subject to Uninstructed Deviation Penalties.
- (s) Uninstructed Deviation Penalties shall not be charged to any deviation from a Dispatch Instruction that does not comply with the requirements set forth in this CAISO Tariff.
- (t) Amounts collected as Uninstructed Deviation Penalties shall first be assigned to reduce the portion of above-LMP costs that would otherwise be assigned pro rata to all Scheduling Coordinators in that Settlement Interval. Any remaining portion of amounts collected as Uninstructed Deviation Penalties after satisfying these sequential commitments shall be treated in accordance with Section 11.29.9.6.3.
- (u) Condition 2 RMR Units shall be exempt from Uninstructed Deviation Penalties.
- (v) The Uninstructed Deviation Penalty shall not apply to positive Uninstructed Imbalance Energy attributable to operation below the Generating Unit's Minimum Operating Limit from the time the Generating Unit synchronizes to the grid to the earlier of (1) the Settlement Interval in which the Generating Unit produces a quantity of Energy that

represents an average rate of delivery over such Settlement Interval in excess of the Generating Unit's Minimum Operating Limit plus the applicable Tolerance Band, or (2) the first Settlement Interval after the expiration of a period of time that begins at the end of the Settlement Interval in which the Generating Unit synchronizes to the grid and ends after the Generating Unit's maximum Start-Up Time as specified in the Master File. The Uninstructed Deviation Penalty shall not apply to any positive Uninstructed Imbalance Energy attributable to operation below the Generating Unit's Minimum Operating Limit for a duration equal to the minimum of two Settlement Intervals or the time specified in the Master File for the Generating Unit to disconnect from the grid after reaching its Minimum Operating Limit following either (1) the last Settlement Interval of an hour in which the Generating Unit had a non-zero Day-Ahead Schedule or (2) the Settlement Interval in which the Generating Unit is expected to reach its Minimum Operating Limit based on the applicable Ramp Rate when the CAISO instructed the Generating Unit to Shut-Down. The amount of Uninstructed Imbalance Energy exempted from the Uninstructed Deviation Penalty shall not exceed the amount of the Generating Unit's Minimum Operating Limit plus the applicable Tolerance Band. This exception from the application of the Uninstructed Deviation Penalty does not apply to Dynamic System Resources.

- (w) UDP shall not apply to deviations by a Generating Unit that are attributable to any automatic response to a system disturbance, including a response to correct frequency decay, in accordance with Applicable Reliability Criteria for the duration of the system disturbance, and for an additional five (5) minutes when a Generating Unit's deviation is in the same direction as the mitigating frequency response.

- (x) The Uninstructed Deviation Penalty shall not apply in the event that a malfunction in a CAISO system application causes an infeasible Dispatch Instruction to be communicated or prevents timely communication of a Dispatch Instruction or a SLIC malfunction prevents a resource from reporting an event that affects the resource's ability to deliver Energy.
- (y) The Uninstructed Deviation Penalty shall not apply to a failure to comply with a manual Dispatch Instruction that is not confirmed by a Dispatch Instruction transmitted through the CAISO's Automated Dispatch System.
- (z) The Uninstructed Deviation Penalty shall not apply if a Dispatch Instruction is validated after the start time of the instruction from the Settlement Interval in which the Dispatch Instruction was first effective to the earliest Settlement Interval, inclusive, in which the resource is able to respond to the Dispatch Instruction.

* * *

30.5.2.2 Supply Bids for Participating Generators

In addition to the common elements listed in Section 30.5.2.1, Supply Bids for Participating Generators shall contain the following components as applicable: Start-Up Bid, Minimum Load Bid, Ramp Rate, Minimum and Maximum Operating Limits; Energy Limit, Regulatory Must-Take/Must-Run Generation; Contingency Flag; and Contract Reference Number (if any). Scheduling Coordinators submitting these Bid components for a Multi-Stage Generating Resource must do so for the submitted MSG Configuration. Scheduling quantities that a Scheduling Coordinator schedules as Regulatory Must-Take Generation for a -CHP Resource shall be limited to the quantity necessary in any hour to meet the reasonably anticipated industrial host's thermal requirements and shall not exceed any established RMTMax values. The CHP Resource owner or operator shall provide its Scheduling Coordinator with the Regulatory Must-Take Generation values and is solely responsible for the accuracy of the information. The

Scheduling Coordinator for the CHP Resource will schedule the quantities consistent with information provided subject to any contract rights between the CHP Resource Generating Unit owner or operator and its counter-party to any power purchase agreement regarding curtailment or dispatchability of the CHP Resource. If the CHP Resource Generating Unit has a power purchase agreement and its counter-party is not the Scheduling Coordinator for the resource, the parties to the agreement share the responsibility for ensuring that the Scheduling Coordinator schedules the resource consistent with contractual rights of the counter-parties. A Scheduling

Coordinator for a Physical Scheduling Plant or a System Unit may include Generation Distribution Factors as part of its Supply Bid. If the Scheduling Coordinator has not submitted the Generation Distribution Factors applicable for the Bid, the CAISO will use default Generation Distribution Factors stored in the Master File. All Generation Distribution Factors used by the CAISO will be normalized based on Outage data that is available to the automated market systems. A Multi-Stage Generating Resource and its MSG Configurations are registered under a single Resource ID and Scheduling Coordinator for the Multi-Stage Generating Resource must submit all Bids for the resource's MSG Configurations under the same Resource ID. For a Multi-Stage Generating Resources Scheduling Coordinators may submit bid curves for up to ten individual MSG Configurations of their Multi-Stage Generating Resources into the Day-Ahead Market and up to three individual MSG Configurations into the Real-Time Market. Scheduling Coordinators for Multi-Stage Generating Resources must submit a single Operational Ramp Rate for each MSG Configuration for which it submits a supply Bid either in the Day-Ahead Market or Real-Time Market. For Multi-Stage Generating Resources the Scheduling Coordinator may submit the Transition Times, which cannot be greater than the maximum Transition Time registered in the Master File. To the extent the Scheduling Coordinator does not submit the Transition Time that is a registered feasible transition the CAISO will use the registered maximum Transition Time for that MSG Transition for the specific Multi-Stage Generating Resource.

* * *

40.8.1.2 Nuclear and Thermal

Nuclear and thermal Generating Units, other than Qualifying Facilities with ~~effective-Existing QF eContracts under the Public Utility Regulatory Policies Act~~ addressed in Section 40.8.1.8 below, must be a Participating Generator or a System Unit. The Qualifying Capacity of nuclear and thermal units, other than Qualifying Facilities addressed in Section 40.8.1.8, will be based on net dependable capacity defined by NERC Generating Availability Data System information.

40.8.1.3 Hydro

Hydroelectric Generating Units, other than Qualifying Facilities with ~~Existing QF eContracts under the Public Utility Regulatory Policies Act~~, must be either Participating Generators or System Units. The Qualifying Capacity of a pond or Pumped-Storage Hydro Unit, other than a QF, will be determined based on net dependable capacity defined by NERC GADS minus variable head derate based on an average dry year reservoir level. The Qualifying Capacity of a pond or Pumped-Storage Hydro Unit that is a QF will be determined based on historic performance during the hours of noon to 6:00 p.m., using a three-year rolling average.

The Qualifying Capacity of all run-of-river hydro units, including Qualifying Facilities, will be based on net dependable capacity defined by NERC GADS minus an average dry year conveyance flow, stream flow, or canal head derate. As used in this section, average dry year reflects a one-in-five year dry hydro scenario (for example, using the 4th driest year from the last 20 years on record).

* * *

40.8.1.6 Wind and Solar

As used in this Section, wind units are those wind ~~g~~Generating Units without backup sources of Generation and solar units are those solar ~~g~~Generating Units without backup sources of Generation. Wind and solar units, other than Qualifying Facilities with ~~Existing QF Contractseffective contracts under the Public Utility Regulatory Policies Act~~, must be Participating Intermittent Resources or subject to availability provisions of Section 40.6.4.3.4.

The Qualifying Capacity of all wind or solar units, including Qualifying Facilities, for each month will be based on their monthly historic performance during that same month during the hours of

noon to 6:00 p.m., using a three-year rolling average. For wind or solar units with less than three years operating history, all months for which there is no historic performance data will utilize the monthly average production factor of all units (wind or solar, as applicable) within the TAC Area, or other production data from another area determined by the CAISO to be appropriate if the unit is not within a TAC Area, in which the ~~g~~Generating ~~u~~Unit is located.

40.8.1.7 Geothermal

Geothermal Generating Units, other than Qualifying Facilities with Existing QF Contracts addressed in Section 40.8.1.8, must be Participating Generators or System Units. The Qualifying Capacity of geothermal units, other than Qualifying Facilities addressed in Section 40.8.1.8, will be based on NERC GADS net dependable capacity minus a derate for steam field degradation.

40.8.1.8 Treatment of Qualifying Capacity for Qualifying Facilities

Qualifying Facilities must be subject to an effective Participating Generator Agreement or Net ScheduledQF Participating Generator Agreement or must be System Units, unless they have an Existing QF Contract~~PURPA contract~~. Except for hydro, wind, and solar Qualifying Facilities addressed pursuant to Sections 40.8.1.3 and 40.8.1.6, the Qualifying Capacity of Qualifying Facilities under PURPA-Existing QF eCContracts, will be based on historic monthly Generation output during the hours of noon to 6:00 p.m. (net of Self-provided Load) during a three-year rolling average.

* * *

40.9.2 Exemptions

The following exemptions apply to the CAISO's Availability Standards program of this Section 40.9:

- (1) Resources with a ~~P~~Max less than one (1.0) MW will not be used to determine Availability Standards, will not be subject to Non-Availability Charges or Availability Incentive Payments, and will not be subject to the additional Outage reporting requirements of this Section 40.9.
- (2) Capacity under a resource specific power supply contract that existed prior to June 28, 2009 and Resource Adequacy Capacity that was procured under a

contract that was either executed or submitted to the applicable Local Regulatory Authority for approval prior to June 28, 2009, and is associated with specific Generating Units or System Resources, will not be subject to Non-Availability Charges or Availability Incentive Payments. Such contracted Resource Adequacy Capacity, except for non Resource-Specific System Resources, will be included in the development of Availability Standards and will be subject to any Outage reporting requirements necessary for this purpose. The exemption will apply only for the initial term of the contract and to the MW capacity quantity and Resource Adequacy Resources specified in the contract prior to June 28, 2009. The exemption shall terminate upon the conclusion of the initial contract term. Exempt contracts may be re-assigned or undergo novation on or after June 28, 2009, but the exemption shall not apply for any extended contract term, increased capacity quantity or additional resource(s) beyond those specified in the contract prior to June 28, 2009, [except as provided in Section 40.9.2\(7\) or 40.9.2\(8\)](#). Scheduling Coordinators for Resource Adequacy Resources subject to these contracts will be required to certify the start date of the contract, the expiration date, the Resource ID(s), and the amount of Resource Adequacy Capacity associated with each Resource ID included in the contract. For Resource Adequacy Resources whose Qualifying Capacity value is determined by historical output, the capacity under a resource specific power supply contract or Resource Adequacy Capacity that was procured under a contract that was either executed or submitted to the applicable Local Regulatory Authority for approval that meets the requirements in this subsection (2) will not be subject to Non-Availability Charges or Availability Incentive Payments, except that the deadline date for either type of contract shall be August 22, 2010 instead of June 28, 2009.

- (3) For a contract entered into prior to June 28, 2009 that provides for the amount of Resource Adequacy Capacity to increase during the original term of the contract,

based on a ratio of the Resource Adequacy Resource's output or due to an addition of capacity, the exemption provided in subsection (2) of this Section 40.9.2 will apply to the additional capacity allowed under the contract; provided that the capacity increase (i) is expressly contained in the provisions of the contract, (ii) occurs during the primary term of the contract; and (iii) does not result from contract extensions or other amendments to the original terms and conditions of the contract, except as provided in Section 40.9.2(7) or 40.9.2(8).

Scheduling Coordinators for Resource Adequacy Resources subject to contracts that provide for such capacity increases or additions must include in their certification, in addition to the requirements of subsection (2) of this Section 40.9.2, (i) the citation to any contract provisions that might entitle them to increased exempt Resource Adequacy Capacity from the contracted resources during the primary term of the contract; (ii) the amount of additional capacity to which they might be entitled; and (iii) the actual effective date of the capacity increase. If the actual amount of capacity and/or the actual effective date of the capacity increase is not known at the time of the initial certification, the Scheduling Coordinator shall provide a supplemental certification(s) when this information becomes known. For Resource Adequacy Resources whose Qualifying Capacity value is determined by historical output the exemption provided in subsection (2) of this Section 40.9.2 will apply to an increase in the capacity under a resource specific power supply contract or Resource Adequacy Capacity that was procured under a contract that was either executed or submitted to the applicable Local Regulatory Authority for approval that meets the requirements in this subsection (3), except that the deadline date for either type of contract to be exempt shall be August 22, 2010 instead of June 28, 2009.

- (4) Demand response resources will not be used to determine Availability Standards, will not be subject to Non-Availability Charges or Availability Incentive Payments,

and will not be subject to the additional Outage reporting requirements of this Section 40.9.

- (5) Resource Adequacy Capacity provided through contracts for Energy from non-specified resources delivered within the CAISO Balancing Authority Area will not be used to determine Availability Standards, will not be subject to Non-Availability Charges or Availability Incentive Payments, and will not be subject to the additional Outage reporting requirements of this Section 40.9. ~~and~~
- (6) Resource Adequacy Resources of a Modified Reserve Sharing LSE or a Load following MSS will be used to determine the Availability Standards and will be subject to any Outage reporting requirements necessary for this purpose. Non-Local Capacity Area Resource Adequacy Resources of a Modified Reserve Sharing LSE or a Load following MSS will not be subject to Non-Availability Charges or Availability Incentive Payments, but those entities shall remain responsible for any other applicable deficiency payments under this CAISO Tariff or the applicable MSS Agreement.
- (7) Scheduling Coordinators for Qualifying Facilities resources with Existing QF Contracts or Amended QF Contracts that are Resource Adequacy Resources shall be exempt from the Outage reporting requirements of Section 40.9 if the resource previously provides Resource Adequacy Capacity under an Existing QF Contract existing agreement for Regulatory Must-Take Generation that was exempt from the application of Non-Availability Charges and Availability Incentive Payments pursuant to Section 40.9.2(2) or 40.9.2(3). This exemption from the Outage reporting requirements of Section 40.9 shall end for each resource when the Existing QF Contract or Amended QF Contract - its contract terminates or it is no longer eligible for exemption under Section 40.9.2(2) or 40.9.2(3), or if requested by the Scheduling Coordinator for the resource, whichever is earlier.
- (8) Scheduling Coordinators for Qualifying Facilities resources with Existing QF Contracts or Amended QF Contracts that are Resource Adequacy Resources

shall be exempt from the Outage reporting requirements of Section 40.9, and will not be subject to Non-Availability Charges or Availability Incentive Payments, if the QF resource previously provided Resource Adequacy Capacity pursuant to an Existing QF Contract agreement for Regulatory Must-Take Generation that was executed prior to the August 22, 2010 deadline for exemption under Section 40.9.2(2), and remains in effect pursuant to California Public Utilities Commission Decision 07-09-040 that extended the term of expiring contracts until such time as the new contracts resulting from that decision are available. This exemption from the Outage reporting requirements of Section 40.9, and the Availability Incentive Payments and Non-Availability Charges, shall end for each resource when its Existing QF Contract or Amended QF eContract terminates or if requested by the Scheduling Coordinator for the resource, whichever is earlier.

Exclusions from the Availability Standards and Outage reporting requirements established in this Section 40.9 are for this Section 40.9 alone and do not affect any other obligation arising under the CAISO Tariff.

* * *

43.5.2 Obligation To Provide Capacity And Termination

The decision to accept an CPM designation shall be voluntary for the Scheduling Coordinator for any resource. If the Scheduling Coordinator for a resource accepts an CPM designation, it shall be obligated to perform for the full quantity and full period of the designation with respect to the amount of CPM Capacity for which it has accepted an CPM designation. If a Participating Generator's or Participating Load's Eligible Capacity is designated under the CPM after the Participating Generator or Participating Load has filed notice to terminate its Participating Generator Agreement, QF-Net Scheduled PGA, Pseudo-Tie Participating Generator Agreement, or Participating Load Agreement or withdraw the Eligible Capacity from its Participating Generator Agreement, QF-Net Scheduled PGA, Pseudo-Tie Participating Generator Agreement, or Participating Load Agreement, and the Scheduling Coordinator for the resource agrees to provide service under the CPM, then the Scheduling Coordinator shall enter into a new Participating

Generator Agreement, QF-Net Scheduled PGA, Pseudo-Tie Participating Generator Agreement, or Participating Load Agreement, as applicable, with the CAISO.

* * *

Appendix A

Master Definition Supplement

* * *

- Amended QF Contract

A Legacy PPA, as defined in the settlement approved by the CPUC in Decision D. 10-12-035 (December 16, 2010), as modified in Decision D.11-07-010 (July 15, 2011), that became effective on or prior to December 20, 1995 or, in the case of a Participating Generator employing landfill gas technology, on or prior to December 31, 1996, that has been amended to include terms that conform with a Legacy PPA Amendment or a Legacy PPA C1 Amendment, as defined by said settlement, but also in a manner that (a) requires compliance with the CAISO Tariff; (b) does not extend the term of the agreement or provide for an increase in the generating capacity of the resource; and (c) does not change the electrical characteristics of the resource.

* * *

- CHP Resource

A Combined Heat and Power Resource.

* * *

- Combined Heat and Power Resource

A Generating Unit that produces electric energy and forms of useful thermal energy used by an industrial or commercial host for industrial, commercial, heating or cooling purposes or a Generating Unit that produces electricity from waste heat from an industrial or commercial host.

* * *

- Eligible Intermittent Resource

A Generating Unit or Dynamic System Resource 1 MW or larger subject to a Participating Generator Agreement, QFNet Scheduled PGA, Dynamic Scheduling Agreement for Scheduling Coordinators, or Pseudo-Tie Participating Generator Agreement that is powered by wind or solar energy, except for a de minimis amount of Energy from other sources.

* * *

- Existing QF Contract

~~A Legacy PPA, as defined in the settlement approved by the CPUC in Decision D. 10-12-035 (December 16, 2010), as modified in Decision D.11-07-010 (July 15, 2011), that became effective on or prior to December 20, 1995 or, in the case of a Generator employing landfill gas technology, on or prior to December 31, 1996, and (1) has not been amended subsequent to November 23, 2011 or (2) has been amended in a manner that (a) does not extend the term of the Legacy Contract, (b) does not increase the capacity subject to the PPA, and (c) does not require compliance with the CAISO Tariff. An agreement for the sale of capacity, Energy, and/or Ancillary Services by a Participating Generator to an electric utility from a Qualifying Facility that became effective on or prior to December 20, 1995 or, in the case of a Participating Generator employing landfill gas technology, on or prior to December 31, 1996.~~

* * *

~~- Must-Take/Must-Run Generation~~

~~The Bid component that identifies Generating Units that are Regulatory Must-Take Generation or Regulatory Must-Run Generation.~~

* * *

- Net Scheduled ~~QF~~ Generating Unit

A ~~Generating Unit-Qualifying Facility~~ identified in a ~~Net ScheduledQF~~ PGA operated as a single unit such that the Energy bid or self-scheduled with the CAISO is the net value of the aggregate electrical net output of the ~~Qualifying Facility-Generating Unit~~ and the Self-provided Load.

Net Scheduled Participating Generator Agreement

An agreement between the CAISO and a Generator eligible to execute such an agreement under Section 4.6.3.3, a pro forma version of which is set forth in Appendix B.3.

Net Scheduled PGA

A Net Scheduled Participating Generator Agreement.

* * *

- Participating Generator

A Generator or other seller of Energy or Ancillary Services through a Scheduling Coordinator over the CAISO Controlled Grid (1) from a Generating Unit with a rated capacity of 1 MW or greater, (2) from a Generating Unit with a rated capacity of from 500 kW up to 1 MW for which the

Generator elects to be a Participating Generator, or (3) from a Generating Unit providing Ancillary Services or submitting Energy Bids through an aggregation arrangement approved by the CAISO, which has undertaken to be bound by the terms of the CAISO Tariff, in the case of a Generator through a Participating Generator Agreement, QF-Net Scheduled PGA, or Pseudo-Tie Participating Generator Agreement.

* * *

- Point Of Demarcation

For a Net Scheduled ~~QF~~ Generating Unit, the point (1) where the electrical conductors from the Net Scheduled QF-Generating Unit contact an electric utility system or the CAISO Controlled Grid; or (2) if dedicated utility distribution facilities are employed, where the dedicated facilities contact the electric utility system or the CAISO Controlled Grid.

* * *

~~-QF PGA~~

~~Qualifying Facility Participating Generator Agreement~~

* * *

~~-Qualifying Facility Participating Generator Agreement~~

~~An agreement between the CAISO and a Generator with a QF Generating Unit, a pro forma version of which is set forth in Appendix B.3.~~

* * *

- Regulatory Must-Take Generation

~~These~~ Generation from the following resources ~~identified by CPUC, or a Local Regulatory Authority, the operation of which is not subject to competition. These resources will be scheduled by that~~ the relevant Scheduling Coordinator schedules directly with the CAISO as Regulatory Must-Take Generation on a must-take basis:

~~(1) - Regulatory Must-Take Generation includes~~ g~~eneration from Generating Units from Qualifying Facility Generating Units~~ subject to

(a) an Existing QF Contract or an Amended QF Contract, or

(b) a QF power purchase agreement for a QF 20 MW or smaller pursuant to a mandatory purchase obligation as defined by federal law;

(2) Generation delivered from a CHP Resource needed to serve its host thermal requirements up to RMTMax in any hour; and

(3) Generation from ~~-, nuclear units and pre-existing power purchase contracts with minimum Energy take requirements.~~

* * *

- RMTMax

For a Generating Unit that provides Regulatory Must-Take Generation from a CHP Resource, the minimum operating level at which the Generating Unit can safely and reliably meet host requirements as established under section 4.6.10, including the production of electricity from heat produced as a consequence of the industrial host's operations.

* * *

- Self-Provided Load

The portion of Load that is served by a Net Scheduled QF-Generating Unit listed in a QF-Net Scheduled PGA, consistent with Section 218(b) of the California Public Utilities Code.

* * *

**Appendix B
Pro Forma Agreements**

* * *

**Appendix B.2
Participating Generator Agreement**

* * *

2.2.1 Exemption for Certain Generators. ~~A~~The Generator with an Existing QF Contract~~existing power purchase agreement~~ with a UDC is not required to sign a Participating Generator Agreement if: (a) the Generator sells all of its Energy (excluding any Energy consumed by auxiliary Load equipment electrically connected to that Generator's Generating Unit at the same point) and Ancillary Services to the UDC; (b) the Generator sells any Energy through "over the fence" arrangements as authorized under Section 218(b) of the California Public Utilities Code; or (c) the Generator employs landfill gas technology for the generation of electricity as authorized under 218(c) of the California Public Utilities Code. ~~With respect to subsections (a) and (b), an existing power purchase agreement shall mean an agreement which has been entered into and is effective as of December 20, 1995. With respect to subsection (c), an existing power purchase agreement shall mean an agreement which has been entered into and is effective as of December 31, 1996.~~

* * *

Appendix B.3

QF-Net Scheduled Participating Generator Agreement

THIS AGREEMENT is dated this ____ day of _____, ____ and is entered into, by and between:

(1) **[Full Legal Name]**, having its registered and principal place of business located at **[Address]** (the "Participating Generator");

and

(2) **California Independent System Operator Corporation**, a California nonprofit public benefit corporation having a principal executive office located at such place in the State of California as the CAISO Governing Board may from time to time designate, ~~initially 151 Blue Ravine Road, Folsom, California 95630~~ (the "CAISO").

The Participating Generator and the CAISO are hereinafter referred to as the "Parties".

Whereas:

- A. The CAISO Tariff provides that the CAISO shall not accept Bids for Energy or Ancillary Services generated by any Generating Unit interconnected to the CAISO Controlled Grid, or to the Distribution System of a Participating TO or of a UDC or MSS Operator otherwise than through a Scheduling Coordinator.
- B. The CAISO Tariff further provides that the CAISO shall not be obliged to accept Bids relating to Generation from any Generating Unit interconnected to the CAISO Controlled Grid unless the relevant Generator undertakes in writing to the CAISO to comply with all applicable provisions of the CAISO Tariff.
- C. The Participating Generator wishes to be able to submit Bids, from a ~~Qualifying Facility~~ Net Scheduled ~~QF-Generating Unit~~ to the CAISO through a Scheduling Coordinator and, therefore, wishes to undertake to the CAISO that it will comply with the applicable provisions of the CAISO Tariff, except as otherwise specified in this Agreement.
- D. It is the intent of the Parties that this Agreement will harmonize the special operational characteristics of the Participating Generator's ~~Qualifying Facility~~ Net Scheduled ~~Generating Unit~~ with the CAISO's grid operation function. Nothing in this Agreement is intended to limit or restrict the rights of the Participating Generator under Section 4.6.3.2 of the CAISO Tariff.
- E. The Parties are entering into this Agreement in order to establish the terms and conditions on which the CAISO and the Participating Generator will discharge their respective duties and responsibilities under the CAISO Tariff.

NOW THEREFORE, in consideration of the mutual covenants set forth herein, **THE PARTIES AGREE** as follows:

ARTICLE I

DEFINITIONS AND INTERPRETATION

1.1 Master Definitions Supplement. Unless defined in this Agreement, all capitalized terms and expressions used in this Agreement shall have the same meaning as those contained in the Master Definitions Supplement to the CAISO Tariff.

1.2 Rules of Interpretation. The following rules of interpretation and conventions shall apply to this Agreement:

- (a) if there is any inconsistency between this Agreement and the CAISO Tariff, the CAISO Tariff will prevail to the extent of the inconsistency, except as expressly provided otherwise in this Agreement;
- (b) the singular shall include the plural and vice versa;
- (c) the masculine shall include the feminine and neutral and vice versa;
- (d) "includes" or "including" shall mean "including without limitation";
- (e) references to a Section, Article or Schedule shall mean a Section, Article or a Schedule of this Agreement, as the case may be, unless the context otherwise requires;
- (f) a reference to a given agreement or instrument shall be a reference to that agreement or instrument as modified, amended, supplemented or restated through the date as of which such reference is made;
- (g) unless the context otherwise requires, references to any law shall be deemed references to such law as it may be amended, replaced or restated from time to time;
- (h) 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 personality;
- (i) unless the context otherwise requires, any reference to a Party includes a reference to its permitted successors and assigns;
- (j) any reference to a day, week, month or year is to a calendar day, week, month or year; and
- (k) the captions and headings in this Agreement are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Agreement.

ARTICLE II

ACKNOWLEDGEMENTS OF PARTICIPATING GENERATOR AND CAISO

- 2.1 CAISO Responsibility.** The Parties acknowledge that the CAISO is responsible for the efficient use and reliable operation of the CAISO Controlled Grid consistent with achievement of planning and Operating Reserve criteria no less stringent than those established by the Western Electricity Coordinating Council and the North American Electric Reliability Corporation and further acknowledges that the CAISO may not be able to satisfy fully these responsibilities if the Participating Generator fails to fully comply with all of its obligations under this Agreement.
- 2.2 Scope of Application to Parties.** The Participating Generator and CAISO acknowledge that all Qualifying Facility Generators, ~~(except those specified in Section 2.2.1 of this Agreement), and CHP Resources~~ wishing to submit Bids, to the CAISO through a Scheduling Coordinator shall first execute this Agreement or the standard Participating Generator Agreement applicable to ~~non-QF any~~ Generators. The Parties acknowledge that execution of this Agreement by the Participating Generator satisfies the requirement ~~of a written agreement as~~ set forth in Section 4.6 of the CAISO Tariff.
- 2.2.1 Exemption for Certain Generators.** ~~A~~ The Generator with an ~~existing power purchase agreement~~ Existing QF Contract with a UDC is not required to sign a QF-Net Scheduled Participating Generator Agreement if: (a) the Generator sells all of its Energy (excluding any Energy consumed by auxiliary Load equipment electrically connected to ~~the~~ QF at the same point) and Ancillary Services to the UDC; (b) the Generator sells any Energy through "over the fence" arrangements as authorized under Section 218(b) of the California Public Utilities Code; or (c) the Generator employs landfill gas technology for the generation of electricity as authorized under 218(c) of the California Public Utilities Code. ~~With respect to subsections (a) and (b), an existing power purchase agreement shall mean an agreement which has been entered into and is effective as of December 20, 1995. With respect to subsection (c), an existing power purchase agreement shall mean an agreement which has been entered into and is effective as of December 31, 1996.~~

ARTICLE III

TERM AND TERMINATION

- 3.1 Effective Date.** This Agreement shall remain in full force and effect until terminated pursuant to Section 3.2 of this Agreement and shall be effective as of the later of: (1) the date the Agreement is executed by the Parties; or (2) where the Participating Generator is a party to an existing Participating Generator Agreement, the date upon which termination of the existing Participating Generator Agreement is accepted for filing and made effective by FERC, if such FERC filing is required; or (3) where the Participating Generator is a party to an existing Participating Generator Agreement and this Agreement is required to be filed with FERC for acceptance, the later of the date upon which termination of the existing Participating Generator Agreement is accepted for filing and made effective by FERC, or the date this Agreement is accepted for filing and made effective by FERC.
- 3.2 Termination**
- 3.2.1 Termination by CAISO.** Subject to Section 5.2, the CAISO may terminate this Agreement by giving written notice of termination in the event that the Participating Generator commits any material default under this Agreement and/or the CAISO Tariff which, if capable of being remedied, is not remedied within thirty (30) days after the CAISO has given, to the Participating Generator, written notice of the default, unless excused by reason of Uncontrollable Forces in accordance with Article X of this

Agreement. With respect to any notice of termination given pursuant to this Section, the CAISO must file a timely notice of termination with FERC, if this Agreement was filed with FERC, or must otherwise comply with the requirements of FERC Order No. 2001 and related FERC orders. The filing of the notice of termination by the CAISO with FERC will be considered timely if: (1) the filing of the notice of termination is made after the preconditions for termination have been met, and the CAISO files the notice of termination within sixty (60) days after issuance of the notice of default; or (2) the CAISO files the notice of termination in accordance with the requirements of FERC Order No. 2001. This Agreement shall terminate upon acceptance by FERC of such a notice of termination, if filed with FERC, or thirty (30) days after the date of the CAISO's notice of default, if terminated in accordance with the requirements of FERC Order No. 2001 and related FERC orders.

- 3.2.2 Termination by Participating Generator.** In the event that the Participating Generator no longer wishes to submit Bids and transmit Energy or provide Ancillary Services through a Scheduling Coordinator over the CAISO Controlled Grid, it may terminate this Agreement, on giving the CAISO not less than ninety (90) days written notice, provided, however, that in accordance with Section 4.1.3, the Participating Generator may modify Schedule 1 to eliminate generating resources which it no longer owns or no longer has contractual entitlement to and such modification shall be effective upon receipt by the CAISO. With respect to any notice of termination given pursuant to this Section, the CAISO must file a timely notice of termination with FERC, if this Agreement has been filed with FERC, or must otherwise comply with the requirements of FERC Order No. 2001 and related FERC orders. The filing of the notice of termination by the CAISO with FERC will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and the CAISO files the notice of termination within thirty (30) days of receipt of such request; or (2) the CAISO files the notice of termination in accordance with the requirements of FERC Order No. 2001. This Agreement shall terminate upon acceptance by FERC of such a notice of termination, if such notice is required to be filed with FERC, or upon ninety (90) days after the CAISO's receipt of the Participating Generator's notice of termination, if terminated in accordance with the requirements of FERC Order No. 2001 and related FERC orders.

ARTICLE IV

GENERAL TERMS AND CONDITIONS

- 4.1 Net Scheduled Generating UnitsQFs**
- 4.1.1 Identification of Net Scheduled Net Scheduled Generating UnitQF.** The Participating Generator has identified the Net Scheduled Generating UnitQF that it owns, operates or has a contractual entitlement to, in Schedule 1, as required by Section 4.6.4 of the CAISO Tariff.
- 4.1.2 Technical Characteristics.** The Participating Generator shall provide to the CAISO the required information regarding operating contacts, rated capacity, and operating characteristics of the Net Scheduled Generating UnitQF. Pursuant to Sections 8.9 and 8.10 of the CAISO Tariff, and the Existing QF Contract or Amended QF Contract, if any, associated with that Net Scheduled Generating UnitQF, the CAISO may verify, inspect and test the capacity and operating characteristics of the Net Scheduled Generating UnitQF. The performance of such inspection or test shall be conducted at a time mutually agreed upon by the Parties, which agreement shall not unreasonably be withheld.
- 4.1.3 Notification of Changes.** Sixty (60) days prior to changing any technical information in Schedule 1, the Participating Generator shall notify the CAISO of the proposed changes.

Pursuant to Sections 8.9 and 8.10 of the CAISO Tariff, the CAISO may verify, inspect and test the capacity and operating characteristics; provided that the performance of such inspection or test is conducted at a time mutually agreed upon by the Parties, which agreement shall not unreasonably be withheld. The CAISO shall post on the CAISO Website a schedule showing, for at least one year in advance: (i) the proposed dates on which the CAISO's Master File will be updated, which dates shall occur at least every three months; (ii) the dates on which the information contained in the revised Master File will become effective; and (iii) the deadlines by which changed technical information must be submitted to the CAISO in order to be tested and included in the next scheduled update of the CAISO's Master File. Unless the Participating Generator fails to test at the values in the proposed change(s), the change will become effective upon the effective date for the next scheduled update of the Master File, provided the Participating Generator submits the changed information by the applicable deadline. Subject to such notification this Agreement shall not apply to any Net Scheduled ~~QF~~ Generating Unit identified in Schedule 1 which the Participating Generator no longer owns nor has contractual entitlement.

- 4.2 Agreement Subject to CAISO Tariff.** The Parties will comply with all applicable provisions of the CAISO Tariff except as expressly provided in Sections 4.2.1 through 4.2.5 of this Agreement.
- 4.2.1 Net Generation Metering.** Notwithstanding Section 10.1.3 of the CAISO Tariff, the Participating Generator may net the value for the Generation produced by each Net Scheduled Generating Unit ~~QF~~ listed in Schedule 1 and the value for the Demand of the Self-provided Load that is (i) served by the Net Scheduled Generating Unit ~~QF~~ and (ii) electrically located on the same side of the Point of Demarcation.
- 4.2.2 Meter and Telemetry Location.** The Participating Generator may satisfy the provisions of the CAISO Tariff for the installation of meters and telemetry by installing at the Point of Demarcation meters and telemetry for the purpose of recording the net impact of the Net Scheduled Generating Unit ~~QF~~ upon the CAISO Controlled Grid; provided that the installed meters and telemetry satisfy the technical functional and performance requirements for meters and telemetry set forth in the CAISO Tariff.
- 4.2.3 Scheduling, Billing and Settlement.** For scheduling, billing, and settlement purposes regarding Net Scheduled Generating Unit ~~QF~~ Self-provided Load, measurements shall be made at the Point of Demarcation.
- 4.2.4 Operating Limitations.** Net Scheduled Generating Unit ~~QF~~ operating limitations shall be set forth in Schedule 1 of this Agreement-, the resource data template used for transmittal of Participating Generator technical data to the CAISO pursuant to the CAISO Tariff, or as otherwise mutually agreed to by the Parties.
- 4.2.5 Limitations on CAISO Operating Orders.** The CAISO will not knowingly issue an operating order that: (1) requires the Participating Generator to reduce its Generation below the delineated Mminimum ~~O~~operating Llimit, other than in a System Emergency; (2) conflicts with operating instructions provided by the Participating Generator; or (3) results in damage to the Participating Generator's equipment, provided that any such equipment limitation has been provided to the CAISO and incorporated in the Participating Generator's operating instructions to the CAISO. If the Participating Generator: (1) receives a Schedule which requires operation below the Mminimum ~~O~~operating Llimit, and (2) deviates from that Schedule to continue to operate at the Mminimum ~~O~~operating Llimit, it will not be subject to any penalties or sanctions as a result of operating at the Mminimum ~~O~~operating Llimit. The Participating Generator's consequences for deviating from Schedules in Real-Time will be governed by the CAISO Tariff.

4.3 Obligations Relating to Ancillary Services

4.3.1 Submission of Bids. When the Scheduling Coordinator on behalf of the Participating Generator submits a Bid for Ancillary Services, the Participating Generator will, by the operation of this Section 4.3.1, warrant to the CAISO that it has the capability to provide that service in accordance with the CAISO Tariff and that it will comply with CAISO Dispatch Instructions for the provision of the service in accordance with the CAISO Tariff.

4.3.2 Certification. The Participating Generator shall not use a Scheduling Coordinator to submit a Bid for the provision of an Ancillary Service or submit a Submission to Self-Provide an Ancillary Service unless the Scheduling Coordinator serving that Participating Generator is in possession of a current certificate pursuant to Sections 8.3.4 and 8.4 of the CAISO Tariff.

4.4 Obligations relating to Major Incidents

4.4.1 Major Incident Reports. The Participating Generator shall promptly provide such information as the CAISO may reasonably request in relation to major incidents, in accordance with Section 4.6.7.3 of the CAISO Tariff.

4.5 Dispatch and Curtailment. The CAISO shall only dispatch or curtail a Net Scheduled Generating Unit QF of the Participating Generator: (a) to the extent the Participating Generator bids Energy or Ancillary Services from the Net Scheduled Generating Unit QF into the CAISO's markets or the Energy is otherwise available to the CAISO under Section 40 or 43 of the CAISO Tariff; or (b) if the CAISO must dispatch or curtail the Net Scheduled Generating Unit QF in order to respond to an existing or imminent System Emergency or condition that would compromise CAISO Balancing Authority Area integrity or reliability as provided in Sections 7 and 7.6.1 of the CAISO Tariff.

