UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

California Independent System Operator Corporation	**)** **)** **)**	**Docket Nos. ER98-997-000** **ER98-1309-000**

BRIEF ON EXCEPTIONS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

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To: The Honorable Jacob Levanthal
Presiding Administrative Law Judge

Pursuant to Rule 711 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.711 (2000), the California Independent System Operator Corporation ("California ISO" or "ISO") submits its Brief on Exceptions in this proceeding.

I. Summary

The issue in this proceeding is whether Qualifying Facilities ("QFs") should be required to sign a Participating Generator Agreement that obligates the QF to abide by the same ISO Tariff provisions that are applicable to other Participating Generators. The primary dispute involves compliance with the ISO Tariff's provisions requiring gross telemetry of QF Generation, and metering of QF Generation and Load on a gross basis. The need for these requirements derives from the ISO's obligation to maintain the reliability of the ISO Controlled Grid, taking into account the QF's behind-the-meter Load.

The Initial Decision concluded, despite overwhelming evidence to the contrary, that the ISO could fulfill its reliability obligations without taking behind-the-

meter Load into account. *This decision, if affirmed by the Commission, would seriously undermine the ISO's ability to comply with relevant reliability criteria and to ensure the reliability of the ISO Controlled Grid and the ISO Control Area.* The Commission should correct the errors of the Initial Decision, and conclude that the ISO's *pro forma* PGA is just and reasonable as applied to QFs.

A. The ISO's Reliability Obligations

State law, Commission orders, and the ISO Tariff require the ISO to maintain the reliability of the ISO Controlled Grid and ISO Control Area consistent with Western Systems Coordinating Council ("WSCC") reliability criteria. WSCC reliability criteria require the ISO, as Control Area operator, to maintain as a Contingency Reserve the sum of five percent of load responsibility served by hydroelectric generation and seven percent of the load responsibility served by thermal generation. Load responsibility includes a Control Area's firm Load. Under the WSCC criteria, a QF behind-the-meter Load is defined as "firm" unless it can be simultaneously curtailed in the event of a QF Generating Unit Outage (i.e. when the QF Generating Unit suffers an Outage, the Load does not draw power from the ISO Controlled Grid). The evidence regarding the inclusion of behind-the-meter Load in the determination of the ISO's Operating Reserve responsibilities is authoritative and uncontradicted.

Moreover, a logical evaluation of reliability needs compels this conclusion. If a QF is connected to the electric grid in the ISO Control Area, and the on-site QF Generating Unit fails, the Generation under the ISO's control will respond immediately to serve the QF's behind-the-meter Load. The ISO must be prepared

to serve the behind-the-meter Load *one hundred percent of the time*, and therefore must have the necessary reserves, which are only a fraction of that total Load, one hundred percent of the time. Despite the assertions of other parties and the conclusion of the Presiding Judge, there is no discrimination against QF Load in this regard. For a QF Load or any other Load, the ISO must procure reserves for the amount of Load that it must serve if the Generation serving that Load fails.

A failure to procure Operating Reserves according to behind-the-meter Load -- just like a failure to do so for any other Load -- would thus reduce the overall reliability of the ISO Control Area, potentially affecting all electric consumers in the Control Area. Quite simply, if there are 100 MW of behind-the-meter Load served by thermal QF Generation in the Control Area, the WSCC criteria require that there be 7 MW of Operating Reserves (7% of 100 MW) available in connection with the on-site Load. The ISO must procure Ancillary Services for those Loads to the extent that they are not self-provided by the QF or on its behalf.

The Initial Decision did not dispute the ISO's responsibility to comply with WSCC criteria or question the authoritative nature of the testimony regarding those criteria. Rather, the Initial Decision -- either mistaking the nature of standby service or misinterpreting the WSCC criteria -- concluded that the Utility Distribution Companies ("UDCs"), through standby service, continue to provide the necessary Ancillary Services for QF behind-the-meter Loads and, consequently, that WSCC reliability requirements are satisfied with respect to those Loads.

Although the Initial Decision found that the capacity that the UDC has set aside pursuant to a standby service contract "is the same amount of capacity that

would be set aside by the ISO," the record evidence is to the contrary. Under the WSCC's minimum criteria, the ISO must carry Operating Reserves equivalent to 7% of the behind-the-meter Load 100% of the time (assuming the QF behind-the-meter Generation is thermal). The only evidence regarding UDC practices is that the UDC determines the Operating Reserves that it provides based *only on the period in which the behind-the-meter Load is served by off-site Generation*, i.e., only a fraction of the time. For example, if there are 500 MW of on-site Load, of which the UDC expects to serve 80 MW from off-site Generation at any time, the ISO must maintain Operating Reserves for that Load, at all times, of 35 MW (7% of 500 MW). Under the practices described in the testimony, the UDC maintains only 5.6 MW (7% of 80 MW).

The Initial Decision relies upon a conclusion that the ISO has not shown that a UDC has ever failed to provide standby Energy to QFs when their Generating Units fail. Whether a UDC has failed to provide Energy when a QF Generating Unit fails is, quite simply, irrelevant to the fulfillment of WSCC Operating Reserve requirements. The provision of Energy when a Generating Unit fails does *not,* and *cannot,* substitute for the provision of capacity in the form of Operating Reserves. Operating Reserve requirements call for *unloaded* capacity that is continuously monitored and capable of being deployed in response to Control Area needs at all times. The requirement cannot be fulfilled by a commitment to provide Energy through standby, backup, or Imbalance Energy service. Indeed, if Operating Reserves are used to provide such Energy, they must be replaced.

The Initial Decision's conclusion that the ISO need not maintain Operating Reserves for behind-the-meter Load is contrary to WSCC criteria and thus cannot stand.

B. Gross Telemetry, Metering, and Scheduling

If the ISO is to maintain Operating Reserves as required by WSCC criteria, it must have the information necessary to do so. The Initial Decision's conclusion that the ISO does not require gross telemetry and metering data is therefore also flawed.

The ISO's determination of its Load responsibility for the purposes of Operating Reserves is based on its Load forecast. That forecast is based on real time measurements of Generation and net interchange with other Control Areas (i.e., imports less exports). The ISO measures Generation because it would be impractical to meter individual Loads in real time. Therefore, to the extent that the ISO lacks accurate information on Generation within its Control Area, the ISO is unable to fulfill its obligations as a Control Area operator. Attempting to compensate by incorporating an estimated additional reserve percentage in an attempt to account for QF behind-the-meter Load can not ensure adequate Operating Reserves and therefore risks the reliability of the Control Area. Alternatively, such estimation could result in overprocurement, for which the entire Control Area would pay the cost.

Gross metering of on-site Load is required for a separate reason. The ISO requires revenue-quality meter data on QF behind-the-meter Loads in order to ensure that the costs of the services that the ISO provides are appropriately allocated to the responsible Market Participants. The ISO allocates costs for ISO

charges such as Ancillary Services based on metered Demand. At least some of these charges apply to QF behind-the-meter Loads. Without Meter Data on those Loads, the ISO cannot properly assess costs and substantial cost shifting is likely to occur.

The validity of the Initial Decision's conclusion that it is not necessary for QFs to schedule Load and Generation on a gross basis will depend upon the Commission's decision whether Loads served by QFs must gross meter. During the settlement process, the ISO uses such differences as may exist between the Schedules and Meter Data to assign for Imbalance Energy charges. If the Commission determines that Loads served by QFs need only net meter, then deviations can be determined against net schedules. If, however, the Commission agrees with the ISO that the proper allocation of costs requires gross metering, QFs and the Load that they serve must schedule all of their Loads and Generation with the ISO, including behind-the-meter Loads and Generation, in order to match Schedules to the gross Meter Data upon which ISO settlements will be based.