4.6 Information to Be Provided by Participating Generator. The Participating Generator shall provide to the CAISO (a) ~~a copy of the FERC order providing Qualifying Facility status to the Net Scheduled QF listed in Schedule 1,~~ (b) a copy of any existing power purchase agreement, if any, with a UDC or MSS for the Net Scheduled Generating Unit QF listed in Schedule 1, and (c) a copy or a summary of the primary terms of any agreement for standby service with a UDC or MSS Operator, a statement that the Net Scheduled Generating Unit is taking standby service pursuant to UDC tariff, or a statement that the Self-provided Load shall be curtailed concurrently with any Outage of the Generation serving that Self-provided Load in an amount sufficient to cover that Outage. The Participating Generator shall notify the CAISO promptly of any change in the status of any of the foregoing.

ARTICLE V

PENALTIES AND SANCTIONS

5.1 Penalties. If the Participating Generator fails to comply with any provisions of this Agreement, the CAISO shall be entitled to impose penalties and sanctions on the Participating Generator. No penalties or sanctions may be imposed under this Agreement unless a Schedule or CAISO Tariff provision providing for such penalties or sanctions has first been filed with and made effective by FERC. Nothing in the Agreement, with the exception of the provisions relating to the CAISO ADR Procedures, shall be construed as waiving the rights of the Participating Generator to oppose or protest any penalty proposed by the CAISO to the FERC or the specific imposition by the CAISO of any FERC-approved penalty on the Participating Generator.

- 5.2 Corrective Measures.** If the Participating Generator fails to meet or maintain the requirements set forth in this Agreement and/or in the CAISO Tariff as limited by the provisions of this Agreement, the CAISO shall be permitted to take any of the measures, contained or referenced in the CAISO Tariff, which the CAISO deems to be necessary to correct the situation.

ARTICLE VI

COSTS

- 6.1 Operating and Maintenance Costs.** The Participating Generator shall be responsible for all its costs incurred in connection with operating and maintaining the Net Scheduled QF identified in Schedule 1 for the purpose of meeting its obligations under this Agreement.

ARTICLE VII

DISPUTE RESOLUTION

- 7.1 Dispute Resolution.** The Parties shall make reasonable efforts to settle all disputes arising out of or in connection with this Agreement. In the event any dispute is not settled, the Parties shall adhere to the CAISO ADR Procedures set forth in Section 13 of the CAISO Tariff, which is incorporated by reference, except that any reference in Section 13 of the CAISO Tariff to Market Participants shall be read as a reference to the Participating Generator and references to the CAISO Tariff shall be read as references to this Agreement.

ARTICLE VIII

REPRESENTATIONS AND WARRANTIES

- 8.1 Representation and Warranties.** Each Party represents and warrants that the execution, delivery and performance of this Agreement by it has been duly authorized by all necessary corporate and/or governmental actions, to the extent authorized by law.
- 8.2 Necessary Approvals.** The Participating Generator represents that all necessary leases, approvals, permits, licenses, easements, rights of way or access to install, own and/or operate its Net Scheduled QF have been or will be obtained by the Participating Generator prior to the effective date of this Agreement.
- 8.3 Specific Warranty.** The Participating Generator represents and warrants that: (1) the Net Scheduled Generating Unit QF listed in Schedule 1 is (a) a Qualifying Facility or is operated as an integral part of a Qualifying Facility, or (b) is a CHP Resource, and (2) (a) the Self-provided Load of the Participating Generator that is served by the Net Scheduling QF either has, ~~contracted for~~ and continues to have through the term of this Agreement, ~~to have secured~~ standby service from a UDC or MSS Operator under terms approved by the Local Regulatory Authority or the Federal Energy Regulatory Commission, as applicable, or (b) that the Self-provided Load shall be curtailed concurrently with any Outage of the Generation serving that Self-provided Load in an amount sufficient to cover that Outage.

ARTICLE IX

LIABILITY

- 9.1 Liability.** The provisions of Section 14 of the CAISO Tariff will apply to liability arising under this Agreement, except that all references in Section 14 of the CAISO Tariff to Market Participants shall be read as references to the Participating Generator and references to the CAISO Tariff shall be read as references to this Agreement.

ARTICLE X

UNCONTROLLABLE FORCES

- 10.1 Uncontrollable Forces Tariff Provisions.** Section 14.1 of the CAISO Tariff shall be incorporated by reference into this Agreement except that all references in Section 14.1 of the CAISO Tariff to Market Participants shall be read as a reference to the Participating Generator and references to the CAISO Tariff shall be read as references to this Agreement.

ARTICLE XI

MISCELLANEOUS

- 11.1 Assignments.** Either Party may assign or transfer any or all of its rights and/or obligations under this Agreement with the other Party's prior written consent in accordance with Section 22.2 of the CAISO Tariff. Such consent shall not be unreasonably withheld. Any such transfer or assignment shall be conditioned upon the successor in interest accepting the rights and/or obligations under this Agreement as if said successor in interest was an original Party to this Agreement.
- 11.2 Notices.** Any notice, demand or request which may be given to or made upon either Party regarding this Agreement shall be made in accordance with Section 22.4 of the CAISO Tariff, provided that all references in Section 22.4 of the CAISO Tariff to Market Participants shall be read as a reference to the Participating Generator and references to the CAISO Tariff shall be read as references to this Agreement, and unless otherwise stated or agreed shall be made to the representative of the other Party indicated in Schedule 3. A Party must update the information in Schedule 3 of this Agreement as information changes. Such changes shall not constitute an amendment to this Agreement.
- 11.3 Waivers.** Any waiver at any time by either Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- 11.4 Governing Law and Forum.** This Agreement shall be deemed to be a contract made under, and for all purposes shall be governed by and construed in accordance with, the laws of the State of California, except its conflict of law provisions. The Parties irrevocably consent that any legal action or proceeding arising under or relating to this Agreement to which the CAISO ADR Procedures do not apply, shall be brought in any of the following forums, as appropriate: any court of the State of California, any federal

court of the United States of America located in the State of California, or, where subject to its jurisdiction, before the Federal Energy Regulatory Commission.

- 11.5 Consistency with Federal Laws and Regulations.** This Agreement shall incorporate by reference Section 22.9 of the CAISO Tariff as if the references to the CAISO Tariff were referring to this Agreement.
- 11.6 Merger.** This Agreement constitutes the complete and final agreement of the Parties with respect to the subject matter hereof and supersedes all prior agreements, whether written or oral, with respect to such subject matter.
- 11.7 Severability.** If any term, covenant, or condition of this Agreement or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Agreement and their application shall not be affected thereby, but shall remain in force and effect and the Parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination unless a court or governmental agency of competent jurisdiction holds that such provisions are not separable from all other provisions of this Agreement.
- 11.8 [NOT USED]**
- 11.9 Amendments.** This Agreement and the Schedules attached hereto may be amended from time to time by the mutual agreement of the Parties in writing. Amendments that require FERC approval shall not take effect until FERC has accepted such amendments for filing and made them effective. If the amendment does not require FERC approval, the amendment will be filed with FERC for information. Nothing contained herein shall be construed as affecting in any way the right of the CAISO to unilaterally make application to FERC for a change in the rates, terms and conditions of this Agreement under Section 205 of the FPA and pursuant to FERC's rules and regulations promulgated thereunder, and the Participating Generator shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the FPA and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the FPA and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 11.10 Counterparts.** This Agreement may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same Agreement.
- 11.11 Rights Reserved.** Execution of this Agreement does not deprive the Participating Generator of any unexpressed legal right, either under law or under an existing power purchase agreement.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be duly executed on behalf of each by and through their authorized representatives as of the date hereinabove written.

California Independent System Operator Corporation

By: _____

Name: _____

Title: _____

Date: _____

[NAME OF PARTICIPATING GENERATOR]

By: _____

Name: _____

Title: _____

Date: _____

[The following page is a placeholder for Schedule 1, Section 1.]

SCHEDULE 2

CAISO IMPOSED PENALTIES AND SANCTIONS

[Section 5.1]

TO BE INSERTED UPON FERC APPROVAL

SCHEDULE 3

**NOTICES
(Section 11.2)**

Participating Generator

Name of Primary

Representative: _____

Title: _____

Address: _____

City/State/Zip Code: _____

Email Address: _____

Phone: _____

Fax No: _____

Name of Alternative

Representative: _____

Title: _____

Address: _____

City/State/Zip Code: _____

Email Address: _____

Phone: _____

Fax No: _____

CAISO

Name of Primary

Representative: _____

Title: _____

Address: _____

City/State/Zip Code: _____

Email Address: _____

Phone: _____

Fax No: _____

Name of Alternative

Representative: _____

Title: _____

Address: _____

City/State/Zip Code: _____

Email Address: _____

Phone: _____

Fax No: _____

* * *

Appendix F

Rate Schedules

* * *

Schedule 4

Eligible Intermittent Resources Forecast Fee

A charge up to \$.10 per MWh shall be assessed on the metered Energy from Eligible Intermittent Resources as a Forecast Fee, provided that Eligible Intermittent Resources smaller than 10 MW that are not Participating Intermittent Resources and that sold power pursuant to a power purchase agreement

entered into pursuant to PURPA prior to entering into a PGA or **QFNet Scheduled** PGA shall be exempt from the Forecast Fee.

The rate of the Forecast Fee shall be determined so as to recover the projected annual costs related to developing Energy forecasting systems, generating forecasts, validating forecasts, and monitoring forecast performance, that are incurred by the CAISO as a direct result of participation by Eligible Intermittent Resources in CAISO Markets, divided by the projected annual Energy production by all Eligible Intermittent Resources.

The initial Forecast Fee, and all subsequent changes as may be necessary from time to time to recover costs incurred by the CAISO for the forecasting conducted on the behalf of Eligible Intermittent Resources pursuant to the foregoing rate formula, shall be set forth in a Business Practice Manual.

Participating Intermittent Resources Export Fee

A Participating Intermittent Resources Export Fee shall be assessed to Exporting Participating Intermittent Resources each calendar month. The Participating Intermittent Resources Export Fee shall be calculated as the product of (1) the sum of all Settlement costs avoided by Participating Intermittent Resources for the preceding calendar month, or portion thereof, consisting of Charge Codes 6486 [Real Time Excess Cost For Instructed] and 1487 [Energy Exchange Program Neutrality], but excluding charges for Uninstructed Energy associated with Charge Code 6475, (2) by the ratio of the total MW/h generated by an Exporting Participating Intermittent Resource during the calendar month, or portion thereof (based on metered output), by the total MW/h generated by all Participating Intermittent Resources during the calendar month, or portion thereof (based on metered output), and (3) by the percentage of the Exporting Participating Intermittent Resource's capacity deemed exporting under Section 5.3 of the EIRP or PIR Export Percentage.

Participating Intermittent Resources Export Fee per Participating Intermittent Resource =

Program Costs x (MW/h individual Participating Intermittent Resource/MW/h all Participating Intermittent Resources) x PIR Export Percentage

* * *

Appendix I Station Power Protocol

* * *

1.2 Eligibility

1.2.1 Only Station Power Loads associated with Generating Units in the CAISO Balancing Authority Area that are part of an approved Station Power Portfolio may be self-supplied in accordance with this SPP. Each Generating Unit must be subject to a PGA, **QFNet Scheduled** PGA, or MSS Agreement. Any generating facility outside the CAISO Balancing Authority Area owned by the same entity is eligible to provide Remote Self-Supply to Station Power Loads, subject to the terms of this SPP. Generating Units wishing to self-supply Station Power, by means other than netting permitted under Section 10.1.3 of the CAISO Tariff, shall complete the application process specified in Section 2 of this SPP.

* * *

2 Station Power Requirements and Review

2.1 Applications to Self-Supply Station Power

2.1.1 An application to establish a Station Power Portfolio or to modify the configuration of Station Power meters or the generating facilities included in a Station Power Portfolio must be submitted according to the process specified by the CAISO and posted on the CAISO Website, and shall include the following information:

- (a) One-line diagrams clearly showing the location and ownership of all Generating Units and Station Power meters, their connection to the CAISO Controlled Grid or distribution system, and the status of breakers and switchgear for normal system operation.
- (b) Identification of any generating facilities outside the CAISO Balancing Authority Area, to be used to provide Remote Self-Supply of Station Power within the proposed Station Power Portfolio. No loads associated with generating facilities outside the CAISO Balancing Authority Area may be supplied under this SPP.
- (c) Certification that the applicant is the sole owner of all generating facilities proposed to be included in the Station Power Portfolio, and that the applicant has the right to call on Energy for its own use from its ownership share of any jointly owned facilities that are proposed to be used to self-supply Station Power.
- (d) Demonstration that each Station Power meter is certified in accordance with the CAISO Tariff.
- (e) Verification that each Station Power meter is subject to a Meter Service Agreement for CAISO Metered Entities, and that each Generating Unit is bound to the CAISO Tariff by a PGA, QF-Net Scheduled PGA, or MSS Agreement.
- (f) Verification that the applicant has arranged for terms of service with the responsible UDC or MSS Operator for the use of any distribution facilities required to self-supply Station Power.

* * *

Appendix Q
Eligible Intermittent Resources Protocol (EIRP)

* * *

2.2.1 Agreements

The following agreements must be executed by the owner or operator of any Eligible Intermittent Resource, unless that resource is not subject to any of these agreements pursuant to the CAISO Tariff, such as an Eligible Intermittent Resource of an MSS Operator:

- (a) A Participating Generator Agreement, QF-Net Scheduled PGA, Dynamic Scheduling Agreement for Scheduling Coordinators, or Pseudo-Tie Participating Generator Agreement that, among other things, binds the Eligible Intermittent Resource to comply with the CAISO Tariff; and
- (b) A Meter Service Agreement for CAISO Metered Entities, for all Eligible Intermittent Resources other than Dynamic System Resources.

If an Eligible Intermittent Resource intends to become a Participating Intermittent Resource, it must also execute a letter of intent, which when executed and delivered to the CAISO shall initiate the process of certifying the Participating Intermittent Resource. The form of the letter of intent shall be specified by the CAISO in a Business Practice Manual.

* * *

Attachment C – Memorandum to the ISO Board of Governors

Regulatory Must-Take Generation – Tariff Amendment

California Independent System Operator

Fifth Replacement FERC Electric Tariff

September 17, 2012



Memorandum

To: ISO Board of Governors

From: Keith Casey, Vice President, Market & Infrastructure Development

Date: May 9, 2012

Re: Decision on Regulatory Must-Take Generation Scheduling Priority

This memorandum requires Board action.

EXECUTIVE SUMMARY

Under the Public Utility Regulatory Policies Act (PURPA) of 1978, certain small generators and combined heat and power generators could obtain treatment as qualifying facilities, which exempted them from parts of the Federal Power Act. PURPA imposed on public utilities a mandatory purchase requirement for energy from qualifying facilities. In 2005, Congress amended PURPA to allow public utilities to seek relief from the mandatory purchase requirement.

Since the inception of the ISO, qualifying facilities under pre-existing contracts entered into pursuant to the PURPA have been treated as “regulatory must-take” resources, and have also been exempt from complying with the tariff. Regulatory must-take resources have a higher scheduling priority than resources with economic bids or self-schedules. As discussed below, many of these resources are no longer under exempt PURPA contracts. By the mid-2015, this will be true of all but certain small qualifying facilities. Facilities that are no longer under the exempt PURPA contracts must comply with the tariff. If the ISO takes no action, these resources will also lose the higher scheduling priority that is used to protect output levels necessary for their host manufacturing needs.

The regulatory must-take scheduling priority provides a higher level of protection from curtailment in the ISO market optimization. In the event of over-generation or congestion, economic bids and self-schedules would be curtailed before regulatory must-take schedules. The purpose of Management’s proposal is to afford a certain class of resources, combined heat and power resources, with the ability to establish a portion of their capacity for continued eligibility for the higher scheduling priority based on the thermal needs of their host industrial requirements.

Regulatory must-take scheduling priority provides continued protection to combined heat and power resources but only for the capacity dedicated to serve their industrial requirements. Capacity of combined heat and power resources that is not eligible for

regulatory must-take scheduling priority will be available to participate in the market through submission of economic bids and self-schedules. The added protection will enable increased participation in the ISO market by combined heat and power resources.

The ISO has identified, through its renewable integration studies, the increased operational need for dispatch flexibility within the existing generation fleet and new resources. By allowing higher scheduling priority to the physical must-take capacity of combined heat and power facilities, the ISO believes that existing and new combined heat and power resources will make existing and new flexibility capacity available to the ISO market.

Management proposes the following motion:

Moved, that the ISO Board of Governors approves the proposed policy change regarding regulatory must-take generation scheduling priority, as described in the memorandum dated May 9, 2012; and

Moved, that the ISO Board of Governors authorizes Management to make all necessary and appropriate filings with the Federal Energy Regulatory Commission to implement the proposed tariff change.

DISCUSSION

Management proposes to provide regulatory must-take scheduling priority to combined heat and power resources up to the amount of capacity that is dedicated for producing thermal energy for an industrial host, regardless of whether the resource is or was a qualifying facility under PURPA. Under the proposal, the scheduling priority protects eligible capacity from curtailment in the ISO market optimization. Currently, in the event of over-generation or congestion, economic bids and self-schedules are curtailed before regulatory must-take schedules. In the event that a regulatory must-take schedule was curtailed, the market optimization would have exhausted all effective economic bids and self-schedules. While the ISO rarely curtails either self-schedules or regulatory must-take schedules, which currently apply to qualifying facilities under pre-existing PURPA contracts and nuclear resources, the potential for curtailment creates risk to the related industrial processes, which could adversely affect the operation of the host industry and potentially increase the costs of products produced by the facilities if the resources are curtailed.

Management recommends revising the tariff definition of regulatory must-take generation that is currently limited to resources under PURPA to make it more generally applicable to combined heat and power resources. Under this proposal, the regulatory must-take scheduling priority is limited to the maximum amount of eligible capacity

needed to produce thermal energy used by a host industrial facility. In addition, Management will require that regulatory must-take schedules reflect the actual hourly physical requirements of the industrial host.

History of regulatory must-take generation for qualifying facilities

In 2007, after many years of proceedings regarding qualifying facilities issues, the CPUC issued a decision that included provisions requiring qualifying facilities whose grandfathered PURPA power purchase agreements had terminated to enter into new standard forms of power purchase agreements that include, among other provisions, requirements to comply with the ISO tariff. In that proceeding, the ISO advocated that qualifying facilities be required to comply with the tariff. In addition, at workshops and hearings, the ISO advanced the concept of continuing to provide the higher scheduling priority to the capacity dedicated to serve industrial hosts to encourage participation in the ISO market of capacity not needed to serve industrial hosts.

Subsequently, representatives of the investor-owned utilities, cogeneration resources, ratepayer advocates, and the CPUC staff entered into settlement negotiations in an effort to develop a “global settlement” of issues outstanding in various CPUC proceedings regarding treatment of qualifying facilities and combined heat and power resources. On December 21, 2010, the CPUC approved a settlement agreement. However, the CPUC subsequently received several applications for rehearing and a petition for modification of the settlement agreement. On July 15, 2011, the CPUC granted the joint petition of California Municipal Utilities Association and the parties to the global settlement for modification of the original CPUC settlement agreement. On November 23, 2011, the conditions outlined in the modified settlement agreement were satisfied and the settlement became effective on that date.

Under the current tariff, qualifying facilities may use the regulatory must-take scheduling priority up to 100% of its capacity provided that the qualifying facility is subject to a “grandfathered” power purchase agreement pursuant to the PURPA. If a grandfathered PURPA power purchase agreement has terminated, no regulatory must-take scheduling priority status applies to the qualify facility.

Establishment of the maximum regulatory must-take scheduling priority amount

Management recommends enforcing, through its market software, a maximum amount of capacity from a combined heat and power facility that is eligible for regulatory must-take scheduling priority.

While the maximum value could be equal to nameplate capacity for some facilities, it is expected to be generally less than the nameplate capacity of most resources. The maximum amount of eligible regulatory must-take capacity would be two values. The two values will allow different maximum eligibility amounts for off-peak and on-peak hours. While the on-peak value will be required, the different off-peak value would be optional and used only if both the combined heat and power resource and its contractual counterparty (or the ISO if there is no contractual counterparty) agree. Regulatory must-take hourly schedules would be limited by these values. However, combined heat and power resources are allowed only to use the scheduling priority up to the actual megawatt quantity necessary to meet the expected host's industrial process requirement in any given hour. In addition, a load serving entity's contract with a combined heat and power resource may contain curtailment provisions that allow the load serving entity as the scheduling coordinator to exercise its rights and schedule, in any given hour, below the maximum amount eligible for the scheduling priority or the actual megawatt quantity necessary to meet the host's industrial process requirement. Capacity above the hourly regulatory must-take scheduling priority amount can be bid as self-schedules or economic bids.

The maximum amount of capacity eligible for regulatory must-take scheduling priority will be agreed upon by the combined heat and power resource owner and the scheduling coordinator if there is a power purchase agreement between the owner and the scheduling coordinator. If the resource and scheduling coordinator cannot agree on a value, the amount will be determined by a mutually agreed upon independent engineer and paid for by the resource owner and scheduling coordinator, who will split such costs evenly unless the parties agree otherwise.

If a combined heat and power resource elects to participate as a merchant generator, the resource owner and the ISO must agree on the maximum amount eligible for regulatory must-take scheduling priority. If they cannot agree, the amount must be determined by an independent engineer agreed to by the ISO and the resource owner and paid for by the resource owner.

The maximum amount eligible for regulatory must-take scheduling priority must be reestablished at least annually but may be changed as often as the resource owner and scheduling coordinator (or ISO) agrees. In addition, on no less than an annual basis, the combined heat and power resource will submit an indicative hourly profile of expected use of the must-take scheduling priority for the year.

Compliance with standard capacity product requirements

On November 30, 2011, FERC conditionally accepted the ISO's tariff filing which exempts scheduling coordinators for certain qualifying facilities that provide resource adequacy capacity from forced outage reporting requirements for the purposes of standard capacity product availability determination. Management recommends permitting resources that have qualified for a standard capacity product exemption, but lose their qualifying facility status, to maintain the exemption for the balance of the term of the existing power purchase agreement, provided all other conditions continue to be met. For example, a combined heat and power resource could lose its qualifying facility status if increased participation in the ISO market resulted in the resource being unable to meet the PURPA efficiency standards required for qualifying facility status.

Eligibility for use-limited resource status

Management anticipates that many combined heat and power resources will qualify for use-limited status under the resource adequacy rules – meaning the resource would be eligible to count for resource adequacy despite having limitations on the number of run hours or amount of energy output it can produce. Unlike conventional generation resources, eligibility as use-limited resource adequacy resources for combined heat and power resources cannot be established based on standard operating limitations, such as energy limits or number of starts. Therefore, Management recommends allowing use-limited resource status based on a demonstration that treatment as a non-use limited resource adequacy resource would unduly interfere with the operation of the thermal host or undermine regulatory policy objectives concerning efficiency or greenhouse gas emissions.

POSITIONS OF THE PARTIES

A lengthy stakeholder process was conducted that has resulted in some evolution toward consensus, compared with the divergent initial positions of the investor-owned utilities and the combined heat and power resource owners. The main point of contention is eligibility for regulatory must-take schedule priority. The final joint position of the utilities is that (in addition to resources that are under PURPA contracts and nuclear plants) only resources that continue to meet the PURPA efficiency standard and have entered into one of the forms of contracts approved in the CPUC global settlement should be eligible for regulatory must-take scheduling priority.

The utilities argue that Management's proposal will result in more resources qualifying for higher scheduling priority than currently exists today. Management agrees that by not restricting the scheduling priority to only resources that meet the PURPA efficiency standard, a larger number of resources could qualify for the higher scheduling priority.

However, the scheduling priority would be based on physical must-take requirements dedicated to the industrial host's requirements. As a result, Management expects much more flexible capacity to be available to the ISO under the proposed approach than had previously been available under the current PURPA contracts which allow for 100 percent of the capacity to use the higher scheduling priority. Management believes this energy should receive a higher scheduling priority in the market optimization due to its non-dispatchable nature, the lower likelihood that the resource would be able to respond to curtailments, and the harm caused to the industrial host as a result of complying with curtailments. In addition, the higher scheduling priority will be limited to the non-dispatchable capacity based upon the host's physical requirements and limitations in a given hour.

The combined heat and power resource representatives generally support Management's proposal, but have indicated some concerns regarding how much flexibility the utility, as scheduling coordinator, would have to determine the amount of physical must-take capacity that would be scheduled. The ISO's position is that the utility, as scheduling coordinator, should schedule the must-take capacity identified by the resource owner subject to any contractual right that might be in issue. The resource representatives have also expressed concerns regarding the requirement to submit an annual indicative profile of expected must-take scheduling. Management believes the requirement is reasonable and that the profile is informational and nonbinding.

A stakeholder matrix is attached for your reference.

MANAGEMENT RECOMMENDATION

Management recommends that the Board approve the proposal to provide regulatory must-take generation scheduling priority to cogeneration facilities as described in this memorandum. The proposal reflects the practical reality that combined heat and power facilities have physical must-take capacity dedicated to an industrial process. At the same time, the proposal provides that capacity not dedicated to a host industrial process is made available to the ISO. The protection provided by the regulatory must-take scheduling priority minimizes the risk of interference with the industrial process of combined heat and power resources caused by participating in the ISO market. The proposed provisions will lead to increased market participation of capacity that is not needed for industrial requirements.

Attachment D – Matrix of Stakeholder Comments
Regulatory Must-Take Generation – Tariff Amendment
California Independent System Operator
Fifth Replacement FERC Electric Tariff
September 17, 2012

Stakeholder Process: Regulatory Must-Take Scheduling Priority

Summary of Submitted Comments

Stakeholders submitted four rounds of written comments to the ISO on the following dates:

- Round One, 1/13/2011
- Round Two, 2/14/2011
- Round Three, 1/25/2012
- Round Four, 2/14/2012

This matrix summarizes the most recently submitted stakeholder comments.

Stakeholder comments are posted at: <http://www.caiso.com/informed/Pages/StakeholderProcesses/Regulatory-Generation.aspx>

Other stakeholder efforts include:

- Stakeholder Conference Call: December 22, 2010
- Stakeholder Conference Call: February 2, 2011
- Stakeholder Conference Call: January 17, 2012
- Stakeholder Conference Call: February 6, 2012
- Stakeholder Conference Call: March 1, 2012
- IOU & CHP Meeting: April 17, 2012

Management Proposal	Wellhead	Investor Owned Utilities	Combined Heat and Power Parties	CalWEA	IEP	Management Response
Amend "Regulatory Must-Take Generation" Definition to limit qualifying facility eligibility to qualifying facilities with PURPA contracts but to allow combined heat and power resources to be eligible	Supports	Support a much narrower combined heat and power eligibility limited to combined heat and power resources entering into pro forma contracts established in the modified CPUC global settlement. IOUs express concern that we are expanding the scope of resources eligible for higher scheduling priority and thereby reducing flexible capacity.	Supports	Proposal fails to deal with other qualifying facility resources that have had 100% regulatory must-take status such as wind	Supports	<p>Management believes the IOUs' proposed definition is too narrow. Management's proposal is intended to be generally applicable to combined heat and power resources to protect that portion of the capacity that is physically not dispatchable. Management's position is that capacity dedicated to an industrial process is effectively non-dispatchable and the ISO is better off operationally to model the capacity as less dispatchable than capacity that is not dedicated to an industrial host. At the same time the ISO is trying to ensure that the capacity not used by the host is dispatchable and made available to the ISO market.</p> <p>With respect to wind resources, Management does not propose to continue to allow regulatory must-take scheduling priority after termination of PURPA power purchase agreements for qualifying facilities that are not combined heat and power resources. In addition, with respect to wind, existing participating intermittent resource program applies and existing stakeholder processes exist dedicated to renewables and renewable integration.</p>
Definition of maximum limit on regulatory	Supports					Management proposes to establish an upper threshold of RMTmax based on the needs of the industrial

Management Proposal	Wellhead	Investor Owned Utilities	Combined Heat and Power Parties	CalWEA	IEP	Management Response
must-take scheduling priority (RMTmax) as the amount of capacity needed to meet industrial host requirements		IOUs appear to support proposed definition, although argue allowing a single RMTmax value for all 24 hours may limit their flexibility. For example, PG&E has requested creating two RMTmax values, one for on-peak hours and a second for off-peak hours.	Supports		Supports	host. In response to PG&E's concerns, Management modified the proposal to allow for two RMTmax values, one for peak and one for off-peak hours.
Daily hourly regulatory must-take schedules should reflect actual requirements even if below RMTmax	Supports	Agrees but supports greater flexibility concerning how capacity is scheduled	Supports but proposes tariff requirement that requires scheduling coordinator to schedule regulatory must-take values as directed by the combined heat and power resource.		Supports	Management agrees that combined heat and power resources should dictate regulatory must-take self-schedule requirements and that the capacity should be scheduled with the self-schedule priority subject to any contractual rights between the combined heat and power resource and the IOU/SC. The capacity not used for higher scheduling priority should be made available to the ISO consistent with resource adequacy must offer obligations. For combined heat and power resources that apply for and qualify as use-limited resource adequacy resources, their use limitation plan will dictate availability.

Management Proposal	Wellhead	Investor Owned Utilities	Combined Heat and Power Parties	CalWEA	IEP	Management Response
Standard capacity product treatment applies but grandfathered qualifying facilities exempted from reporting and penalties	Supports	Does not oppose	Does not oppose		Does not oppose	
Allow combined heat and power resources to apply for use-limited status	Supports	Does not oppose	Supports		Supports	
Establishing the amount of regulatory must-take as agreed upon or as determined by a mutually agreed upon engineer		Agrees but asserts that initial value should be zero until amount agreed upon or established per independent engineer.				<p>Based on the current tariff, regulatory must-take status is lost at termination of PURPA contracts. So current tariff default would be zero regulatory must-take capacity and new values for RMTmax will not be in effect until the effective date of the tariff amendment.</p> <p>Management proposes that once a default value is established, this would be the default value until changed. Management proposes that this value be reestablished annually. This means that if there is any dispute, the prior year's value would remain in place during the time period required to engage an</p>

Management Proposal	Wellhead	Investor Owned Utilities	Combined Heat and Power Parties	CalWEA	IEP	Management Response
						independent engineer in case parties fail to agree on the value.
Annual establishment of RMTmax values and annual submission of non-binding indicative regulatory must-take usage profile		Agree	Propose a three year review		Expressed concerns about unpredictability of annual host requirements	Management believes that a one year review is reasonable compromise. Management also believes it is reasonable to request non-binding information on anticipated yearly scheduling of regulatory must-take capacity based on information known or anticipated at the time of submission subject to the understanding that the information is subject to change.

FERC rendition of the electronically filed tariff records in Docket No. ER12-02634-000
Filing Data:
CID: C001183
Filing Title: 2012-09-17 CAISO Regulatory Must-Take Generation Amendment Filing
Company Filing Identifier: 364
Type of Filing Code: 10
Associated Filing Identifier:
Tariff Title: CAISO eTariff
Tariff ID: 11
Payment Confirmation:
Suspension Motion: N

Tariff Record Data:
Record Content Description, Tariff Record Title, Record Version Number, Option Code:
4.5.1, Scheduling Coordinator Certification, 8.0.0, A
Record Narrative Name:
Tariff Record ID: 5825
Tariff Record Collation Value: 24334072 Tariff Record Parent Identifier: 5824
Proposed Date: 2012-12-12
Priority Order: 500
Record Change Type: CHANGE
Record Content Type: 1
Associated Filing Identifier:

4.5.1 Scheduling Coordinator Certification

Only Scheduling Coordinators that the CAISO has certified as having met the requirements of this Section 4.5.1 may participate in the CAISO's Energy and Ancillary Services markets. Scheduling Coordinators offering Ancillary Services shall additionally meet the requirements of Section 8.

Each Scheduling Coordinator shall:

- (a) demonstrate to the CAISO's reasonable satisfaction that it is capable of performing the functions of a Scheduling Coordinator under this CAISO Tariff including (without limitation) the functions specified in Sections 4.5.3 and 4.5.4 as applicable;
- (b) identify each of the Eligible Customers (including itself if it trades for its own account) which it is authorized to represent as Scheduling Coordinator and confirm that the metering requirements under Section 10 are met in relation to each Eligible Customer that it represents under this CAISO Tariff;
- (c) identify each of the Convergence Bidding Entities that it is authorized to represent as Scheduling Coordinator;
- (d) confirm that each of the End-Use Customers it represents is eligible for service as a Direct Access End User;

- (e) confirm that none of the Wholesale Customers it represents is ineligible for wholesale transmission service pursuant to the provisions of FPA Section 212(h);
- (f) demonstrate to the CAISO's reasonable satisfaction that it meets the financial criteria set out in Section 12;
- (g) enter into a Scheduling Coordinator Agreement with the CAISO; and
- (h) provide NERC tagging data, as applicable.

4.5.1.1 Procedure to become a Scheduling Coordinator

4.5.1.1.1 Scheduling Coordinator Application

To become a Scheduling Coordinator, a Scheduling Coordinator Applicant must submit a completed application, as set forth in the applicable Business Practice Manual, to the CAISO by mail or in person. A Scheduling Coordinator Applicant may retrieve the application and necessary information from the CAISO Website.

4.5.1.1.2 CAISO Information

The CAISO will provide the following information, in its most current form, on the CAISO Website. Upon a request by a Scheduling Coordinator Applicant, the CAISO will send the following information by electronic mail:

- (a) the Scheduling Coordinator Application Form, as set forth in the applicable Business Practice Manual;
- (b) the CAISO Tariff and Business Practice Manuals; and
- (c) forms for a credit application for Scheduling Coordinator Applicants applying for Unsecured Credit Limits and for provision of Financial Security to be provided pursuant to Section 12.

4.5.1.1.3 Duplicate Information

If two or more Scheduling Coordinators apply simultaneously to register with the CAISO for a single meter or Meter Point for a CAISO Metered Entity or if a Scheduling Coordinator applies to register with the CAISO for a meter or Meter Point for a CAISO Metered Entity for which a Scheduling Coordinator has already registered, the CAISO will return the application with an

explanation that only one Scheduling Coordinator may register with the CAISO for the meter or Meter Point in question and that a Scheduling Coordinator has already registered or that more than one Scheduling Coordinator is attempting to register for that meter or Meter Point. The CAISO will send the Scheduling Coordinator Applicant the name and address of the applicable Scheduling Coordinator or Scheduling Coordinator Applicant. Nothing in this Section 4.5.1.1.3 shall prohibit one Scheduling Coordinator from registering with the CAISO to submit Bids for Demand Response Services from a Proxy Demand Resource associated with a given meter (or Meter Point) where a different Scheduling Coordinator is registered for purposes of serving the demand of the Load associated with that meter (or Meter Point).

4.5.1.1.4 Scheduling Coordinator Applicant Returns Application

At least 120 days before the proposed commencement of service, the Scheduling Coordinator Applicant must return a completed application form with the non-refundable application fee of \$5,000 to cover the application processing costs.

4.5.1.1.5 Notice of Receipt

Within three (3) Business Days of receiving the application, the CAISO will send electronic notification to the Scheduling Coordinator Applicant that it has received the application and the non-refundable fee.

4.5.1.1.6 CAISO Review of Application

Within ten (10) Business Days after receiving an application, the CAISO will provide electronic notification to the Scheduling Coordinator Applicant whether the Scheduling Coordinator Applicant has submitted all necessary information as set forth in Section 4.5.1, and the Scheduling Coordinator Application Form set forth in the applicable Business Practice Manual.

4.5.1.1.6.1 Information Requirements

The Scheduling Coordinator Applicant must submit with its application:

- (a) the proposed date for commencement of service, which may not be less than 120 days after the date the application was filed, unless waived by the CAISO;
- (b) financial and credit information as set forth in Section 12; and

- (c) the prescribed non-refundable application fee of \$5,000.

4.5.1.1.6.2 Scheduling Coordinator Applicant's Obligation for Contracts

A Scheduling Coordinator Applicant must certify that it is duly authorized to represent the Generators and Loads that are its Scheduling Coordinator Customers and must further certify that:

- (a) represented Generators or other suppliers have entered into Participating Generator Agreements, Net Scheduled Participating Generator Agreements, or Pseudo Tie Participating Generator Agreements as provided in Appendices B.2, B.3, and B.16, respectively with the CAISO or other contracts that obligate the supplier to comply with the terms of the CAISO Tariff, as applicable;
- (b) represented UDCs have entered into UDC Operating Agreements as provided in Appendix B.8 with the CAISO;
- (c) represented CAISO Metered Entities have entered into Meter Service Agreements for CAISO Metered Entities as provided in Appendix B.6 with the CAISO;
- (d) none of the Wholesale Customers it will represent are ineligible for wholesale transmission service pursuant to the provisions of the FPA Section 212(h); and
- (e) each End-Use Customer it will represent is eligible for service as a Direct Access End User pursuant to an established program approved by the California Public Utilities Commission or a Local Regulatory Authority.

A Scheduling Coordinator Applicant that seeks to serve as Scheduling Coordinator for one or more Convergence Bidding Entities must certify that it is duly authorized to represent those Convergence Bidding Entities and to submit and settle Virtual Bids on their behalf.

4.5.1.1.7 Deficient Application

In the event that the CAISO has determined that the application is deficient, the CAISO will send an electronic notification of the deficiency to the Scheduling Coordinator Applicant within ten (10)

Business Days of receipt by the CAISO of the application explaining the deficiency and requesting additional information.

4.5.1.1.7.1 Scheduling Coordinator Applicant's Additional Information

Once the CAISO requests additional information, the Scheduling Coordinator Applicant has five (5) Business Days, or such longer period as the CAISO may agree, to provide the additional material requested by the CAISO.

4.5.1.1.7.2 No Response from Scheduling Coordinator Applicant

If the Scheduling Coordinator Applicant does not submit additional information within five (5) Business Days or the longer period referred to in Section 4.5.1.1.7.1, the application may be rejected by the CAISO.