There are simply no significant burdens associated with Scheduling on a gross basis under such circumstances. The *only* QFs that do not already have a Scheduling Coordinator are those QFs that currently do not have a Power Purchase Agreement with a UDC and make no sales into the ISO's markets. There is no evidence that even in those cases retaining a Scheduling Coordinator will be burdensome. Although QFs that sign PGAs will be subject to Imbalance Energy charges (as are all Loads in the ISO Control Area), the ISO is already providing Imbalance Energy for QF Loads, and Scheduling Coordinators are paying for them.

Scheduling on a gross basis will not modify the need for, or amount of, such Imbalance Energy. The record is not clear regarding the extent to which Scheduling Coordinators are currently passing Imbalance Energy charges on to QFs. The record provides no basis, however, for concluding that it is not just and reasonable to allocate to QFs charges for Imbalance Energy they require.

C. Other Matters

The Initial Decision concluded that it was just and reasonable to require QFs to abide by the ISO Tariff provisions governing the ISO's ability to dispatch or curtail generation. Nonetheless, the Initial Decision found that "on the balance" incorporating the provisions of the ISO Tariff into a QF-specific PGA is the better outcome. The Initial Decision's conclusion is not a sufficient basis for directing a modification of the *pro forma* PGA in this regard. Under Commission precedent the ISO is not required to show that other approaches are not, "on the balance," preferable. There is no basis for requiring the modification of a portion of a filed rate that the proponent has shown to be just and reasonable. Moreover, inclusion of the ISO Tariff provisions in a QF-specific PGA makes little sense in light of the Initial Decision's conclusion that it is just and reasonable for the provisions of the ISO Tariff to prevail in the case of conflicts with the PGA.

The Initial Decision found no evidence that the ISO Tariff currently provides an onerous penalty for failures to comply with the Tariff. The logical ruling based on this finding is that the application through the PGA of the penalties set forth in the ISO Tariff is not unjust or unreasonable. Whether inadvertently or otherwise, the Initial Decision ruled, however, that "the application through the PGA of the penalties

set forth in the ISO Tariff is not necessary." The Commission should correct the ruling to reflect the logical result of the findings in the Initial Decision.

Finally, the Initial Decision concluded that inclusion in the QF PGA of a provision indicating that the execution of a PGA does not deprive the QF of any existing legal rights would not impose any new obligation on the ISO. If this is so, then the provision is redundant. The absence of a redundant provision cannot render the *pro forma* PGA unjust or unreasonable.

II. Statement of the Case

A. Background

The ISO is a nonprofit public benefit corporation responsible under California law for the operation and reliability of the transmission systems of the California investor-owned utilities, Pacific Gas and Electric Company, Southern California Edison Company ("Edison"), San Diego Gas & Electric Company (collectively, "IOUs") and such other transmission systems as are placed under ISO control.[1] Ex. No. ISO-11A (Rebuttal Testimony of David A. Deluca) at 4:8-15. The ISO is also the Control Area operator for the entire system within its electrical boundaries (defined by interchange metering with adjacent Control Areas), which comprises the ISO Controlled Grid, the Distribution Systems of the IOUs and other Utility Distribution Companies ("UDCs"), and other transmission and distribution systems

[1] The City of Vernon, California became a Participating Transmission Owner on January 1, 2001, thereby expanding the ISO Controlled Grid. *City of Vernon, California*, 93 FERC ¶ 61,312 (2000).

within California, including the systems of municipal, state, and federal governmental entities. *Id.* at 4:17-24.[2]

The ISO operates the ISO Controlled Grid in accordance with the ISO Tariff and Protocols, which, with the exception of certain "unresolved issues", have been accepted by the Commission as just and reasonable. *See Pacific Gas & Electric Co.*, *et al.*, 81 FERC ¶ 61,122 (1997); *California Independent System Operator Corp.*, 84 FERC ¶ 61,217 at 62,046 (1998) (noting that "a number of unresolved issues remain outstanding" from proceedings involving the initial operations of the ISO). Pursuant to the ISO Tariff, the ISO enters into agreements with various Market Participants that govern the relationship of those Market Participants with the ISO. Most relevant to this proceeding, the ISO Tariff requires Generators that are interconnected with the ISO Controlled Grid and wish to make use of the ISO Controlled Grid or participate in the ISO's markets to execute Participating Generators Agreements ("PGAs") and Meter Service Agreements for ISO Metered Entities. *See* ISO Tariff §§ 5, 10.3.1.[3] The heart of the PGA is the requirement that the parties comply with the terms of the ISO Tariff applicable to Generators. *See* Ex. No. ISO-1 (Direct Testimony of Deborah A. Le Vine) at 4:15-19. The purpose of the Meter Service Agreement for ISO Metered Entities is to establish the terms and conditions upon which the ISO shall certify the revenue quality meters of ISO Metered Entities and the terms on which those ISO Metered Entities will make Meter

[2] Terms used herein with initial capitalization and not otherwise defined herein have the meanings set forth in the Master Definitions Supplement, ISO Tariff Appendix A.

[3] The ISO Tariff has been incorporated into the record by reference. Tr. at 239:14-240:7.

Data available to the ISO revenue meter data acquisition and processing system. ISO Tariff § 10.3.1.

Qualifying Facilities ("QFs") are Generators that qualify for such designation under the terms of the Section 210 of the Public Utility Regulatory Policies Act of 1978 ("PURPA"), 16 U.S.C. 824a-3, and Part 292 of the Commission's Rules and Regulations, 18 C.F.R. Part 292. The ISO Tariff does not distinguish between QFs and other Generators with regard to the requirement that the Generator enter a PGA as a condition of participation in the ISO's markets. *See* ISO Tariff § 5 (stating that the ISO shall not be obligated to accept Schedules or bids from *any* Generating Unit unless that Generating Unit undertakes in writing to comply with all applicable provisions of the ISO Tariff).

On December 9, 1997, the ISO filed a PGA with Midway Sunset Cogeneration Company ("Midway Sunset"), which was assigned Docket No. ER98-997. On December 30, 1997, the ISO filed a PGA with Texaco Exploration and Production, Inc. ("Texaco"),[4] which was assigned Docket No. ER98-1309. In an order issued on February 25, 1998, the Commission accepted for filing a number of ISO agreements filed in various dockets, including the Midway Sunset and Texaco PGAs, and set them for hearing.[5] On March 19, 1998, the Chief Administrative Law Judge issued an order consolidating Docket Nos. ER98-997 and ER98-1309 with

[4] The Texaco facility at issue here is identified in the PGA and has been referred to in various pleadings and testimony in this proceeding as the Texaco North Midway Cogeneration Project.

[5] In this Order, the Commission also granted all timely motions to intervene in these various dockets, including Edison's motions to intervene in Docket Nos. ER98-997 and ER98-1309. *Id.*

other dockets concerning the ISO's *pro forma* PGAs, which were filed with the Commission on December 9, 1997 in Docket No. ER98-992-000.

On September 1, 1998, the ISO filed the prepared direct testimony of Deborah A. Le Vine in the consolidated dockets. CAC filed the direct testimony of James A. Ross on October 20, 1998. In that testimony, CAC asserted that the ISO should establish a PGA specific to QF Generators.

On November 19, 1998, the Chief Administrative Law Judge granted a motion made by the ISO, pursuant to the suggestion of Staff, to sever the dockets involving PGAs for QFs from the remaining PGA dockets. On that same date, the Presiding Judge established a procedural schedule that allowed the ISO to work with interested parties to develop a QF-specific PGA, and stated that if any milestones relevant to that process were not met, then the parties would continue under an alternate schedule beginning with the ISO's submission of testimony responsive to the arguments raised in CAC's October 1998 testimony, to be followed by the submission of testimony by CAC, and concluding with a formal hearing on the QF-PGA issues. The consolidated *pro forma* PGA proceedings were resolved by a negotiated settlement, which was approved by the Commission on February 24, 2000. On August 13, 1999, the Commission's Chief Administrative Law Judge appointed a Settlement Judge in these severed proceedings.

On March 1, 1999, the ISO submitted to the Presiding Judge a status report indicating that although the parties continued to engage in efforts to develop a mutually acceptable PGA for QFs, no final agreement had been reached as of the date set forth in the Presiding Judge's November 19 Order. Therefore, the ISO, in

accordance with that order, submitted the prepared direct testimony of Michael Dozier on March 15, 1999. On March 17, 1999, the ISO filed a joint motion with CAC to extend the procedural schedule in this proceeding for thirty-six days to provide the parties additional time to pursue settlement discussions. The Presiding Judge granted this motion in an order dated March 19, 1999. Then, on April 27, 1999, the ISO and CAC filed a joint motion requesting that the Presiding Judge suspend the procedural schedule indefinitely so that the parties could focus on reaching an agreement as to the outstanding issues in this proceeding. The Presiding Judge granted this motion in an order issued on April 28, 1999.

On April 14, 2000, the ISO filed an unexecuted PGA with ARCO CQC Kiln ("ARCO"). On May 5, 2000, CAC filed an intervention in the proceeding. By Order dated June 2, 2000, the Commission accepted the interventions, declined to set the ARCO PGA for hearing, and accepted for filing the unexecuted version of the ARCO PGA subject to the outcome of the instant proceeding. *California Independent System Operator Corp.*, 91 FERC ¶ 61,243 (2000).

On August 11, 2000, the Chief Administrative Law Judge terminated the settlement proceedings in Docket Nos. ER98-997 and ER98-1309. On August 23, 2000, Judge Leventhal was designated as the Presiding Judge for this proceeding, and on September 7, 2000, the Presiding Judge issued a new procedural schedule that called for both parties to resubmit their previously filed testimony, and, as in the procedural order of November 18, 1998, allowed for the submission of another round of intervenor testimony before the filing of Staff testimony, cross-answering testimony, and rebuttal testimony.

Pursuant to this schedule, both the ISO and CAC re-filed their previous testimony on September 18, 2000. CAC then filed direct testimony by James A. Ross on October 3, 2000, and Commission Staff filed its direct testimony on November 9, 2000. Cross-answering testimony was filed on November 29, 2000, by Mark R. Minick and Neil E. Shockey on behalf of Edison, James A. Ross on behalf of CAC, and Roger VanHoy on behalf of the Modesto Irrigation District ("Modesto").[6] CAC filed the rebuttal testimony of James A. Ross on December 19, 2000, and the ISO filed the rebuttal testimony of Deborah A. Le Vine, Michael Dozier, and Trent Carlson on December 20, 2000. On May 1, 2001, the hearing on this matter commenced before Judge Leventhal and continued through May 3, 2001.

Subsequent to the hearing, the parties filed their Initial Briefs on May 30, 2001, and their Reply Briefs on June 13, 2001. The ISO also filed two motions requesting that the Presiding Judge take official notice of certain facts, and CAC filed a motion asking the Presiding Judge to disregard three arguments made by Staff in its Initial Brief. The Presiding Judge, in an order issued on June 27, 2001, granted the ISO's motions to take official notice, but rejected CAC's request. Additionally, both the ISO and CAC filed motions for leave to file supplemental authority, which the Presiding Judge granted in orders issued on July 11, 2001 and July 30, 2001, respectively. Finally, on June 22, 2001, Aera Energy, LLC, a cogeneration facility in California, moved to intervene in this proceeding, which the

[6] In response to motion by Edison, the Presiding Judge ruled that large portions of Modesto's cross-answering testimony should be stricken from this proceeding. Pursuant to that order, Modesto informed the parties and Presiding Judge that it would not offer the remaining portions of that testimony into evidence.

Presiding Judge granted in his order issued on July 11, 2001. The Presiding Judge issued his Initial Decision on July 31, 2001.

B. The Initial Decision

Issue I.A: Is the *pro forma* Participating Generator Agreement (PGA) just and reasonable if applied to QFs?

Issue I.B: If it is not just and reasonable, what changes to the existing terms and conditions of the *pro forma* PGA are required in order to create a just and reasonable QF PGA?

The Initial Decision found that the *pro forma* PGA is not just and reasonable as applied to QFs because the purpose of a QF is to provide for the needs of an industrial site, and to treat a QF as "simply another generator would defeat the purpose for its creation." Initial Decision at 96 FERC ¶ 63,015 at 65,131 (hereafter "I.D."). The Initial Decision concluded that the resolution of the instant proceeding should have a generic effect on all QFs, rather than being confined to the three named QF parties, reasoning that recent statements by the Commission indicate an intention that the instant proceeding have a generic effect. *Id.* at 65,133. Responding to Edison's request that the ISO be required to furnish advance notice to the relevant IOU of a QF's intention to enter into a PGA, the Initial Decision stated that Edison failed to demonstrate that this burden should be imposed on the ISO. *Id.* at 65,134.

Issue II.A: Is the requirement of the PGA that QFs abide by the ISO's tariff provisions regarding metering, telemetry, scheduling, procurement and cost allocation of Ancillary Services on a gross basis just and reasonable?

Issue II.A.1: Does the ISO's "Control Area Firm Load" include a QF's gross behind-the-meter Loads, as opposed to its net Load, for the purposes of determining the ISO's responsibilities under relevant reliability criteria?

With respect to the relation between QF behind-the-meter Load[7] and the ISO's Control Area firm load, the Initial Decision concluded that the ISO's Control Area firm load includes only a QF's net Load. The Initial Decision found that if a QF is shut down, the UDC connected to the QF provides back up power to behind-the-meter Loads through its Schedules; that the UDCs procure Operating Reserves for their expected standby Loads; and that the restructuring of the California electricity market did not change the cost-causitive aspects of standby service. *Id.* at 65,137. The Initial Decision concluded that because the UDCs continue to provide the necessary Ancillary Services for QF behind-the-meter Loads through standby service, NERC and WSCC reliability criteria are satisfied, and only QF net Loads should thus be included in the ISO's Control Area firm load for purposes of determining the ISO's responsibility under those reliability criteria. *Id.* at 65,138. The Initial Decision rejected the ISO's position that standby service, as provided by the UDCs, is not a substitute for Operating Reserves, explaining that the ISO failed to prove that Edison is not fulfilling its responsibilities to provide standby service. *Id.* at 65,138.

Issue II.A.2: Is it just and reasonable to procure Ancillary Services and allocate Ancillary Services costs for a QF's gross behind-the-meter Loads, as opposed to its net Load?

[7] The Initial Decision described behind-the-meter Load as follows: "Basically, a QF will produce a certain amount of energy at the facility and directly consume all or part of that energy for itself or others before delivering any surplus energy (if any) to the ISO. Under normal operating conditions, the load served by the QF without using the ISO Controlled Grid is called the "site load." The site load refers to the QF load itself and "over the fence loads" (loads that are physically beyond the boundary of the QF but use the QF facilities to deliver the QF energy to the load). Ex. No. S-1 at 10. In short, the site load or "behind-the-meter" Load refers to all load that is on the QFs side of the [site boundary] meter." *Id.* at 65,136.

Issue II.A.3: Is it unjust or unreasonable to require QFs that enter into PGAs to gross meter (including telemetry, when required by the ISO tariff) generation and behind-the-meter Load?

Issue II.A.4: Is it just and reasonable to require QFs that enter into PGAs to gross schedule generation and Load?

Based on its findings with respect to the ISO's calculation of Control Area firm load, the Initial Decision concluded that it is not just and reasonable to allocate Ancillary Services costs to QFs based on their gross Load. *Id.* at 65,139. Regarding gross metering, the Initial Decision stated that in order to effectively monitor the electric system under actual conditions for reliability purposes, the ISO only needs to measure power flow as it appears at the point of interconnection between the ISO and the UDC, and thus concluded that it is unjust and unreasonable for the ISO to require QFs that enter into a PGA to meter and telemeter gross Generation and Loads. *Id.* at 65,140. The Initial Decision stated, however, that the ISO is permitted, for reliability purposes, to require QFs that enter into PGAs to install telemetry at the point of interconnection with the UDC. *Id.* at 65,140. Finally, as to scheduling, the Initial Decision concludes that it is not just and reasonable to require QFs that enter into PGAs to schedule gross Load and Generation, because the ISO did not demonstrate that such scheduling is necessary for either reliability or cost-causation purposes. *Id.* at 65,141.