4.5.1.1.8 CAISO Approval or Rejection of an Application

4.5.1.1.8.1 Approval or Rejection Notification

- (a) If the CAISO approves the application, it will send an electronic notification of approval. In addition, the CAISO will provide a Scheduling Coordinator Agreement, a Meter Service Agreement for Scheduling Coordinators as provided in Appendix B.7, if applicable, any other applicable agreements, and any required CAISO network connectivity security agreement for the Scheduling Coordinator Applicant's signature.
- (b) If the CAISO rejects the application, the CAISO will send an electronic notification of rejection stating one or more of the following grounds:
 - (i.) incomplete information;
 - (ii.) non-compliance with credit requirements pursuant to Section 12;
 - (iii.) non-compliance with third party contractual obligations;
 - (iv.) non-compliance with technical requirements; or
 - (v.) non-compliance with any other CAISO Tariff requirements.

Upon request, the CAISO will provide guidance as to how the Scheduling Coordinator Applicant can cure the grounds for the rejection.

4.5.1.1.8.2 Time for Processing Application

The CAISO will make a decision whether to accept or reject the application within ten (10) Business Days of receipt of the application. If more information is requested, the CAISO will make a final decision within ten (10) Business Days of the receipt of all outstanding or additional information requested.

4.5.1.1.9 Scheduling Coordinator Applicant's Response

4.5.1.1.9.1 Scheduling Coordinator Applicant's Acceptance

If the CAISO accepts the application, the Scheduling Coordinator Applicant must return an executed Scheduling Coordinator Agreement, Meter Service Agreement for Scheduling Coordinators, if applicable, any other applicable agreements, and a completed credit application and Financial Security provided pursuant to Section 12, as applicable.

4.5.1.1.9.2 Scheduling Coordinator Applicant's Rejection

4.5.1.1.9.2.1 Resubmittal

If an application is rejected, the Scheduling Coordinator Applicant may resubmit its application at any time. An additional application fee will not be required for the second application submitted within six (6) months after the CAISO's issuance of a rejection notification.

4.5.1.1.9.2.2 Appeal

The Scheduling Coordinator Applicant may also appeal against the rejection of an application by the CAISO. An appeal must be submitted within twenty (20) Business Days following the CAISO's issuance of a notification of rejection of its application.

4.5.1.1.10 Post Application Procedures Prior to Final Certification

4.5.1.1.10.1 Scheduling Coordinator's Administrative, Financial and Technical Requirements

The CAISO will not certify that a Scheduling Coordinator Applicant has become a Scheduling Coordinator until the Scheduling Coordinator Applicant has completed all of the following requirements:

- (a) provided the technical/operational information required to complete the Scheduling Coordinator Application Form as set forth in the applicable Business Practice Manual, and to comply with Section 10.3;

- (b) executed a network connectivity security agreement for access to the CAISO's software used in conducting business with the CAISO and compliance with the CAISO's system security requirements in a form approved by the CAISO, if applicable;
- (c) obtained and installed any required software for functional interface for Validation, Estimation and Editing meter values (VEE), if applicable;
- (d) undertaken required training and testing regarding the use of the CAISO's market, operating, and technical systems, as specified in the applicable Business Practice Manual;
- (e) provided its bank account information and arranged for Fed-Wire transfers;
- (f) provided an emergency plan specifying the procedures by which Scheduling Coordinator operations and contacts with the CAISO will be maintained during an emergency, containing information specified in the applicable Business Practice Manual; and
- (g) obtained and installed a computer link and any necessary software in order to communicate with the CAISO, as specified in the applicable Business Practice Manual.

Additional instructions for completing the foregoing requirements will be set forth in a Business Practice Manual posted on the CAISO Website.

4.5.1.1.10.2 Application Closure after 12 Months

The CAISO will not certify a Scheduling Coordinator Applicant as a Scheduling Coordinator until the Scheduling Coordinator Applicant has completed all of the requirements for certification set forth in this Section 4.5 to the CAISO's satisfaction within twelve (12) months following the CAISO's acceptance of the application for processing. If the Scheduling Coordinator Applicant has not completed all the above referenced requirements within twelve (12) months after the CAISO's acceptance of the application, the CAISO may close the Scheduling Coordinator Applicant's application. The CAISO shall provide the Scheduling Coordinator Applicant thirty (30)

days advance notice of its intent to close the application. If the CAISO closes the application, the Scheduling Coordinator Applicant must submit a new application and non-refundable application fee if it continues to request certification as a Scheduling Coordinator.

4.5.1.1.11 Final Certification of Scheduling Coordinator Applicant

The Scheduling Coordinator Applicant will become a Scheduling Coordinator when:

- (a) its application has been accepted;
- (b) it has entered into a Scheduling Coordinator Agreement, a Meter Service Agreement for Scheduling Coordinators, if applicable, and any other applicable agreements with the CAISO;
- (c) it has met the credit requirements of Section 12; and
- (d) it has fulfilled all technical/operational requirements of Sections 4.5.4.1 and 4.5.1.1.10.1.

The CAISO will not certify a Scheduling Coordinator Applicant as a Scheduling Coordinator until the Scheduling Coordinator Applicant has completed all the above referenced requirements to the CAISO's satisfaction, at least ten (10) Business Days before the commencement of service.

4.5.1.1.12 Generation Affiliate Disclosure Requirements

Each Scheduling Coordinator Applicant will notify the CAISO of any Affiliate that owns, controls, and/or schedules resources that may provide Energy or Ancillary Services in the CAISO Markets. The Scheduling Coordinator Applicant will provide the CAISO with information on each such Affiliate, including information concerning the corporate relationship of such Affiliate and the business purpose of such Affiliate. These requirements will continue to apply after a Scheduling Coordinator Applicant becomes a Scheduling Coordinator.

4.5.1.1.13 Resource Control Agreements

Each Scheduling Coordinator Applicant will register with the CAISO any resource it controls through a Resource Control Agreement to which the Scheduling Coordinator Applicant and/or any Affiliate that satisfies the criteria set forth in Section 4.5.1.1.12 is a party. This requirement will continue to apply after a Scheduling Coordinator Applicant becomes a Scheduling Coordinator. The applicable Business Practice Manual sets forth the procedures for registering a resource

controlled through a Resource Control Agreement.

4.5.1.2 Scheduling Coordinator's Ongoing Obligations After Certification

4.5.1.2.1 Scheduling Coordinator's Obligation to Report Changes

4.5.1.2.1.1 Obligation to Report a Change in Filed Information

Each Scheduling Coordinator has an ongoing obligation to inform the CAISO of any changes to any of the information submitted by it to the CAISO as part of the application process including, but not limited to, any changes to the information requested by the CAISO, any changes in its credit ratings, any changes regarding its Affiliates that satisfy the requirements of Section 4.5.1.1.12, and any changes regarding resources controlled through Resource Control Agreements that satisfy the requirements of Section 4.5.1.1.13. The applicable Business Practice Manual sets forth the procedures for changing the Scheduling Coordinator's information and the timing of notifying the CAISO of such changes.

4.5.1.2.1.2 Obligation to Report a Change in Credit Rating or Material Change in Financial Condition

The Scheduling Coordinator has an ongoing obligation to inform the CAISO within three (3) Business Days of any change to its credit ratings or any Material Change in Financial Condition.

4.5.1.2.2 CAISO's Response for Failure to Inform

4.5.1.2.2.1 Failure to Promptly Report a Material Change

If a Scheduling Coordinator fails to inform the CAISO of a material change in its information provided to the CAISO, which may affect the reliability or safety of the CAISO Controlled Grid, or the Financial Security of the CAISO, the CAISO may suspend or terminate the Scheduling Coordinator's rights under the CAISO Tariff in accordance with the terms of Sections 12 and 4.5 respectively. If the CAISO intends to terminate the Scheduling Coordinator's rights it shall file a notice of termination with FERC, if required by FERC rules, in accordance with the terms of the Scheduling Coordinator Agreement. Such termination shall be effective upon acceptance by FERC of a notice of termination, if required by FERC rules, or as otherwise permitted by FERC rules.

4.5.1.3 Additional Scheduling Coordinator ID Code Registration

A Scheduling Coordinator Applicant is granted one Scheduling Coordinator ID Code (SCID) with

its application fee. Requests may be made for additional Scheduling Coordinator ID Codes. The fee for each additional Scheduling Coordinator Identification Code is \$500 per month, or as otherwise specified in Schedule 1 of Appendix F.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
 4.6, Relationship Between CAISO And Generators, 6.0.0, A
 Record Narrative Name:
 Tariff Record ID: 5829
 Tariff Record Collation Value: 27810368 Tariff Record Parent Identifier: 5808
 Proposed Date: 2012-12-12
 Priority Order: 500
 Record Change Type: CHANGE
 Record Content Type: 1
 Associated Filing Identifier:

The CAISO shall not accept Bids for any Generating Unit interconnected to the electric grid within the CAISO Balancing Authority Area (which includes a Pseudo-Tie of a Generating Unit to the CAISO Balancing Authority Area) otherwise than through a Scheduling Coordinator. The CAISO shall further not be obligated to accept Bids from Scheduling Coordinators relating to Generation from any Generating Unit interconnected to the electric grid within the CAISO Balancing Authority Area (which includes a Pseudo-Tie of a Generating Unit to the CAISO Balancing Authority Area) unless the relevant Generator undertakes in writing, by entering into a Participating Generator Agreement or, if eligible to enter such an agreement under the applicable terms of the CAISO tariff, a Net Scheduled PGA, Pseudo-Tie Participating Generator Agreement, or Metered Subsystem Agreement, with the CAISO to comply with all applicable provisions of this CAISO Tariff as they may be amended from time to time, including, without limitation, the applicable provisions of this Section 4.6 and Section 7.7.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
 4.6.3, Requirements for Certain Participating Generators, 3.0.0, A
 Record Narrative Name:
 Tariff Record ID: 5832
 Tariff Record Collation Value: 30417590 Tariff Record Parent Identifier: 5829
 Proposed Date: 2012-12-12
 Priority Order: 500
 Record Change Type: CHANGE
 Record Content Type: 1
 Associated Filing Identifier:

4.6.3.1 Participating Generators Directly Connected to a Distribution System

With regard to any Generating Unit directly connected to a Distribution System, a Participating Generator shall comply with applicable UDC tariffs, requirements of the Local Regulatory Authority, interconnection requirements and generation agreements. With regard to a

Participating Generator's Generating Units directly connected to a Distribution System, the CAISO and the UDC or MSS, as applicable, will coordinate to develop procedures to avoid conflicting CAISO and UDC or MSS, as applicable, operational directives. .

4.6.3.2 Exemption for Generating Units Less Than One (1) MW

A Generator with a Generating Unit directly connected to a Distribution System will be exempt from compliance with this Section 4.6 and Section 10.1.3 in relation to that Generating Unit provided that (i) the rated capacity of the Generating Unit is less than one (1) MW, and (ii) the Generator does not use the Generating Unit to participate in the CAISO Markets. This exemption in no way affects the calculation of or any obligation to pay the appropriate charges or to comply with all the other applicable Sections of this CAISO Tariff. A Generating Unit with a rated capacity of less than 500 kW, unless the Generating Unit is participating in an aggregation agreement approved by the CAISO, is not eligible to participate in the CAISO Markets and the Generator is not a Participating Generator for that Generating Unit.

With regard to any Generating Unit directly connected to a UDC system, a Participating Generator shall comply with applicable UDC tariffs, interconnection requirements and generation agreements. With regard to a Participating Generator's Generating Units directly connected to a UDC system, the CAISO and the UDC will coordinate to develop procedures to avoid conflicting CAISO and UDC operational directives. With regard to Regulatory Must-Take Generation, the CAISO will honor applicable terms and conditions of existing agreements, including Existing QF Contracts, as specified in Section 4.6.3.2. Qualifying Facilities that are not Regulatory Must-Take Generation subject to an Existing QF Contract shall comply with the requirements applicable to Participating Generators, as specified in Section 4.6.3.3.

4.6.3.3 Qualifying Facilities and Combined Heat and Power Resources

The owner or operator of (1) a Qualifying Facility, (2) a resource that is subject to an Amended QF Contract, or (3) a Combined Heat and Power Resource may satisfy the requirements of Section 4.6, to the extent applicable, by entering into Net Scheduled Participating Generator Agreement (Net Scheduled PGA) with the CAISO, in which case it shall comply with the provisions of the Net Scheduled PGA and Section 4.6.3.4. In order to be eligible to enter into the

Net Scheduled PGA, a Participating Generator must demonstrate to the CAISO (a) that its Generating Unit (1) has established QF status pursuant to PURPA, (2) is a party to an Amended QF Contract; or (3) is a CHP Resource and (b) that the Self-provided Load of the Participating Generator that is served by the resource either (1) has and continues through the term of the Net Scheduled PGA to have, standby service from a UDC or MSS Operator under terms approved by the Local Regulatory Authority or FERC, as applicable, or (2) is curtailed concurrently with any Outage of the Generation serving that Self-provided Load in an amount sufficient to cover that Outage.

4.6.3.4 Participating Generator with a Net Scheduled PGA

A Participating Generator that is eligible for and has entered into a Net Scheduled Participating Generator Agreement shall be subject to the provisions of this Section 4.6.3.4, as reflected in the terms of the Net Scheduled PGA.

4.6.3.4.1 Revenue Metering for a Net Scheduled Generating Unit

In accordance with the terms of the Net Scheduled PGA and Section 10.1.3.3, a Participating Generator that has entered into a Net Scheduled PGA may net the revenue metering value for the Generation produced by each Net Scheduled Generating Unit listed in the Net Scheduled PGA and the revenue metering value for the Demand of the Self-provided Load that is (i) served by the Net Scheduled Generating Unit and (ii) electrically located on the same side of the Point of Demarcation.

4.6.3.4.2 Telemetry for a Net Scheduled Generating Unit

A Participating Generator that has entered into a Net Scheduled PGA may satisfy the provisions of Section 7.6.1(d) for the installation of telemetry by installing telemetry at the Point of Demarcation for the purpose of recording the net impact of the Net Scheduled Generating Unit upon the CAISO Controlled Grid; provided that the installed telemetry satisfies the technical, functional, and performance requirements for telemetry set forth in the CAISO Tariff and the applicable Business Practice Manual.

4.6.3.4.3 Market and Settlement Processes for a Net Scheduled Generating Unit

For bidding, scheduling, billing, and Settlement purposes regarding the Net Scheduled

Generating Unit Self-provided Load of a Participating Generator that has entered into a Net Scheduled PGA, measurements of Generation or Demand of the Net Scheduled Generating Unit shall be made at the Point of Demarcation. In all other respects, the Generation and Load of the Net Scheduled Generating Unit shall be subject to the applicable provisions of the CAISO Tariff regarding bidding, scheduling, billing, and Settlements.

4.6.3.4.4 Operating Requirements for a Net Scheduled Generating Unit

A Participating Generator that has entered into a Net Scheduled PGA shall abide by CAISO Tariff provisions regarding the CAISO's ability to dispatch or curtail Generation from the Net Scheduled Generating Units listed in its Net Scheduled PGA. The CAISO shall only dispatch or curtail a Net Scheduled Generating Unit of the Participating Generator: (a) to the extent the Participating Generator bids Energy or Ancillary Services from the Net Scheduled Generating Unit into the CAISO Markets or the Energy is otherwise available to the CAISO under Section 40, subject to the restrictions on operating orders set forth below; or (b) if the CAISO must dispatch or curtail the Net Scheduled Generating Unit in order to respond to an existing or imminent System Emergency or condition that would compromise CAISO Balancing Authority Area integrity or reliability as provided in Sections 7 and 7.6.1.

The CAISO will not knowingly issue an operating order to a Participating Generator that has entered into a Net Scheduled PGA that: (1) requires a Participating Generator to reduce its Generation below the delineated minimum operating limit, other than in a System Emergency; (2) conflicts with operating instructions provided to the CAISO by the Participating Generator; or (3) results in damage to the Participating Generator's equipment, provided that any such equipment limitation has been provided to the CAISO and incorporated in the Participating Generator's operating instructions provided to the CAISO. If the Participating Generator: (1) receives a Schedule which requires operation below the minimum operating limit, and (2) deviates from that Schedule to continue to operate at the minimum operating limit, it will not be subject to any penalties or sanctions as a result of operating at the minimum operating limit. The Participating Generator's consequences for deviating from Schedules in Real-Time will be governed by the CAISO Tariff.

The CAISO shall have the authority to coordinate and approve Generation Outage schedules for the Generating Unit(s) listed in a Net Scheduled PGA, in accordance with the provisions of Section 9.

4.6.3.5 Participating Generator with a Net Scheduled PGA

A Participating Generator that is eligible for and has entered into a Net Scheduled Participating Generator Agreement shall be subject to the provisions of this Section 4.6.3.5, as reflected in the terms of the Net Scheduled PGA.

4.6.3.5.1 Revenue Metering for a Net Scheduled Generating Unit

In accordance with the terms of the Net Scheduled PGA and Section 10.1.3.3, a Participating Generator that has entered into a Net Scheduled PGA may net the revenue metering value for the Generation produced by each Net Scheduled Generating Unit listed in the Net Scheduled PGA and the revenue metering value for the Demand of the Self-provided Load that is (i) served by the Net Scheduled Generating Unit and (ii) electrically located on the same side of the Point of Demarcation.

4.6.3.5.2 Telemetry for a Net Scheduled Generating Unit

A Participating Generator that has entered into a Net Scheduled PGA may satisfy the provisions of Section 7.6.1(d) for the installation of telemetry by installing telemetry at the Point of Demarcation for the purpose of recording the net impact of the Net Scheduled Generating Unit upon the CAISO Controlled Grid; provided that the installed telemetry satisfies the technical, functional, and performance requirements for telemetry set forth in the CAISO Tariff and the applicable Business Practice Manual.

4.6.3.5.3 Market and Settlement Processes for a Net Scheduled Generating Unit

For bidding, scheduling, billing, and Settlement purposes regarding the Net Scheduled Generating Unit Self-provided Load of a Participating Generator that has entered into a Net Scheduled PGA, measurements of Generation or Demand of the Net Scheduled Generating Unit shall be made at the Point of Demarcation. In all other respects, the Generation and Load of the Net Scheduled Generating Unit shall be subject to the applicable provisions of the CAISO Tariff regarding bidding, scheduling, billing, and Settlements.

4.6.3.5.4 Operating Requirements for a Net Scheduled Generating Unit

A Participating Generator that has entered into a Net Scheduled PGA shall abide by CAISO Tariff provisions regarding the CAISO's ability to dispatch or curtail Generation from the Net Scheduled Generating Units listed in its Net Scheduled PGA. The CAISO shall only dispatch or curtail a Net Scheduled Generating Unit of the Participating Generator: (a) to the extent the Participating Generator bids Energy or Ancillary Services from the Net Scheduled Generating Unit into the CAISO Markets or the Energy is otherwise available to the CAISO under Section 40, subject to the restrictions on operating orders set forth below; or (b) if the CAISO must dispatch or curtail the Net Scheduled Generating Unit in order to respond to an existing or imminent System Emergency or condition that would compromise CAISO Balancing Authority Area integrity or reliability as provided in Sections 7 and 7.6.1.

The CAISO will not knowingly issue an operating order to a Participating Generator that has entered into a Net Scheduled PGA that: (1) requires a Participating Generator to reduce its Generation below the delineated minimum operating limit, other than in a System Emergency; (2) conflicts with operating instructions provided to the CAISO by the Participating Generator; or (3) results in damage to the Participating Generator's equipment, provided that any such equipment limitation has been provided to the CAISO and incorporated in the Participating Generator's operating instructions provided to the CAISO. If the Participating Generator: (1) receives a Schedule which requires operation below the minimum operating limit, and (2) deviates from that Schedule to continue to operate at the minimum operating limit, it will not be subject to any penalties or sanctions as a result of operating at the minimum operating limit. The Participating Generator's consequences for deviating from Schedules in Real-Time will be governed by the CAISO Tariff.

The CAISO shall have the authority to coordinate and approve Generation Outage schedules for the Generating Unit(s) listed in a Net Scheduled PGA, in accordance with the provisions of Section 9.

Record Narrative Name:
Tariff Record ID: 9309
Tariff Record Collation Value: 36066570 Tariff Record Parent Identifier: 5829
Proposed Date: 2012-12-12
Priority Order: 500
Record Change Type: NEW
Record Content Type: 1
Associated Filing Identifier:

4.6.10 RMTMax for CHP Resources

4.6.10.1 Initial Determination

Each Generating Unit that provides Regulatory Must-Take Generation from a CHP Resource must establish an RMTMax, which is determined as follows:

- (a) If the Generating Unit's Scheduling Coordinator is a UDC or MSS and there is a power purchase agreement between the Generating Unit's owner or operator and its Scheduling Coordinator, by agreement of the two entities, or if not, by agreement of the Generating Unit's owner or operator and the CAISO, subject to subsection (d) below,
- (b) In the event agreement cannot be reached or there is insufficient evidence of any agreement, by affidavit of an independent California-licensed certified engineer based on the engineer's assessment of the annual and seasonal requirements of the host and the resulting electrical output. Unless otherwise agreed upon, the cost of the engineer will be evenly shared by the Generating Unit's owner or operator and its Scheduling Coordinator if the Scheduling Coordinator is a UDC or MSS and there is a power purchase agreement between the Generating Unit's owner or operator and the Scheduling Coordinator, or paid entirely by the Generating Unit's owner or operator, if the Scheduling Coordinator is not a UDC or MSS.
- (c) Based on an agreement between the Generating Unit owner or operator and the Scheduling Coordinator, if it is a UDC or MSS and there is a power purchase agreement between the Generating Unit's owner or operator and the Scheduling Coordinator, or, otherwise, between the Generating Unit owner or operator and the CAISO, two daily RMTMax values may be established, one for off-peak and one for

on-peak, as those terms are defined by NERC.

- (d) RMTMax may not be established at a level that will conflict with the terms and conditions of a power purchase agreement negotiated by the Generating Unit owner or operator and the UDC or MSS.

4.6.10.2 Redetermination

The RMTMax must be reestablished on an annual basis using the methodologies described in section 4.6.10.1. It may be reestablished more frequently than once a year subject to the Master File change process if agreed by the Generating Unit's owner or operator and its Scheduling Coordinator, if the Scheduling Coordinator is a UDC or MSS, or by agreement of the Generating Unit's owner or operator and the CAISO.

4.6.10.3 Usage Profile

As part of the initial and annual recertification process, the Generating Unit owner or operator must provide the CAISO and its Scheduling Coordinator, if the Scheduling Coordinator is a UDC or MSS, with an annual non-binding indicative Regulatory Must-Take Generation usage profile.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

7.7.2, Emergency Procedures, 1.0.0, A

Record Narrative Name:

Tariff Record ID: 5920

Tariff Record Collation Value: 106896104 Tariff Record Parent Identifier: 5918

Proposed Date: 2012-12-12

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

In the event of a System Emergency, the CAISO shall take such action as it considers necessary to preserve or restore stable operation of the CAISO Controlled Grid. The CAISO shall act in accordance with Good Utility Practice to preserve or restore reliable, safe and efficient service as quickly as reasonably practicable. The CAISO shall keep system operators in adjacent Balancing Authority Areas informed as to the nature and extent of the System Emergency in accordance with WECC procedures and, where practicable, shall additionally keep the Market Participants within the Balancing Authority Area informed.

7.7.2.1 Declarations of System Emergencies

The CAISO shall, when it considers that conditions giving rise to a System Emergency exist,

declare the existence of such System Emergency. A declaration by the CAISO of a System Emergency shall be binding on all Market Participants until the CAISO announces that the System Emergency no longer exists.

7.7.2.2 Responsibilities of UDCs and MSSs Operators During a System Emergency

In the event of a System Emergency, UDCs shall comply with all directions from the CAISO concerning the management and alleviation of the System Emergency and shall comply with all procedures concerning System Emergencies set out in this CAISO Tariff, the Business Practice Manuals, and the Operating Procedures, and each MSS Operator shall comply with all directions from the CAISO concerning the avoidance, management and alleviation of the System Emergency and shall comply with all procedures concerning System Emergencies set forth in the CAISO Tariff, Business Practice Manuals and Operating Procedures. During a System Emergency, the CAISO and UDCs shall communicate through their respective control centers and in accordance with procedures established in individual UDC Operating Agreements, and the CAISO and the MSS Operator shall communicate through their respective control centers and in accordance with procedures established in the MSS Agreement.

7.7.2.3 Responsibilities of Generating Units, System Units and System Resources During System Emergencies

All Generating Units and System Units that are owned or controlled by a Participating Generator are (without limitation to the CAISO's other rights under this CAISO Tariff) subject to control by the CAISO during a System Emergency and in circumstances in which the CAISO considers that a System Emergency is imminent or threatened. The CAISO shall, subject to this Section 7, have the authority to instruct a Participating Generator to bring its Generating Unit on-line, off-line, or increase or curtail the output of the Generating Unit and to alter scheduled deliveries of Energy and Ancillary Services into or out of the CAISO Controlled Grid, if such an instruction is reasonably necessary to prevent an imminent or threatened System Emergency or to retain Operational Control over the CAISO Controlled Grid during an actual System Emergency. The CAISO shall have the authority to instruct an RMR Unit whose owner has selected Condition 2 of its RMR Contract to start-up and change its output if the CAISO has reasonably used all other

available and effective resources to prevent a threatened System Emergency without declaring that a System Emergency exists. If the CAISO so instructs a Condition 2 RMR Unit, it shall compensate that unit in accordance with Section 11.5.6.3 and allocate the costs in accordance with Section 11.5.6.3.2. Each QF subject to an Existing QF Contract and not subject to a PGA or Net Scheduled PGA will make reasonable efforts to comply with the CAISO's instructions during a System Emergency without penalty for failure to do so.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
 8.2.3, Quantities Of Ancillary Services Required; Use Of AS Regions, 8.0.0, A
 Record Narrative Name:
 Tariff Record ID: 5946
 Tariff Record Collation Value: 129492024 Tariff Record Parent Identifier: 5943
 Proposed Date: 2012-12-12
 Priority Order: 500
 Record Change Type: CHANGE
 Record Content Type: 1
 Associated Filing Identifier:

For each of the Ancillary Services, the CAISO shall determine the quantity and location of the Ancillary Service which is required using Ancillary Service Regions as described in Section 8.3.3. For each of the Ancillary Services, the CAISO shall determine the required locational dispersion in accordance with CAISO Controlled Grid reliability requirements. The Ancillary Services provided must be under the direct Dispatch control of the CAISO on a Real-Time Dispatch Interval basis. The CAISO shall determine the quantities it requires as provided for in Sections 8.2.3.1 to 8.2.3.3.

8.2.3.1 Regulation Service

The CAISO shall maintain sufficient resources immediately responsive to the CAISO's EMS control in order to provide sufficient Regulation service to allow the CAISO Balancing Authority Area to meet NERC and WECC reliability standards and any requirements of the NRC by continuously balancing resources to meet deviations between actual and scheduled Demand and to maintain Interchange Schedules. The quantity of Regulation Down and Regulation Up capacity needed for each Settlement Period of the Day-Ahead Market and in each fifteen (15) minute period in Real-Time shall be determined by the CAISO as a percentage of the applicable CAISO Forecast of CAISO Demand for the Day-Ahead and Real-Time Markets. In HASP, the amount of advisory Regulation from Dynamic System Resources required for each Settlement

Period in the next Trading Hour is also determined based on the CAISO Forecast of CAISO Demand. The advisory awards of Regulation from Dynamic System Resources in HASP are not binding and are re-optimized through the RTUC and RTD processes in the Real-Time Market. The CAISO's determination is based upon its need to meet the NERC and WECC reliability standards and any requirements of the NRC.

The CAISO will publish on OASIS the estimated quantity, or the percentage used to determine the estimated quantity, of Regulation Reserves required for each hour of the Day-Ahead Market and in each fifteen (15) minute period in Real-Time for the Trading Day.

8.2.3.2 Spinning and Non-Spinning Reserves

The CAISO shall maintain minimum contingency Operating Reserve made up of Spinning Reserve and Non-Spinning Reserve in accordance with NERC and WECC reliability standards and any requirements of the NRC. The CAISO from time to time may determine to use more stringent criteria.

8.2.3.3 Voltage Support

The CAISO shall determine on an hourly basis for each day the quantity and location of Voltage Support required to maintain voltage levels and reactive margins within NERC and WECC reliability standards, and any requirements of the NRC using a power flow study based on the quantity and location of scheduled Demand. The CAISO shall issue daily voltage schedules (Dispatch Instructions) to Participating Generators, Participating TOs and UDCs, which are required to be maintained for CAISO Controlled Grid reliability. All other Generating Units shall comply with the power factor requirements set forth in contractual arrangements in effect on the CAISO Operations Date, or, if no such contractual arrangements exist and the Generating Unit exists within the system of a Participating TO, the power factor requirements applicable under the Participating TO's TO Tariff or other tariff on file with the FERC.

All Participating Generators that operate Asynchronous Generating Facilities subject to the Large Generator Interconnection Agreement set forth in Appendix BB or CC shall maintain the CAISO specified voltage schedule if required under Appendix H of the Large Generator Interconnection Agreement, while operating within the power factor range specified in their interconnection

agreements. For all other Generating Units, Participating Generators shall maintain the CAISO specified voltage schedule at the Generating Unit terminals to the extent possible, while operating within the power factor range specified in their interconnection agreements, or, for Regulatory Must-Take Generation with Existing QF Contracts or Amended QF Contracts, Regulatory Must-Run Generation and Reliability Must-Run Generation, consistent with existing obligations. For Generating Units that do not operate under one of these agreements, the minimum power factor range will be within a band of 0.90 lag (producing VARs) and 0.95 lead (absorbing VARs) power factors. Participating Generators with Generating Units existing at the CAISO Operations Date that are unable to meet this operating power factor requirement may apply to the CAISO for an exemption. Prior to granting such an exemption, the CAISO shall require the Participating TO, UDC or other utility to whose system the relevant Generating Units are interconnected to notify it of the existing contractual requirements for Voltage Support established prior to the CAISO Operations Date for such Generating Units. Such requirements may be contained in CPUC Electric Rule 21 or the Interconnection Agreement with the Participating TO, UDC or other utility. The CAISO shall not grant any exemption under this Section from such existing contractual requirements. The CAISO shall be entitled to instruct Participating Generators to operate their Generating Units at specified points within their power factor ranges. Participating Generators shall receive no compensation for operating within these specified ranges.

If the CAISO requires additional Voltage Support, it shall procure this either through Reliability Must-Run Contracts or, if no other more economic sources are available, by instructing a Generating Unit to move its MVar output outside its mandatory range. Only if the Generating Unit must reduce its MW output in order to comply with such an instruction will it be eligible to recover its opportunity cost in accordance with Section 11.10.1.4.

All Loads directly connected to the CAISO Controlled Grid shall maintain reactive flow at grid interface points within a specified power factor band of 0.97 lag to 0.99 lead. Loads shall not be compensated for the service of maintaining the power factor at required levels within the bandwidth. A UDC interconnecting with the CAISO Controlled Grid at any point other than a Scheduling Point shall be subject to the same power factor requirement.

The CAISO will establish voltage control standards with UDCs and the operators of other Balancing Authority Areas and will enter into operational agreements providing for the coordination of actions in the event of a voltage problem occurring.

8.2.3.4 Black Start Capability

The CAISO shall determine the amount and location of Black Start Generation it requires through contingency studies that are used as the basis of the CAISO's emergency plans. The studies shall specify:

- (a) the initiating disturbance;
- (b) the magnitude of the Outage, including the extent of the Outage (local area, CAISO Controlled Grid, or WECC), the assumed status of Generation after the initiating disturbance, the status of interconnections, the system Demand level at the time of the disturbance, the interconnection support, and assumptions regarding the availability of support from other utilities to help restore Generation and Demand;
- (c) the Generator performance including a percentage of Black Start units (to be determined by the CAISO) which are expected to fail to start, and;
- (d) expected transmission system damage.

The CAISO shall also specify the following Load restoration performance goals:

- (i) Black Start unit startup and connection times;
- (ii) CAISO Controlled Grid restoration times; and
- (iii) Load restoration times.

Scheduling Coordinators shall provide the CAISO with their Load restoration time requirements for any Loads that provide emergency services.

8.2.3.4.1 Black Start Units

The CAISO will select Black Start capacity in locations where adequate transmission capacity can be made readily available (assuming no transmission damage) to connect the Black Start Generating Unit to the station service bus of a Generating Unit designated by the CAISO. Black

Start Generating Units:

- (a) must be located in the CAISO Balancing Authority Area;
- (b) may be located anywhere in the CAISO Balancing Authority Area provided that the Black Start resource is capable of meeting the CAISO performance requirements for starting and interconnection to the CAISO Controlled Grid; but
- (c) must be dispersed throughout the CAISO Balancing Authority Area.

8.2.3.4.2 Black Start Services

- (a) All Participating Generators with Black Start Generating Units must satisfy technical requirements specified by the CAISO.
- (b) The CAISO shall from time to time undertake performance tests, with or without prior notification.
- (c) The CAISO shall have the sole right to determine when the operation of Black Start Generating Units is required to respond to conditions on the CAISO Controlled Grid.
- (d) If the CAISO has intervened in the market for Energy and/or Ancillary Services pursuant to Section 7.7.4, the price paid by the CAISO for Black Start services shall be sufficient to permit the relevant Participating Generator to recover its costs over the period that it is directed to operate by the CAISO.
- (e) If a Black Start Generating Unit fails to achieve a Black Start when called upon by the CAISO, or fails to pass a performance test administered by the CAISO, the Market Participant that has contracted to supply Black Start service from the Generating Unit shall re-pay to the CAISO any reserve payment(s) that it has received since the administration of the last performance test or the last occasion upon which it successfully achieved a Black Start when called upon by the CAISO, whichever is the

shorter period.

8.2.3.5 Ancillary Service Substitution

The CAISO, whenever possible, will increase its purchases of an Ancillary Service that can substitute for another Ancillary Service, when doing so is expected to reduce its total cost of procuring Ancillary Services while meeting reliability requirements. The substitution described in this section can only occur with the purchase of bid-in Ancillary Services; substitution may not involve Self-Provided Ancillary Services. The CAISO will make such adjustments in accordance with the following principles:

- (a) The Regulation requirement must be satisfied only by Regulation Bids for resources qualified to provide Regulation;
- (b) Additional Regulation Up capacity can be used to satisfy requirements for Spinning Reserve, or Non-Spinning Reserve;
- (c) Regulation Up and Spinning Reserve requirements must be collectively satisfied by the combination of Regulation Up and Spinning Reserve Bids. Spinning Reserve and Regulation may be provided as separate services from the same resource, provided that the sum of Spinning Reserve and Regulation Up provided is not greater than the maximum Ramp Rate of the resource (MW/minute) times ten (10);
- (d) Additional Regulation Up and Spinning Reserve capacity can be used to satisfy requirements for Non-Spinning Reserve.
- (e) Regulation Up, Spinning Reserve, and Non-Spinning Reserve requirements must be collectively satisfied by the combination of Regulation Up, Spinning Reserve and Non-Spinning Reserve Bids;
- (f) Total MW purchased from the Regulation Up, Spinning Reserve, and Non-Spinning Reserve markets will not be changed by this Section 8.2.3.5; and
- (g) Regulation Energy resulting from Regulation that substituted for another

Ancillary Service continues to be treated as Regulation Energy
regardless of what service it substituted.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
9.3.5, Method Of Communications, 1.0.0, A
Record Narrative Name:
Tariff Record ID: 6008
Tariff Record Collation Value: 183374608 Tariff Record Parent Identifier: 6003
Proposed Date: 2012-12-12
Priority Order: 500
Record Change Type: CHANGE
Record Content Type: 1
Associated Filing Identifier:

The primary method of communication from an Operator to the CAISO with regard to
maintenance and Outage planning will be as described in the Operating Procedure on the CAISO
Website and in the applicable Business Practice Manual. Emergency capabilities, to be used
only as a back-up if the primary communication method is unavailable, will include:

- (a) voice;
- (b) fax; and
- (c) electronic (E-mail, FTP file, etc.).

9.3.5.1 Confirmation

When fax or electronic communication is utilized, confirmation from the CAISO must be received
by the Operator to validate the receipt of the request.

9.3.5.2 Communication of Approval or Rejection

The CAISO shall use the same methods in communicating the approval or rejection of an Outage
request or approval of a request to change an Approved Maintenance Outage to the relevant
Operator.

9.3.5.2.1 Information regarding planned Outages for resources with an Existing QF Contract or an
Amended QF Contract shall be provided to the CAISO Outage Coordination Office by the
Participating TO or UDC that is a party to the Existing QF Contract or an Amended QF Contract
or by a Participating Generator. Information provided will be that obtained by the Participating
TO, UDC or a Participating Generator pursuant to the terms of Existing QF Contract or an
Amended QF Contract or as requested by the CAISO. Scheduling and approvals of Maintenance
Outages for resources with an Existing QF Contract or an Amended QF Contract shall continue to

be coordinated as detailed in the applicable contract with the Participating TO or UDC, provided the owner of the Regulatory Must-Take Generation resource has not executed a Participating Generator Agreement or Net Scheduled PGA. If the owner of a resource has executed a Participating Generator Agreement or Net Scheduled PGA, it shall comply with Section 9.3.5 and other provisions applicable to Participating Generators.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

9.3.6, Maintenance Outage Planning, 6.0.0, A

Record Narrative Name:

Tariff Record ID: 6009

Tariff Record Collation Value: 184243680 Tariff Record Parent Identifier: 6003

Proposed Date: 2012-12-12

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

9.3.6 Maintenance Outage Planning

Each Operator shall, by not later than October 15 each year, provide the CAISO with a proposed schedule of all Maintenance Outages it wishes to undertake in the following year. The proposed schedule shall include all of the Operator's transmission facilities that comprise the CAISO Controlled Grid and Generating Units subject to a Participating Generator Agreement, Net Scheduled PGA, or Pseudo-Tie Participating Generator Agreement (including its Reliability Must-Run Units). In the case of a Participating TO's transmission facilities, that proposed schedule shall be developed in consultation with the UDCs interconnected with that Participating TO's system and shall take account of each UDC's planned maintenance requirements. The nature of the information to be provided and the detailed Maintenance Outage planning procedure shall be established by the CAISO. This information shall include:

The following information is required for each Generating Unit of a Participating Generator:

- (a) the Generating Unit name and Location Code;
- (b) the MW capacity unavailable;
- (c) the scheduled start and finish date for each Outage; and
- (d) where there is a possibility of flexibility, the earliest start date and the latest finish date, along with the actual duration of the Outage once it commences.