Issue II.A.5: Is it discriminatory vis-à-vis other customers if the ISO does not permit metering, scheduling, and cost allocation of Ancillary Services on a net basis for QFs?

The Initial Decision stated that the determination as to whether the ISO's gross metering, scheduling, Ancillary Services allocation proposals discriminate against QFs vis-à-vis non-QF customers hinges on whether there is an undue rate difference between QFs and other customers. *Id.* at 65,142. The Initial Decision

concluded that such a rate disparity will exist if the ISO looks to the gross loads of large QFs because those QFs already pay a standby charge to the UDC to backup their on-site Loads, and under the ISO's proposal, the QFs would end up paying both for standby service to the UDC and costs to the ISO for services based on gross Load. *Id.* at 65,142-143.

Issue III.A: Is the requirement of the PGA that QFs abide by ISO tariff provisions governing the ISO's ability to dispatch or curtail generation just and reasonable?

The Initial Decision next addressed CAC's contention that it is unjust and unreasonable for the ISO to retain in the PGA a requirement that a QF abide by the ISO Tariff provisions governing the ISO's ability to dispatch or curtail Generation. The Initial Decision rejected this assertion, stating that the current ISO Tariff definition of System Emergency suffices to satisfy CAC's concerns that the ISO might exercise an inappropriate level of control over QF Generating Units. *Id.* at 65,145. Nevertheless, the Initial Decision concluded that "incorporating the provisions of the [ISO] Tariff in a QF-specific PGA is a better outcome of this issue." *Id.* at 65,145. With respect to the Commission's recently imposed "must-offer" requirement for Generators in California, the Initial Decision found that this requirement imposes no greater obligation on QFs because it does not authorize the ISO to dispatch QF capacity that is committed to serving behind-the-meter Loads. *Id.* at 65,145. The Initial Decision also explained that Edison's concern that the ISO honor Power Purchase Agreements ("PPAs") is satisfied by the ISO's acknowledgement that it is committed to do so pursuant to Section 5.1.5 of the ISO Tariff. *Id.* at 65,145.

Issue III.B: Is the application to QFs through the PGA of the ISO tariff provisions regarding outages scheduling just and reasonable?

Concerning the application to QFs, through the PGA, of the ISO Tariff provisions regarding Outage scheduling, the Initial Decision concluded that in light of the Commission's recent order involving Outage coordination issues, as well as the pleadings submitted in that proceeding by the ISO and CAC, any objections CAC may have relating to Outages should be addressed through the compliance filing proceeding arising from that order. *Id.* at 65,145.

Issue III.C: Is the application to QFs through the PGA of the penalties set forth in the ISO tariff just and reasonable?

The Initial Decision dismissed CAC's argument that QFs should not be subject to any penalties in the ISO Tariff for operating below their minimum operating limit, explaining that CAC has not shown that any such penalty exists. *Id.* at 65,145. The Initial Decision concluded that "application through the PGA of the penalties set forth in the ISO Tariff is not necessary." *Id.* at 65,145.

Issue IV.A.1: Is it just and reasonable for a QF to have to seek FERC approval and/or ISO approval to terminate a PGA?

Issue IV.A.2. If a requirement for FERC approval is just and reasonable, must the PGA require, in order to be just and reasonable, that the ISO not protest or otherwise object to a QF's request to terminate its PGA in a FERC proceeding related to the termination?

The Initial Decision also addressed several issues regarding the procedures for terminating a PGA with a QF. First, the Initial Decision stated that because a PGA is a contract that affects service, and that the ISO is therefore required, pursuant to Section 205 of the Federal Power Act (16 U.S.C. 824d(c)) , to file a notice of termination of a PGA with the Commission, it is just and reasonable that Commission approval be a necessary predicate to the termination of a QF's PGA.

Id. at 65,146. Similarly, the Initial Decision concluded that it not just and reasonable for a QF-specific PGA to require that the ISO not protest or otherwise object to a QF's request to terminate its PGA in a Commission proceeding, noting that CAC failed to provide any justification for such a provision, and that such a provision would unduly discriminate against other Generators. *Id*. at 165,147.

Issue IV.B: Is the provision of the PGA that states that the ISO tariff will control in the case of conflict between the ISO tariff and the PGAs just and reasonable as applied to QFs?

Issue IV.C: Is it just and reasonable for the ISO to have the unilateral ability to amend the ISO tariff requirements that are incorporated into the PGA by amending the ISO tariff pursuant to its Section 205 rights under the FPA?

The Initial Decision found that it is just and reasonable for the ISO to have the ability to amend the ISO Tariff requirements incorporated into the PGA for a QF by amending the ISO Tariff itself, pursuant to its rights under Section 205 of the FPA. The Initial Decision explained that the right of the ISO to amend its Tariff is subject to protest by interested parties and Commission review, and QFs thus have a remedy with respect to unjust or unreasonable amendments or changes to tariff provisions, and recognizes that the ISO's ability to amend its Tariff in such a manner is necessary because of changing conditions in the electric market. *Id*. at 65,148.

Issue IV.D: Is a PGA just and reasonable in the absence of a provision that nothing in the PGA or the ISO tariff be construed as a waiver of any rights of QFs under federal or state law or a waiver of any rights under existing power purchase agreements such that the ISO must continue to honor existing power purchase agreements?

Finally, the Initial Decision concluded that a QF-specific PGA should recognize that the execution of a PGA does not deprive a QF of any unexpressed legal right either under law or under an existing PPA. *Id*. at 65,148.

III. Exceptions

The ISO excepts to the following conclusions of the Initial Decision:

1. That the ISO has not shown that the ISO's *pro forma* PGA is just and reasonable as applied to QFs.

2. That a QF-specific PGA should include changes to the existing terms and conditions of the *pro forma* PGA as discussed in the Initial Decision.

3. That the ISO is not required by NERC and WSCC criteria to maintain Operating Reserves for behind-the-meter Load.

4. That it is unjust and unreasonable to require that QFs that enter into a PGA to meter and telemeter gross Generation and behind-the-meter Load.

5. That it is not reasonable to require QFs that enter into PGAs to schedule gross Generation and Load.

6. That it is discriminatory vis-à-vis other customers if the ISO does not permit metering, scheduling, and cost allocation of Ancillary Services on a net basis for QFs.

7. That the ISO Tariff provisions regarding the dispatch and curtailment of Generation must be included in a QF-specific PGA.

8. That "the application through the PGA of the penalties set forth in the ISO Tariff is not necessary."

9. That a provision providing that QFs executing a PGA do not waive any existing legal rights must be included in a QF-specific PGA.

The ISO submits that the Initial Decision includes the following errors of law or fact:

1. That the distinct characteristics of QFs require modifications to the terms and conditions of the ISO's *pro forma* PGA.

2. That UDCs, such as Edison, provide necessary Ancillary Services for QF behind-the-meter Loads through standby service, and that WSCC and NERC reliability criteria are therefore satisfied.

3. That the ISO's Control Area firm Load, for the purposes of determining the ISO's responsibilities under WSCC and NERC reliability criteria includes only QF net Load, i.e., excludes QF behind-the-meter Load.

4. That the ISO failed to show that standby service was not a substitute for Ancillary Services with respect to QF behind-the-meter Load.

5. That, for reliability purposes, the ISO need only telemeter the power flow at the interconnection point between the QF and the UDC.

6. That, for settlement purposes, the ISO need only meter the power flow at the interconnection point between the QF and the UDC.

7. That the scheduling of gross Load is not necessary in order to allocate to such Loads their share of real time Energy costs.

8. That the ISO Tariff provisions regarding metering, scheduling, and cost allocation of Ancillary Services would impose costs on QFs that are not borne by similarly situated other customers.

9. That a determination that, "on the balance," incorporating the ISO Tariff provisions regarding the dispatch and curtailment of Generation in to the PGA is "the better course" justifies an order directing the ISO to do so.

10. That the failure to include in the *pro forma* PGA a provision that imposes no additional obligation on the ISO is a sufficient legal basis to find that the *pro forma* PGA is unjust and unreasonable as applied to QFs.

In addition, the ISO submits that the ruling that "the application through the PGA of the penalties set forth in the ISO Tariff is not necessary" is not supported by the finding in the Initial Decision. *Id.* at 65,145.

IV. Policy Considerations Warranting Commission Review

There are on the order of 10,000 MW of QF Generation connected to the ISO Controlled Grid. As demonstrated by recent Commission proceedings, large portions of that Generation wish to participate in the ISO market's, which will require the execution of a PGA. The applicability of the terms and conditions of the ISO Tariff through the PGA will have a broad impact on the reliability of the ISO Controlled Grid and the allocation of costs to ISO Market Participants and,

ultimately, to California retail electric customers. In particular, the issues in the proceeding below included the scope of the ISO's responsibility to procure Operating Reserves for QF-served Loads, the amount of data the ISO will receive regarding QF operations in order to assist the maintenance of system reliability, and the allocation of reliability costs. The breadth of the impact of this decision, and the long term effect of the decision on the ISO Control Area, in themselves warrant Commission review.

Moreover, these issues will continue to arise as the Commission guides the evolution of independent system operator corporations and regional transmission organizations. The resolution of these issues at this time will provide guidance and certainty to all participants with respect to these developments.

V. Argument

A. The *Pro Forma* PGA Is Just and Reasonable If Applied to QFs. (Issue I.)

The Initial Decision found that the ISO had failed to show that the *pro forma* PGA is just and reasonable as applied to QFs. *Id.* at 65,132. In connection with the issues specified in the Joint Statement of Issues, the Initial Decision identified particular changes that it found necessary in order to render the *pro forma* PGA just and reasonable as applied to QFs.

As the ISO noted in its Initial Brief, the essence of the *pro forma* PGA is the requirement that the Participating Generator abide by the applicable provisions of the ISO Tariff and Protocols. ISO Initial Brief [hereinafter "ISO I.B."] at 4; *see* Ex. No. ISO-1 (Le Vine) at 4:15-17. The ISO Tariff and Protocols, with the exception of certain unresolved issues, have been duly approved by the Commission. *See*

Pacific Gas & Electric Co., *et al.*, 81 FERC ¶ 61,122 (1997); *California Independent System Operator Corp.*, 84 FERC ¶ 61,217 at 62,046 (1998). These facts, in themselves, are sufficient to establish a prima facie case that the *pro forma* PGA is just and reasonable as applied to any Generator that intends to engage in activities governed by the ISO Tariff.

The Initial Decision concluded that a QF differs in purpose and operation from a traditional Generator and that, because of the distinct characteristics of QFs, the *pro forma* PGA is not just and reasonable as applied to QFs. Many types of Generatoring Units have unique characteristics – for example nuclear plants and hydro-electric facilities. ISO Ex. No. 5 Dozier 9:1-4 The *pro forma* PGA allows for the identification of special conditions recognizing such characteristics in Schedule 1 of the PGA, which establishes the operating parameters for each specific Generating Unit. Dozier 9:4-5

The issue, thus, must be whether any of the characteristics of QFs as a group are such that the cannot be accommodated within the parameters of the *pro forma* PGA. As discussed below, the Initial Decision's conclusions with regard to manner in which the *pro forma* PGA must be altered in response to the distinct characteristics of QFs or for other reasons are unsupported by the facts or are contrary to law or public policy. With regard to each of the concerns raised by intervenors and addressed by the Initial Decision, the ISO has shown that the provisions of the ISO Tariff, as applied to QFs through the *pro forma* PGA, are no less just and reasonable than as applied to other Generators. Accordingly, there is

no basis for concluding that the ISO has failed to show that the *pro forma* PGA is just and reasonable as applied to QFs.

Finally, if there were evidence -- which, again, there is not -- that the ISO Tariff, as applied to certain QFs, is unjust and unreasonable, the appropriate course of action would be an amendment to the ISO Tariff to provide necessary accommodations for exemptions. The various provisions governing participation in the ISO's markets and transmission on the ISO Controlled Grid should be contained in one document. *See* Tr. (Dozier) at 187:5-8. ISO Operators, and others, should not need to search various documents in order to determine applicable tariff requirements.[8]

B. WSCC Reliability Criteria Require the ISO to Maintain Operating Reserves for QF Behind-the-Meter Load, and It Is Appropriate to Allocate the Cost of Those Operating Reserves to Load Served by QFs. (Issues II.A.1. and II.A.2.)

In testimony and on brief, the ISO explained that California law and the ISO Tariff require the ISO, in its role as Control Area operator, to maintain the reliability of the ISO Controlled Grid in accordance with criteria promulgated by the Western Systems Coordinating Council ("WSCC").[9] WSCC promulgates several sets of

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[8] The ISO recognizes that the requirements of Sections 2.4.4 and 5.1.5 of the ISO Tariff, which require the ISO to honor certain contracts in existence at the time the ISO commenced operations, are exceptions to this result. This is not a reason, however, to aggravate the situation by creating even more exceptions in documents external to the ISO Tariff.

[9] Specifically, Section 345 of the California Public Utilities Code requires the ISO to "ensure efficient use and reliable operation of the transmission grid consistent with the achievement of planning and operating reserve criteria no less stringent than those established by the Western Systems Coordinating Council and the North American Electric Reliability Council." Cal. Pub. Util. Code § 345 (West 2001).

reliability criteria, one of which is the Minimum Operating Reliability Criteria ("MORC"). MORC requires that "[e]ach control area shall maintain minimum operating reserve . . . ." Ex. No. ISO-11A (Deluca) at 5:21-26. To meet this responsibility, MORC requires that Control Areas maintain as a Contingency Reserve the sum of five percent of load responsibility served by hydroelectric generation and seven percent of the load responsibility served by thermal generation (the criterion applicable to the ISO) or an amount equal to the most severe single contingency of generation or transmission forced outage. Ex. No. ISO-14 (Comish) at 10:5-12. Load responsibility is defined in MORC as "[a] control area's firm load demand, plus those firm sales, minus those firm purchases for which reserve capacity is provided by the supplier." *Id*. at 11:8-17.

Under the WSCC criteria, a QF behind-the-meter Load is defined as "firm" unless it can be simultaneously curtailed in the event of a QF Generating Unit Outage (i.e. when the QF Generating Unit suffers an outage, the Load does not draw power from the electric Grid). A representative of the WSCC, Mr. Joseph William Comish, confirmed this interpretation in this proceeding. Mr. Comish unequivocally testified that "Control Area firm Load" includes QF behind-the-meter Loads, and therefore, that Control Area operators such as the ISO must include those Loads in their calculation of Operating Reserves. Ex. No. ISO-14 (Comish) at

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Similarly, the ISO Tariff states that the ISO "shall exercise Operational Control over the ISO Controlled Grid to meet planning and Operating Reserve criteria no less stringent than those established by WSCC and NERC as those standards may be modified from time to time… ." ISO Tariff § 2.3.1.3.1.

12:8-13:20; Tr. (Comish) at 156:11-23.[10] Quite simply, if there are 100 MW of behind-the-meter Load in the Control Area (served by thermal generation), the MORC require that there be 7 MW of Operating Reserves (7% of 100 MW) available in connection with the on-site Load. Ex. No. ISO-14 (Comish) at 13:15 – 13:22.

Because the WSCC requires that the ISO include QF behind-the-meter Loads in its calculation of "load responsibility," the ISO is responsible for ensuring that there are adequate Operating Reserves for the QFs' behind-the-meter Loads. It is the ISO's position that it must procure Ancillary Services for those Loads to the extent that they are not self-provided by the QF or on its behalf.