The following information is required for each transmission facility:

- (a) the identification of the facility and location;

- (b) the nature of the proposed Maintenance Outage;
- (c) the preferred start and finish date for each Maintenance Outage; and
- (d) where there is a possibility of flexibility, the earliest start date and the latest finish date, along with the actual duration of the Outage once it commences.

Either the CAISO, pursuant to Section 9.3.7, or an Operator, subject to Section 9.3.6.11, may at any time request a change to an Approved Maintenance Outage. An Operator may, as provided in Section 9.3.6.3, schedule with the CAISO Outage Coordination Office a Maintenance Outage on its system, subject to the conditions of Sections 9.3.6.4.1, 9.3.6.8, and 9.3.6.9.

9.3.6.1 Quarterly Updates

9.3.6.1.1 Each Participating Generator will provide the CAISO with quarterly updates of its long-range Outage schedule referred to in Section 9.3.6 for Generating Units and System Units by the close of business on the fifteenth (15th) day of each January, April, and July. These updates must identify known changes to any previously planned Generating Unit Outages and any additional Outages anticipated over the next twelve (12) months from the time of this report. In this report, each Participating Generator must include all known planned Outages for the following twelve (12) months.

9.3.6.1.2 Each Participating TO will provide the CAISO with quarterly updates of the data provided under Section 9.3.6 by close of business on the fifteenth (15th) day of each January, April, and July. These updates must identify known changes to any previously planned CAISO Controlled Grid facility Maintenance Outages and any additional Outages anticipated over the next twelve (12) months from the time of the report. As part of this update, each Participating TO must include all known Maintenance Outages for the following twelve (12) months.

9.3.6.2 90 Day Look Ahead

In addition to changes made at quarterly Outage submittals, each Participating Generator shall notify the CAISO in writing of any known changes to a Generating Unit or System Unit Outage scheduled to occur within the next ninety (90) days and may submit changes to its planned Maintenance Outage schedule at any time. Participating Generators must obtain the approval of the CAISO Outage Coordination Office in accordance with Section 9. Such approval may be

withheld only for reasons of System Reliability or security.

9.3.6.3 Timeframe for Scheduling Generation and Transmission Outages

9.3.6.3.1 72 Hours Ahead for Generating Units

An Operator may, upon seventy-two (72) hours advance notice (or within the notice period in the Operating Procedures posted on the CAISO Website), schedule with the CAISO Outage Coordination Office a Maintenance Outage for a Generating Unit, subject to the conditions of Sections 9.3.6.4.1, 9.3.6.8 and 9.3.6.9.

9.3.6.3.2 Transmission Maintenance Outages

A Participating TO shall submit a request for a Maintenance Outage or a request to change an Approved Maintenance Outage for transmission facilities on its system in advance of the start date for the Outage, as follows:

1. An Operator may, upon thirty (30) days notice in advance of the first day of the month the Outage is proposed to be scheduled (or within the notice period in the Operating Procedures posted on the CAISO Website), schedule with the CAISO Outage Coordination Office a CRR Transmission Maintenance Outage for transmission facilities on its system, subject to the conditions of Sections 9.3.6.4.1, 9.3.6.8, 9.3.6.9, and 36.4.3.
2. A Participating TO shall submit a request for a Planned Transmission Maintenance Outage or a request to change an Approved Maintenance Outage to the CAISO Outage Coordination Office at least seven days in advance of the start date for the Outage, subject to the provisions of Sections 9.3.6.3.2, 9.3.6.4.1, 9.3.6.8, and 9.3.6.9. The timeline for submitting the required advance notice is calculated excluding the day the request is submitted and the day the Outage is scheduled to commence. This requirement does not preclude submission of a request for a forced outage under Section 9.3.10.3 where immediate corrective action is needed because equipment has failed in service, is in danger of imminent failure, or is urgently needed to protect personnel.
3. If a Participating TO submits a request for a Planned Transmission Maintenance Outage or a request to change an Approved Maintenance Outage less than seven days in

advance of the start date for the Outage, the CAISO Outage Coordination Office may, at its discretion, reject the request as untimely, or approve the request as an Unplanned Transmission Maintenance Outage provided that the CAISO Outage Coordination Office has adequate time to analyze the request before the Outage begins and the analysis determines that (i) the Outage is necessary for reliability, (ii) system conditions and the overall Outage schedule provide an opportunity to take the facilities out of service without a detrimental effect on the efficient use and reliable operation of the CAISO Controlled Grid and without disrupting efficient market operations, and (iii) the Outage has not already commenced as a Forced Outage, The CAISO Outage Coordination Office will consider Unplanned Transmission Maintenance Outages in the order the requests are received.

9.3.6.4 Changes to Maintenance Outages

A Participating TO may submit changes to its Maintenance Outage information at any time, provided, however, that if the Participating TO cancels an Approved Maintenance Outage after 5:00 a.m. of the day prior to the day upon which the Outage is scheduled to commence and the CAISO determines that the change was not required to preserve System Reliability, the CAISO may disregard the availability of the affected facilities in determining the availability of transmission capacity in the Day-Ahead Market. The CAISO will, however, notify Market Participants and reflect the availability of transmission capacity in the HASP and Real-Time Market as promptly as practicable.

9.3.6.4.1 The CAISO Outage Coordination Office shall evaluate whether the requested Maintenance Outage or change to an Approved Maintenance Outage is likely to have a detrimental effect on the efficient use and reliable operation of the CAISO Controlled Grid or the facilities of a Connected Entity. The CAISO may request additional information or seek clarification from Participating Generators or Participating TOs of the information submitted in relation to a planned Generating Unit and System Unit Outage or a transmission Maintenance Outage. This information may be used to assist the CAISO in prioritizing conflicting requests for Outages.

9.3.6.5 CAISO Analysis of Generating Unit Outage Plans**9.3.6.5.1 [Not Used]****9.3.6.6 Withdrawal or Modification of Request**

The Operator of a Participating Generator or a Participating TO's Operator may withdraw a request at any time prior to actual commencement of the Outage. The Operator of a Participating Generator or Participating TO's Operator may modify a request at any time prior to receipt of any acceptance or rejection notice from the CAISO Outage Coordination Office or pursuant to Sections 9.3.8.1, 9.3.8.2 and 9.3.8.3, but the CAISO Outage Coordination Office shall have the right to reject such modified request for reasons of System Reliability, system security or market impact, because of the complexity of the modifications proposed, or due to insufficient time to assess the impact of such modifications.

9.3.6.7 Each Participating Generator or Participating TO which has scheduled a Maintenance Outage pursuant to Section 9.3.4 must schedule and receive approval of the Outage from the CAISO Outage Coordination Office prior to initiating the Approved Maintenance Outage. The CAISO

Outage Coordination Office will review the Maintenance Outages to determine if any one or a combination of Maintenance Outage requests relating to CAISO Controlled Grid facilities, Generating Units or System Units may cause the CAISO to violate the Applicable Reliability Criteria. This review will take consideration of factors including, but not limited to, the following:

- (a) forecast peak Demand conditions;
- (b) other Maintenance Outages, previously Approved Maintenance Outages, and anticipated Generating Unit Outages;
- (c) potential to cause Congestion;
- (d) impacts on the transfer capability of Interconnections; and
- (e) impacts on the market.

9.3.6.8 The CAISO Outage Coordination Office shall acknowledge receipt of each request to confirm or approve a Maintenance Outage for a Generating Unit, System Unit, or Physical

Scheduling Plant. Where the CAISO Outage Coordination Office reasonably determines that the requested Maintenance Outage or the requested change to an Approved Maintenance Outage, when evaluated together with existing Approved Maintenance Outages, is not likely to have a detrimental effect on the efficient use and reliable operation of the CAISO Controlled Grid, the CAISO shall authorize the Maintenance Outage or change to the Approved Maintenance Outage, and shall so notify the requesting Operator and other entities who may be directly affected.

9.3.6.9 Where, in the reasonable opinion of the CAISO Outage Coordination Office, the requested Maintenance Outage or requested change to an Approved Maintenance Outage is likely to have a detrimental effect on the efficient use and reliable operation of the CAISO Controlled Grid, the CAISO Outage Coordination Office may reject the requested Maintenance Outage or requested change to Approved Maintenance Outage. If in the CAISO's determination, any of the Maintenance Outages would cause the CAISO to violate the Applicable Reliability Criteria, the CAISO will notify the relevant Operator, and the Operator will then revise the proposed Maintenance Outage and inform the CAISO of the proposed changes. The CAISO Outage Coordination Office shall, in a rejection notice, identify the CAISO's reliability, security and market concerns which prompt the rejection and suggest possible remedies or schedule revisions which might mitigate any such concerns. The CAISO Outage Coordination Office may provide each Operator in writing with any suggested amendments to those Maintenance Outage requests rejected by the CAISO Outage Coordination Office. Any such suggested amendments will be considered as a CAISO maintenance request and will be approved in accordance with the process set forth in Section 9.3.7. The determination of the CAISO Outage Coordination Office shall be final and binding on the Operator. If, within fourteen (14) days of having made its determination, the Operator requests the CAISO Outage Coordination Office to provide reasons for its determination, it shall do so as soon as is reasonably practicable. The CAISO will give reasons for informational purposes only and without affecting in any way the finality or validity of the determination.

9.3.6.10 Failure to Meet Requirements

Any request to consider maintenance that does not meet the notification requirements contained

in Sections 9.3.8.2 and 9.3.8.3 will be rejected without further consideration, unless Section 9.3.10 applies.

9.3.6.11 Cancellation of Approved Maintenance Outage

In the event an Operator of facilities forming part of the CAISO Controlled Grid cancels an Approved Maintenance Outage after 5:00 a.m. of the day prior to the day upon which the Outage is scheduled to commence and the CAISO determines that the change was not required to preserve System Reliability, the CAISO may disregard the availability of the affected facilities in determining the availability of transmission capacity in the Day-Ahead Market, provided, however, that the CAISO will, as promptly as practicable, notify Market Participants and reflect the availability of the affected facilities in determining the availability of transmission capacity in the HASP and Real-Time Market.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

10.1.3, Netting, 1.0.0, A

Record Narrative Name:

Tariff Record ID: 6025

Tariff Record Collation Value: 198148864 Tariff Record Parent Identifier: 6022

Proposed Date: 2012-12-12

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

10.1.3.1 Permitted Netting

CAISO Metered Entities and Scheduling Coordinators may, when providing Meter Data to the CAISO, net MWh values for Generating Unit output and auxiliary Load equipment electrically connected to that Generating Unit at the same point provided that the Generating Unit is on-line and is producing sufficient output to serve all of that auxiliary Load equipment. For example, where a Generating Unit's auxiliary Load equipment is served via a distribution line that is separate from the switchyard to which the Generating Unit is connected, that Generating Unit and auxiliary Load equipment will not be considered to be electrically connected at the same point.

10.1.3.2 Prohibited Netting

CAISO Metered Entities or Scheduling Coordinators may not net values for Generating Unit output and Load. CAISO Metered Entities or Scheduling Coordinators that serve third party Load connected to a Generating Unit's auxiliary system must add that third party Load to the

Generating Unit's output. The CAISO Metered Entity may add that third party Load to the Generating Unit's output either by means of a hard wire local meter connection between the metering systems of the third party Load and the Generating Unit or by requesting the CAISO to use RMDAPS to perform the addition. Scheduling Coordinators representing Scheduling Coordinator Metered Entities that serve third party Load connected to the auxiliary system of a Generating Unit must ensure that those Scheduling Coordinator Metered Entities add the Energy consumed by such third parties to that Generating Unit's output so as to ensure proper settlement of that Generating Unit's gross output. The CAISO Metered Entity or the Scheduling Coordinator must ensure that the third party Load has Metering Facilities that meet the standards referred to in this Section 10 and the Business Practice Manuals.

10.1.3.3 Permitted Netting for a Net Scheduled Generating Unit or a QF

A Generating Unit that is a QF subject to an Existing QF Contract is subject to the revenue metering requirements set forth in the Existing QF Contract for the QF and is not subject to the revenue metering requirements of Section 10. A QF Generating Unit that is not operating under the terms of an Existing QF Contract is subject to the metering requirements of Section 10 prohibiting the net metering of Generation and Load, except if it is subject to a Net Scheduled PGA. A Generating Unit that is a QF or a CHP Resource and that operates under the terms of a Net Scheduled PGA is eligible for net metering treatment. Notwithstanding Section 10.1.3.2, a Participating Generator with a Net Scheduled PGA may net the value for the Generation produced by each Net Scheduled Generating Unit listed in its Net Scheduled PGA and the value for the Demand of the Self-provided Load that is (i) served by the Net Scheduled Generating Unit and (ii) electrically located on the same side of the Point of Demarcation. The Participating Generator with a Net Scheduled PGA may satisfy the provisions of Section 10 for the installation of revenue metering by installing Metering Facilities at the Point of Demarcation; provided that the installed Metering Facilities satisfy the technical, functional, and performance requirements for Metering Facilities set forth in Section 10 and the applicable Business Practice Manual.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
10.2.12, Exemptions, 1.0.0, A
Record Narrative Name:
Tariff Record ID: 6041

Tariff Record Collation Value: 212054048 Tariff Record Parent Identifier: 6029
Proposed Date: 2012-12-12
Priority Order: 500
Record Change Type: CHANGE
Record Content Type: 1
Associated Filing Identifier:

The CAISO has the authority to grant exemptions from certain CAISO metering standards for a CAISO Metered Entity, as set forth in Section 10.4. A CAISO Metered Entity with a temporary exemption shall provide site specific Revenue Quality Meter Data to the CAISO in accordance with its Meter Service Agreement for CAISO Metered Entities and the CAISO Tariff. A Generating Unit that provides Regulatory Must-Take Generation with an Existing QF Contract or an Amended QF Contract that is connected directly to a Distribution System and that sells its entire output to the UDC or in the MSS in which the Generating Unit is located is not subject to the audit, testing or certification requirements of the CAISO.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
11.23, Penalties For Uninstructed Imbalance Energy, 5.0.0, A
Record Narrative Name:
Tariff Record ID: 6173
Tariff Record Collation Value: 326771840 Tariff Record Parent Identifier: 6067
Proposed Date: 2012-12-12
Priority Order: 500
Record Change Type: CHANGE
Record Content Type: 1
Associated Filing Identifier:

Effective December 1, 2004, the CAISO shall not charge any Uninstructed Deviation Penalties pursuant to this Section 11.23 until FERC issues an order authorizing the CAISO to charge Uninstructed Deviation Penalties pursuant to this section. Beginning with Settlement Statements for the first Trading Day for which FERC authorizes the CAISO to charge Uninstructed Deviation Penalties pursuant to this section, the CAISO shall charge Scheduling Coordinators Uninstructed Deviation Penalties for Uninstructed Imbalance Energy resulting from resource deviations outside a Tolerance Band from their Dispatch Operating Point, for dispatched resources, or their Day-Ahead Schedule otherwise. Publishing of Uninstructed Deviation Penalty results will not occur on the Initial Settlement Statement T+3B but rather will occur on the Recalculation Settlement Statement T+12B. The Uninstructed Deviation Penalty will be applied as follows:

- (a) The Uninstructed Deviation Penalty for negative Uninstructed Imbalance Energy will be calculated and assessed in each Settlement Interval. The Uninstructed Deviation Penalty for positive Uninstructed Imbalance

Energy will be calculated and assessed in each Settlement Interval in which the CAISO has not declared a staged System Emergency;

- (b) The Uninstructed Deviation Penalty will apply to pre-Dispatched Bids from Non-Dynamic System Resources identified, when such a pre-Dispatch Instruction is issued more than forty (40) minutes prior to the relevant Operating Hour, subject to the following conditions: (i) the Uninstructed Deviation Penalty will only apply to the pre-Dispatched amount of the Bid that is declined or not delivered, (ii) the Uninstructed Deviation Penalty will not apply to a portion of a pre-Dispatched Bid that is subsequently not delivered at the direction of a Balancing Authority, including the CAISO, due to a curtailment of transmission capability or to prevent curtailment of native firm load occurring subsequent to issuing the pre-Dispatch Instruction, (iii) the Uninstructed Deviation Penalty will not apply to Uninstructed Imbalance Energy resulting from declining subsequent intra-hour Dispatch Instructions. Dynamically scheduled Dynamic System Resources, to the extent they deviate from their Day-Ahead Schedule plus any Dispatch Instructions, will be subject to the Uninstructed Deviation Penalty.
- (c) The Uninstructed Deviation Penalty will not apply to Load, Curtailable Demand, or Demand Response Services.
- (d) [NOT USED]
- (e) The Uninstructed Deviation Penalty will not apply to Regulatory Must-Run Generation or Participating Intermittent Resources that meet the scheduling obligations established in the Eligible Intermittent Resources Protocol in Appendix Q. No other applicable charges will be affected by this exemption. The Uninstructed Deviation Penalty also will not apply to Qualifying Facilities (QFs), including those that are dynamically scheduled, that have not executed and are not required pursuant to this

CAISO Tariff to execute a Participating Generator Agreement (PGA) or Qualifying Facility Participating Generator Agreement.

- (f) All MSS resources designated as Load-following resources pursuant to Section 4.9.13.2 (regardless of gross or net settlement election) are exempt from Uninstructed Deviation Penalties in this Section 11.23. All MSS resources not designated as Load-following resources pursuant to Section 4.9.13.2 (regardless of gross or net Settlement election) are subject to Uninstructed Deviation Penalties in this Section 11.23.
- (g) The Uninstructed Deviation Penalty will apply to Generating Units providing Regulation and dynamically scheduled Dynamic System Resources providing Regulation to the extent that Uninstructed Deviations from such resources exceed each resource's actual Regulation range plus the applicable Tolerance Band. Resources providing Regulation and generating within their relevant Regulating range (or outside their relevant Regulating range as a direct result of CAISO control or instruction) will be deemed to have zero (0) deviations for purposes of the Uninstructed Deviation Penalty.
- (h) The Uninstructed Deviation Penalty will be calculated and assessed for each resource individually, except as specified in Appendix R, which specifies when Uninstructed Deviations from individual resources may be aggregated.
- (i) The Uninstructed Deviation Penalty shall not apply to any Uninstructed Imbalance Energy resulting from compliance with a directive by the CAISO or the Reliability Coordinator.
- (j) [NOT USED]
- (k) The Uninstructed Deviation Penalty will not apply when the applicable LMP is negative or zero.

- (l) The Uninstructed Deviation Penalty for positive Uninstructed Imbalance Energy will be the amount of the Uninstructed Imbalance Energy in excess of the Tolerance Band multiplied by a price equal to one hundred (100) percent of the corresponding LMP. The relevant LMP will be calculated for each UDP Location as the ten-minute weighted average price of two five-minute Dispatch Interval LMPs and the two five-minute optimal Instructed Imbalance Energy quantities. The net effect of the Uninstructed Deviation Penalty and the Settlement for positive Uninstructed Imbalance Energy beyond the Tolerance Band will be that the CAISO will not pay for such Energy.
- (m) The Uninstructed Deviation Penalty for negative Uninstructed Imbalance Energy will be the amount of the Uninstructed Imbalance Energy in excess of the Tolerance Band multiplied by a price equal to fifty (50) percent of the corresponding Resource-Specific Settlement Interval LMP or, in the case of aggregated resources, the Settlement Interval Penalty Location Real-Time LMP.
- (n) The Uninstructed Deviation Penalty will not apply to deviations from Energy delivered as part of a scheduled test so long as the test has been scheduled by the Scheduling Coordinator with the CAISO or the CAISO has initiated the test for the purposes of validating unit performance.
- (o) The Uninstructed Deviation Penalty shall not apply to any excess Energy delivered from or any shortfall of Energy not delivered from an Exceptional Dispatch involving a Generating Unit or a System Unit unless the CAISO and the supplier have agreed upon the time of, duration of, and amount of Energy to be delivered in the out-of-market transaction and the CAISO reflects the out-of-market transaction in its Real-Time Expected Energy calculations. The Uninstructed Deviation Penalty shall apply to Energy outside the Tolerance Band from out-of-

market transactions with dynamically scheduled Dynamic System Resources to the extent the agreed-to Energy is not delivered or over-delivered, and to any Energy from Non-Dynamic System Resources to the extent the agreed-to Energy is not delivered if that over- or under-delivery was due to action taken by or not taken by the System Resource and not the result of action taken by a Balancing Authority due to a curtailment of firm transmission capability or to prevent curtailment of native firm load occurring subsequent to the out-of-market transaction.

- (p) The Uninstructed Deviation Penalty shall not apply to Generating Units and dynamically scheduled Dynamic System Resources with Uninstructed Imbalance Energy if the Generating Unit or dynamically scheduled Dynamic System Resource was physically incapable of delivering the expected Energy or if systems malfunctions prevent receipt of Dispatch Instructions, provided that the Generating Unit or dynamically scheduled Dynamic System Resource had notified the CAISO within thirty (30) minutes of the onset of an event that prevents the resource from performing its obligations. A Generating Unit or dynamically scheduled Dynamic System Resource must notify CAISO operations staff of its reasons for failing to deliver the Expected Energy in accordance with Section 9.3.10.6 and must provide information to the CAISO that verifies the reason the resource failed to comply with the Dispatch Instruction within forty-eight (48) hours of the Operating Hour in which the instruction is issued.
- (q) Adjustments to any Generating Unit, Curtailable Demand and System Resource Day-Ahead Schedules or HASP Intertie Schedules made in accordance with the terms of TRTC Instructions for Existing Contracts or TORs shall not be subject to Uninstructed Deviation Penalties. Valid changes to ETC Self-Schedules or TOR Self-Schedules submitted after

the close of the HASP or the RTM shall not be subject to Uninstructed Deviation Penalties.

- (r) Any changes made to Schedules prior to the CAISO issuing HASP Intertie Schedules shall not be subject to Uninstructed Deviation Penalties.
- (s) Uninstructed Deviation Penalties shall not be charged to any deviation from a Dispatch Instruction that does not comply with the requirements set forth in this CAISO Tariff.
- (t) Amounts collected as Uninstructed Deviation Penalties shall first be assigned to reduce the portion of above-LMP costs that would otherwise be assigned pro rata to all Scheduling Coordinators in that Settlement Interval. Any remaining portion of amounts collected as Uninstructed Deviation Penalties after satisfying these sequential commitments shall be treated in accordance with Section 11.29.9.6.3.
- (u) Condition 2 RMR Units shall be exempt from Uninstructed Deviation Penalties.
- (v) The Uninstructed Deviation Penalty shall not apply to positive Uninstructed Imbalance Energy attributable to operation below the Generating Unit's Minimum Operating Limit from the time the Generating Unit synchronizes to the grid to the earlier of (1) the Settlement Interval in which the Generating Unit produces a quantity of Energy that represents an average rate of delivery over such Settlement Interval in excess of the Generating Unit's Minimum Operating Limit plus the applicable Tolerance Band, or (2) the first Settlement Interval after the expiration of a period of time that begins at the end of the Settlement Interval in which the Generating Unit synchronizes to the grid and ends after the Generating Unit's maximum Start-Up Time as specified in the Master File. The Uninstructed Deviation Penalty shall not apply to any

positive Uninstructed Imbalance Energy attributable to operation below the Generating Unit's Minimum Operating Limit for a duration equal to the minimum of two Settlement Intervals or the time specified in the Master File for the Generating Unit to disconnect from the grid after reaching its Minimum Operating Limit following either (1) the last Settlement Interval of an hour in which the Generating Unit had a non-zero Day-Ahead Schedule or (2) the Settlement Interval in which the Generating Unit is expected to reach its Minimum Operating Limit based on the applicable Ramp Rate when the CAISO instructed the Generating Unit to Shut-Down. The amount of Uninstructed Imbalance Energy exempted from the Uninstructed Deviation Penalty shall not exceed the amount of the Generating Unit's Minimum Operating Limit plus the applicable Tolerance Band. This exception from the application of the Uninstructed Deviation Penalty does not apply to Dynamic System Resources.

- (w) UDP shall not apply to deviations by a Generating Unit that are attributable to any automatic response to a system disturbance, including a response to correct frequency decay, in accordance with Applicable Reliability Criteria for the duration of the system disturbance, and for an additional five (5) minutes when a Generating Unit's deviation is in the same direction as the mitigating frequency response.
- (x) The Uninstructed Deviation Penalty shall not apply in the event that a malfunction in a CAISO system application causes an infeasible Dispatch Instruction to be communicated or prevents timely communication of a Dispatch Instruction or a SLIC malfunction prevents a resource from reporting an event that affects the resource's ability to deliver Energy.
- (y) The Uninstructed Deviation Penalty shall not apply to a failure to comply

with a manual Dispatch Instruction that is not confirmed by a Dispatch Instruction transmitted through the CAISO's Automated Dispatch System.

- (z) The Uninstructed Deviation Penalty shall not apply if a Dispatch Instruction is validated after the start time of the instruction from the Settlement Interval in which the Dispatch Instruction was first effective to the earliest Settlement Interval, inclusive, in which the resource is able to respond to the Dispatch Instruction.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
30.5.2, Supply Bids, 12.0.0, A
Record Narrative Name:
Tariff Record ID: 6488
Tariff Record Collation Value: 600530112 Tariff Record Parent Identifier: 6486
Proposed Date: 2012-12-12
Priority Order: 500
Record Change Type: CHANGE
Record Content Type: 1
Associated Filing Identifier:

30.5.2.1 Common Elements for Supply Bids

In addition to the resource-specific Bid requirements of this Section, all Supply Bids must contain the following components: Scheduling Coordinator ID Code; Resource Location or Resource ID, as appropriate; MSG Configuration ID, as applicable; PNode or Aggregated Pricing Node as applicable; Energy Bid Curve; Self-Schedule component; Ancillary Services Bid; RUC Availability Bid as applicable, the CAISO Market to which the Bid applies; Trading Day to which the Bid applies; Priority Type (if any). Supply Bids offered in the CAISO Markets must be monotonically increasing. Energy Bids in the RTM must also contain a Bid for Ancillary Services to the extent the resource is certified and capable of providing Ancillary Service in the RTM up to the registered certified capacity for that Ancillary Service less any Day-Ahead Ancillary Services Awards.

Scheduling Coordinators must submit the applicable Supply Bid components, including Self-Schedules, for the submitted MSG Configuration.

30.5.2.2 Supply Bids for Participating Generators

In addition to the common elements listed in Section 30.5.2.1, Supply Bids for Participating

Generators shall contain the following components as applicable: Start-Up Bid, Minimum Load Bid, Ramp Rate, Minimum and Maximum Operating Limits; Energy Limit, Regulatory Must-Take/Must-Run Generation; Contingency Flag; and Contract Reference Number (if any). Scheduling Coordinators submitting these Bid components for a Multi-Stage Generating Resource must do so for the submitted MSG Configuration. Scheduling quantities that a Scheduling Coordinator schedules as Regulatory Must-Take Generation for a CHP Resource shall be limited to the quantity necessary in any hour to meet the reasonably anticipated industrial host's thermal requirements and shall not exceed any established RMTMax values. The CHP Resource owner or operator shall provide its Scheduling Coordinator with the Regulatory Must-Take Generation values and is solely responsible for the accuracy of the information. The Scheduling Coordinator for the CHP Resource will schedule the quantities consistent with information provided subject to any contract rights between the CHP Resource Generating Unit owner or operator and its counter-party to any power purchase agreement regarding curtailment or dispatchability of the CHP Resource. If the CHP Resource Generating Unit has a power purchase agreement and its counter-party is not the Scheduling Coordinator for the resource, the parties to the agreement share the responsibility for ensuring that the Scheduling Coordinator schedules the resource consistent with contractual rights of the counter-parties. A Scheduling Coordinator for a Physical Scheduling Plant or a System Unit may include Generation Distribution Factors as part of its Supply Bid. If the Scheduling Coordinator has not submitted the Generation Distribution Factors applicable for the Bid, the CAISO will use default Generation Distribution Factors stored in the Master File. All Generation Distribution Factors used by the CAISO will be normalized based on Outage data that is available to the automated market systems. A Multi-Stage Generating Resource and its MSG Configurations are registered under a single Resource ID and Scheduling Coordinator for the Multi-Stage Generating Resource must submit all Bids for the resource's MSG Configurations under the same Resource ID. For a Multi-Stage Generating Resources Scheduling Coordinators may submit bid curves for up to ten individual MSG Configurations of their Multi-Stage Generating Resources into the Day-Ahead Market and up to three individual MSG Configurations into the Real-Time Market. Scheduling Coordinators for

Multi-Stage Generating Resources must submit a single Operational Ramp Rate for each MSG Configuration for which it submits a supply Bid either in the Day-Ahead Market or Real-Time Market. For Multi-Stage Generating Resources the Scheduling Coordinator may submit the Transition Times, which cannot be greater than the maximum Transition Time registered in the Master File. To the extent the Scheduling Coordinator does not submit the Transition Time that is a registered feasible transition the CAISO will use the registered maximum Transition Time for that MSG Transition for the specific Multi-Stage Generating Resource.

30.5.2.3 Supply Bids for Participating Loads, Including Pumped-Storage Hydro Units and Aggregated Participating Loads

In addition to the common elements listed in Section 30.5.2.1, Scheduling Coordinators submitting Supply Bids for Participating Loads, which includes Pumping Load or Pumped-Storage Hydro Units, may include the following components: Pumping Level (MW), Minimum Load Bid (Generation mode only of a Pumped-Storage Hydro Unit), Load Distribution Factor, Ramp Rate, Energy Limit, Pumping Cost, and Pump Shut-Down Costs. If no values for Pumping Cost or Pump Shut-Down Costs are submitted, the CAISO will generate these Bid components based on values in the Master File. Scheduling Coordinators may only submit Supply Bids for Aggregated Participating Loads by using a Generating Unit or Physical Scheduling Plant Resource ID for the Demand reduction capacity represented by the Aggregated Participating Load as set forth in a Business Practice Manual. The CAISO will use Generation Distribution Factors provided by the Scheduling Coordinator for the Aggregated Participating Load.

30.5.2.4 Supply Bids for System Resources

In addition to the common elements listed in Section 30.5.2.1, Supply Bids for System Resources shall also contain: the relevant Ramp Rate; Start-Up Costs; and Minimum Load Costs.

Resource-Specific System Resources may elect the Proxy Cost option or Registered Cost option for Start-Up Costs and Minimum Load Costs as provided in Section 30.4. Other System Resources are not eligible to recover Start-Up Costs and Minimum Load Costs. Resource-Specific System Resources are eligible to participate in the Day-Ahead Market on an equivalent basis as Generating Units and are not obligated to participate in RUC or the RTM if the resource

did not receive a Day-Ahead Schedule unless the resource is a Resource Adequacy Resource. If the Resource-Specific System Resource is a Resource Adequacy Resource, the Scheduling Coordinator for the resource is obligated to make it available to the CAISO Market as prescribed by Section 40.6. Dynamic Resource-Specific System Resources are also eligible to participate in the HASP and RTM on an equivalent basis as Generating Units. Non-Dynamic Resource-Specific System Resources will be treated like other System Resources in the HASP and RTM. The quantity (in MWh) of Energy categorized as Interruptible Imports (non-firm imports) can only be submitted through Self-Schedules in the Day-Ahead Market and cannot be incrementally increased in the HASP or RTM. Bids submitted to the Day-Ahead Market for ELS Resources will be applicable for two days after they have been submitted and cannot be changed the day after they have been submitted.

30.5.2.4.1 Intertie Block Bids

Intertie Block Bids must contain the same energy Bid price for all hours of the period for which the Intertie Block Bid is submitted. Intertie Block Bids may only be submitted in the DAM.

30.5.2.5 Supply Bids for Metered Subsystems

Consistent with the bidding rules specified in this Section 30.5, Scheduling Coordinators that represent MSS Operators may submit Bids for Energy and Ancillary Services, including Self-Schedules and Submissions to Self-Provide an Ancillary Service, to the DAM. All Bids to supply Energy by MSS Operators must identify each Generating Unit on an individual unit basis. The CAISO will not accept aggregated Generation Bids without complying with the requirements of Section 4.9.12 of the CAISO Tariff. All Scheduling Coordinators that represent MSS Operators must submit Demand Bids at the relevant MSS LAP. Scheduling Coordinators that represent MSS Operators must comply with Section 4.9 of the CAISO Tariff. Scheduling Coordinators that represent MSS Operators that have opted out of RUC participation pursuant to Section 31.5 must Self-Schedule one hundred percent (100%) of the Demand Forecast for the MSS. For an MSS that elects Load following, the MSS Operator shall also self-schedule or bid Supply to match the Demand Forecast. All Bids for MSSs must be identify each Generating Unit on an individual unit basis or a System Unit. For an MSS that elects Load following consistent with Section 4.9.13.2,

the Scheduling Coordinator for the MSS Operator must include the following additional information with its Bids: the Generating Unit(s) that are Load following; the range of the Generating Unit(s) being reserved for Load following; whether the quantity of Load following capacity is either up or down; and, if there are multiple Generating Units in the MSS, the priority list or distribution factors among the Generating Units. The CAISO will not dispatch the resource within the range declared as Load following capacity, leaving that capacity entirely available for the MSS to dispatch. The CAISO uses this information in the IFM runs and the RUC to simulate MSS Load following. The Scheduling Coordinator for the MSS Operator may change these characteristics through the Bid submission process in the HASP.

If the Load following resource is also an RMR Unit, the MSS Operator must not specify the Maximum Net Dependable Capacity specified in the RMR Contract as Load following up or down capacity to allow the CAISO to access such capacity for RMR Dispatch.

30.5.2.6 Ancillary Services Bids

There are four distinct Ancillary Services: Regulation Up, Regulation Down, Spinning Reserve and Non-Spinning Reserve. A resource shall be eligible to provide Ancillary Service if it has complied with the CAISO's certification and testing requirements as contained in Appendix K and the CAISO's Operating Procedures. Scheduling Coordinators may use Dynamic System Resources to Self-Provide Ancillary Services as specified in Section 8. Scheduling Coordinators may not use Non-Dynamic System Resources to Self-Provide Ancillary Services. All System Resources, including Dynamic System Resources and Non-Dynamic System Resources, will be charged the Shadow Price as prescribed in Section 11.10, for any awarded Ancillary Services. A Scheduling Coordinator may submit Ancillary Services Bids for Regulation Up, Regulation Down, Spinning Reserve, and Non-Spinning Reserve for the same capacity by providing a separate price in \$/MW per hour as desired for each Ancillary Service. The Bid for each Ancillary Services is a single Bid segment. Only resources certified by the CAISO as capable of providing Ancillary Services are eligible to provide Ancillary Services and submit Ancillary Services Bids. In addition to the common elements listed in Section 30.5.2.1, all Ancillary Services Bid components of a Supply Bid must contain the following: (1) the type of Ancillary Service for which a Bid is being

submitted; (2) Ramp Rate (Operating Reserve Ramp Rate and Regulation Ramp Rate, if applicable); and (3) Distribution Curve for Physical Scheduling Plant or System Unit. A Scheduling Coordinator may only submit an Ancillary Services Bid or Submission to Self-Provide an Ancillary Service for Multi-Stage Generating Resources for the Ancillary Service for which the specific MSG Configurations are certified. For any such certified MSG Configurations the Scheduling Coordinator may submit only one Operating Reserve Ramp Rate and Regulation Ramp Rate. An Ancillary Services Bid submitted to the Day-Ahead Market when submitted to the Day-Ahead Market may be, but is not required to be, accompanied by an Energy Bid that covers the capacity offered for the Ancillary Service. Submissions to Self-Provide an Ancillary Services submitted to the Day-Ahead Market when submitted to the Day-Ahead Market may be, but are not required to be, accompanied by an Energy Bid that covers the capacity to be self-provided. If a Scheduling Coordinator's Submission to Self-Provide an Ancillary Service is qualified as specified in Section 8.6, the Scheduling Coordinator must submit an Energy Bid that covers the self-provided capacity prior to the close of the Real-Time Market for the day immediately following the Day-Ahead Market in which the Ancillary Service Bid was submitted. Except as provided below, the Self-Schedule for Energy need not include a Self-Schedule for Energy from the resource that will be self-providing the Ancillary Service. If a Scheduling Coordinator is self-providing an Ancillary Service from a Fast Start Unit, no Self-Schedule for Energy for that resource is required. If a Scheduling Coordinator proposes to self-provide Spinning Reserve, the Scheduling Coordinator is obligated to submit a Self-Schedule for Energy for that particular resource, unless as discussed above the particular resource is a Fast Start Unit. When submitting Ancillary Service Bids in the HASP and Real-Time Market, Scheduling Coordinators for resources that either have been awarded or self-provide Spinning Reserve or Non-Spinning Reserve capacity in the Day-Ahead Market must submit an Energy Bid for at least the awarded or self-provided Spinning Reserve or Non-Spinning Reserve capacity, otherwise the CAISO will apply the Bid validation rules described in Section 30.7.6.1.

As provided in Section 30.5.2.6.4, a Submission to Self-Provide an Ancillary Service shall contain all of the requirements of a Bid for Ancillary Services with the exception of Ancillary Service Bid

price information. In addition, Scheduling Coordinators must comply with the Ancillary Services requirements of Section 8. Scheduling Coordinators submitting Ancillary Services Bids for System Resources in the HASP or Real-Time Market must also submit an Energy Bid for the associated Ancillary Services Bid under the same Resource ID, otherwise the bid validation rules in Section 30.7.6.1 will apply to cover any portion of the Ancillary Services Bid not accompanied by an Energy Bid. As described in Section 33.7, if the resource is a Non-Dynamic System Resource, the CAISO will only use the Ancillary Services Bid in the HASP optimization and will not use the associated Energy Bid for the same Resource ID to schedule Energy from the Non-Dynamic System Resource in the HASP. Scheduling Coordinators must also comply with the bidding rules associated with the must offer requirements for Ancillary Services specified in Section 40.6.