At no point does the Initial Decision dispute the ISO's responsibility to comply with WSCC standards. At no point does the Initial Decision challenge the authority of Mr. Comish to speak for the WSCC. Rather, the Initial Decision mistakenly concludes that the UDC, through standby service, continues to provide the necessary Ancillary Services for QF behind-the-meter Loads and, consequently, that WSCC reliability requirements are satisfied with respect to those Loads. I.D. at 65,137. It is unclear whether the Initial Decision, in reaching this conclusion, mistakes the nature of standby service or misinterprets the WSCC criteria.[11] In either case, the conclusion is unsupportable.

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[10] On brief, CAC attempted to discredit Mr. Comish's testimony by mixing and matching WSCC criteria (setting contingency reserves requirements according to "load responsibilities") with the NERC definition of load. CAC Initial Brief [hereinafter "CAC I.B."] at 23-24. As described in the ISO's Reply Brief, however, the NERC definitions simply do not apply to the WSCC criteria. *See* ISO Reply Brief [hereinafter "ISO R.B."] at 8. NERC does not describe contingency reserves according to Load, but rather according to Demand. *See Id.*

[11] The I.D. appears to conclude that the WSCC Operating Reserves requirements (which govern the responsibilities of the Control Area operator) apply to QF behind-the-meter Load,

1. Standby Service Is Not a Substitute for the ISO's Procurement of Ancillary Services for Behind-the-Meter Load.

a. Operating Reserves as Provided Through Standby Service Are Insufficient to Meet WSCC Reliability Criteria.

The Initial Decision quotes extensively from Staff witness Ballard for the proposition that standby service includes Operating Reserves for behind-the-meter Load, and that the ISO does not need to procure Operating Reserves for the behind-the-meter Load if the Operating Reserves are provided through a standby tariff. I.D. at 65,138. The Initial Decision notes that standby service includes Operating Reserves and concludes that the reliability requirements are met. *Id.* at 65,139. What the Initial Decision fails to recognize is that witness Ballard's conclusion was explicitly based on an assumption that the capacity that the UDC has set aside pursuant to a standby service contract "is the same amount of capacity that would be set aside by the ISO… ." Tr. (Ballard) at 565:15-16.[12] An

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but the UDC is meeting those requirements. I.D. at 65,139. Yet it also concludes that the ISO's Control Area firm load "for the purposes of determining the ISO's responsibilities under relevant reliability criteria" does not include QF behind-the-meter Load. *Id.*

[12] If indeed that were the case (which, as discussed below, it is not), the ISO would not have to procure additional Ancillary Services for QF behind-the-meter Load. The ISO Tariff, however, already accommodates such a situation. It permits Loads to "self-provide" Ancillary Services through third parties. *See* ISO I.B. at 21, ISO Tariff §§ 2.5.20.2, 2.5.20.4. If a UDC were supplying Ancillary Services on behalf of a QF Load, the Operating Reserves responsibility of that Load under the ISO Tariff would be reduced accordingly, and the ISO would not procure Operating Reserves for the QF Load so served. Therefore, even if UDCs were supplying Operating Reserves for behind-the-meter Load through standby service, that fact would not support a finding that the *pro forma* PGA is unjust or unreasonable as applied to QFs because it would allow the ISO to provide Ancillary Services already being provided by the UDCs. As discussed in Section 2.5.20.2, *infra*, however, in order to fulfill its responsibilities as Control Area operator, the ISO would still require information about such self-provision of Ancillary Services.

examination of the record evidence in this regard reveals that the Operating Reserves provided through the standby service provided by California UDCs are *not* "the same amount of capacity as the ISO would set aside" in accordance with the WSCC criteria set forth above.

According to the testimony, the QFs for which Edison provides standby service have approximately 500 MW of behind-the-meter Load. Tr. (Minick) at 471:25 – 472:3.[13] WSCC criteria would therefore require 35 MW of Operating Reserves for the behind-the-meter Load, assuming the QF Generation serving that Load is thermal (7% of 500 MW). Edison, however, only sets aside 5.6 MW of capacity. Tr. (Minick) at 450:1-4.

To the extent the Initial Decision assumed otherwise – i.e., assumed that a California UDC providing standby service meets this requirement by maintaining Operating Reserves in addition to 5-7% of the "expected" Load (in the example discussed, 7% of 80 MW = 5.6 MW of reserve capacity) – the evidence is completely to the contrary. Edison's witness stated that Edison has never bought reserves for behind-the-meter Load, and does not think it appropriate to do so. Tr. (Minick) at 448:16-17. He further testified that Edison's procurement of Operating Reserves is "unlike what you're proposing here," i.e. unlike 7% of the behind-the-meter Load. Tr. (Minick) at 450:7. He stated that procuring Operating Reserves for any Load beyond what the UDC "sees" on the system would be "imprudent and irresponsible." Tr. (Minick) at 450:16 – 451:4. It is thus indisputable that the

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[13] The ISO's Initial Brief erroneously referred to 400 MW of on-site Load, which led to the conclusion in the I.D. that the ISO had miscalculated the amount of Operating Reserves necessary. I.D. at 65,139.

standby service under which the UDCs "procure operating reserves for their expected standby loads," I.D. at 65,138, is not sufficient to satisfy the minimum WSCC criteria as described by Mr. Comish.

b. Replacement Energy Scheduled Pursuant to Standby Service Is Not a Substitute for Ancillary Services Provided by the ISO.

The ISO presented the above specific example of Edison's maintenance of reserves in its Initial Brief. ISO I.B. at 20. In response to this argument, the Initial Decision cites Edison's Reply Brief, noting that Edison procures 80 MW of Energy to serve the expected Load and 5.6 MW of Operating Reserves in case that 80 MW of Generation used to serve the-standby Load fails. I.D. at 65,139. The Initial Decision then concludes that the ISO has not shown that Edison has ever failed to provide that Energy to QFs when their Generating Units fail. *Id.*

The Initial Decision's analysis, however, is fundamentally flawed in that it fails to take into account the distinction between Energy and capacity. Whether Edison has failed to provide Energy when a QF Generating Unit fails is, quite simply, irrelevant to the fulfillment of WSCC Operating Reserve requirements. The provision of Energy when a Generating Unit fails does *not,* and *cannot,* substitute for the provision of capacity in the form of Operating Reserves. Although related (in that balancing Energy may be provided from Operating Reserves), the requirement that a Control Area operator maintain system balance by providing Energy and the requirement that a Control Area operator maintain Operating Reserves are distinct requirements. *See* Order No. 888, FERC Stats. & Regs. ¶ 31,036 at 31,708 (1996); Ex. No. ISO-11A (Deluca) at 6:23-7:12. Operating Reserve requirements call for

unloaded capacity that is continuously monitored and capable of being deployed in response to Control Area needs. *See* Order No. 888 at 31,708; ISO Tariff, Appendix A, Definitions of Operating Reserves, Spinning Reserves, and Non-Spinning Reserves. The requirement cannot be fulfilled by a commitment to provide Energy through standby, backup, or Imbalance Energy service. The provision of Energy from Operating Reserves does not reduce the requirement for unloaded capacity; the unloaded capacity , once deployed, must be replaced as soon as possible. *See* Order No. 888 at 31,717. Under the ISO Tariff, for example, if the ISO calls upon Ancillary Services capacity, it must procure additional Ancillary Services to restore the appropriate level of Operating Reserves capacity to meet WSCC criteria. ISO Tariff § 2.5.22.3.1.

Thus, if there is 500 MW of behind-the-meter Load, WSCC criteria require 25-35 MW of Operating Reserves. If 80 MW of behind-the-meter Generation is unavailable, and 80 MW of on-site Load is served by standby service, *there are still 500 MW of on-site Load, and the WSCC criteria still require 25-35 MW of unloaded capacity as* Operating Reserves. Edison's witness Minick testified that Edison schedules and procures approximately 80 MW of Energy to serve expected QF Load, Tr. (Minick) at 449:3-21; because it is meeting expected Load, however, it also delivers all or most of that Energy. Although Edison testified it provides Operating Reserves – i.e., sets aside unloaded capacity – of approximately 5.5 MW for the 80 MW on-site Load that it expects to "see" on the system in any particular hour (which, by virtue of Edison's provision of Energy will actually be metered Load), Tr. (Minick) at 450:4-8, it does not set aside unloaded capacity for the remaining 420

MW behind-the-meter Load. Providing replacement Energy and maintaining reserves based on the amount of backup Energy scheduled or provided does not fulfill WSCC criteria as described by Mr. Comish and cannot substitute for the ISO's procurement of adequate Ancillary Services.[14]

c. Standby Service Provided Under Revised Regulations Will Not Substitute for Ancillary Services Provided by the ISO.

That standby service is not a substitute for Operating Reserves is equally obvious on a going-forward basis. On July 12, 2001, the California Public Utilities Commission issued Decision 01-07-027 in California Public Utilities Commission ("CPUC") Docket No. 99-10-025, *Order Instituting Rulemaking into Distributed Generation.* The order concerned, inter alia, the standby service and tariffs of California IOUS, and was offered by CAC, and accepted by the Presiding Judge, as supplemental authority in this proceeding. In the Order, the CPUC directed that all charges for Generation Energy and capacity be eliminated from the standby rate, which would include only transmission and distribution related charges. *Id.* at 78-79.[15] It directed that an IOU providing Energy in the case of a QF Generating Unit Outage file a separate rate for that Energy. It does not even address an IOU's provision of reserve capacity in the future. Thus, unless an IOU files a new tariff for the provision of sufficient Operating Reserves to meet WSCC criteria, there can be

[14] Order No. 888 distinguishes "Energy Imbalance Service," which makes up for a net mismatch over an hour between scheduled Energy and actual load, from "Backup Supply Service," which makes up for the loss of Generation for more than a short time. Order No. 888 at 31,708, 31,710. The former is an Ancillary Service, the latter is not. *Id.* The record does not establish whether Edison's standby service would qualify as Energy Imbalance Service; it definitively establishes that it does not qualify as Operating Reserves.

no question that the ISO must procure those reserves, and the application of the ISO Tariff Ancillary Services requirements to the QF and its Load is appropriate. If a QF or its Load does contract with an IOU or other UDC for the necessary amount of Operating Reserves, then the Scheduling Coordinator for the UDC can identify those reserves to the ISO as self-provided, which will satisfy the terms of the ISO Tariff. In either case, the application of the ISO Tariff provisions regarding the procurement of Ancillary Services will continue to be just and reasonable, and there is no basis for finding the *pro forma* PGA unjust or unreasonable in this regard.

2. Standby Service Cannot Fulfill the Operating Reserve Requirements of the WSCC Criteria.

a. The Requirement That Operating Reserves Be Determined According to Gross Load Is Established by Uncontradicted Reliable Evidence.

If the Initial Decision's conclusion that standby service satisfies WSCC reliability criteria for behind-the-meter Load is based not on a misunderstanding of the nature of standby service, but on a conclusion that the procurement of Operating Reserves for "expected" Load meets WSCC criteria, it is equally flawed. The WSCC criteria, specifying that Operating Reserve requirements be determined according to gross Load (i.e., including behind-the-meter Load), are described by ISO witness Deluca and by Joseph William Comish, testifying for the WSCC. Ex. No. ISO-11A (Deluca) at 5:21-6:15, Ex. No. ISO-14 (Comish) at 10:5-12. The Initial Decision cites to only one portion of Mr. Comish's testimony, and refers to it as "very general, addressing a hypothetical situation on how the behind-the-meter Load

[15] This Order was filed by CAC as a supplemental authority on July 18, 2001.

would be served by the ISO when a QF tripped." I.D. at 65,138. To the contrary, Mr. Comish's testimony regarding Operating Reserve requirements was very specific. Mr. Comish testified that a Control Area operator *must* include all behind-the-meter Load in its Load calculation for determining the Operating Reserves requirements. Tr. (Comish) at 123:9 –124:24. The hypothetical situation offered by counsel for CAC posited 10,000 MW of Load reported at net meters, and 300 MW behind-the-meter Load, all of which is served by thermal Generation. Mr. Comish repeatedly stated that calculating the reserve requirement under this scenario would involve multiplying 10,300 MW times 7 percent, regardless of the portion of the Generation serving the behind-the-meter Load that was off-line. *Id.* Control Area operators cannot take into account the likelihood of outages to justify any different requirement. *Id.* at 117:5-20.

During Mr. Comish's deposition, counsel for Edison posited 10 customers with on-site Generating Units of one hundred megawatts each (for a total of 1000 MW), and each with a 10% historical outage rate. Ex. No. ISO-14 (Comish) at 64:9-20. Under such circumstances, according to Edison's testimony, Edison would procure Operating Reserves based on 10% of 1000 MW (the Load "reasonably expected to occur" on Edison's system). Tr. (Minick) at 449:3-13. Mr. Comish was unequivocal that the WSCC criteria require that Operating Reserves be based on the entire 1000 MW. Ex. No. ISO-14 (Comish) at 65:1-3.

There is no basis for rejecting Mr. Comish's interpretation of the WSCC criteria. According to Mr. Comish's uncontradicted testimony, he is authorized to speak on behalf of the WSCC regarding interpretations of reliability criteria. Ex. No.

ISO-14 (Comish) at 31:9-20; Tr. (Comish) at 159:4-8. Moreover, he confirmed this interpretation with the other person so authorized, Mr. Dennis Eyre, the Executive Director of WSCC. Tr. (Comish) at 158:13-159:3. The Initial Decision makes no findings that would justify disregarding this testimony.

b. The Procurement of Operating Reserves Based on Gross Load Is Necessary to the Reliability of the ISO Control Area.

The inclusion of a QF's behind-the-meter Load within the ISO's firm load requirements is not only consistent with testimony regarding WSCC criteria, but is also logically compelled. If a QF is connected to the ISO Controlled Grid, and the on-site Generating Unit fails, the Generation under the ISO's control will respond immediately to serve the QF's behind-the-meter Load. Ex. No. ISO-11A (Deluca) at 12:19 - 13:6. The ISO must be prepared serve the behind-the-meter Load *one hundred percent of the time. See* Tr. (Minick) at 436:15 - 437:3. Accordingly, the ISO must have adequate reserves to serve such Load 100% of the time; in this regard, a QF's behind-the-meter Load is no different than any other Load. [16]

If an unexpected event occurs and a Generating Unit's Generation is lost from the system, the ISO's Area Control Error changes in the amount of the lost Generation. Participating Generators providing Regulation (*i.e.,* enabled Automatic

[16] That the ISO must carry Operating Reserves to meet behind-the-meter Load 100% of the time does not imply that the ISO carries 100% reserves for 100% of Load 100% of the time. Rather, the WSCC MORC mandated that the ISO must carry a five to seven percent reserve for 100% of the Load 100% of the time to accommodate the simple fact that Generators do not run all the time. Thus, the ISO is not assuming, contrary to 18 C.F.R. § 292.305(c), that Forced Outages by all QFs will occur simultaneously. Were the ISO to do so, it would have to maintain Operating Reserves equal to 100% of the behind-the-meter Load. Instead, the criteria require the ISO to maintain reserves equivalent to five to seven percent of the behind-the-meter Load depending upon the type of Generation.

Generation Control) would issue control signals to adjust their output to accommodate the deficiency. To return the Regulation units to their preferred operating points, the ISO would then call on resources from the real time balancing energy market, including Operating Reserves as necessary. Exhibit No. ISO 11 at 12-13. The impact on the ISO Controlled Grid is the same whether the Unit that fails is a QF on-site Generating Unit fails or a Generating Unit – such as that of an Energy service provider – that is connected to its Load through the ISO Controlled Grid. Tr. (Minick) at 451:7-10.