30.5.2.6.1 Regulation Up or Regulation Down Bid Information

In the case of Regulation Up or Regulation Down, the Ancillary Services Bid or submission to self-provide must also contain: (a) the upward and downward range of generating capacity over which the resource is willing to provide Regulation in ten (10) minutes; (b) the Bid price of the capacity reservation, stated separately for Regulation Up and Regulation Down (\$/MW) and (c) the Bid price (\$) of the Mileage stated separately for Regulation Up and Regulation Down. In the case of Regulation Up or Regulation Down from Dynamic System Resources, the Ancillary Services Bid must also contain the Contract Reference Number, if applicable. Scheduling Coordinators may include inter-temporal opportunity costs in their Regulation capacity bids, but these inter-temporal opportunity costs must be verifiable. Ancillary Services Bids submitted to the Day-Ahead or Real-Time Market for Regulation need not be accompanied by an Energy Supply Bid that covers the Ancillary Services capacity being offered. A Regulation Down Bid will be erased unless there is an Energy Supply Bid or Energy Self-Schedule at a level that would permit the resource to provide Regulation Down to its lower Regulation Limit. A submission to self-provide Regulation Down will be erased unless there is an Energy Self-Schedule at a level that would permit the resource to provide Regulation Down to its lower Regulation Limit. A Regulation Up Bid will be erased unless there is an Energy Supply Bid or Energy Self-Schedule at a level

that would permit the resource to provide Regulation Up within its Regulation Limit. A submission to self-provide Regulation Up will be erased unless there is an Energy Self-Schedule at a level that would permit the resource to provide Regulation Up within its Regulation Limit.

30.5.2.6.2 Spinning Reserve Capacity Bid Information

In the case of Spinning Reserve capacity, the Ancillary Services Bid must also contain: (a) MW of additional capability synchronized to the system, immediately responsive to system frequency, and available within ten (10) minutes; (b) Bid price of capacity reservation, and (c) an indication whether the capacity reserved would be available to supply Imbalance Energy only in the event of the occurrence of an unplanned Outage, a Contingency or an imminent or actual System Emergency (Contingency Flag). In the case of Spinning Reserve capacity from System Resources, the Ancillary Services Bid must also contain: (a) Interchange ID code of the selling entity, (b) Schedule ID (NERC ID number, and (c) a Contract Reference Number, if applicable. Ancillary Services Bids and Submissions to Self-Provide an Ancillary Services submitted to the Real-Time Market for Spinning Reserves must also submit an Energy Bid that covers the Ancillary Services capacity being offered into the Real-Time Market.

30.5.2.6.3 Non-Spinning Reserve Capacity

In the case of Non-Spinning Reserve, the Ancillary Service Bid must also contain: (a) the MW capability available within ten (10) minutes; (b) the Bid price of the capacity reservation; (c) time of synchronization following notification (minutes); and (d) an indication whether the capacity reserved would be available to supply Imbalance Energy only in the event of the occurrence of an unplanned Outage, a Contingency or an imminent or actual System Emergency (Contingency Flag). In the case of Non-Spinning Reserve Capacity from System Resources, the Ancillary Services Bid must also contain: (a) Interchange ID code of the selling entity, (b) Schedule ID (NERC ID number); and (c) a Contract Reference Number, if applicable. In the case of Non-Spinning Reserve Capacity from Participating Load within the CAISO Balancing Authority Area, the Ancillary Service Bid must also contain: (a) a Load identification name and Location Code, (b) Demand reduction available within ten (10) minutes, (c) time to interruption following notification (minutes), and (d) maximum allowable curtailment duration (hour). In the case of Aggregated

Participating Load, and Proxy Demand Resources, Scheduling Coordinators must submit Bids using a Generating Unit, Physical Scheduling Plant Resource ID, or Resource ID for the Proxy Demand Resource for the Demand reduction capacity of the Aggregated Participating Load through a Bid to provide Non-Spinning Reserve or a Submission to Self-Provide an Ancillary Service for Non-Spinning Reserve. Ancillary Services Bids and Submissions to Self-Provide an Ancillary Services submitted to the Real-Time Market for Non-Spinning Reserves must also submit an Energy Bid that covers the Ancillary Services capacity being offered into the Real-Time Market.

30.5.2.6.4 Additional Rules For Self-Provided Ancillary Services

Scheduling Coordinators electing to self-provide Ancillary Services shall supply the information referred to in this Section 30.5 in relation to each Ancillary Service to be self-provided, excluding the capacity price information, but including the name of the trading Scheduling Coordinator in the case of Inter-Scheduling Coordinator Ancillary Service Trades. The portion of the Energy Bid that corresponds to the high end of the resource's operating range, shall be allocated to any awarded or Self-Provided Ancillary Services in the following order from higher to lower capacity: (a) Regulation Up; (b) Spinning Reserve; and (c) Non-Spinning Reserve. For resources providing Regulation Up, the upper regulating limit shall be used if it is lower than the highest operating limit. The remaining portion of the Energy Bid (i.e. that portion not associated with capacity committed to provide Ancillary Services) shall constitute a Bid to provide Energy.

30.5.2.7 RUC Availability Bids

Scheduling Coordinators may submit RUC Availability Bids for specific Generating Units capacity that is not Resource Adequacy Capacity or CPM Capacity in the DAM. Scheduling Coordinators for Resource Adequacy Capacity or CPM Capacity must participate in RUC to the extent that such capacity is not reflected in an IFM Schedule but need not submit RUC Availability Bids. Resource Adequacy Capacity participating in RUC will be optimized using a zero dollar (\$0/MW-hour) RUC Availability Bid. For Multi-Stage Generating Resources, the RUC Availability Bids shall be submitted at the MSG Configuration. Capacity that does not have Bids for Supply of Energy in the IFM will not be eligible to participate in the RUC process. The RUC Availability Bid

component is MW-quantity of non-Resource Adequacy Capacity in \$/MW per hour.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

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Record Narrative Name:

Tariff Record ID: 6781

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The criteria in this Section 40.8 shall apply only: (i) where the CPUC or Local Regulatory Authority has not established and provided to the CAISO criteria to determine the types of resources that may be eligible to provide Qualifying Capacity and for calculating Qualifying Capacity for such eligible resource types and (ii) until the CAISO has been notified in writing by the CPUC of its intent to overturn, reject or fundamentally modify the capacity-based framework in CPUC Decisions 04-01-050 (Jan. 10, 2004), 04-10-035 (Oct. 28, 2004), and 05-10-042 (Oct. 31, 2005). The types of resources specified in this Section 40.8.1 will be eligible to provide Qualifying Capacity to the extent they meet the criteria for each type of resource set forth in this Section 40.8.1.

40.8.1.2 Nuclear and Thermal

Nuclear and thermal Generating Units, other than Qualifying Facilities with Existing QF Contracts addressed in Section 40.8.1.8 below, must be a Participating Generator or a System Unit. The Qualifying Capacity of nuclear and thermal units, other than Qualifying Facilities addressed in Section 40.8.1.8, will be based on net dependable capacity defined by NERC Generating Availability Data System information.

40.8.1.3 Hydro

Hydroelectric Generating Units, other than Qualifying Facilities with Existing QF Contracts, must be either Participating Generators or System Units. The Qualifying Capacity of a pond or Pumped-Storage Hydro Unit, other than a QF, will be determined based on net dependable capacity defined by NERC GADS minus variable head derate based on an average dry year reservoir level. The Qualifying Capacity of a pond or Pumped-Storage Hydro Unit that is a QF will be determined based on historic performance during the hours of noon to 6:00 p.m., using a

three-year rolling average.

The Qualifying Capacity of all run-of-river hydro units, including Qualifying Facilities, will be based on net dependable capacity defined by NERC GADS minus an average dry year conveyance flow, stream flow, or canal head derate. As used in this section, average dry year reflects a one-in-five year dry hydro scenario (for example, using the 4th driest year from the last 20 years on record).

40.8.1.4 Unit-Specific Contracts

Unit-specific contracts with Participating Generators or System Units will qualify as Resource Adequacy Capacity subject to the verification that the total MW quantity of all contracts from a specific unit do not exceed the total Net Qualifying Capacity (MW) consistent with the Net Qualifying Capacity determination for that unit.

40.8.1.5 Contracts with Liquidated Damage Provisions

Firm Energy contracts with liquidated damages provisions, as generally reflected in Service Schedule C of the Western Systems Power Pool Agreement or the Firm LD product of the Edison Electric Institute pro forma agreement, or any other similar firm Energy contract that does not require the seller to source the Energy from a particular unit, and specifies a delivery point internal to the CAISO Balancing Authority Area entered into before October 27, 2005 shall be eligible to count as Qualifying Capacity until the end of 2008. A Scheduling Coordinator, however, cannot have more than twenty-five percent (25%) of its portfolio of Qualifying Capacity met by contracts with liquidated damage provisions for 2008.

40.8.1.6 Wind and Solar

As used in this Section, wind units are those wind Generating Units without backup sources of Generation and solar units are those solar Generating Units without backup sources of Generation. Wind and solar units, other than Qualifying Facilities with Existing QF Contracts, must be Participating Intermittent Resources or subject to availability provisions of Section 40.6.4.3.4.

The Qualifying Capacity of all wind or solar units, including Qualifying Facilities, for each month will be based on their monthly historic performance during that same month during the hours of

noon to 6:00 p.m., using a three-year rolling average. For wind or solar units with less than three years operating history, all months for which there is no historic performance data will utilize the monthly average production factor of all units (wind or solar, as applicable) within the TAC Area, or other production data from another area determined by the CAISO to be appropriate if the unit is not within a TAC Area, in which the Generating Unit is located.

40.8.1.7 Geothermal

Geothermal Generating Units, other than Qualifying Facilities with Existing QF Contracts addressed in Section 40.8.1.8, must be Participating Generators or System Units. The Qualifying Capacity of geothermal units, other than Qualifying Facilities addressed in Section 40.8.1.8, will be based on NERC GADS net dependable capacity minus a derate for steam field degradation.

40.8.1.8 Treatment of Qualifying Capacity for Qualifying Facilities

Qualifying Facilities must be subject to an effective Participating Generator Agreement or Net Scheduled Participating Generator Agreement or must be System Units, unless they have an Existing QF Contract. Except for hydro, wind, and solar Qualifying Facilities addressed pursuant to Sections 40.8.1.3 and 40.8.1.6, the Qualifying Capacity of Qualifying Facilities under Existing QF Contracts, will be based on historic monthly Generation output during the hours of noon to 6:00 p.m. (net of Self-provided Load) during a three-year rolling average.

40.8.1.9 Participating Loads

The Qualifying Capacity of Participating Loads shall be the average reduction in Demand over a three-year period on a per Dispatch basis or, if the Load does not have three years of performance history, based on comparable evaluation data using similar programs. Loads of Participating Loads must be available at least 48 hours, and if the Loads can only be dispatched for a maximum of two hours per event, then only 0.89 percent of a Scheduling Coordinator's portfolio may be made up of such Loads.

40.8.1.10 Jointly-Owned Facilities

A jointly-owned facility must be either a Participating Generator or a System Unit. The Qualifying Capacity for the entire facility will be determined based on the type of resource as described elsewhere in this Section 40.8.1. In addition, the Scheduling Coordinator must provide the

CAISO with a demonstration of its entitlement to the output of the jointly-owned facility's Qualified Capacity and an explanation of how that entitlement may change if the facility's output is restricted.

40.8.1.11 Facilities under Construction

The Qualifying Capacity for facilities under construction will be determined based on the type of resource as described elsewhere in this Section 40.8. In addition, the facility must have been in commercial operation for no less than one month to be eligible to be included as a Resource Adequacy Resource in a Scheduling Coordinator's monthly Resource Adequacy Plan.

40.8.1.12 System Resources and Pseudo-Ties

40.8.1.12.1 Dynamic System Resources and Pseudo-Ties

Dynamic System Resources and Pseudo-Ties of Generating Units to the CAISO Balancing Authority Area shall be treated similar to resources within the CAISO Balancing Authority Area, except with respect to the deliverability screen under Section 40.4.6.1 and with respect to the limitation on the Qualifying Capacity of wind and solar resources set forth in Section 40.8.1.6. However, eligibility as a Resource Adequacy Resource is contingent upon a showing by the Scheduling Coordinator that the Dynamic System Resource or Pseudo-Tie of a Generating Unit to the CAISO Balancing Authority Area has secured transmission through any intervening Balancing Authority Areas for the Operating Hours that cannot be curtailed for economic reasons or bumped by higher priority transmission and that the Load Serving Entity for which the Scheduling Coordinator is submitting Demand Bids has an allocation of import capacity at the import Scheduling Point under Section 40.4.6.2 that is not less than the Resource Adequacy Capacity provided by the Dynamic System Resource or Pseudo-Tie of a Generating Unit to the CAISO Balancing Authority Area.

40.8.1.12.2 Non-Dynamic System Resources

For Non-Dynamic System Resources, the Scheduling Coordinator must demonstrate that the Load Serving Entity for which the Scheduling Coordinator is scheduling Demand has an allocation of import capacity at the import Scheduling Point under Section 40.4.6.2 that is not less

than the Resource Adequacy Capacity from the Non-Dynamic System Resource. The Scheduling Coordinator must also demonstrate that the Non-Dynamic System Resource is covered by Operating Reserves, unless unit contingent, in the sending Balancing Authority Area. Eligibility as Resource Adequacy Capacity is contingent upon a showing by the Scheduling Coordinator of the System Resource that it has secured transmission through any intervening Balancing Authority Areas for the Operating Hours that cannot be curtailed for economic reasons or bumped by higher priority transmission. With respect to Non-Dynamic System Resources, any inter-temporal constraints, such as multi-hour run blocks, must be explicitly identified in the monthly Resource Adequacy Plan, and no constraints may be imposed beyond those explicitly stated in the plan.

40.8.1.13 Proxy Demand Resources

The Qualifying Capacity of a Proxy Demand Resource, for each month, will be based on the resource's average monthly historic demand reduction performance during that same month during the Availability Assessment Hours, as described in Section 40.9.3, using a three-year rolling average. For a Proxy Demand Resource with fewer than three years of performance history, for all months for which there is no historic data, the CAISO will utilize a monthly megawatt value as certified and reported to the CAISO by the Demand Response Provider; otherwise, where available, the CAISO will use the average of historic demand reduction performance data available, by month, for a Proxy Demand Resource. Proxy Demand Resources must be available at least four (4) hours per month in which they are eligible to provide RA Capacity and must be dispatchable for a minimum of thirty (30) minutes per event within each of those months.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

40.9.2, Exemptions, 4.0.0, A

Record Narrative Name:

Tariff Record ID: 6784

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40.9.2 Exemptions

The following exemptions apply to the CAISO's Availability Standards program of this Section 40.9:

- (1) Resources with a PMax less than one (1.0) MW will not be used to determine Availability Standards, will not be subject to Non-Availability Charges or Availability Incentive Payments, and will not be subject to the additional Outage reporting requirements of this Section 40.9.
- (2) Capacity under a resource specific power supply contract that existed prior to June 28, 2009 and Resource Adequacy Capacity that was procured under a contract that was either executed or submitted to the applicable Local Regulatory Authority for approval prior to June 28, 2009, and is associated with specific Generating Units or System Resources, will not be subject to Non-Availability Charges or Availability Incentive Payments. Such contracted Resource Adequacy Capacity, except for non Resource-Specific System Resources, will be included in the development of Availability Standards and will be subject to any Outage reporting requirements necessary for this purpose. The exemption will apply only for the initial term of the contract and to the MW capacity quantity and Resource Adequacy Resources specified in the contract prior to June 28, 2009. The exemption shall terminate upon the conclusion of the initial contract term. Exempt contracts may be re-assigned or undergo novation on or after June 28, 2009, but the exemption shall not apply for any extended contract term, increased capacity quantity or additional resource(s) beyond those specified in the contract prior to June 28, 2009, except as provided in Section 40.9.2(7) or 40.9.2(8). Scheduling Coordinators for Resource Adequacy Resources subject to these contracts will be required to certify the start date of the contract, the expiration date, the Resource ID(s), and the amount of Resource Adequacy Capacity associated with each Resource ID included in the contract. For Resource Adequacy Resources whose Qualifying Capacity value is determined

by historical output, the capacity under a resource specific power supply contract or Resource Adequacy Capacity that was procured under a contract that was either executed or submitted to the applicable Local Regulatory Authority for approval that meets the requirements in this subsection (2) will not be subject to Non-Availability Charges or Availability Incentive Payments, except that the deadline date for either type of contract shall be August 22, 2010 instead of June 28, 2009.

- (3) For a contract entered into prior to June 28, 2009 that provides for the amount of Resource Adequacy Capacity to increase during the original term of the contract, based on a ratio of the Resource Adequacy Resource's output or due to an addition of capacity, the exemption provided in subsection (2) of this Section 40.9.2 will apply to the additional capacity allowed under the contract; provided that the capacity increase (i) is expressly contained in the provisions of the contract, (ii) occurs during the primary term of the contract; and (iii) does not result from contract extensions or other amendments to the original terms and conditions of the contract, except as provided in Section 40.9.2(7) or 40.9.2(8). Scheduling Coordinators for Resource Adequacy Resources subject to contracts that provide for such capacity increases or additions must include in their certification, in addition to the requirements of subsection (2) of this Section 40.9.2, (i) the citation to any contract provisions that might entitle them to increased exempt Resource Adequacy Capacity from the contracted resources during the primary term of the contract; (ii) the amount of additional capacity to which they might be entitled; and (iii) the actual effective date of the capacity increase. If the actual amount of capacity and/or the actual effective date of the capacity increase is not known at the time of the initial certification, the Scheduling Coordinator shall provide a supplemental certification(s) when this information becomes known. For Resource Adequacy Resources whose Qualifying Capacity value is determined by historical output the exemption

provided in subsection (2) of this Section 40.9.2 will apply to an increase in the capacity under a resource specific power supply contract or Resource Adequacy Capacity that was procured under a contract that was either executed or submitted to the applicable Local Regulatory Authority for approval that meets the requirements in this subsection (3), except that the deadline date for either type of contract to be exempt shall be August 22, 2010 instead of June 28, 2009.

- (4) Demand response resources will not be used to determine Availability Standards, will not be subject to Non-Availability Charges or Availability Incentive Payments, and will not be subject to the additional Outage reporting requirements of this Section 40.9.
- (5) Resource Adequacy Capacity provided through contracts for Energy from non-specified resources delivered within the CAISO Balancing Authority Area will not be used to determine Availability Standards, will not be subject to Non-Availability Charges or Availability Incentive Payments, and will not be subject to the additional Outage reporting requirements of this Section 40.9.
- (6) Resource Adequacy Resources of a Modified Reserve Sharing LSE or a Load following MSS will be used to determine the Availability Standards and will be subject to any Outage reporting requirements necessary for this purpose. Non-Local Capacity Area Resource Adequacy Resources of a Modified Reserve Sharing LSE or a Load following MSS will not be subject to Non-Availability Charges or Availability Incentive Payments, but those entities shall remain responsible for any other applicable deficiency payments under this CAISO Tariff or the applicable MSS Agreement.
- (7) Scheduling Coordinators for resources with Existing QF Contracts or Amended QF Contracts that are Resource Adequacy Resources shall be exempt from the Outage reporting requirements of Section 40.9 if the resource previously provided Resource Adequacy Capacity under an Existing QF Contract that was exempt from the application of Non-Availability Charges and Availability Incentive

Payments pursuant to Section 40.9.2(2) or 40.9.2(3). This exemption from the Outage reporting requirements of Section 40.9 shall end for each resource when the Existing QF Contract or Amended QF Contract terminates or it is no longer eligible for exemption under Section 40.9.2(2) or 40.9.2(3), or if requested by the Scheduling Coordinator for the resource, whichever is earlier.

- (8) Scheduling Coordinators for resources with Existing QF Contracts or Amended QF Contracts that are Resource Adequacy Resources shall be exempt from the Outage reporting requirements of Section 40.9, and will not be subject to Non-Availability Charges or Availability Incentive Payments, if the QF resource previously provided Resource Adequacy Capacity pursuant to an Existing QF Contract that was executed prior to the August 22, 2010 deadline for exemption under Section 40.9.2(2), and remained in effect pursuant to California Public Utilities Commission Decision 07-09-040 that extended the term of expiring contracts until such time as the new contracts resulting from that decision are available. This exemption from the Outage reporting requirements of Section 40.9, and the Availability Incentive Payments and Non-Availability Charges, shall end for each resource when its Existing QF Contract or Amended QF Contract terminates or if requested by the Scheduling Coordinator for the resource, whichever is earlier.

Exclusions from the Availability Standards and Outage reporting requirements established in this Section 40.9 are for this Section 40.9 alone and do not affect any other obligation arising under the CAISO Tariff.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
43.5.2, Obligation To Provide Capacity And Termination, 3.0.0, A
Record Narrative Name:
Tariff Record ID: 6837
Tariff Record Collation Value: 903836928 Tariff Record Parent Identifier: 6835
Proposed Date: 2012-12-12
Priority Order: 500
Record Change Type: CHANGE
Record Content Type: 1
Associated Filing Identifier:

The decision to accept an CPM designation shall be voluntary for the Scheduling Coordinator for any resource. If the Scheduling Coordinator for a resource accepts an CPM designation, it shall

be obligated to perform for the full quantity and full period of the designation with respect to the amount of CPM Capacity for which it has accepted an CPM designation. If a Participating Generator's or Participating Load's Eligible Capacity is designated under the CPM after the Participating Generator or Participating Load has filed notice to terminate its Participating Generator Agreement, QF PGA, Pseudo-Tie Participating Generator Agreement, or Participating Load Agreement or withdraw the Eligible Capacity from its Participating Generator Agreement, QF PGA, Pseudo-Tie Participating Generator Agreement, or Participating Load Agreement, and the Scheduling Coordinator for the resource agrees to provide service under the CPM, then the Scheduling Coordinator shall enter into a new Participating Generator Agreement, QF PGA, Pseudo-Tie Participating Generator Agreement, or Participating Load Agreement, as applicable, with the CAISO.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
 -, Amended QF Contract, 0.0.0, A
 Record Narrative Name:
 Tariff Record ID: 9310
 Tariff Record Collation Value: 940772608 Tariff Record Parent Identifier: 6859
 Proposed Date: 2012-12-12
 Priority Order: 500
 Record Change Type: NEW
 Record Content Type: 1
 Associated Filing Identifier:

A Legacy PPA, as defined in the settlement approved by the CPUC in Decision D. 10-12-035 (December 16, 2010), as modified in Decision D.11-07-010 (July 15, 2011), that became effective on or prior to December 20, 1995 or, in the case of a Participating Generator employing landfill gas technology, on or prior to December 31, 1996, that has been amended to include terms that conform with a Legacy PPA Amendment or a Legacy PPA C1 Amendment, as defined by said settlement, but also in a manner that (a) requires compliance with the CAISO Tariff; (b) does not extend the term of the agreement or provide for an increase in the generating capacity of the resource; and (c) does not change the electrical characteristics of the resource.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
 -, CHP Resource, 0.0.0, A
 Record Narrative Name:
 Tariff Record ID: 9311
 Tariff Record Collation Value: 1035501664 Tariff Record Parent Identifier: 6859
 Proposed Date: 2012-12-12
 Priority Order: 500
 Record Change Type: NEW
 Record Content Type: 1
 Associated Filing Identifier:

A Combined Heat and Power Resource.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
-, Combined Heat and Power Resource, 0.0.0, A
Record Narrative Name:
Tariff Record ID: 9312
Tariff Record Collation Value: 1038108896 Tariff Record Parent Identifier: 6859
Proposed Date: 2012-12-12
Priority Order: 500
Record Change Type: NEW
Record Content Type: 1
Associated Filing Identifier:

A Generating Unit that produces electric energy and forms of useful thermal energy used by an industrial or commercial host for industrial, commercial, heating or cooling purposes or a Generating Unit that produces electricity from waste heat from an industrial or commercial host.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
-, Existing QF Contract, 1.0.0, A
Record Narrative Name:
Tariff Record ID: 7142
Tariff Record Collation Value: 1168904576 Tariff Record Parent Identifier: 6859
Proposed Date: 2012-12-12
Priority Order: 500
Record Change Type: CHANGE
Record Content Type: 1
Associated Filing Identifier:

A Legacy PPA, as defined in the settlement approved by the CPUC in Decision D. 10-12-035 (December 16, 2010), as modified in Decision D.11-07-010 (July 15, 2011), that became effective on or prior to December 20, 1995 or, in the case of a Generator employing landfill gas technology, on or prior to December 31, 1996, and (1) has not been amended subsequent to November 23, 2011 or (2) has been amended in a manner that (a) does not extend the term of the Legacy Contract, (b) does not increase the capacity subject to the PPA, and (c) does not require compliance with the CAISO Tariff.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
-, [Not Used], 1.0.0, A
Record Narrative Name:
Tariff Record ID: 7435
Tariff Record Collation Value: 1423543168 Tariff Record Parent Identifier: 6859
Proposed Date: 2012-12-12
Priority Order: 500
Record Change Type: CHANGE
Record Content Type:
Associated Filing Identifier:

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Record Content Description, Tariff Record Title, Record Version Number, Option Code:
-, Net Scheduled Generating Unit, 1.0.0, A
Record Narrative Name:
Tariff Record ID: 7458
Tariff Record Collation Value: 1443531904 Tariff Record Parent Identifier: 6859
Proposed Date: 2012-12-12
Priority Order: 500
Record Change Type: CHANGE
Record Content Type: 1
Associated Filing Identifier:

A Generating Unit identified in a Net Scheduled PGA operated as a single unit such that the Energy bid or self-scheduled with the CAISO is the net value of the aggregate electrical net output of the Generating Unit and the Self-provided Load.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
-, Net Scheduled Participating Generator Agreement, 0.0.0, A
Record Narrative Name:
Tariff Record ID: 9313
Tariff Record Collation Value: 1443966464 Tariff Record Parent Identifier: 6859
Proposed Date: 2012-12-12
Priority Order: 500
Record Change Type: NEW
Record Content Type: 1
Associated Filing Identifier:

An agreement between the CAISO and a Generator eligible to execute such an agreement under Section 4.6.3.3, a pro forma version of which is set forth in Appendix B.3.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
-, Net Scheduled PGA, 0.0.0, A
Record Narrative Name:
Tariff Record ID: 9314
Tariff Record Collation Value: 1444183744 Tariff Record Parent Identifier: 6859
Proposed Date: 2012-12-12
Priority Order: 500
Record Change Type: NEW
Record Content Type: 1
Associated Filing Identifier:

A Net Scheduled Participating Generator Agreement.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
-, Participating Generator, 4.0.0, A
Record Narrative Name:
Tariff Record ID: 7515
Tariff Record Collation Value: 1493069184 Tariff Record Parent Identifier: 6859
Proposed Date: 2012-12-12
Priority Order: 500
Record Change Type: CHANGE
Record Content Type: 1
Associated Filing Identifier:

A Generator or other seller of Energy or Ancillary Services through a Scheduling Coordinator over the CAISO Controlled Grid (1) from a Generating Unit with a rated capacity of 1 MW or greater, (2) from a Generating Unit with a rated capacity of from 500 kW up to 1 MW for which the Generator elects to be a Participating Generator, or (3) from a Generating Unit providing Ancillary Services or submitting Energy Bids through an aggregation arrangement approved by the CAISO, which has undertaken to be bound by the terms of the CAISO Tariff, in the case of a Generator through a Participating Generator Agreement, Net Scheduled PGA, or Pseudo-Tie Participating Generator Agreement.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
-, Point Of Demarcation, 1.0.0, A
Record Narrative Name:
Tariff Record ID: 7544
Tariff Record Collation Value: 1518272256 Tariff Record Parent Identifier: 6859
Proposed Date: 2012-12-12
Priority Order: 500
Record Change Type: CHANGE

Record Content Type: 1
Associated Filing Identifier:

For a Net Scheduled Generating Unit, the point (1) where the electrical conductors from the Net Scheduled Generating Unit contact an electric utility system or the CAISO Controlled Grid; or (2) if dedicated utility distribution facilities are employed, where the dedicated facilities contact the electric utility system or the CAISO Controlled Grid.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
-, [Not Used], 1.0.0, A
Record Narrative Name:
Tariff Record ID: 7586
Tariff Record Collation Value: 1554773376 Tariff Record Parent Identifier: 6859
Proposed Date: 2012-12-12
Priority Order: 500
Record Change Type: CHANGE
Record Content Type:
Associated Filing Identifier:

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Record Content Description, Tariff Record Title, Record Version Number, Option Code:
-, [Not Used], 1.0.0, A
Record Narrative Name:
Tariff Record ID: 7591
Tariff Record Collation Value: 1559118720 Tariff Record Parent Identifier: 6859
Proposed Date: 2012-12-12
Priority Order: 500
Record Change Type: CHANGE
Record Content Type:
Associated Filing Identifier:

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Record Content Description, Tariff Record Title, Record Version Number, Option Code:
-, Regulatory Must-Take Generation, 1.0.0, A
Record Narrative Name:
Tariff Record ID: 7634
Tariff Record Collation Value: 1596488960 Tariff Record Parent Identifier: 6859
Proposed Date: 2012-12-12
Priority Order: 500
Record Change Type: CHANGE
Record Content Type: 1
Associated Filing Identifier:

Generation from the following resources that the relevant Scheduling Coordinator schedules directly with the CAISO as Regulatory Must-Take Generation:

- (1) Generation from Generating Units subject to
 - (a) an Existing QF Contract or an Amended QF Contract, or
 - (b) a QF power purchase agreement for a QF 20 MW or smaller pursuant to a mandatory purchase obligation as defined by federal law;
- (2) Generation delivered from a CHP Resource needed to serve its host thermal requirements up to RMTMax in any hour; and
- (3) Generation from nuclear units.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
-, RMTMax, 0.0.0, A
Record Narrative Name:
Tariff Record ID: 9315
Tariff Record Collation Value: 1645374368 Tariff Record Parent Identifier: 6859
Proposed Date: 2012-12-12

Priority Order: 500
Record Change Type: NEW
Record Content Type: 1
Associated Filing Identifier:

For a Generating Unit that provides Regulatory Must-Take Generation from a CHP Resource, the minimum operating level at which the Generating Unit can safely and reliably meet host requirements as established under section 4.6.10, including the production of electricity from heat produced as a consequence of the industrial host's operations.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
-, Self-Provided Load, 1.0.0, A
Record Narrative Name:
Tariff Record ID: 7759
Tariff Record Collation Value: 1705123200 Tariff Record Parent Identifier: 6859
Proposed Date: 2012-12-12
Priority Order: 500
Record Change Type: CHANGE
Record Content Type: 1
Associated Filing Identifier:

The portion of Load that is served by a Net Scheduled Generating Unit listed in a Net Scheduled PGA, consistent with Section 218(b) of the California Public Utilities Code.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
Appendix B.2, Participating Generator Agreement, 1.0.0, A
Record Narrative Name:
Tariff Record ID: 7939
Tariff Record Collation Value: 1861556480 Tariff Record Parent Identifier: 7937
Proposed Date: 2012-12-12
Priority Order: 500
Record Change Type: CHANGE
Record Content Type: 1
Associated Filing Identifier:

THIS AGREEMENT is dated this ____ day of _____, _____ and is entered into, by and between:

- (1) **[Full Legal Name]** having its registered and principal place of business located at **[Address]** (the "Participating Generator");

and

- (2) **California Independent System Operator Corporation**, a California nonprofit public benefit corporation having a principal executive office located at such place in the State of California as the CAISO Governing Board may from time to time designate, initially 151 Blue Ravine Road, Folsom, California 95630 (the "CAISO").

The Participating Generator and the CAISO are hereinafter referred to as the "Parties".

Whereas:

- A.** The CAISO Tariff provides that the CAISO shall not accept Bids for Energy or Ancillary Services generated by any Generating Unit interconnected to the CAISO Controlled Grid, or to the Distribution System of a Participating TO or of a UDC otherwise than through a Scheduling Coordinator.
- B.** The CAISO Tariff further provides that the CAISO shall not be obliged to accept Bids relating

to Generation from any Generating Unit interconnected to the CAISO Controlled Grid unless the relevant Generator undertakes in writing to the CAISO to comply with all applicable provisions of the CAISO Tariff.

- C. The Participating Generator wishes to be able to submit Bids to the CAISO through a Scheduling Coordinator and, therefore, wishes to undertake to the CAISO that it will comply with the applicable provisions of the CAISO Tariff.
- D. The Parties are entering into this Agreement in order to establish the terms and conditions on which the CAISO and the Participating Generator will discharge their respective duties and responsibilities under the CAISO Tariff.

NOW THEREFORE, in consideration of the mutual covenants set forth herein, **THE PARTIES AGREE** as follows:

ARTICLE I

DEFINITIONS AND INTERPRETATION

- 1.1 **Master Definitions Supplement.** All terms and expressions used in this Agreement shall have the same meaning as those contained in the Master Definitions Supplement to the CAISO Tariff.
- 1.2 **Rules of Interpretation.** The following rules of interpretation and conventions shall apply to this Agreement:
 - (a) if there is any inconsistency between this Agreement and the CAISO Tariff, the CAISO Tariff will prevail to the extent of the inconsistency;
 - (b) the singular shall include the plural and vice versa;
 - (c) the masculine shall include the feminine and neutral and vice versa;
 - (d) "includes" or "including" shall mean "including without limitation";
 - (e) references to a Section, Article or Schedule shall mean a Section, Article or a Schedule of this Agreement, as the case may be, unless the context otherwise requires;
 - (f) a reference to a given agreement or instrument shall be a reference to that agreement or instrument as modified, amended, supplemented or restated through the date as of which such reference is made;
 - (g) unless the context otherwise requires, references to any law shall be deemed references to such law as it may be amended, replaced or restated from time to time;
 - (h) 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 personality;
 - (i) unless the context otherwise requires, any reference to a Party includes a reference to its permitted successors and assigns;

- (j) any reference to a day, week, month or year is to a calendar day, week, month or year; and
- (k) the captions and headings in this Agreement are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Agreement.

ARTICLE II

ACKNOWLEDGEMENTS OF PARTICIPATING GENERATOR AND CAISO

- 2.1 CAISO Responsibility.** The Parties acknowledge that the CAISO is responsible for the efficient use and reliable operation of the CAISO Controlled Grid consistent with achievement of planning and Operating Reserve criteria no less stringent than those established by the Western Electricity Coordinating Council and the North American Electric Reliability Corporation and further acknowledges that the CAISO may not be able to satisfy fully these responsibilities if the Participating Generator fails to fully comply with all of its obligations under this Agreement and the CAISO Tariff.
- 2.2 Scope of Application to Parties.** The Participating Generator and CAISO acknowledge that all Generators, except those specified in Section 2.2.1 of this Agreement, wishing to submit Bids to the CAISO through a Scheduling Coordinator must sign this Agreement in accordance with Section 4.6 of the CAISO Tariff.
- 2.2.1 Exemption for Certain Generators.** A Generator with an Existing QF Contract with a UDC is not required to sign a Participating Generator Agreement if: (a) the Generator sells all of its Energy (excluding any Energy consumed by auxiliary Load equipment electrically connected to that Generator's Generating Unit at the same point) and Ancillary Services to the UDC; (b) the Generator sells any Energy through "over the fence" arrangements as authorized under Section 218(b) of the California Public Utilities Code; or (c) the Generator employs landfill gas technology for the generation of electricity as authorized under 218(c) of the California Public Utilities Code.

ARTICLE III

TERM AND TERMINATION

- 3.1 Effective Date.** This Agreement shall be effective as of the later of the date it is executed by the Parties or the date accepted for filing and made effective by FERC, if such FERC filing is required, and shall remain in full force and effect until terminated pursuant to Section 3.2 of this Agreement.
- 3.2 Termination**
 - 3.2.1 Termination by CAISO.** Subject to Section 5.2, the CAISO may terminate this Agreement by giving written notice of termination in the event that the Participating Generator commits any material default under this Agreement and/or the CAISO Tariff which, if capable of being remedied, is not remedied within thirty (30) days after the CAISO has given, to the Participating Generator, written notice of the default, unless excused by reason of Uncontrollable Forces in accordance with Article X of this Agreement. With respect to any notice of termination given pursuant to this Section, the

CAISO must file a timely notice of termination with FERC, if this Agreement was filed with FERC, or must otherwise comply with the requirements of FERC Order No. 2001 and related FERC orders. The filing of the notice of termination by the CAISO with FERC will be considered timely if: (1) the filing of the notice of termination is made after the preconditions for termination have been met, and the CAISO files the notice of termination within sixty (60) days after issuance of the notice of default; or (2) the CAISO files the notice of termination in accordance with the requirements of FERC Order No. 2001. This Agreement shall terminate upon acceptance by FERC of such a notice of termination, if filed with FERC, or thirty (30) days after the date of the CAISO's notice of default, if terminated in accordance with the requirements of FERC Order No. 2001 and related FERC orders.

- 3.2.2 Termination by Participating Generator.** In the event that the Participating Generator no longer wishes to submit Bids and transmit Energy over the CAISO Controlled Grid, it may terminate this Agreement, on giving the CAISO not less than ninety (90) days written notice, provided, however, that in accordance with Section 4.1.3, the Participating Generator may modify Schedule 1 to eliminate Generating Units which it no longer owns or no longer has contractual entitlement to and such modification shall be effective upon receipt by the CAISO. With respect to any notice of termination given pursuant to this Section, the CAISO must file a timely notice of termination with FERC, if this Agreement has been filed with FERC, or must otherwise comply with the requirements of FERC Order No. 2001 and related FERC orders. The filing of the notice of termination by the CAISO with FERC will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and the CAISO files the notice of termination within thirty (30) days of receipt of such request; or (2) the CAISO files the notice of termination in accordance with the requirements of FERC Order No. 2001. This Agreement shall terminate upon acceptance by FERC of such a notice of termination, if such notice is required to be filed with FERC, or upon ninety (90) days after the CAISO's receipt of the Participating Generator's notice of termination, if terminated in accordance with the requirements of FERC Order No. 2001 and related FERC orders.

ARTICLE IV

GENERAL TERMS AND CONDITIONS

4.1 Generating Units

- 4.1.1 Identification of Generating Units.** The Participating Generator has identified the Generating Units that it owns, operates or has a contractual entitlement to in Schedule 1, as required by Section 4.6.4 of the CAISO Tariff.
- 4.1.2 Technical Characteristics.** The Participating Generator has provided to the CAISO in Schedule 1 the required information regarding the capacity and operating characteristics of each of the Generating Units listed in that schedule. Pursuant to Sections 8.9 and 8.10 of the CAISO Tariff, the CAISO may verify, inspect and test the capacity and operating characteristics provided in Schedule 1.
- 4.1.3 Notification of Changes.** Sixty (60) days prior to changing any technical information in Schedule 1, the Participating Generator shall notify the CAISO of the proposed changes. Pursuant to Sections 8.9 and 8.10 of the CAISO Tariff, the CAISO may verify, inspect and test the capacity and operating characteristics provided in the revised Schedule 1. The CAISO shall post on the CAISO Website a schedule showing, for at least one year in advance: (i) the proposed dates on which the CAISO's Master File will be updated, which dates shall occur at least every three months; (ii) the dates on which the information contained in the revised Master File will become effective; and (iii) the

deadlines by which changed technical information must be submitted to the CAISO in order to be tested and included in the next scheduled update of the CAISO's Master File. Unless the Participating Generator fails to test at the values in the proposed change(s), the change will become effective upon the effective date for the next scheduled update of the Master File, provided the Participating Generator submits the changed information by the applicable deadline and is tested by the deadline. Subject to such notification this Agreement shall not apply to any generating unit identified in Schedule 1 which the Participating Generator no longer owns or no longer has contractual entitlement to.

4.2 Agreement Subject to CAISO Tariff. The Parties will comply with all applicable provisions of the CAISO Tariff. This Agreement shall be subject to the CAISO Tariff which shall be deemed to be incorporated herein.

4.3 Obligations Relating to Ancillary Services

4.3.1 Submission of Bids. When the Scheduling Coordinator on behalf of the Participating Generator submits a Bid, the Participating Generator will, by the operation of this Section 4.3.1, warrant to the CAISO that it has the capability to provide that service in accordance with the CAISO Tariff and that it will comply with CAISO Dispatch Instructions for the provision of the service in accordance with the CAISO Tariff.

4.3.2 Certification. The Participating Generator shall not use a Scheduling Coordinator to submit a Bid for the provision of an Ancillary Service or submit a Submission to Self-Provide an Ancillary Service unless the Scheduling Coordinator serving that Participating Generator is in possession of a current certificate pursuant to Sections 8.3.4 and 8.4 of the CAISO Tariff.

4.4 Obligations relating to Major Incidents

4.4.1 Major Incident Reports. The Participating Generator shall promptly provide such information as the CAISO may reasonably request in relation to major incidents, in accordance with Section 4.6.7.3 of the CAISO Tariff.

ARTICLE V

PENALTIES AND SANCTIONS

5.1 Penalties. If the Participating Generator fails to comply with any provisions of this Agreement, the CAISO shall be entitled to impose penalties and sanctions on the Participating Generator. No penalties or sanctions may be imposed under this Agreement unless a Schedule or CAISO Tariff provision providing for such penalties or sanctions has first been filed with and made effective by FERC. Nothing in the Agreement, with the exception of the provisions relating to the CAISO ADR Procedures, shall be construed as waiving the rights of the Participating Generator to oppose or protest any penalty proposed by the CAISO to the FERC or the specific imposition by the CAISO of any FERC-approved penalty on the Participating Generator.

5.2 Corrective Measures. If the Participating Generator fails to meet or maintain the requirements set forth in this Agreement and/or the CAISO Tariff, the CAISO shall be permitted to take any of the measures, contained or referenced in the CAISO Tariff, which the CAISO deems to be necessary to correct the situation.

ARTICLE VI

COSTS

- 6.1 Operating and Maintenance Costs.** The Participating Generator shall be responsible for all its costs incurred in connection with operating and maintaining the Generating Units identified in Schedule 1 for the purpose of meeting its obligations under this Agreement.

ARTICLE VII

DISPUTE RESOLUTION

- 7.1 Dispute Resolution.** The Parties shall make reasonable efforts to settle all disputes arising out of or in connection with this Agreement. In the event any dispute is not settled, the Parties shall adhere to the CAISO ADR Procedures set forth in Section 13 of the CAISO Tariff, which is incorporated by reference, except that any reference in Section 13 of the CAISO Tariff to Market Participants shall be read as a reference to the Participating Generator and references to the CAISO Tariff shall be read as references to this Agreement.

ARTICLE VIII

REPRESENTATIONS AND WARRANTIES

- 8.1 Representation and Warranties.** Each Party represents and warrants that the execution, delivery and performance of this Agreement by it has been duly authorized by all necessary corporate and/or governmental actions, to the extent authorized by law.
- 8.2 Necessary Approvals.** The Participating Generator represents that all necessary leases, approvals, permits, licenses, easements, rights of way or access to install, own and/or operate its Generating Units have been or will be obtained by the Participating Generator prior to the effective date of this Agreement.

ARTICLE IX

LIABILITY

- 9.1 Liability.** The provisions of Section 14 of the CAISO Tariff will apply to liability arising under this Agreement, except that all references in Section 14 of the CAISO Tariff to Market Participants shall be read as references to the Participating Generator and references to the CAISO Tariff shall be read as references to this Agreement.

ARTICLE X

UNCONTROLLABLE FORCES

- 10.1 Uncontrollable Forces Tariff Provisions.** Section 14.1 of the CAISO Tariff shall be incorporated by reference into this Agreement except that all references in Section 14.1 of the CAISO Tariff to Market Participants shall be read as a reference to the Participating Generator and references to the CAISO Tariff shall be read as references to this Agreement.

ARTICLE XI

MISCELLANEOUS

- 11.1 Assignments.** Either Party may assign or transfer any or all of its rights and/or obligations under this Agreement with the other Party's prior written consent in accordance with Section 22.2 of the CAISO Tariff. Such consent shall not be unreasonably withheld. Any such transfer or assignment shall be conditioned upon the successor in interest accepting the rights and/or obligations under this Agreement as if said successor in interest was an original Party to this Agreement.
- 11.2 Notices.** Any notice, demand or request which may be given to or made upon either Party regarding this Agreement shall be made in accordance with Section 22.4 of the CAISO Tariff, provided that all references in Section 22.4 of the CAISO Tariff to Market Participants shall be read as a reference to the Participating Generator and references to the CAISO Tariff shall be read as references to this Agreement, and unless otherwise stated or agreed shall be made to the representative of the other Party indicated in Schedule 3. A Party must update the information in Schedule 3 of this Agreement as information changes. Such changes shall not constitute an amendment to this Agreement.
- 11.3 Waivers.** Any waiver at any time by either Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- 11.4 Governing Law and Forum.** This Agreement shall be deemed to be a contract made under, and for all purposes shall be governed by and construed in accordance with, the laws of the State of California, except its conflict of law provisions. The Parties irrevocably consent that any legal action or proceeding arising under or relating to this Agreement to which the CAISO ADR Procedures do not apply, shall be brought in any of the following forums, as appropriate: any court of the State of California, any federal court of the United States of America located in the State of California, or, where subject to its jurisdiction, before the Federal Energy Regulatory Commission.
- 11.5 Consistency with Federal Laws and Regulations.** This Agreement shall incorporate by reference Section 22.9 of the CAISO Tariff as if the references to the CAISO Tariff were referring to this Agreement.
- 11.6 Merger.** This Agreement constitutes the complete and final agreement of the Parties with respect to the subject matter hereof and supersedes all prior agreements, whether written or oral, with respect to such subject matter.
- 11.7 Severability.** If any term, covenant, or condition of this Agreement or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Agreement and their application shall not be affected thereby, but shall remain in force and effect and the Parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination unless a court or governmental agency of competent jurisdiction holds that such provisions are not separable from all other provisions of this Agreement.

11.8 [NOT USED]

11.9 Amendments. This Agreement and the Schedules attached hereto may be amended from time to time by the mutual agreement of the Parties in writing. Amendments that require FERC approval shall not take effect until FERC has accepted such amendments for filing and made them effective. Nothing contained herein shall be construed as affecting in any way the right of the CAISO to unilaterally make application to FERC for a change in the rates, terms and conditions of this Agreement under Section 205 of the FPA and pursuant to FERC's rules and regulations promulgated thereunder, and the Participating Generator shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the FPA and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the FPA and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.

11.10 Counterparts. This Agreement may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same Agreement.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be duly executed on behalf of each by and through their authorized representatives as of the date hereinabove written.

California Independent System Operator Corporation

By: _____

Name: _____

Title: _____

Date: _____

[NAME OF PARTICIPATING GENERATOR]

By: _____

Name: _____

Title: _____

Date: _____

[The following page is a placeholder for Schedule 1, Section 1.]

[The following page is a placeholder for Schedule 1, Section 2.]

SCHEDULE 2

CAISO IMPOSED PENALTIES AND SANCTIONS

Section 5.1

TO BE INSERTED UPON FERC APPROVAL

SCHEDULE 3

NOTICES

Section 11.2

Participating Generator

Name of Primary

Representative: _____

Title: _____

Company: _____

Address: _____

City/State/Zip Code: _____

Email Address: _____

Phone: _____

Fax No: _____

Name of Alternative

Representative: _____

Title: _____

Company: _____

Address: _____

City/State/Zip Code: _____

Email Address: _____

Phone: _____

Fax No: _____

CAISO

Name of Primary

Representative: _____

Title: _____

Address: _____

City/State/Zip Code: _____

Email Address: _____

Phone: _____

Fax No: _____

Name of Alternative

Representative: _____

Title: _____

Address: _____

City/State/Zip Code: _____

Email Address: _____

Phone: _____

Fax No: _____

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

Appendix B.3, Net Scheduled Participating Generator Agreement, 1.0.0, A

Record Narrative Name:

Tariff Record ID: 7940

Tariff Record Collation Value: 1862425600 Tariff Record Parent Identifier: 7937

Proposed Date: 2012-12-12

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

THIS AGREEMENT is dated this ____ day of _____, ____ and is entered into, by and between:

(1) [Full Legal Name], having its registered and principal place of business located at

[Address] (the "Participating Generator");

and

- (2) California Independent System Operator Corporation**, a California nonprofit public benefit corporation having a principal executive office located at such place in the State of California as the CAISO Governing Board may from time to time designate (the "CAISO").

The Participating Generator and the CAISO are hereinafter referred to as the "Parties".

Whereas:

- A.** The CAISO Tariff provides that the CAISO shall not accept Bids for Energy or Ancillary Services generated by any Generating Unit interconnected to the CAISO Controlled Grid, or to the Distribution System of a Participating TO or of a UDC or MSS Operator otherwise than through a Scheduling Coordinator.
- B.** The CAISO Tariff further provides that the CAISO shall not be obliged to accept Bids relating to Generation from any Generating Unit interconnected to the CAISO Controlled Grid unless the relevant Generator undertakes in writing to the CAISO to comply with all applicable provisions of the CAISO Tariff.
- C.** The Participating Generator wishes to be able to submit Bids, from a Net Scheduled Generating Unit to the CAISO through a Scheduling Coordinator and, therefore, wishes to undertake to the CAISO that it will comply with the applicable provisions of the CAISO Tariff, except as otherwise specified in this Agreement.
- D.** It is the intent of the Parties that this Agreement will harmonize the special operational characteristics of the Participating Generator's Net Scheduled Generating Unit with the CAISO's grid operation function. Nothing in this Agreement is intended to limit or restrict the rights of the Participating Generator under Section 4.6.3.2 of the CAISO Tariff.
- E.** The Parties are entering into this Agreement in order to establish the terms and conditions on which the CAISO and the Participating Generator will discharge their respective duties and responsibilities under the CAISO Tariff.

NOW THEREFORE, in consideration of the mutual covenants set forth herein, **THE PARTIES AGREE** as follows:

ARTICLE I

DEFINITIONS AND INTERPRETATION

1.1 Master Definitions Supplement. Unless defined in this Agreement, all capitalized terms and expressions used in this Agreement shall have the same meaning as those contained in the Master Definitions Supplement to the CAISO Tariff.

1.2 Rules of Interpretation. The following rules of interpretation and conventions shall apply to this Agreement:

- (a) if there is any inconsistency between this Agreement and the CAISO Tariff, the CAISO Tariff will prevail to the extent of the inconsistency, except as expressly provided otherwise in this Agreement;
- (b) the singular shall include the plural and vice versa;
- (c) the masculine shall include the feminine and neutral and vice versa;
- (d) "includes" or "including" shall mean "including without limitation";
- (e) references to a Section, Article or Schedule shall mean a Section, Article or a Schedule of this Agreement, as the case may be, unless the context otherwise requires;
- (f) a reference to a given agreement or instrument shall be a reference to that agreement or instrument as modified, amended, supplemented or restated through the date as of which such reference is made;
- (g) unless the context otherwise requires, references to any law shall be deemed references to such law as it may be amended, replaced or restated from time to time;
- (h) 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 personality;
- (i) unless the context otherwise requires, any reference to a Party includes a reference to its permitted successors and assigns;
- (j) any reference to a day, week, month or year is to a calendar day, week, month or year; and
- (k) the captions and headings in this Agreement are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Agreement.

ARTICLE II

ACKNOWLEDGEMENTS OF PARTICIPATING GENERATOR AND CAISO

- 2.1 CAISO Responsibility.** The Parties acknowledge that the CAISO is responsible for the efficient use and reliable operation of the CAISO Controlled Grid consistent with achievement of planning and Operating Reserve criteria no less stringent than those established by the Western Electricity Coordinating Council and the North American Electric Reliability Corporation and further acknowledges that the CAISO may not be able to satisfy fully these responsibilities if the Participating Generator fails to fully comply with all of its obligations under this Agreement.
- 2.2 Scope of Application to Parties.** The Participating Generator and CAISO acknowledge that all Qualifying Facility Generators (except those specified in Section 2.2.1 of this Agreement) and CHP Resources wishing to submit Bids to the CAISO through a Scheduling Coordinator shall first execute this Agreement or the standard Participating Generator Agreement applicable to any Generator. The Parties acknowledge that execution of this Agreement by the Participating Generator satisfies the requirement set forth in Section 4.6 of the CAISO Tariff.
- 2.2.1 Exemption for Certain Generators.** A Generator with an Existing QF Contract with a UDC is not required to sign a Net Scheduled Participating Generator Agreement if: (a) the Generator sells all of its Energy (excluding any Energy consumed by auxiliary Load equipment electrically connected to the QF at the same point) and Ancillary Services to the UDC; (b) the Generator sells any Energy through "over the fence" arrangements as authorized under Section 218(b) of the California Public Utilities Code; or (c) the Generator employs landfill gas technology for the generation of electricity as authorized under 218(c) of the California Public Utilities Code.

ARTICLE III

TERM AND TERMINATION

- 3.1 Effective Date.** This Agreement shall remain in full force and effect until terminated pursuant to Section 3.2 of this Agreement and shall be effective as of the later of: (1) the date the Agreement is executed by the Parties; or (2) where the Participating Generator is a party to an existing Participating Generator Agreement, the date upon which termination of the existing Participating Generator Agreement is accepted for filing and made effective by FERC, if such FERC filing is required; or (3) where the Participating Generator is a party to an existing Participating Generator Agreement and this Agreement is required to be filed with FERC for acceptance, the later of the date upon which termination of the existing Participating Generator Agreement is accepted for filing and made effective by FERC, or the date this Agreement is accepted for filing and made effective by FERC.
- 3.2 Termination**
- 3.2.1 Termination by CAISO.** Subject to Section 5.2, the CAISO may terminate this Agreement by giving written notice of termination in the event that the Participating Generator commits any material default under this Agreement and/or the CAISO Tariff which, if capable of being remedied, is not remedied within thirty (30) days after the CAISO has given, to the Participating Generator, written notice of the default, unless excused by reason of Uncontrollable Forces in accordance with Article X of this Agreement. With respect to any notice of termination given pursuant to this Section, the CAISO must file a timely notice of termination with FERC, if this Agreement was filed with FERC, or must otherwise comply with the requirements of FERC Order No. 2001 and related FERC orders. The filing of the notice of termination by the CAISO with FERC will be considered timely if: (1) the filing of the notice of termination is made after the

preconditions for termination have been met, and the CAISO files the notice of termination within sixty (60) days after issuance of the notice of default; or (2) the CAISO files the notice of termination in accordance with the requirements of FERC Order No. 2001. This Agreement shall terminate upon acceptance by FERC of such a notice of termination, if filed with FERC, or thirty (30) days after the date of the CAISO's notice of default, if terminated in accordance with the requirements of FERC Order No. 2001 and related FERC orders.

- 3.2.2 Termination by Participating Generator.** In the event that the Participating Generator no longer wishes to submit Bids and transmit Energy or provide Ancillary Services through a Scheduling Coordinator over the CAISO Controlled Grid, it may terminate this Agreement, on giving the CAISO not less than ninety (90) days written notice, provided, however, that in accordance with Section 4.1.3, the Participating Generator may modify Schedule 1 to eliminate generating resources which it no longer owns or no longer has contractual entitlement to and such modification shall be effective upon receipt by the CAISO. With respect to any notice of termination given pursuant to this Section, the CAISO must file a timely notice of termination with FERC, if this Agreement has been filed with FERC, or must otherwise comply with the requirements of FERC Order No. 2001 and related FERC orders. The filing of the notice of termination by the CAISO with FERC will be considered timely if: (1) the request to file a notice of termination is made after the preconditions for termination have been met, and the CAISO files the notice of termination within thirty (30) days of receipt of such request; or (2) the CAISO files the notice of termination in accordance with the requirements of FERC Order No. 2001. This Agreement shall terminate upon acceptance by FERC of such a notice of termination, if such notice is required to be filed with FERC, or upon ninety (90) days after the CAISO's receipt of the Participating Generator's notice of termination, if terminated in accordance with the requirements of FERC Order No. 2001 and related FERC orders.

ARTICLE IV

GENERAL TERMS AND CONDITIONS

4.1 Net Scheduled Generating Units

- 4.1.1 Identification of Net Scheduled Net Scheduled Generating Unit.** The Participating Generator has identified the Net Scheduled Generating Unit that it owns, operates or has a contractual entitlement to, in Schedule 1, as required by Section 4.6.4 of the CAISO Tariff.
- 4.1.2 Technical Characteristics.** The Participating Generator shall provide to the CAISO the required information regarding operating contacts, rated capacity, and operating characteristics of the Net Scheduled Generating Unit. Pursuant to Sections 8.9 and 8.10 of the CAISO Tariff, and the Existing QF Contract or Amended QF Contract, if any, associated with that Net Scheduled Generating Unit, the CAISO may verify, inspect and test the capacity and operating characteristics of the Net Scheduled Generating Unit. The performance of such inspection or test shall be conducted at a time mutually agreed upon by the Parties, which agreement shall not unreasonably be withheld.
- 4.1.3 Notification of Changes.** Sixty (60) days prior to changing any technical information in Schedule 1, the Participating Generator shall notify the CAISO of the proposed changes. Pursuant to Sections 8.9 and 8.10 of the CAISO Tariff, the CAISO may verify, inspect and test the capacity and operating characteristics; provided that the performance of such inspection or test is conducted at a time mutually agreed upon by the Parties, which agreement shall not unreasonably be withheld. The CAISO shall post on the CAISO Website a schedule showing, for at least one year in advance: (i) the proposed dates on which the CAISO's Master File will be updated, which dates shall occur at least every

three months; (ii) the dates on which the information contained in the revised Master File will become effective; and (iii) the deadlines by which changed technical information must be submitted to the CAISO in order to be tested and included in the next scheduled update of the CAISO's Master File. Unless the Participating Generator fails to test at the values in the proposed change(s), the change will become effective upon the effective date for the next scheduled update of the Master File, provided the Participating Generator submits the changed information by the applicable deadline. Subject to such notification this Agreement shall not apply to any Net Scheduled Generating Unit identified in Schedule 1 which the Participating Generator no longer owns nor has contractual entitlement.

- 4.2 Agreement Subject to CAISO Tariff.** The Parties will comply with all applicable provisions of the CAISO Tariff except as expressly provided in Sections 4.2.1 through 4.2.5 of this Agreement.
- 4.2.1 Net Generation Metering.** Notwithstanding Section 10.1.3 of the CAISO Tariff, the Participating Generator may net the value for the Generation produced by each Net Scheduled Generating Unit listed in Schedule 1 and the value for the Demand of the Self-provided Load that is (i) served by the Net Scheduled Generating Unit and (ii) electrically located on the same side of the Point of Demarcation.
- 4.2.2 Meter and Telemetry Location.** The Participating Generator may satisfy the provisions of the CAISO Tariff for the installation of meters and telemetry by installing at the Point of Demarcation meters and telemetry for the purpose of recording the net impact of the Net Scheduled Generating Unit upon the CAISO Controlled Grid; provided that the installed meters and telemetry satisfy the technical functional and performance requirements for meters and telemetry set forth in the CAISO Tariff.
- 4.2.3 Scheduling, Billing and Settlement.** For scheduling, billing, and settlement purposes regarding Net Scheduled Generating Unit Self-provided Load, measurements shall be made at the Point of Demarcation.
- 4.2.4 Operating Limitations.** Net Scheduled Generating Unit operating limitations shall be set forth in Schedule 1 of this Agreement, the resource data template used for transmittal of Participating Generator technical data to the CAISO pursuant to the CAISO Tariff, or as otherwise mutually agreed to by the Parties.
- 4.2.5 Limitations on CAISO Operating Orders.** The CAISO will not knowingly issue an operating order that: (1) requires the Participating Generator to reduce its Generation below the delineated minimum operating limit, other than in a System Emergency; (2) conflicts with operating instructions provided by the Participating Generator; or (3) results in damage to the Participating Generator's equipment, provided that any such equipment limitation has been provided to the CAISO and incorporated in the Participating Generator's operating instructions to the CAISO. If the Participating Generator: (1) receives a Schedule which requires operation below the minimum operating limit, and (2) deviates from that Schedule to continue to operate at the minimum operating limit, it will not be subject to any penalties or sanctions as a result of operating at the minimum operating limit. The Participating Generator's consequences for deviating from Schedules in Real-Time will be governed by the CAISO Tariff.
- 4.3 Obligations Relating to Ancillary Services**
- 4.3.1 Submission of Bids.** When the Scheduling Coordinator on behalf of the Participating Generator submits a Bid for Ancillary Services, the Participating Generator will, by the operation of this Section 4.3.1, warrant to the CAISO that it has the capability to provide that service in accordance with the CAISO Tariff and that it will comply with CAISO

Dispatch Instructions for the provision of the service in accordance with the CAISO Tariff.

- 4.3.2 Certification.** The Participating Generator shall not use a Scheduling Coordinator to submit a Bid for the provision of an Ancillary Service or submit a Submission to Self-Provide an Ancillary Service unless the Scheduling Coordinator serving that Participating Generator is in possession of a current certificate pursuant to Sections 8.3.4 and 8.4 of the CAISO Tariff.
- 4.4 Obligations relating to Major Incidents**
- 4.4.1 Major Incident Reports.** The Participating Generator shall promptly provide such information as the CAISO may reasonably request in relation to major incidents, in accordance with Section 4.6.7.3 of the CAISO Tariff.
- 4.5 Dispatch and Curtailment.** The CAISO shall only dispatch or curtail a Net Scheduled Generating Unit of the Participating Generator: (a) to the extent the Participating Generator bids Energy or Ancillary Services from the Net Scheduled Generating Unit into the CAISO's markets or the Energy is otherwise available to the CAISO under Section 40 or 43 of the CAISO Tariff; or (b) if the CAISO must dispatch or curtail the Net Scheduled Generating Unit in order to respond to an existing or imminent System Emergency or condition that would compromise CAISO Balancing Authority Area integrity or reliability as provided in Sections 7 and 7.6.1 of the CAISO Tariff.
- 4.6 Information to Be Provided by Participating Generator.** The Participating Generator shall provide to the CAISO (a) a copy of any existing power purchase agreement, if any, with a UDC or MSS for the Net Scheduled Generating Unit listed in Schedule 1, and (b) a copy or a summary of the primary terms of any agreement for standby service with a UDC or MSS Operator, a statement that the Net Scheduled Generating Unit is taking standby service pursuant to UDC tariff, or a statement that the Self-provided Load shall be curtailed concurrently with any Outage of the Generation serving that Self-provided Load in an amount sufficient to cover that Outage. The Participating Generator shall notify the CAISO promptly of any change in the status of any of the foregoing.

ARTICLE V

PENALTIES AND SANCTIONS

- 5.1 Penalties.** If the Participating Generator fails to comply with any provisions of this Agreement, the CAISO shall be entitled to impose penalties and sanctions on the Participating Generator. No penalties or sanctions may be imposed under this Agreement unless a Schedule or CAISO Tariff provision providing for such penalties or sanctions has first been filed with and made effective by FERC. Nothing in the Agreement, with the exception of the provisions relating to the CAISO ADR Procedures, shall be construed as waiving the rights of the Participating Generator to oppose or protest any penalty proposed by the CAISO to the FERC or the specific imposition by the CAISO of any FERC-approved penalty on the Participating Generator.
- 5.2 Corrective Measures.** If the Participating Generator fails to meet or maintain the requirements set forth in this Agreement and/or in the CAISO Tariff as limited by the provisions of this Agreement, the CAISO shall be permitted to take any of the measures, contained or referenced in the CAISO Tariff, which the CAISO deems to be necessary to correct the situation.

ARTICLE VI

COSTS

- 6.1 Operating and Maintenance Costs.** The Participating Generator shall be responsible for all its costs incurred in connection with operating and maintaining the Net Scheduled QF identified in Schedule 1 for the purpose of meeting its obligations under this Agreement.

ARTICLE VII

DISPUTE RESOLUTION

- 7.1 Dispute Resolution.** The Parties shall make reasonable efforts to settle all disputes arising out of or in connection with this Agreement. In the event any dispute is not settled, the Parties shall adhere to the CAISO ADR Procedures set forth in Section 13 of the CAISO Tariff, which is incorporated by reference, except that any reference in Section 13 of the CAISO Tariff to Market Participants shall be read as a reference to the Participating Generator and references to the CAISO Tariff shall be read as references to this Agreement.

ARTICLE VIII

REPRESENTATIONS AND WARRANTIES

- 8.1 Representation and Warranties.** Each Party represents and warrants that the execution, delivery and performance of this Agreement by it has been duly authorized by all necessary corporate and/or governmental actions, to the extent authorized by law.
- 8.2 Necessary Approvals.** The Participating Generator represents that all necessary leases, approvals, permits, licenses, easements, rights of way or access to install, own and/or operate its Net Scheduled QF have been or will be obtained by the Participating Generator prior to the effective date of this Agreement.
- 8.3 Specific Warranty.** The Participating Generator represents and warrants that: (1) the Net Scheduled Generating Unit listed in Schedule 1 is (a) a Qualifying Facility or is operated as an integral part of a Qualifying Facility, or (b) is a CHP Resource, and (2) (a) the Self-provided Load of the Participating Generator that is served by the Net Scheduling QF either has, and continues to have through the term of this Agreement, standby service from a UDC or MSS Operator under terms approved by the Local Regulatory Authority or the Federal Energy Regulatory Commission, as applicable, or (b) the Self-provided Load shall be curtailed concurrently with any Outage of the Generation serving that Self-provided Load in an amount sufficient to cover that Outage.

ARTICLE IX

LIABILITY

- 9.1 Liability.** The provisions of Section 14 of the CAISO Tariff will apply to liability arising under this Agreement, except that all references in Section 14 of the CAISO Tariff to Market Participants shall be read as references to the Participating Generator and references to the CAISO Tariff shall be read as references to this Agreement.

ARTICLE X

UNCONTROLLABLE FORCES

- 10.1 Uncontrollable Forces Tariff Provisions.** Section 14.1 of the CAISO Tariff shall be incorporated by reference into this Agreement except that all references in Section 14.1 of the CAISO Tariff to Market Participants shall be read as a reference to the Participating Generator and references to the CAISO Tariff shall be read as references to this Agreement.

ARTICLE XI

MISCELLANEOUS

- 11.1 Assignments.** Either Party may assign or transfer any or all of its rights and/or obligations under this Agreement with the other Party's prior written consent in accordance with Section 22.2 of the CAISO Tariff. Such consent shall not be unreasonably withheld. Any such transfer or assignment shall be conditioned upon the successor in interest accepting the rights and/or obligations under this Agreement as if said successor in interest was an original Party to this Agreement.
- 11.2 Notices.** Any notice, demand or request which may be given to or made upon either Party regarding this Agreement shall be made in accordance with Section 22.4 of the CAISO Tariff, provided that all references in Section 22.4 of the CAISO Tariff to Market Participants shall be read as a reference to the Participating Generator and references to the CAISO Tariff shall be read as references to this Agreement, and unless otherwise stated or agreed shall be made to the representative of the other Party indicated in Schedule 3. A Party must update the information in Schedule 3 of this Agreement as information changes. Such changes shall not constitute an amendment to this Agreement.
- 11.3 Waivers.** Any waiver at any time by either Party of its rights with respect to any default under this Agreement, or with respect to any other matter arising in connection with this Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Agreement shall not constitute or be deemed a waiver of such right.
- 11.4 Governing Law and Forum.** This Agreement shall be deemed to be a contract made under, and for all purposes shall be governed by and construed in accordance with, the laws of the State of California, except its conflict of law provisions. The Parties irrevocably consent that any legal action or proceeding arising under or relating to this Agreement to which the CAISO ADR Procedures do not apply, shall be brought in any of the following forums, as appropriate: any court of the State of California, any federal court of the United States of America located in the State of California, or, where subject to its jurisdiction, before the Federal Energy Regulatory Commission.
- 11.5 Consistency with Federal Laws and Regulations.** This Agreement shall incorporate by reference Section 22.9 of the CAISO Tariff as if the references to the CAISO Tariff were referring to this Agreement.
- 11.6 Merger.** This Agreement constitutes the complete and final agreement of the Parties with respect to the subject matter hereof and supersedes all prior agreements, whether written or oral, with respect to such subject matter.

- 11.7 Severability.** If any term, covenant, or condition of this Agreement or the application or effect of any such term, covenant, or condition is held invalid as to any person, entity, or circumstance, or is determined to be unjust, unreasonable, unlawful, imprudent, or otherwise not in the public interest by any court or government agency of competent jurisdiction, then such term, covenant, or condition shall remain in force and effect to the maximum extent permitted by law, and all other terms, covenants, and conditions of this Agreement and their application shall not be affected thereby, but shall remain in force and effect and the Parties shall be relieved of their obligations only to the extent necessary to eliminate such regulatory or other determination unless a court or governmental agency of competent jurisdiction holds that such provisions are not separable from all other provisions of this Agreement.
- 11.8 [NOT USED]**
- 11.9 Amendments.** This Agreement and the Schedules attached hereto may be amended from time to time by the mutual agreement of the Parties in writing. Amendments that require FERC approval shall not take effect until FERC has accepted such amendments for filing and made them effective. If the amendment does not require FERC approval, the amendment will be filed with FERC for information. Nothing contained herein shall be construed as affecting in any way the right of the CAISO to unilaterally make application to FERC for a change in the rates, terms and conditions of this Agreement under Section 205 of the FPA and pursuant to FERC's rules and regulations promulgated thereunder, and the Participating Generator shall have the right to make a unilateral filing with FERC to modify this Agreement pursuant to Section 206 or any other applicable provision of the FPA and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by the other Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Agreement shall limit the rights of the Parties or of FERC under Sections 205 or 206 of the FPA and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 11.10 Counterparts.** This Agreement may be executed in one or more counterparts at different times, each of which shall be regarded as an original and all of which, taken together, shall constitute one and the same Agreement.
- 11.11 Rights Reserved.** Execution of this Agreement does not deprive the Participating Generator of any unexpressed legal right, either under law or under an existing power purchase agreement.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be duly executed on behalf of each by and through their authorized representatives as of the date hereinabove written.

California Independent System Operator Corporation

By: _____
Name: _____
Title: _____
Date: _____

[NAME OF PARTICIPATING GENERATOR]

By: _____
Name: _____
Title: _____
Date: _____

[The following page is a placeholder for Schedule 1, Section 1.]

SCHEDULE 2

CAISO IMPOSED PENALTIES AND SANCTIONS

[Section 5.1]

TO BE INSERTED UPON FERC APPROVAL

SCHEDULE 3

NOTICES
(Section 11.2)

Participating Generator

Name of Primary

Representative: _____

Title: _____

Address: _____

City/State/Zip Code: _____

Email Address: _____

Phone: _____

Fax No: _____

Name of Alternative

Representative: _____

Title: _____

Address: _____

City/State/Zip Code: _____

Email Address: _____

Phone: _____

Fax No: _____

CAISO

Name of Primary

Representative: _____

Title: _____

Address: _____

City/State/Zip Code: _____

Email Address: _____

Phone: _____

Fax No: _____

Name of Alternative

Representative: _____

Title: _____

Address: _____

City/State/Zip Code: _____

Email Address: _____

Phone: _____

Fax No: _____

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

Appendix F, Rate Schedules, 9.0.0, A

Record Narrative Name:

Tariff Record ID: 7954

Tariff Record Collation Value: 1874592640 Tariff Record Parent Identifier: 0

Proposed Date: 2012-12-12

Priority Order: 500

Record Change Type: CHANGE

Record Content Type: 1

Associated Filing Identifier:

**Schedule 1
Grid Management Charge**

Part A - Monthly Calculation of Grid Management Charge (GMC)

The GMC consists of the following separate service charges: (1) the Market Services Charge; (2) the System Operations Charge; and (3) the CRR Services Charge. The GMC revenue requirement, determined in accordance with Part C of this Schedule 1, shall be allocated to the service charges specified in Part A of this Schedule 1 as follows: twenty seven (27) percent to Market Services; sixty nine (69) percent to System Operations; and four (4) percent to CRR Services.

1. The rate for the Market Services Charge will be calculated by dividing the annual GMC revenue requirement allocated to this service category by the forecast annual gross absolute value of MW per hour of Ancillary Services capacity awarded in the Day-Ahead and Real-Time Markets, MWh of Energy cleared in the Day-Ahead market, Virtual Demand Award, Virtual Supply Award, and Instructed Imbalance Energy, less the forecast annual gross absolute value of such Energy as may be excluded for a load following MSS pursuant to an MSS agreement, Standard Ramping Energy, Regulation Energy, Ramping Energy Deviation, Residual Imbalance Energy, Exceptional Dispatch Energy and Operational Adjustments for the Day-Ahead and Real-Time.
2. The rate for the System Operations Charge will be calculated by dividing the annual GMC revenue requirement allocated to this service category by forecast annual gross absolute value of MWh of real-time energy flows on the ISO Controlled Grid, net of amounts excluded pursuant to Part E of this Schedule.
3. The rate for the CRR Services Charge will be calculated by dividing the annual GMC revenue requirement allocated to this service category by the forecast annual sum of awarded MW of CRRs per hour.

The rates for the foregoing charges shall be adjusted automatically each year, effective January 1 for the following twelve (12) months, in the manner set forth in Part D of this Schedule.

Part B - Quarterly Adjustment, If Required

Each component rate of the GMC will be adjusted automatically on a quarterly basis, up or down, so that rates reflect the annual revenue requirement as posted on the CAISO Website, as applicable, if the estimated revenue collections for that component, after accounting for revenue collected from the Bid Segment Transaction Fee, the CRR Transaction Fee, the Inter-Scheduling Coordinator Trade Transaction Fee, and the Scheduling Coordinator ID Charge, on an annual basis, change by more than two (2) percent or \$1 million, whichever is greater, during the year. Such adjustment may be implemented not more than once per calendar quarter, and will be effective the first day of the next calendar month.

The rates will be adjusted according to the formulae listed in Appendix F, Schedule 1, Part A with the billing determinant(s) readjusted on a going-forward basis to reflect the change of more than two (2) percent or \$1 million, whichever is greater, from the estimated revenue collections provided in the annual informational filing.

Part C - Costs Recovered through the GMC

As provided in Section 11.22.2 of the CAISO Tariff, the GMC includes the following costs, as projected in the CAISO's budget for the year to which the GMC applies:

- CAISO Operating Costs;
- CAISO Other Costs and Revenues, including penalties, interest earnings and other revenues;
- CAISO Financing Costs, including debt service on CAISO Start Up and Development Costs and subsequent capital expenditures;
- CAISO Operating Cost Reserve; and

- CAISO Cash-Funded Capital and Project Costs.

Such costs, for the CAISO as a whole, are allocated to the service charges that comprise the GMC: (1) Market Services, (2) System Operations, and (3) CRR Services, according to the factors listed in Part A of this Schedule 1, and

adjusted annually for:

- any surplus revenues from the previous year as deposited in the CAISO Operating Reserve Account, or deficiency of revenues, as recorded in a memorandum account;

divided by:

- forecasted annual billing determinant volumes;

adjusted quarterly for:

- a change in the volume estimate used to calculate the individual GMC components, if, on an annual basis, the change is two (2) percent or \$1 million, whichever is greater, from the estimated revenue collections provided in the annual informational filing.

The GMC revenue requirement formula is as follows:

GMC revenue requirement =

CAISO Operating Costs + CAISO Financing Costs + CAISO Other Costs and Revenues + CAISO Operating Reserve Credit adjustment + CAISO Cash Funded Capital and Project Costs,

[The "USoA" reference below is the FERC Uniform System of Accounts, and is intended to include subsequent re-numbering or re-designation of the same accounts or subaccounts.]

Where,

(1) CAISO Operating Costs include:

- Transmission expenses (USoA 560-574);
- Regional market expenses (USoA 575.1-575.8);
- Maintenance accounts (USoA 576-576.5)
- Customer accounting expenses (USoA 901-905);
- Customer service and informational expenses (USoA 906-910);
- Sales expenses (USoA 911-917);
- Administrative & general expenses (USoA 920-935);
- Taxes other than income taxes that relate to CAISO operating income (USoA 408.1); and
- Miscellaneous, non-operating expenses, penalties and other deductions (USoA 426 subaccounts).

(2) CAISO Financing Costs include:

- For any fiscal year, scheduled principal and interest payments, sinking fund payments related to balloon maturities, repayment of commercial paper notes, net payments required pursuant to a payment obligation, or payments due on any CAISO notes. This amount includes the current year accrued principal and interest payments due in the first one hundred twenty (120) days of the following year except for the collection of the

remaining payments of the 2008 bonds which shall be divided evenly between 2012 and 2013.

- (b) The debt service coverage requirement, which is a percentage of the senior lien debt service, i.e., all debt service that has a first lien on CAISO net operating revenues. The coverage requirement is twenty-five (25) percent, unless otherwise specified by the rate covenants of the official statements for each CAISO bond offering.
- (3) CAISO Other Costs and Revenues include:
 - (a) Interest earnings (USoA 419) on funds not restricted by bond or note proceeds specifically designated for capital projects or capitalized interest. Unrealized gains or losses shall be excluded and realized gains and losses shall be included. If it has been determined that a permanent impairment in an investment has occurred, it shall be included.
 - (b) Miscellaneous revenues (USoA 421 and 456 subaccounts), including but not limited to Scheduling Coordinator application and training fees, and fines assessed and collected by the CAISO.
 - (c) Other interest expenses (USoA 431) not provided for elsewhere.
- (4) CAISO Operating Cost Reserve adjustment is the sum of
 - (a) The excess or shortfall in collections of the prior year's rates compared to the budgeted amounts;
 - (b) The excess or shortfall in actual CAISO Operating Costs, CAISO Other Costs and Revenues and CAISO Financing Costs for the prior year compared to the budgeted amounts;
 - (c) The estimate of current year collections and costs compared to budgeted amounts for the current year; and
 - (d) The change in CAISO Operating Cost Reserve consistent with the level of the CAISO Operating Cost Reserve requirement.
- (5) CAISO Cash-Funded Capital and Project Costs include funding from current year revenue for approved capital and projects.

A separate revenue requirement shall be established for each component of the GMC by developing the revenue requirement for the CAISO as a whole and then assigning such costs to the service categories using the allocation factors provided in Appendix F, Schedule 1, Part A.

Part D - Information Requirements

Budget Schedule

The CAISO will convene, prior to the commencement of the annual budget process, an initial meeting with stakeholders to: (a) receive ideas to control CAISO costs; (b) receive ideas for projects to be considered in the capital budget development process; and, (c) receive suggestions for reordering CAISO priorities in the coming year.

Within two (2) weeks of the initial meeting, the ideas presented by the stakeholders shall be communicated in writing to the CAISO's officers, directors and managers as part of the budget development process, and a copy of this communication shall be made available to stakeholders.

Subsequent to the initial submission of the draft budget to the CAISO Governing Board, the CAISO will provide stakeholders with the following information: (a) proposed capital budget with indicative projects for the next subsequent calendar year, a budget-to-actual review for capital expenditures for the previous calendar year, and a budget-to-actual review of current year capital costs; and, (b) expenditures and activities in detail for the next subsequent calendar year (in the form of a draft of the budget book for the CAISO Governing Board), budget-to-actual review of

expenditures and activities for the previous calendar year, and a budget-to-actual review of expenditures for the current year. Certain of this detailed information which is deemed commercially sensitive will only be made available to parties that pay the CAISO's GMC (or regulators) who execute a confidentiality agreement.

The CAISO shall provide such materials on a timely basis to provide stakeholders at least one full Board meeting cycle to review and prepare comments on the draft annual budget to the CAISO Governing Board.

At least one month prior to the CAISO Governing Board meeting scheduled to consider approval of the proposed budget, the CAISO will hold a meeting open to all stakeholders to discuss the details of the CAISO's budget and revenue requirement for the forthcoming year.

Prior to a final recommendation by the CAISO Governing Board on the CAISO's draft annual budget, the CAISO shall respond in writing to all written comments on the draft annual budget submitted by stakeholders and/or the CAISO shall issue a revised draft budget indicating in detail the manner in which the stakeholders' comments have been taken into consideration.

The CAISO will provide no fewer than forty-five (45) days for stakeholder review of its annual budget between initial budget posting and final approval of the budget by the CAISO Governing Board.

Budget Posting

After the approval of the annual budget by the CAISO Governing Board, the CAISO will post on the CAISO Website the CAISO operating and capital budget to be effective during the subsequent fiscal year, and the billing determinant volumes used to develop the rate for each component of the GMC, together with workpapers showing the calculation of such rates.

Periodic Financial Reports

The CAISO will create periodic financial reports consisting of an income statement, balance sheet, statement of operating reserves, and such other reports as are required by the CAISO Governing Board. The periodic financial reports will be posted on the CAISO Website not less than quarterly.

Part E - System Operations Charge Exemption for Certain Long-Term Power Supply Contracts

- (1) The real time MWh Energy flows from Generating Units with certain existing power supply contracts will be exempt from the System Operations Charge until the first opportunity to renegotiate the contract or the contract expires. To be eligible for this exemption, the generating unit and the power supply contract must meet the following criteria:
 - (a) The generator owner must be the Scheduling Coordinator for the generating unit;
 - (b) The power supply contract may not be with another Scheduling Coordinator that has the same parent company as the generator owner;
 - (c) The power supply contract may not be with the same Scheduling Coordinator ID Code as the Generating Unit;
 - (d) The power supply contract precludes the supplier from recovering additional GMC costs incurred as a result of the GMC rate design that became effective on January 1, 2012;
 - (e) The power supply contract must have been executed prior to January 1, 2011;

- (f) The duration of the power supply contract must be such that it is three (3) years or more until the termination of the contract or the first opportunity to renegotiate the terms and conditions of the contract.
- (2) To establish eligibility for exemption from the Systems Operation charge, the generator owner must submit the following information in accordance with the procedures set forth on the ISO website:
 - (a) Power supply contract timeline, including the execution date and either termination date or the earliest date upon which the contract may be renegotiated;
 - (b) Resource ID;
 - (c) SCID; and,
 - (d) Effected MW.
 - (3) An officer of the generation owner company must provide a signed affidavit attesting to the information that demonstrates the power supply contract eligibility for the exemption.

Part F -[Not Used]

**Schedule 2
[Not Used]**

**Schedule 3
High Voltage Access Charge and Wheeling Access Charge**

1. Objectives and Definitions.

1.1 Objectives.

- (a) The Access Charge will remain utility-specific until a New Participating TO executes the Transmission Control Agreement, at which time the Access Charge will change as discussed below.
- (b) The Access Charge is the charge assessed for using the CAISO Controlled Grid. It consists of three components, the High Voltage Access Charge (HVAC), the Transition Charge and the Low Voltage Access Charge (LVAC).
- (c) The HVAC ultimately will be based on one CAISO Grid-wide rate. Initially, the HVAC will be based on TAC Areas, which will transition 10% per year to the CAISO Grid-wide rate. In the first year after the TAC Transition Date described in Section 4.2 of this Schedule 3, the HVAC will be a blend based on 10% CAISO Grid-wide and 90% TAC Area.
- (d) New High Voltage Facility additions and capital additions to Existing High Voltage Facilities will be immediately included in the CAISO Grid-wide component of the HVAC. The Transmission Revenue Requirement for New High Voltage Facilities will not be included in the calculation of the Transition Charge.
- (e) The LVAC will remain utility-specific and will be determined by each Participating TO. The LVAC of Non-Load-Serving Participating TOs may also be project specific. Each Participating TO will charge for and collect the LVAC, subject to Section 26.1 of the CAISO Tariff and Section 13 of this Schedule 3.

- (f) The cost-shift associated with transitioning from utility-specific rates to one CAISO Grid-wide rate will be mitigated in accordance with the CAISO Tariff, including this schedule.
- (g) The Wheeling Access Charge is paid by Scheduling Coordinators for Wheeling as set forth in Section 26.1.4 of the CAISO Tariff. The CAISO will collect the Wheeling revenues from Scheduling Coordinators on a Trading Interval basis and repay these to the Participating TOs based on the ratio of each Participating TO's Transmission Revenue Requirement to the sum of all Participating TOs' Transmission Revenue Requirements.

1.2 Definitions

Unless the context otherwise requires, any word or expression defined in the Master Definition Supplement shall have the same meaning where used in this Schedule 3.

2. Assessment of High Voltage Access Charge and Transition Charge.

All UDCs and MSS Operators in a PTO Service Territory serving Gross Loads directly connected to the transmission facilities or Distribution System of a UDC or MSS Operator in a PTO Service Territory shall pay to the CAISO a charge for transmission service on the High Voltage Transmission Facilities included in the CAISO Controlled Grid. The charge will be based on the High Voltage Access Charge applicable to the TAC Area in which the point of delivery is located and the applicable Transition Charge. A UDC or MSS Operator that is also a Participating TO shall pay, or receive payment of, if applicable, the difference between (i) the High Voltage Access Charge and Transition Charge applicable to its transactions as a UDC or MSS Operator; and (ii) the disbursement of High Voltage Access Charge revenues to which it is entitled pursuant to Section 26.1.3 of the CAISO Tariff.

3. TAC Areas.

- 3.1** TAC Areas are based on the Control Areas in California prior to the CAISO Operations Date. Three TAC Areas will be established based on the Original Participating TOs: (1) a Northern Area consisting of the PTO Service Territory of Pacific Gas and Electric Company and the PTO Service Territory of any entity listed in Section 3.3 or 3.5 of this Schedule; (2) an East Central Area consisting of the PTO Service Territory of Southern California Edison Company and the PTO Service Territory of any entity listed in Section 3.4, 3.5 or 3.6 (as indicated therein) of this Schedule 3; and (3) a Southern Area consisting of the PTO Service Territory of San Diego Gas & Electric Company. Participating TOs that are not in one of the above cited PTO Service Territories are addressed below.
- 3.2** If the Los Angeles Department of Water and Power joins the CAISO and becomes a Participating TO, its PTO Service Territory will form a fourth TAC Area, the West Central Area.
- 3.3** If any of the following entities becomes a Participating TO, its PTO Service Territory will become part of the Northern Area: Sacramento Municipal Utility District, Western Area Power Administration - Sierra Nevada Region, the Department of Energy California Labs, Northern California Power Agency, City of Redding, Silicon Valley Power, City of Palo Alto, City and County of San Francisco, Alameda Bureau of Electricity, City of Biggs, City of Gridley, City of Healdsburg, City of Lodi, City of Lompoc Utility Department, Modesto Irrigation District, Turlock Irrigation District, Plumas County Water Agency, City of Roseville Electric Department, City of Shasta Lake, and City of Ukiah or any other entity

owning or having contractual rights to High Voltage or Low Voltage Transmission Facilities in Pacific Gas and Electric Company's Control Area prior to the CAISO Operations Date.

- 3.4** If any of the following entities becomes a Participating TO, its PTO Service Territory will become part of the East Central Area: City of Anaheim Public Utility Department, City of Riverside Public Utility Department, City of Azusa Light and Water, City of Banning Electric, City of Colton, City of Pasadena Water and Power Department, The Metropolitan Water District of Southern California and City of Vernon or any other entity owning or having contractual rights to High Voltage or Low Voltage Transmission Facilities in Southern California Edison Company's Control Area prior to the CAISO Operations Date.
- 3.5** If the California Department of Water Resources becomes a Participating TO, its High Voltage Transmission Revenue Requirements associated with High Voltage Transmission Facilities in the Northern Area would become part of the High Voltage Transmission Revenue Requirement for the Northern Area while the remainder would be included in the East Central Area.
- 3.6** If the City of Burbank Public Service Department (Burbank) and/or the City of Glendale Public Service Department (Glendale) become Participating TOs after or at the same time as the Los Angeles Department of Water and Power becomes a Participating TO, then the PTO Service Territory of Burbank and/or Glendale would become part of the West Central Area. Otherwise, if Burbank or Glendale becomes a Participating TO, prior to Los Angeles, its PTO Service Territory will become part of the East Central Area. Once either Burbank or Glendale are part of the East Central Area, they will not move to the West Central Area if such area is established.
- 3.7** If the Imperial Irrigation District or an entity outside the State of California should apply to become a Participating TO, the CAISO Governing Board will review the reasonableness of integrating the entity into one of the existing TAC Areas. If the entity cannot be integrated without the potential for significant cost shifts, the CAISO Governing Board may establish a separate TAC Area.

4. TAC Transition Date.

- 4.1** New Participating TOs shall provide the CAISO with a notice of intent to join and execute the Transmission Control Agreement by either January 1 or July 1 of any year and provide the CAISO with an application within 15 days of such notice of intent.
- 4.2** The TAC Transition Period shall begin on either January 1 or July 1 after the date the first New Participating TO's execution of the Transmission Control Agreement takes effect (TAC Transition Date). The TAC Transition Date shall be the same for the Northern Area, East Central Area and the Southern Area. The TAC Transition Date shall also be the same for the West Central Area, should it come into existence in accordance with Section 3.2 of this Schedule 3, unless the CAISO provides additional information demonstrating the need for a deferral. The 10-year TAC Transition Period described in Section 5.8 of Schedule 3 shall start from that date. If the West Central TAC Area is created after the TAC Transition Date, the applicable High Voltage Access Charge shall transition to a CAISO Grid-wide High Voltage Access Charge over the TAC Transition Period remaining from the TAC Transition Date, on the same schedule as the other TAC Areas.
- 4.3** Application to Additional TAC Areas. For any TAC Areas other than those specified in Section 4.2 of this Schedule 3, created after the TAC Transition Date, including any TAC Area created as a result of the application of Section 3.7 of this Schedule 3, whether and over what period the applicable High Voltage Access Charge shall transition to a CAISO

Grid-wide charge shall be determined by the CAISO Governing Board.

- 4.4** Application to Wheeling Access Charges. The transition described in this Section 4 shall also apply, on the same schedule, to High Voltage Wheeling Access Charges.
- 4.5** Conversion of Existing Rights. During the process by which a New Participating TO executes the Transmission Control Agreement, the CAISO and potential New Participating TO that has an obligation to serve Load shall determine the IFM Congestion Credit to be allocated to the New Participating TO in accordance with Section 4.3.1.2 of the CAISO Tariff for each Existing Right that the New Participating TO converts to Converted Rights. In making that determination, the CAISO will consider the amount of contracted transmission capacity, the firmness of the contracted transmission capacity, and other characteristics of the contracted transmission capacity.

5. Determination of the Access Charge.

- 5.1** The Access Charge consists of a High Voltage Access Charge (HVAC) that is based on a TAC Area component and a CAISO Grid-wide component, a Transition Charge, and a Low Voltage Access Charge (LVAC) that is based on a utility-specific rate established by each Participating TO in accordance with its TO Tariff.
- 5.2** Each Participating TO will develop, in accordance with Section 6 of this Schedule 3, a High Voltage Transmission Revenue Requirement (HVTRR_{PTO}) consisting of a Transmission Revenue Requirement for Existing High Voltage Facility (EHVTRR_{PTO}) and a Transmission Revenue Requirement for New High Voltage Facility (NHVTRR_{PTO}). The HVTRR_{PTO} includes the TRBA adjustment described in Section 6.1 of this Schedule 3.
- 5.3** The Gross Load amount in MWh shall be established by each Participating TO and filed at FERC with each Participating TO's Transmission Revenue Requirement (GL_{PTO}).
- 5.4** The HVAC applicable to each UDC or MSS Operator serving Gross Load in the PTO Service Territory, shall be based on a TAC Area component (HVAC_A) and a CAISO Grid-wide component (HVAC_I).

$$\text{HVAC} = \text{HVAC}_A + \text{HVAC}_I$$

- 5.5** The Existing Transmission Revenue Requirement for the TAC Area component (ETRR_A) is the summation of each Participating TO's EHVTRR_{PTO} in that TAC Area. The Gross Load in the TAC Area (GL_A) is the summation of each Participating TO's Gross Load in that TAC Area (GL_{PTO}). The TAC Area component will be based on the product of Existing Transmission Revenue Requirement for the TAC Area (ETRR_A) and the applicable annual transition percentage (%TA) in Section 5.8 of this Schedule 3, divided by the Gross Load in the TAC Area (GL_A).

$$\text{ETRR}_A = \sum \text{EHVTRR}_{\text{PTO}}$$

$$\text{GL}_A = \sum \text{GL}_{\text{PTO}}$$

$$\text{HVAC}_A = (\text{ETRR}_A * \%TA) / \text{GL}_A$$

- 5.6** The Existing Transmission Revenue Requirement for the CAISO Grid-wide component (ETRR_I) will be the summation of all TAC Areas' ETRR_A multiplied by the applicable annual transition percentage (%IGW) in Section 5.8 of this Schedule 3. The New Transmission Revenue Requirement (NTRR) is the summation of each Participating TO's NHVTRR_{PTO}. The CAISO Grid-wide component will be based on the ETRR_I plus the

NTRR, divided by the summation of all Gross Loads in the TAC Areas (GL_A).

$$ETRR_i = \sum ETRR_A * \%IGW$$

$$HVAC_i = (ETRR_i + NTRR) / \sum GL_A$$

The foregoing formulas will be adjusted, as necessary to take account of new TAC Areas.

- 5.7** The Transition Charge shall be calculated separately for each Participating TO by dividing (i) the net difference between (1) the Participating TO's payment responsibility, if any, under Section 26.5 of the CAISO Tariff and Section 7 of this Schedule 3; and (2) the amount, if any, payable to the Participating TO in accordance with Section 26.5 of the CAISO Tariff and Section 7 of this Schedule 3; by (ii) the total of all forecasted Gross Load in the PTO Service Territory of the Participating TO, including the UDC and/or MSS Operator. If greater than zero, the Transition Charge shall be collected with the High Voltage Access Charge. If less than zero, the Transition Charge shall be credited with the High Voltage Access Charge. The amount of each Participating TO's NHVTRR shall not be included in the Transition Charge calculation.
- 5.8** The High Voltage Access Charge shall transition over a 10-year TAC Transition Period from TAC Area to CAISO Grid-wide. The transition percentage to be used for each year will be based on the following:

YearTAC Area

High Voltage

(%TA)CAISO Grid-Wide

High Voltage

(%IGW) 190%10%280%20%370%30%460%40%550%50%640%60%730%70%820%80%910%90%100%100%**5.9** After the completion of the TAC Transition Period described in Section 4 of this Schedule 3, the High Voltage Access Charge shall be equal to the sum of the High Voltage Transmission Revenue Requirements of all Participating TOs, divided by the sum of the Gross Loads of all Participating TOs.

6. High Voltage Transmission Revenue Requirement.

- 6.1** The High Voltage Transmission Revenue Requirement of a Participating TO will be determined consistent with CAISO procedures posted on the CAISO Website and shall be the sum of:
- (a) the Participating TO's High Voltage Transmission Revenue Requirement (including costs related to Existing Contracts associated with transmission by others and deducting transmission revenues actually expected to be received by the Participating TO related to transmission for others in accordance with Existing Contracts, less the sum of the Standby Transmission Revenues); and

- (b) the annual high voltage TRBA adjustment, which shall be based on the principal balance in the high voltage TRBA as of September 30 and shall be calculated as a dollar amount based on the projected Transmission Revenue Credits as adjusted for the true up of the prior year's difference between projected and actual credits. A Non-Load-Serving Participating TO shall include any over- or under-recovery of its annual High Voltage Transmission Revenue Requirement in its high voltage TRBA. If the annual high voltage TRBA adjustment involves only a partial year of operations, the Non-Load-Serving Participating TO's over- or under-recovery shall be based on a partial year revenue requirement, calculated by multiplying the Non-Load-Serving Participating TO's High Voltage Transmission Revenue Requirement by the number of days the High Voltage Transmission Facilities were under the CAISO's Operational Control divided by the number of days in the year.

7. Limitation.

- (a) During each year of the TAC Transition Period described in this Schedule 3, the increase in the total payment responsibility applicable to Gross Loads in the PTO Service Territory of an Original Participating TO attributable to the total for the year of (i) the amount applicable for the Original Participating TO under Section 26.5 of the CAISO Tariff; plus (ii) the amount applicable to the implementation of the High Voltage Access Charge shall not exceed the amount specified in paragraph (b) of this section. This limitation shall be calculated individually for each Original Participating TO, provided that, if the net effect of clauses (i) and (ii) of this paragraph is positive for one or more Original Participating TOs for any year, the combined net effect shall be allocated among all Original Participating TOs in proportion to the amounts specified in paragraph (b) of this section. This limitation shall be applied by the CAISO's calculation annually of amounts payable by New Participating TOs to Original Participating TOs such that the combined effect of clauses (i) and (ii) of this paragraph, and the payments received by each Original Participating TO shall not exceed the amounts specified in paragraph (b) of this section. The amount receivable by the Original Participating TO from the New Participating TOs to implement the limitation in paragraph (b) of this section, shall be credited through the Transition Charge established pursuant to Section 5.7 of this Schedule 3. Payment responsibility under this section, if any, shall be allocated among New Participating TOs in proportion to their TAC Benefits.
- (b) The maximum annual amounts for Original Participating TO shall be as follows:
 - (i) For Pacific Gas and Electric Company and Southern California Edison Company, the maximum annual amount shall be thirty-two million dollars (\$32,000,000.00) each; and
 - (ii) For San Diego Gas & Electric Company, the maximum annual amount shall be eight million dollars (\$8,000,000.00).

8. Updates to High Voltage Access Charges.

- 8.1** High Voltage Access Charges and High Voltage Wheeling Access Charges shall be adjusted: (1) on January 1 and July 1 of each year when necessary to reflect the addition of any New Participating TO and (2) on the date FERC makes effective a change to the High Voltage Transmission Revenue Requirements of any Participating TO. Using the High Voltage Transmission Revenue Requirement accepted or authorized by FERC, consistent with Section 9 of this Schedule 3, for each Participating TO, the CAISO will

recalculate on a monthly basis the High Voltage Access Charge and Transition Charge applicable during such period. Revisions to the Transmission Revenue Balancing Account adjustment shall be made effective annually on January 1 based on the principal balance in the TRBA as of September 30 of the prior year and a forecast of Transmission Revenue Credits for the next year.

- 8.2** For service provided by a Participating TO prior to the TAC Transition Date, no refund ordered by FERC or amount accrued to that Participating TO's Transmission Revenue Balancing Account related to such service shall be reflected in the High Voltage Access Charge, Low Voltage Access Charge, the High Voltage Transmission Revenue Requirement, or the Low Voltage Transmission Revenue Requirement of a Participating TO. For service provided by a Participating TO following the TAC Transition Date, any refund associated with a Participating TO's Transmission Revenue Requirement that has been accepted by FERC, subject to refund, shall be provided as ordered by FERC. Such refund shall be invoiced separately from the CAISO Market Invoice.
- 8.3** If the Participating TO withdraws one or more of its transmission facilities from the CAISO Operational Control in accordance with Section 3.4 of the Transmission Control Agreement, then the CAISO will no longer collect the TRR for that transmission facility through the CAISO's Access Charge effective upon the date the transmission facility is no longer under the Operational Control of the CAISO. The withdrawing Participating TO shall be obligated to provide the CAISO will all necessary information to implement the withdrawal of the Participating TO's transmission facilities and to make any necessary filings at FERC to revise its TRR. The CAISO shall revise its transmission Access Charge to reflect the withdrawal of one or more transmission facilities from CAISO Operational Control.

9. Approval of Updated High Voltage Revenue Requirements.

- 9.1** Participating TOs will make the appropriate filings at FERC to establish their Transmission Revenue Requirements for their Low Voltage Access Charges and the applicable High Voltage Access Charges, and to obtain approval of any changes thereto. All such filings with the FERC will include a separate appendix that states the HVTRR, LVTRR (if applicable) and the appropriate Gross Load data and other information required by the FERC to support the Access Charges. The Participating TO will provide a copy of its filing to the CAISO and the other Participating TOs in accordance with the notice provisions in the Transmission Control Agreement.
- 9.2** Federal power marketing agencies whose transmission facilities are under CAISO Operational Control shall develop their High Voltage Transmission Revenue Requirements pursuant to applicable federal laws and regulations, including filing with FERC. All such filings with FERC will include a separate appendix that states the HVTRR, LVTRR (if applicable) and the appropriate Gross Load data and other information required by the FERC to support the Access Charges. The procedures for public participation in a federal power marketing agency's ratemaking process shall be posted on the federal power marketing agency's website. The federal power marketing agency shall also post on the website the Federal Register Notices and FERC orders for rate making processes that impact the federal power marketing agency's High Voltage Transmission Revenue Requirement. The Participating TO will provide a copy of its filing to the CAISO and the other Participating TOs in accordance with the notice provisions in the Transmission Control Agreement.

10. Disbursement of High Voltage Access Charge and Transition Charge Revenues.

- 10.1** High Voltage Access Charge and Transition Charge revenues shall be calculated for disbursement to each Participating TO on a monthly basis as follows:

- (a) the amount determined in accordance with Section 26.1.2 of the CAISO Tariff ("Billed HVAC/TC");
- (b)
 - (i) for a Participating TO that is a UDC or MSS Operator and has Gross Load in its TO Tariff in accordance with Appendix F, Schedule 3, Section 9, then calculate the amount each UDC or MSS Operator would have paid and the Participating TO would have received by multiplying the High Voltage Utility-Specific Rates for the Participating TO whose High Voltage Facilities served such UDC and MSS Operator times the actual Gross Load of such UDCs and MSS Operators ("Utility-specific HVAC"); or
 - (ii) for a Non-Load-Serving Participating TO, then calculate the Non-Load-Serving Participating TO's portion of the total Billed HVAC/TC in subsection (a) based on the ratio of the Non-Load-Serving Participating TO's High Voltage Transmission Revenue Requirement to the sum of all Participating TOs' High Voltage Revenue Requirements.
- (c) if the total Billed HVAC/TC in subsection (a) received by the CAISO less the total dollar amounts calculated in Utility-specific HVAC in subsection (b)(i) and subsection (b)(ii) is different from zero, the CAISO shall allocate the positive or negative difference among those Participating TOs that are subject to the calculations in subsection (b)(i) based on the ratio of each Participating TO's High Voltage Transmission Revenue Requirement to the sum of all of those Participating TOs' High Voltage Transmission Revenue Requirements that are subject to the calculations in subsection (b)(i). This monthly distribution amount is the "HVAC Revenue Adjustment";
- (d) the sum of the HVAC revenue share determined in subsection (b) and the HVAC Revenue Adjustment in subsection (c) will be the monthly disbursement to the Participating TO.

10.2 If the same entity is both a Participating TO and a UDC or MSS Operator, then the monthly High Voltage Access Charge and Transition Charge amount billed by the CAISO will be the charges payable by the UDC or MSS Operator in accordance with Section 26.1.2 of the CAISO Tariff less the disbursement determined in accordance with Section 10.1(d) of this Schedule 3. If this difference is negative, that amount will be paid by the CAISO to the Participating TO.

11. Determination of Transmission Revenue Requirement Allocation Between High Voltage and Low Voltage Transmission Facilities.

11.1 Each Participating TO shall allocate its Transmission Revenue Requirement between the High Voltage Transmission Revenue Requirement and Low Voltage Transmission Revenue Requirement based on the Procedure for Division of Certain Costs Between the High and Low Voltage Transmission Access Charges contained in Section 12 of this Schedule.

12. Procedure for Division of Certain Costs Between the High and Low Voltage Transmission Access Charges.

12.1 Division of Costs:

(a) Substations

Costs for substations and substation equipment, including transformers:

- (i) If the Participating TO has substation TRR information by facility and voltage, then the TRR for facilities and equipment at or above 200 kV should be allocated to the HVTRR and the TRR for facilities and equipment below 200 kV should be allocated to the LVTRR;
- (ii) If the Participating TO has substation TRR information by facility but not by voltage, then the TRR for facilities and equipment should be allocated to the HVTRR and to the LVTRR based on the ratio of gross substation investment allocated to HVTRR to gross substation investment allocated to LVTRR pursuant to Section 12.1(a)(i); or
- (iii) If the Participating TO does not have substation TRR information by facility or voltage, then the TRR for facilities and equipment should be allocated to the HVTRR and to the LVTRR based on the Participating TO's transmission system-wide gross plant ratio. The system-wide gross plant ratio is determined once the costs that can be split between High Voltage Transmission Facilities and Low Voltage Transmission Facilities for all facilities has been developed in accordance with Sections 12.1(a) through (c), then the resulting cost ratio between High Voltage Transmission Facilities and Low Voltage Transmission Facilities shall be used as the system-wide gross plant ratio.
- (iv) Costs of transformers that step down from high voltage (200 kV or above) to low voltage, to the extent the Participating TO does not have the revenue requirement information available on a voltage basis, should be allocated consistent with the procedures for substations addressed above.

(b) Transmission Towers and Land with Circuits on Multiple Voltages

For transmission towers that have both High Voltage Transmission Facilities and Low Voltage Transmission Facilities on the same tower, the cost of these assets should be allocated two-thirds to the HVTRR and one-third to the LVTRR. If the transmission tower has only High Voltage Transmission Facilities, then the costs of these assets should be allocated entirely to the HVTRR. If the transmission tower has only Low Voltage Transmission Facilities, then the TRR of these assets should be allocated entirely to the LVTRR. Provided that the Participating TO does not have land cost information available on a voltage basis, in which case the costs should be allocated based on the bright-line of the voltage levels, the costs for land used for transmission rights-of-way for towers that have both high voltage and low voltage wires should be allocated two-thirds to the HVTRR component and one-third to the LVTRR.

(c) Operation and Maintenance, Transmission Wages & Salaries, Taxes, Depreciation and Amortization, and Capital Costs

If the Participating TO can delineate costs for transmission operations and maintenance (O&M), transmission wages and salaries, taxes, depreciation and amortization, or capital costs on a voltage basis, the costs shall be applied on a bright-line voltage basis. If the costs for O&M, transmission wages and salaries, taxes, depreciation and amortization, or capital costs, are not available on voltage levels, the allocation to the HVTRR and the LVTRR should be based on the Participating TO's system-wide gross plant ratio defined in Section 12.1(a).

(d) Existing Transmission Contracts

If the Take-Out Point for the Existing Contract is a High Voltage Transmission Facility, the Existing Contract revenue will be credited to the HVTRR of the Participating TO receiving such revenue. Similarly, the Participating TO that is paying charges under such an Existing Contract may include the costs in its HVTRR. If the Take-Out Point for the Existing Contract is a Low Voltage Transmission Facility, the Existing Contract revenue will be credited to the HVTRR and the LVTRR of the receiving Participating TO based on the ratio of the Participating TO's HVTRR to its LVTRR, prior to any adjustments for such revenues. The Participating TO that is paying the charges under the Existing Contract will include the costs in its HVTRR and LVTRR in the same ratio as the revenues are recognized by the Participating TO receiving the payments.

(e) Division of the TRBA Adjustment between HVTRR and LVTRR

- (i) Wheeling revenues associated with transactions exiting the CAISO Controlled Grid at Scheduling Points or Take-Out Points that are at High Voltage Transmission Facilities shall be reflected as high voltage TRBA adjustment components;
- (ii) Wheeling revenues associated with transactions exiting the CAISO Controlled Grid at Scheduling Points or Take-Out Points that are at Low Voltage Transmission Facilities shall be attributed between high voltage and low voltage TRBA adjustment components based on the High Voltage and Low Voltage Wheeling Access Charge rates assessed to such transactions by the CAISO and/or the Participating TO;
- (iii) Any Low Voltage Access Charge amounts paid pursuant to Section 26.1 of the CAISO Tariff for the Low Voltage Transmission Facilities of a Non-Load-Serving Participating TO shall be reflected as a component of the low voltage TRBA adjustment associated with the Low Voltage Access Charge;
- (iv) CRR revenues from CRRs allocated to Participating TOs shall be assigned to high voltage or low voltage TRBA adjustment components based on the voltage of the path related to the CRR; and,
- (v) Other Transmission Revenue Credits shall be allocated between high voltage and low voltage TRBA adjustment components on a gross plant basis.

13. Low Voltage Access Charge for a Non-Load-Serving Participating TO. Pursuant to Section 26.1 of the CAISO Tariff, the provisions of this Section 13 of this Schedule 3 shall apply to a Non-Load-Serving Participating TO that has Low Voltage Transmission Facilities.

13.1 Low Voltage Transmission Revenue Requirement. The Low Voltage Transmission Revenue Requirement of a Non-Load-Serving Participating TO shall be calculated separately for each individual project that includes one or more Low Voltage Transmission Facilities or shall be calculated for a group of Low Voltage Transmission Facilities if all are part of projects directly connected to the facilities of the same Participating TO(s). The Low Voltage Transmission Revenue Requirement will be determined consistent with CAISO procedures posted on the CAISO Website and shall be the sum of:

- (a) the Non-Load-Serving Participating TO's Low Voltage Transmission Revenue Requirement for the relevant Low Voltage Transmission Facility or group of

facilities; and

- (b) the annual low voltage TRBA adjustment for the relevant Low Voltage Transmission Facility or group of facilities, which shall be based on the principal balance in the low voltage TRBA as of September 30 and shall be calculated as a dollar amount based on the projected Transmission Revenue Credits as adjusted for the true up of the prior year's difference between projected and actual credits. In accordance with Section 26.1 of the CAISO Tariff, the Non-Load-Serving Participating TO shall include any over- or under-recovery of its annual Low Voltage Transmission Revenue Requirement in its low voltage TRBA. If the annual low voltage TRBA adjustment involves only a partial year of operations, the Non-Load-Serving Participating TO's over- or under-recovery shall be based on a partial year revenue requirement, calculated by multiplying the Non-Load-Serving Participating TO's Low Voltage Transmission Revenue Requirement by the number of days the Low Voltage Transmission Facilities were under the CAISO's Operational Control divided by the number of days in the year.

- 13.2** Updates to Low Voltage Access Charges. Unless otherwise agreed by the affected Participating TOs, a Non-Load-Serving Participating TO shall adjust its Low Voltage Access Charges and Low Voltage Wheeling Access Charges (1) when necessary to reflect any new transmission addition directly connecting a Participating TO to the Low Voltage Transmission Facilities of the Non-Load-Serving Participating TO; (2) on the date FERC makes effective a change to the Low Voltage Transmission Revenue Requirement of the Non-Load-Serving Participating TO; and (3) on the date FERC makes effective a change to Gross Load of a

Participating TO directly connected to the Non-Load-Serving Participating TO. Using the Low Voltage Transmission Revenue Requirement accepted or authorized by FERC, consistent with Section 9 of this Schedule 3, for the Non-Load-Serving Participating TO, the ISO will recalculate on a monthly basis the Low Voltage Access Charge applicable during such period. Revisions to the low voltage TRBA adjustment shall be made effective annually on January 1 based on the principal balance in the low voltage TRBA as of September 30 of the prior year and a forecast of Transmission Revenue Credits for the next year.

For service provided by a Non-Load-Serving Participating TO following the TAC Transition Date, any refund associated with a Non-Load-Serving Participating TO's Transmission Revenue Requirement that has been accepted by FERC, subject to refund, shall be provided as ordered by FERC. Such refund shall be invoiced separately from the CAISO Market Invoice.

If the Non-Load-Serving Participating TO withdraws one or more of its transmission facilities from the CAISO Operational Control in accordance with Section 3.4 of the Transmission Control Agreement, then the CAISO will no longer collect the TRR for that transmission facility through the CAISO's Access Charge effective upon the date the transmission facility is no longer under the Operational Control of the CAISO. The withdrawing Non-Load-Serving Participating TO shall be obligated to provide the CAISO with all necessary information to implement the withdrawal of the Participating TO's transmission facilities and to make any necessary filings at FERC to revise its TRR. The CAISO shall revise its transmission Access Charge to reflect the withdrawal of one or more transmission facilities from CAISO Operational Control.

- 13.3** Approval of Updated Low Voltage Transmission Revenue Requirement. A Non-Load-Serving Participating TO will make the appropriate filings at FERC to establish its Transmission Revenue Requirement for its Low Voltage Access Charge, and to obtain

approval of any changes thereto. All such filings with the FERC will include a separate appendix that states the LVTRR and other information required by the FERC to support the Low Voltage Access Charge. The Non-Load-Serving Participating TO will provide a copy of its filing to the CAISO and the other Participating TOs in accordance with the notice provisions in the Transmission Control Agreement.

Federal power marketing agencies whose transmission facilities are under CAISO Operational Control shall develop their Low Voltage Transmission Revenue Requirements pursuant to applicable federal laws and regulations, including filing with FERC. All such filings with FERC will include a separate appendix that states the LVTRR and other information required by the FERC to support the Access Charges. The procedures for public participation in a federal power marketing agency's ratemaking process shall be posted on the federal power marketing agency's website. The federal power marketing agency shall also post on the website the Federal Register Notices and FERC orders for rate making processes that impact the federal power marketing agency's Low Voltage Transmission Revenue Requirement. The Non-Load-Serving Participating TO will provide a copy of its filing to the CAISO and the other Participating TOs in accordance with the notice provisions in the Transmission Control Agreement.

- 13.4** Disbursement of Low Voltage Access Charge Revenues. Unless otherwise agreed by the affected Participating TOs, Low Voltage Access Charge revenues of a Non-Load-Serving Participating TO shall be calculated for disbursement to that Non-Load-Serving Participating TO on a monthly basis as the sum of Low Voltage Access Charges billed by the CAISO to the UDCs or MSS Operators of Participating TOs pursuant to Section 26.1 of the CAISO Tariff.
- 13.5** Payment of Low Voltage Access Charge. Notwithstanding the separate accounting for the Low Voltage Access Charge specified in Section 26.1 of the CAISO Tariff and this Section 13 of this Schedule 3, if the same entity is both a Participating TO and a UDC or MSS Operator, then the monthly High Voltage Access Charge and Transition Charge amount, and any Low Voltage Access Charge amount pursuant to this Section 13 of this Schedule 3, billed by the CAISO will be the charges payable by the UDC or MSS Operator in accordance with Sections 26.1.2 and 26.1 of the CAISO Tariff less the disbursement determined in accordance with Section 10.1(d) of this Schedule 3. If this difference is negative, that amount will be paid by the CAISO to the Participating TO.
- 14. Wheeling Access Charges.**
- 14.1** CAISO Charges on Scheduling Coordinators for Wheeling. The CAISO will charge Scheduling Coordinators for a Wheeling Out or a Wheeling Through transaction the product of the Wheeling Access Charge and the total of the hourly Schedules or awards of Wheeling in MWh for each Trading Interval at each Scheduling Point associated with that transaction pursuant to Section 26.1.4 of the CAISO Tariff.
- 14.2** Wheeling Access Charge. The Wheeling Access Charge for each Participating TO shall be as specified in Section 26.1.4 of the CAISO Tariff.
- 14.3** CAISO Payments to Transmission Owners for Wheeling. The CAISO will pay all Wheeling revenues to Participating TOs on the basis of the ratio of each Participating TO's Transmission Revenue Requirement (less the TRR associated with Existing Rights) to the sum of all Participating TOs' TRRs (less the TRRs associated with Existing Rights) as specified in Section 26.1.4.3 of the CAISO Tariff and in the applicable Business Practice Manual. The Low Voltage Wheeling Access Charge shall be disbursed to the appropriate Participating TO in accordance with the applicable Business Practice Manual.
- 14.4** Weighted Average Rate for Wheeling Service. The weighted average rate payable for

Wheeling over joint facilities at each Scheduling Point shall be calculated as the sum of the applicable Wheeling Access Charge rates for each applicable TAC Area or Participating TO as these rates are weighted by the ratio of the Available Transfer Capability for each Participating TO at the particular Scheduling Point to the total Available Transfer Capability for the Scheduling Point. The calculation of this rate is set forth in more detail in the applicable Business Practice Manual.

Schedule 4

Eligible Intermittent Resources Forecast Fee

A charge up to \$.10 per MWh shall be assessed on the metered Energy from Eligible Intermittent Resources as a Forecast Fee, provided that Eligible Intermittent Resources smaller than 10 MW that are not Participating Intermittent Resources and that sold power pursuant to a power purchase agreement entered into pursuant to PURPA prior to entering into a PGA or Net Scheduled PGA shall be exempt from the Forecast Fee.

The rate of the Forecast Fee shall be determined so as to recover the projected annual costs related to developing Energy forecasting systems, generating forecasts, validating forecasts, and monitoring forecast performance, that are incurred by the CAISO as a direct result of participation by Eligible Intermittent Resources in CAISO Markets, divided by the projected annual Energy production by all Eligible Intermittent Resources.

The initial Forecast Fee, and all subsequent changes as may be necessary from time to time to recover costs incurred by the CAISO for the forecasting conducted on the behalf of Eligible Intermittent Resources pursuant to the foregoing rate formula, shall be set forth in a Business Practice Manual.

Participating Intermittent Resources Export Fee

A Participating Intermittent Resources Export Fee shall be assessed to Exporting Participating Intermittent Resources each calendar month. The Participating Intermittent Resources Export Fee shall be calculated as the product of (1) the sum of all Settlement costs avoided by Participating Intermittent Resources for the preceding calendar month, or portion thereof, consisting of Charge Codes 6486 [Real Time Excess Cost For Instructed] and 1487 [Energy Exchange Program Neutrality], but excluding charges for Uninstructed Energy associated with Charge Code 6475, (2) by the ratio of the total MW/h generated by an Exporting Participating Intermittent Resource during the calendar month, or portion thereof (based on metered output), by the total MW/h generated by all Participating Intermittent Resources during the calendar month, or portion thereof (based on metered output), and (3) by the percentage of the Exporting Participating Intermittent Resource's capacity deemed exporting under Section 5.3 of the EIRP or PIR Export Percentage.

Participating Intermittent Resources Export Fee per Participating Intermittent Resource =

Program Costs x (MW/h individual Participating Intermittent Resource/MW/h all Participating Intermittent Resources) x PIR Export Percentage

Schedule 5
[Not Used]

Schedule 6

CPM SCHEDULES

Monthly CPM Capacity Payment

The monthly CPM Capacity Payment shall be calculated by multiplying the monthly shaping factor of 1/12 by the annual effective fixed CPM Capacity price per kW-year in accordance with Section 43.7.1, unless the Scheduling Coordinator for the CPM Capacity resource has agreed to another price that has been determined in accordance with Section 43.7.2.

Availability

The target availability for a resource designated under CPM is 95%. Incentives and penalties for availability above and below the target are as set forth in the table below, entitled "Availability Factor Table." The CAISO shall calculate availability on a monthly basis using actual availability data. The CPM Availability Factor for Forced Outages for each month shall be calculated using the following curve:

AVAILABILITY FACTOR TABLE

Availability

Capacity Payment Factor CPM Availability

Capacity Payment Factor	CPM Availability
100%	3.3%
1.13999%	3.3%
1.10698%	3.3%
1.07397%	2.5%
1.04096%	1.5%
1.01595%	1.00094%
1.00094%	1.5%
.98593%	1.5%
.97092%	1.5%
.95591%	1.5%
.94090%	1.5%
.92589%	1.5%
.91088%	1.5%
.89587%	1.5%
.88086%	1.5%
.86585%	1.5%
.85084%	1.5%
.83583%	1.5%
.82082%	1.5%
.80581%	1.5%
.79080%	1.5%
.77579%	1.5%
.76078%	1.5%
.74577%	1.5%
.73076%	1.5%
.71575%	1.5%
.70074%	1.5%
.68573%	1.5%
.67072%	1.5%
.65571%	1.5%
.64070%	1.5%
.62569%	1.5%
.61068%	1.5%
.59567%	1.5%
.58066%	1.5%
.56565%	1.5%
.55064%	1.5%
.53563%	1.5%
.52062%	1.5%
.50561%	1.5%
.49060%	1.5%
.47559%	1.5%
.46058%	1.5%
.44557%	1.5%
.43056%	1.5%
.41555%	1.5%
.40054%	1.5%
.38553%	1.5%
.37052%	1.5%
.35551%	1.5%
.34050%	1.5%
.32549%	1.5%
.31048%	1.5%
.29547%	1.5%
.28046%	1.5%
.26545%	1.5%
.25044%	1.5%
.23543%	1.5%
.22042%	1.5%
.20541%	1.5%
.19040%	1.5%
.17539%	1.5%
.16038%	1.5%
.14537%	1.5%
.13036%	1.5%
.11535%	1.5%
.10034%	1.5%
.08533%	1.5%
.07032%	1.5%
.05531%	1.5%
.04030%	1.5%
.02529%	1.5%
.01028%	1.5%
0.00527%	1.5%
0.00026%	1.5%
0.00025%	1.5%
0.00024%	1.5%
0.00023%	1.5%
0.00022%	1.5%
0.00021%	1.5%
0.00020%	1.5%
0.00019%	1.5%
0.00018%	1.5%
0.00017%	1.5%
0.00016%	1.5%
0.00015%	1.5%
0.00014%	1.5%
0.00013%	1.5%
0.00012%	1.5%
0.00011%	1.5%
0.00010%	1.5%
0.00009%	1.5%
0.00008%	1.5%
0.00007%	1.5%
0.00006%	1.5%
0.00005%	1.5%
0.00004%	1.5%
0.00003%	1.5%
0.00002%	1.5%
0.00001%	1.5%
0.00000%	1.5%

*The "Capacity Payment Factor" decreases by 1.7% and 1.9% respectively for every 1% decrease in availability.

The CPM Capacity Payment shall be adjusted upward from the 95% availability starting point by the positive percentages listed as the "Capacity Payment Factor" above, by multiplication by the amounts listed for each CPM Availability Factor above 95%, so that, for example, if a 97% availability is achieved for the month, then the CPM Capacity Payment for that month would be the monthly value for 95% plus an additional 4% (1.5% for the first percent availability above 95%, and 2.5% for the second percent availability above 95%), i.e., multiplication of the otherwise applicable CPM Capacity Payment by the CPM Availability Factor of 1.040. Reductions in the CPM Capacity Payment shall be made correspondingly according to the "Capacity Payment Factor" above for monthly availability levels falling short of the 95% availability starting point, by multiplication by the amounts listed for each CPM Availability Factor below 95%.

Record Content Description, Tariff Record Title, Record Version Number, Option Code:

Appendix I, Station Power Protocol, 2.0.0, A

Record Narrative Name:

Tariff Record ID: 7975

Tariff Record Collation Value: 1892843136 Tariff Record Parent Identifier: 0

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Associated Filing Identifier:

1 General Conditions

1.1 Procurement

Station Power may be voluntarily self-supplied through On-Site Self-Supply or Remote Self-Supply. Third Party Supply may serve Station Power only to the extent permissible under the rules and regulations of the applicable Local Regulatory Authority.

1.2 Eligibility

1.2.1 Only Station Power Loads associated with Generating Units in the CAISO Balancing Authority Area that are part of an approved Station Power Portfolio may be self-supplied in accordance with this SPP. Each Generating Unit must be subject to a PGA, Net Scheduled PGA, or MSS Agreement. Any generating facility outside the CAISO Balancing Authority Area owned by the same entity is eligible to provide Remote Self-Supply to Station Power Loads, subject to the terms of this SPP. Generating Units wishing to self-supply Station Power, by means other than netting permitted under Section 10.1.3 of the CAISO Tariff, shall complete the application process specified in Section 2 of this SPP.

1.2.2 Station Power may be self-supplied by a single corporate entity, government agency, or joint powers agency or other legal entity organized under the laws of the State of California. A Station Power Portfolio may not include any facilities that are owned by the owner's corporate Affiliates. In the case of a joint powers agency, a Station Power Portfolio may not include facilities independently owned by one or more members or other legally distinct entities. If an entity owns a portion of a jointly owned Generating Unit, such ownership share may be included in a Station Power Portfolio up to the amount of the associated entitlement to Energy from the jointly-owned Generating Unit provided that: (i) the entity has the right to call upon that Energy for its own use; and (ii) the Energy entitlement is not characterized as a sale from the jointly owned Generating Unit to any of its joint owners.

1.2.3 Net Output from generating facilities outside the CAISO Balancing Authority Area may be included in a Station Power Portfolio and used as a source of Remote Self-Supply to serve Station Power of Generating Units in the CAISO Balancing Authority Area and part of the Station Power Portfolio, so long as the following conditions are fulfilled:

- (a) Imports of Net Output must be submitted in Self-Schedules using a Resource ID specified by the CAISO;
- (b) HASP Intertie Schedules using such Resource ID do not exceed the available Net Output of such generating facilities in any hour;
- (c) Firm transmission service to a Scheduling Point that assures delivery into the CAISO Balancing Authority Area is secured; and
- (d) Meter Data for generating facilities located outside the CAISO Balancing Authority Area shall be subject to CAISO audit to verify performance in accordance with these requirements.

1.3 Limitations

1.3.1 Station Power supplied by contemporaneous on-site Generation is treated as permitted netting under Section 10.1.3 of this CAISO Tariff. This SPP neither expands opportunities for nor imposes additional conditions on permitted netting. In accordance with this CAISO Tariff, such contemporaneous self-supplied Station Power need not be submitted in Self-Schedules with the CAISO.

1.3.2 Self-supply of Station Power shall be strictly voluntary. Nothing in this SPP is intended to: 1) preclude a Generating Unit from purchasing Station Power pursuant to an applicable retail rate or tariff; or 2) supersede otherwise applicable jurisdiction of a Local Regulatory Authority, except in the event of a conflict between federal and state tariff provisions, in which case the federal tariff provisions will control.

2 Station Power Requirements and Review

2.1 Applications to Self-Supply Station Power

2.1.1 An application to establish a Station Power Portfolio or to modify the configuration of Station Power meters or the generating facilities included in a Station Power Portfolio must be submitted according to the process specified by the CAISO and posted on the CAISO Website, and shall include the following information:

- (a) One-line diagrams clearly showing the location and ownership of all Generating Units and Station Power meters, their connection to the CAISO Controlled Grid or distribution system, and the status of breakers and switchgear for normal system operation.
- (b) Identification of any generating facilities outside the CAISO Balancing Authority Area, to be used to provide Remote Self-Supply of Station Power within the proposed Station Power Portfolio. No loads associated with generating facilities outside the CAISO Balancing Authority Area may be supplied under this SPP.
- (c) Certification that the applicant is the sole owner of all generating facilities proposed to be included in the Station Power Portfolio, and that the applicant has the right to call on Energy for its own use from its ownership share of any jointly owned facilities that are proposed to be used to self-supply Station Power.
- (d) Demonstration that each Station Power meter is certified in accordance with the CAISO Tariff.
- (e) Verification that each Station Power meter is subject to a Meter Service Agreement for CAISO Metered Entities, and that each Generating Unit is bound to the CAISO Tariff by a PGA, Net Scheduled PGA, or MSS Agreement.
- (f) Verification that the applicant has arranged for terms of service with the responsible UDC or MSS Operator for the use of any distribution facilities required to self-supply Station Power.

2.1.2 On the CAISO's written request, the applicant will provide additional information that the CAISO reasonably determines is necessary to verify the planned operation of the Station Power Portfolio and meet the requirements of Section 2.1.1 of this SPP.

2.2 CAISO Monitoring and Review

2.2.1 The CAISO will take the following actions with respect to each application to establish a Station Power Portfolio:

- (a) The CAISO shall post on the CAISO Website a listing of the specific

Station Power meters and Generating Units located in the CAISO Balancing Authority Area (which may include a Pseudo-Tie of a Generating Unit to the CAISO Balancing Authority Area, provided that firm transmission service has been reserved across the transmission path from the CAISO Intertie to the Pseudo-Tie Generating Unit and the Station Power service is provided by a UDC or MSS Operator within the CAISO Balancing Authority Area), and any generating facilities outside the CAISO Balancing Authority Area, that compose each Station Power Portfolio, and which are eligible to participate in the self-supply of Station Power in accordance with this SPP.

- (b) The CAISO will provide the appropriate UDC or MSS Operator and the Local Regulatory Authority with one-line diagrams and other information regarding each application.
- (c) The CAISO will make a determination in consultation with the UDC or MSS Operator and the Local Regulatory Authority on the factual question of whether distribution facilities are involved in the requested self-supply of Station Power. Any disputes regarding such determinations shall be subject to the dispute resolution procedures of this CAISO Tariff.
- (d) The CAISO will verify metering schemes and assign unique Load identifiers consistent with the CAISO data templates and validation rules that the Scheduling Coordinator responsible for each meter will be required to use for scheduling and Settlement.

2.2.2 The CAISO shall promptly review each application to establish or modify a Station Power Portfolio. Within ten (10) Business Days after the submittal of the application, the CAISO shall notify the applicant in writing that the application is complete, or shall list any specific deficiencies or additional information that the CAISO reasonably requires to complete the application. The CAISO shall use all reasonable efforts to make the changes necessary for the new or modified configurations to take effect and the Station Power Portfolio to begin self-supplying Station Power within twenty (20) Business Days after a complete application is submitted. In no event shall a Station Power Portfolio begin self-supplying Station Power until any and all required changes to the configuration of metering or other equipment are completed as required under Section 6 of this SPP. The CAISO will have an ongoing right to request additional information reasonably necessary to verify that conditions on the self-supply of Station Power as specified in this SPP are met.

3 Self-Supply Verification and CAISO Charges

3.1 Self-Supply Verification

At the end of each Netting Period, the CAISO will calculate the Net Output for each Generating Unit in the Station Power Portfolio. If the Net Output is positive, then all Station Power associated with that Generating Unit will have been served by On-Site Self-Supply. Any positive Net Output from facilities in the Station Power Portfolio will be available to provide Remote Self-Supply to any Generating Unit with negative Net Output. If the available Remote Self-Supply is less than the aggregate negative Net Output in the Station Power Portfolio, then such shortfall will be deemed to have been served by Third Party Supply. The CAISO will incorporate these determinations in its accounting and billing for the Netting Period by reassigning Station Power to unique Load identifiers for Remote Self-Supply and Third Party Supply, as required.

3.2 Charges on Metered Demand

Station Power that is not eligible for permitted netting in accordance with Section 10.1.3 of this CAISO Tariff must be submitted in Self-Schedules in accordance with the CAISO Tariff, and will be assessed all charges applicable to metered Demand under the CAISO Tariff, except as provided in Section 4.1 of this SPP.

3.3 Administrative Charge

Scheduling Coordinators of Generating Units that have Station Power meters shall be assessed an administrative charge in accordance with Schedule 5 of Appendix F.

4 Transmission Service

4.1 Station Power Load that is directly connected to the transmission facilities or directly connected to the Distribution System of a UDC or MSS Operator located in a PTO Service Territory and that is determined to have been served by On-Site Self-Supply shall be deemed not to have used the CAISO Controlled Grid and shall not be included in the Gross Load of the applicable UDC or MSS Operator. Station Power that is served by Wheeling service and that is determined to have been served by On-Site Self-Supply shall be deemed not to have used the CAISO Controlled Grid and shall not be included in the hourly Self-Schedules (in kWh) of the applicable Scheduling Coordinator that are subject to the Wheeling Access Charge.

4.2 Station Power Load that is directly connected to the transmission facilities or directly connected to the Distribution System of a UDC or MSS Operator located in a PTO Service Territory and that is determined to have been served by Remote Self-Supply or Third Party Supply shall be included in the Gross Load of the applicable UDC or MSS Operator. Station Power that is served by Wheeling service and that is determined to have been served by Remote Self-Supply or Third Party Supply shall be included in the hourly Self-Schedules (in kWh) of the applicable Scheduling Coordinator that are subject to the Wheeling Access Charge.

4.3 If the Generating Unit requires the use of distribution facilities or other facilities that are not part of the CAISO Controlled Grid, then the Generating Unit will be subject to the appropriate charges of the applicable UDC, MSS Operator or owner of such non-CAISO Controlled Grid facilities.

5 Energy Pricing

All deviations between metered Generation or Station Power and that submitted in Self-Schedules will be settled at the resource-specific LMP at the applicable Custom LAP for the Station Power Load. The determination of Net Output and attribution of On-Site Self-Supply, Remote Self-Supply and Third Party Supply to serving Station Power under this SPP shall apply only to determine whether Station Power was self-supplied during the Netting Period and will have no effect on the price of Energy sold or consumed by any facility in the Station Power Portfolio.

6 Metering

6.1 In order to self-supply Station Power under this SPP by means other than netting permitted under Section 10.1.3 of this CAISO Tariff, a Generating Unit must be subject to a Meter Service Agreement for CAISO Metered Entities pursuant to CAISO Tariff Section 10.3.1. A meter certified in accordance with the CAISO Tariff is required for Station Power Load taken under the SPP. Separate metering is required for any on-site Load that does not meet the definition of Station Power. Under no circumstances may ineligible Loads be included in the Meter Data collected by the CAISO from a Station Power meter.

6.2 Any costs associated with owning or operating metering or related facilities necessary to

self-supply Station Power according to the terms of this SPP are the responsibility of the owner-applicant.

6.3 A single Scheduling Coordinator must represent the unique Load identifiers assigned by the CAISO for On-Site Self-Supply and Remote Self-Supply associated with each Station Power meter.

7 Provision Of Data To UDC Or MSS Operator

The CAISO will provide the applicable UDC or MSS Operator with the amount of On-Site Self-Supply, Remote Self-Supply, and Third Party Supply serving Station Power at the granularity required to allow the UDC or MSS Operator to assess charges, if any, under the applicable retail tariff(s).

Record Content Description, Tariff Record Title, Record Version Number, Option Code:
Appendix Q, Eligible Intermittent Resources Protocol (EIRP), 5.0.0, A
Record Narrative Name:
Tariff Record ID: 7983
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Record Change Type: CHANGE
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Associated Filing Identifier:

1 SCOPE

1.1 Scope of Application to Parties

This EIRP applies to the CAISO and to:

- (a) Scheduling Coordinators (SCs);
- (b) Eligible Intermittent Resources; and
- (c) Participating Intermittent Resources.

1.2 Liability of the CAISO

Any liability of the CAISO arising out of or in relation to this EIRP shall be subject to Section 14 of the CAISO Tariff as if references to the CAISO Tariff were references to this EIRP.

2 REQUIREMENTS FOR ELIGIBLE AND PARTICIPATING INTERMITTENT RESOURCES

2.1 No Mandatory Participation

Eligible Intermittent Resources may elect to be scheduled and settled as the CAISO Tariff provides for Generating Units, and are not required to seek certification as Participating Intermittent Resources.

2.2 Minimum Certification Requirements

Those Eligible Intermittent Resources and Participating Intermittent Resources must meet the following requirements, as applicable.

2.2.1 Agreements

The following agreements must be executed by the owner or operator of any Eligible Intermittent Resource, unless that resource is not subject to any of these agreements pursuant to the CAISO Tariff, such as an Eligible Intermittent Resource of an MSS Operator:

- (a) A Participating Generator Agreement, Net Scheduled PGA, Dynamic Scheduling Agreement for Scheduling Coordinators, or Pseudo-Tie Participating Generator Agreement that, among other things, binds the Eligible Intermittent Resource to comply with the CAISO Tariff; and
- (b) A Meter Service Agreement for CAISO Metered Entities, for all Eligible Intermittent Resources other than Dynamic System Resources.

If an Eligible Intermittent Resource intends to become a Participating Intermittent Resource, it must also execute a letter of intent, which when executed and delivered to the CAISO shall initiate the process of certifying the Participating Intermittent Resource. The form of the letter of intent shall be specified by the CAISO in a Business Practice Manual.

2.2.2 Composition of a Participating Intermittent Resource

The CAISO shall develop criteria to determine whether one or more Eligible Intermittent Resources may be included within a Participating Intermittent Resource. Such criteria shall include:

- (a) A Participating Intermittent Resource must be at least one (1) MW rated capacity.
- (b) A Participating Intermittent Resource may include one (1) or more Eligible Intermittent Resources that have similar response to weather conditions or other variables relevant to forecasting Energy, as determined by the CAISO.
- (c) Each Participating Intermittent Resource shall be electrically connected at a single point on the CAISO Controlled Grid, except as otherwise permitted by the CAISO on a case-by-case basis as may be allowed under the CAISO Tariff. Interconnection to a portion of the CAISO Controlled Grid outside or not contiguous to the CAISO Balancing Authority Area does not make an Eligible Intermittent Resource that is a Dynamic System Resource or Pseudo-Tie Generating Unit eligible to be included within a Participating Intermittent Resource.
- (d) The same Scheduling Coordinator must schedule all Eligible Intermittent Resources aggregated into a single Participating Intermittent Resource.

2.2.3 Equipment Installation

An Eligible Participating Intermittent Resource must install and maintain the communication equipment required pursuant to Section 3 of this EIRP, and the equipment supporting forecast data required pursuant to Section 6 of this EIRP.

2.2.4 Forecast Model Validation

The CAISO must determine that sufficient historic and real-time telemetered data are available to support an accurate and unbiased forecast of Energy generation by a Participating Intermittent Resource, according to the forecasting process validation criteria described in Section 4 of this EIRP.

2.2.5 Information Requirements For Participating Intermittent Resource Export Fee

In order for the CAISO to administer, implement and calculate the Participating Intermittent Resource Export Fee, each Participating Intermittent Resource jointly with, and through, its Scheduling Coordinator must provide the CAISO with the following information and documents under the schedule and conditions set forth in this section.

The CAISO will maintain the confidentiality of all information and documents received under this section in accordance with CAISO Tariff Section 20 et seq.

- (a) A certification, in the form set for in a Business Practice Manual, signed by an officer of the Participating Intermittent Resource and its Scheduling Coordinator, identifying (1) the PIR Export Percentage under Section 5.3.2 of this EIRP, if any, and basis thereof, and (2) each contract to sell Energy or capacity from the Participating Intermittent Resource, including for each such contract, the counterparty, start and end dates, delivery point(s), quantity in MW, other temporal terms, i.e., seasonal or hourly limitations.

The certification must be updated by resubmission to the CAISO (1) upon a request to modify the composition of the Participating Intermittent Resource under Section 2.4.2 of this EIRP; or (2) within ten (10) calendar days of final execution of a new contract or any change in counterparty, start and end dates, delivery point(s), quantity in MW, or other temporal terms, as described above, for any prior certified contract. All other contractual changes will not trigger the obligation for recertification;

- (b) Copies of all contracts, including changes, identified in the above-referenced certification; however, price information may be redacted from the contracts provided.

Each Participating Intermittent Resource, as of November 1, 2006, must initially provide the information requested by this Section 2.2.5 in accordance with a Market Notice provided by the CAISO to Participating Intermittent Resources. All other Eligible Intermittent Resources must satisfy this Section 2.2.5 in order to become a Participating Intermittent Resource after November 1, 2006.

2.3 Notice of Certification of a Participating Intermittent Resource

When all requirements described in Section 2.2 of this EIRP applicable to Participating Intermittent Resources have been fulfilled, the CAISO shall notify the Scheduling Coordinator and the representatives of the Eligible Intermittent Resources comprising the Participating Intermittent Resource that the Participating Intermittent Resource has been certified, and is eligible for the settlement terms provided under Section 11.12 of the CAISO Tariff, as conditioned by the terms of this EIRP.

2.4 Additional Requirements

2.4.1 Forecast Fee

An Eligible Intermittent Resource must pay the Forecast Fee for all metered Energy generated by the Eligible Intermittent Resource, as specified in CAISO Tariff Appendix F, Schedule 4.

2.4.2 Modification of Participating Intermittent Resource Composition

A Participating Intermittent Resource may seek to modify the composition of the Participating Intermittent Resource (e.g., by adding or eliminating an Eligible Intermittent Resource from the Participating Intermittent Resource). Such changes shall not be implemented without prior compliance with the written approval by the CAISO. The CAISO will apply consistent criteria and expeditiously review any proposed changes in the composition of a Participating Intermittent Resource.

2.4.3 Changes in Scheduling Coordinator

This EIRP does not impose any additional requirement for CAISO approval to change the Scheduling Coordinator for an approved Participating Intermittent Resource than would otherwise apply under the CAISO Tariff to changes in the Scheduling Coordinator representing a Generating Unit.

2.4.4 Continuing Obligation

A Participating Intermittent Resource or Eligible Intermittent Resource must meet all applicable obligations established for Participating Intermittent Resources or Eligible Intermittent Resources under the CAISO Tariff and this EIRP, and must fully cooperate in providing all data, other information, and authorizations the CAISO reasonably requests to fulfill its obligation to validate forecast models, explain deviations, and implement the Participating Intermittent Resource Export Fees.

2.4.5 Failure to Perform

If the CAISO determines that a material deficiency has arisen in the Participating Intermittent Resource's fulfillment of its obligations under the CAISO Tariff and this EIRP, and such Participating Intermittent Resource fails to promptly correct such deficiencies when notified by the CAISO, then the eligibility of the Participating Intermittent Resource for the settlement accommodations provided in Section 11.12 of the CAISO Tariff shall be suspended until such time that the unavailable data is provided or other material deficiency is corrected to the CAISO's reasonable satisfaction. Such suspension shall not relieve the Scheduling Coordinator for the deficient Participating Intermittent Resource from paying the Forecast Fee over the duration of the period covered by the letter of intent described in Section 2.2.1(c) of this EIRP.

3 COMMUNICATIONS

3.1 Forecast Data

The CAISO may require various data relevant to forecasting Energy from the Eligible Intermittent Resource to be telemetered to the CAISO, including appropriate operational data, meteorological data or other data reasonably necessary to forecast Energy.

3.2 Standards

The standards for communications shall be the monitoring and communications

requirements for Generating Units providing only Energy; as such standards may be amended from time to time, and published on the CAISO Website.

3.3 Cost Responsibility

An Eligible Intermittent Resource is responsible for expenses associated with engineering, installation, operation and maintenance of required communication equipment.

4 FORECASTING

The CAISO is responsible for overseeing the development of tools or services to forecast Energy for Participating Intermittent Resources. The CAISO will use its best efforts to develop accurate and unbiased forecasts, as limited by the availability of relevant explanatory data. Objective criteria and thresholds for unbiased, accurate forecasts shall be set forth in a Business Practice Manual, and shall be used to certify Participating Intermittent Resources in accordance with Section 2.2.4 of this EIRP.

4.1 Hour-Ahead Forecast

The CAISO shall develop expert, independent hourly forecasts of Energy generation for each Participating Intermittent Resource. A forecast shall be published each hour for each of the next seven (7) operating hours. Other forecasts, including a Day-Ahead forecast, may be developed at the CAISO's discretion. The Scheduling Coordinator representing the Participating Intermittent Resource must use the hour-ahead forecast that is available thirty (30) minutes prior to the deadline for submitting the HASP/RTM Bids. The CAISO shall use best efforts to provide reliable and timely forecasts. However, if the CAISO fails to deliver the hour-ahead forecast to the Scheduling Coordinator prior to fifteen (15) minutes before the deadline for submitting HASP/RTM Bids, then the hour-ahead forecast shall be the most recent Energy forecast provided by the CAISO to the Scheduling Coordinator for the operating hour for which Bids are next due.

4.2 [NOT USED]

4.3 Confidentiality

The CAISO shall maintain the confidentiality of proprietary data for each Participating Intermittent Resource in accordance with Section 20 of the CAISO Tariff.

5 SCHEDULING AND SETTLEMENT

5.1 Schedules

Scheduling Coordinators shall be required to submit HASP/RTM Bids(MWh) for the Generating Units that comprise each Participating Intermittent Resource that are identical, in the aggregate, to the hour-ahead forecast published for that Participating Intermittent Resource (MWh).

5.2 Settlement

After a Participating Intermittent Resource is certified, Settlement shall be determined for

each Settlement Period based on consistency of Bids submitted on behalf of such Participating Intermittent Resource with the rules specified in the CAISO Tariff and this EIRP.

5.3 Participating Intermittent Resource Export Fee

5.3.1 Exemptions

After November 1, 2006, Participating Intermittent Resources shall be subject to the Participating Intermittent Resource Export Fee, as set forth in Schedule 4 of Appendix F, for Energy generated, except to the extent the Participating Intermittent Resource is exempt under one or more of the following conditions:

- (a) The owner of a Participating Intermittent Resource, as of November 1, 2006, utilizes the Energy generated from the Participating Intermittent Resource to meet its own Native Load outside the CAISO Balancing Authority Area. Should any Participating Intermittent Resource subject to this exemption increase its PMax set forth in the CAISO's Master File by modification under Section 2.4.2 of this EIRP, the exemption will not apply to the added capacity unless exempt under another subsection of this Section 5.3.1.

If the Participating Intermittent Resource subject to this exemption changes ownership, the Participating Intermittent Resource Export Fee will apply, except where the prior exempt owner demonstrates that the entire output of the Participating Intermittent Resource continues to be delivered to the exempt owner under a power purchase agreement for the purpose of serving the prior exempt owner's Native Load. The exemption will then continue only for the period of the power purchase agreement as provided in accordance with Section 2.2.5 of this EIRP and cannot exceed the MW quantity originally exempted.

- (b) A Participating Intermittent Resource demonstrates in its certification under Section 2.2.5(a) of this EIRP an export contract with a starting term prior to November 1, 2006. An export contract is any power purchase agreement to sell Energy to any entity other than a Load Serving Entity with an obligation under law or franchise to serve Demand within the CAISO Balancing Authority Area.

The exemption will apply to any extension of the current export contract through an evergreen or other existing extension provision. The exemption terminates upon termination of the export contract. Should any Participating Intermittent Resource subject to this exemption increase its PMax set forth in the CAISO's Master File by modification under Section 2.4.2 of this EIRP, the exemption will apply only to Energy generated up to the contract quantity, unless the Participating Intermittent Resource demonstrates a basis for exemption under subsection (c) for the expanded capacity.

- (c) A Participating Intermittent Resource demonstrates in its certification under Section 2.2.5(a) of this EIRP a contract to sell Energy to a Load Serving Entity with Native Load within the CAISO Balancing Authority Area. Energy service providers with contractual obligations with customers within the CAISO Balancing Authority Area would be deemed

a Load Serving Entity with an obligation to serve Native Load within the CAISO Balancing Authority Area.

The exemption will apply to any extension of the current contract through an evergreen or other existing extension provision. The exemption terminates upon termination of the contract. Should any Participating Intermittent Resource subject to this exemption increase its PMax set forth in the CAISO's Master File by modification under Section 2.4.2 of this EIRP, the exemption will continue to apply only to Energy generated up to the contract quantity unless the Participating Intermittent Resource demonstrates a basis for exemption under this subsection (c) for the expanded capacity.

5.3.2 Participating Intermittent Resource Export Percentage

Based on the information required in Section 2.2.5 of this EIRP and application of the exemptions to the Participating Intermittent Resource Export Fee in Section 5.3.1 of this EIRP, the CAISO will determine a PIR Export Percentage for each Participating Intermittent Resource that will be calculated as the ratio of the Participating Intermittent Resource's PMax in the CAISO Master File minus the MW, subject to an exemption under Section 5.3.1 of this EIRP on a MW basis to the Participating Intermittent Resource's PMax in the CAISO Master File. For example, a Participating Intermittent Resource with a PMax of 100 MW and a contract with a CAISO Balancing Authority Area Load Serving Entity for 40 MW would have a PIR Export Percentage of $(100-40)/100 = 60\%$. A Participating Intermittent Resource with a PIR Export Percentage greater than zero (0) will be deemed an Exporting Participating Intermittent Resource. The CAISO will notify the Participating Intermittent Resource and its Scheduling Coordinator of the facility's PIR Export Percentage. Any dispute regarding the CAISO's determination of the PIR Export Percentage shall be subject to the dispute resolution procedures under Section 13 of the CAISO Tariff.

5.3.3 Quarterly Application of Participating Intermittent Resource Export Fee

Each quarter the CAISO will charge Exporting Participating Intermittent Resources the Participating Intermittent Resource Export Fee, as set forth in Schedule 4 of Appendix F.

5.3.4 Allocation of Credit for Participating Intermittent Resource Export Fees Received

Payments received by the CAISO from application of the Participating Intermittent Resource Export Fee in accordance with this Section 5.3 shall be allocated as a credit on a quarterly basis to Scheduling Coordinators with Net Negative Uninstructed Deviations in proportion to the amount of Net Negative Uninstructed Deviations that each Scheduling Coordinator was assessed for Participating Intermittent Resources Settlement charges for the applicable CAISO Charge Code during the prior quarter.

5.3.5 Recording of Exemptions and Notice of Termination

The CAISO will record any exemption period ending date, if applicable, for each Participating Intermittent Resource. At the conclusion of the exemption period, the CAISO will notify the Scheduling Coordinator for the Participating Intermittent Resource that the facility is no longer exempt from the Participating Intermittent Resource Export Fee.

5.3.6 Annual Confirmation

On December 31 of each calendar year, each Participating Intermittent Resource shall confirm in the form set forth in a Business Practice Manual, signed by an officer of the Participating Intermittent Resource, that the operations of the Participating Intermittent Resource are consistent with any certification(s) provided to the CAISO under Section 2.2.5 of this EIRP.

5.3.7 Audit Rights

In addition to the rights set forth in CAISO Tariff Section 4.6.9, the CAISO shall have the right to contact any counterparty to a contract relied upon under Section 5.3.1 of this EIRP for purposes of determining compliance with this EIRP.

6 DATA COLLECTION FACILITIES

An Eligible Intermittent Resource not otherwise exempt must install and maintain equipment to collect, record and transmit data that the CAISO reasonably determines is necessary to develop and support a forecast model that meets the requirements of Section 4 of this EIRP.

6.1 Wind Resources

An Eligible Intermittent Resource powered by wind must install at least one meteorological tower at a project location that is representative of the microclimate within the project boundary.

The meteorological tower must rely on equipment typically used in the wind industry to continuously monitor weather conditions at a wind resource site. Data collected shall be consistent with requirements set forth in a Business Practice Manual. Such data must be gathered and telemetered to the CAISO in accordance with Section 3 of this EIRP.

If objective standards developed by the CAISO indicate that the meteorological data may not be sufficiently representative of conditions affecting Energy output or changes in Energy output by that Eligible Intermittent Resource, then the CAISO may require that additional meteorological equipment be temporarily installed at another location within the project boundary. The cost of such equipment, which may be temporarily installed by the Eligible Intermittent Resource or the CAISO, shall be the responsibility of the Eligible Intermittent Resource.

If objective standards indicate that the data collected from such a temporary site contribute significantly to the development of an accurate and unbiased forecast, then the Eligible Intermittent Resource shall be responsible for installing and arranging for the telemetry of data from an additional permanent meteorological tower at such site, and for the reasonable cost, if any, that the CAISO may have incurred to install and remove the temporary equipment. Relocation of the original meteorological tower to the new site will be allowed if the CAISO determines that a sufficiently accurate and unbiased forecast can be generated from a single relocated meteorological tower.

The CAISO may establish exemptions from requirements of this Section 6.1 in a Business Practice Manual.

6.2 Other Eligible Intermittent Resources

Eligible Intermittent Resources other than wind projects will be required to provide data of comparable relevance to estimating Energy generation. Standards will be developed as such projects are identified and will be specified in a Business Practice Manual.

7 PROGRAM MONITORING

The CAISO shall monitor the operation of these rules, and will in particular seek to eliminate any gaming opportunities provided by the flexibility provided Participating Intermittent Resources to self-select participation on an hourly basis.

Participating Intermittent Resources are expected to bid, schedule, and otherwise perform in good faith, and not seek to act strategically in a manner that causes financial gain through systematic behavior, where such gain results solely from the settlement accommodations provided under CAISO Tariff Section 11.12.

If requirements specified in this EIRP are not met, then Participating Intermittent Resource certification may be revoked pursuant to Section 2.4.5 of this EIRP. Any patterns of strategic behavior by Participating Intermittent Resources will be tracked, and the statistical significance of such deviations will be used by the CAISO to evaluate whether changes in the rules defined in this EIRP are appropriate.

The CAISO will monitor the impact of rules for Participating Intermittent Resources on Imbalance Energy and Regulation costs to the CAISO.

8 AMENDMENTS

If the CAISO determines a need for an amendment to this EIRP, the CAISO will follow the requirements as set forth in Section 15 of the CAISO Tariff.

Document Content(s)

2012-09-17 Transmittal - RMTG amendment.PDF.....1-12

2012-09-17 Att. A - Clean RMTG Tariff.PDF.....13-57

2012-09-17 Att. B - Marked RMTG Tariff.PDF.....58-103

2012-09-17 Att. C - RMTG Memo to ISO Board.PDF.....104-110

2012-09-17 Att. D - RMTG Matrix of Comments.PDF.....111-116

FERC GENERATED TARIFF FILING.RTF.....117-232