A failure to procure Operating Reserves according to gross Load would thus reduce the overall reliability of the ISO Control Area, potentially affecting all electric consumers in the Control Area.[17] Unless a QF Load is willing to be curtailed instantaneously upon failure of the on-site Generation, there is no way to limit the impact of the lesser reliability such that only the QF is affected. The parties make much of the point that the ISO currently lacks the information to base procurement of Operating Reserves on gross Load, and that no wide-spread disruptions have occurred. Edison I.B. at 10,13. Yet these same parties insist that QF Generation must be encouraged. CAC I.B. at 19. The ISO supports the increase in Generation resources, but unless the ISO is allowed maintain the appropriate reserves for increasing amounts of behind-the-meter Load, the Operating Reserve "deficit" will continue to grow, as will the threat to reliability.

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[17] If the parties believe that the WSCC criteria are overly stringent, the issue should be addressed through the WSCC procedures, not by limiting the ISO's ability to fulfill its responsibilities.

C. The ISO Tariff Requirements for Gross Telemetry of Generation and for Gross Metering Are Just and Reasonable As Applied to QFs Through the *Pro Forma* PGA. (Issue II.A.3.)

In testimony and on brief, the ISO explained that gross telemetry on behind-the-meter QF Generation is necessary so that the ISO can meet its obligations as a Control Area operator, especially to the extent that this involves satisfying applicable Reliability Criteria, and gross metering of on-site Loads served by QFs is necessary to fairly allocate the costs of these services.

The Initial Decision properly concluded that the ISO requires adequate information to monitor the system in real time in order to maintain system balance and ensure reliability. I.D. at 65,140. The Initial Decision found that telemetry at the point of interconnection with the grid would satisfy that need. *Id*. at 65,140. Because of its conclusions regarding Ancillary Services discussed above, however, the Initial Decision did not address the impact of the ISO's Operating Reserve responsibilities on its need for real time data regarding gross Generating Unit output. The record evidence of that need is compelling. Neither did the Initial Decision address the need for data that would permit the fair allocation of the costs of maintaining reliability and avoid unnecessary cost shifting.

1. The ISO Requires Gross Telemetry of Behind-the-Meter Generation in Order to Fulfill Its Reliability Responsibilities.

As described above, the ISO's responsibility as a Control Area operator is not limited to maintaining system balance. The ISO must also ensure the maintenance of adequate Operating Reserves. The ISO's determination of its Load responsibility for the purposes of Operating Reserves is based on its Load forecast. Ex. No. ISO-

11A (Deluca) at 13:21-24. That forecast is based on real time measurements of Generation and net interchange with other Control Areas (i.e., imports less exports). *Id*. at 13:14-17. The ISO measures Generation because it would be impractical to meter individual Loads in real time. *Id*. at 14:6-10. Thus, during real time, the ISO's Energy Management System (EMS) scans the individual points of interchange with other Control Areas and the output from individual Generating Units through telemetry to determine the ISO's total firm load obligation. *Id*. at 13:17-20. This information is then trended forward, and, with appropriate adjustments made for weather and other circumstances, provides the ISO with a "forecast" of what its Control Area Load will be at any particular day and time. *Id*. at 13:21-24. It is this forecast that the ISO uses to determine its obligations to procure Ancillary Services in the Day-Ahead and Hour-Ahead scheduling processes. *Id*.

Therefore, to the extent that the ISO lacks accurate information on Generation and Loads within its Control Area, for which Applicable Reliability Criteria require the ISO to procure Operating Reserves, the ISO is unable to fulfill its obligations as a Control Area operator consistent with WSCC and NERC requirements. *Id*. at 13:25-27. Attempting to compensate by incorporating an estimated additional reserve percentage in an attempt to account for QF behind-the-meter Load -- which the ISO estimates to total at least 1,000 MW, Tr. (Deluca) at 343:14-24 – can not ensure adequate Operating Reserves and therefore risks the reliability of the Control Area. Alternatively, such estimation could result in overprocurement, for which the entire Control Area would pay the cost.

The need for gross telemetry on behind-the-meter Generation would exist even if the UDCs were providing necessary Operating Reserves through standby service (which, as shown above, they are not). The ISO is the Control Area operator, not the UDCs. Ex. ISO-11A (Rebuttal Testimony of David A. Deluca at 4:17-24. It is therefore the ISO's responsibility to ensure that Operating Reserve requirements are met. As witness Ballard noted, the ISO "would need to make sure that the proper amount of reserves has been set aside." Tr. (Ballard) at 566:16-17. The ISO requires gross telemetry on behind-the-meter Generation in order to do so.[18]

Moreover, direct telemetry on Generating Units is vital for the ISO to be in a position to respond to System Emergencies. For example, the Midway Sunset Generating Unit has a capacity of more than 225 MW. Ex. No. ISO-17 (Schedule 1); Tr. (Ross) at 491:1. If the ISO is limited to telemetry at the site boundary and that boundary meter shows 0 MW of output, the ISO does not know if the unit is being fully used for on-site needs, is out of service, or is only running at partial capacity and could contribute significant resources in the event of an emergency.

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[18] In its Initial Brief, CAC also correctly noted that Generation telemetry would not recognize circumstances in which a QF and its associated behind-the-meter Load were physically disconnected from the electric grid. CAC I.B. at 40. If a QF has in place equipment to accomplish such a disconnection in the event of a Generating Unit failure, and the QF identifies that circumstance to the ISO through a notation in PGA Schedule 1 or through some other means, the ISO would not need to procure Operating. In such circumstances the on-site Load would not be firm Load in accordance with WSCC MORC criteria. Tr. (Comish) at 156:11-157:10.

The circumstances under which disconnection might occur in the absence of such equipment are unclear, and could be expected to be rare. Such an unexpected disconnection might result in the ISO having overprocured Ancillary Services. Nevertheless, the QF could employ the means provided under the ISO Tariff to challenge any allocation of Ancillary Services costs to its disconnected behind-the-meter Load under such circumstances. *See* ISO Tariff SABP § 4.4.

2. The ISO Requires Gross Metering of On-Site Load in Order to Fairly Allocate the Costs of ISO Services.

Gross metering of on-site Load is required for a separate reason. As the ISO explained in testimony and on brief, the ISO requires revenue meter data on QF behind-the-meter Loads in order to ensure that the costs of the services that the ISO provides are appropriately allocated to the responsible Market Participants. Ex. No. ISO-11A (Deluca) at 17:28-18:3. The ISO allocates costs for ISO charges such as Ancillary Services based on metered Demand. *Id*. at 17:17-18, 24-28. Because at least some of these charges apply to QF behind-the-meter Loads, the ISO must have accurate revenue Meter Data on those Loads in order to ensure that costs to *all* Market Participants are accurately assessed. To the extent that the ISO does not have this information, substantial cost shifting is likely to occur, a result that no party to this proceeding has suggested would be appropriate. *See* Ex. No. ISO-11A (Deluca) at 17:28-18:8.

D. The Requirement that QFs Schedule Their Behind-the-Meter Load is Just and Reasonable. (Issue II.A.4.)

The Initial Decision concludes that it is not just and reasonable to require QFs that enter into PGAs to schedule gross Load and Generation, because the ISO did not demonstrate that such scheduling is necessary for either reliability or cost-causation purposes. *Id*. at 65,141. The validity of this conclusion will depend upon the decision of the Commission whether Loads served by QFs must gross meter.

During the ISO's settlement process, the ISO compares Meter Data from Loads and Generating Units with the Final Schedules submitted by the Scheduling Coordinator representing those Loads and Generating Units. The ISO then uses

such differences as may exist between the Schedules and Meter Data as the basis measuring performance of Load and Generation and can assign any real-time credits or charges that apply to these entities causing the needs in real time. ISO Tariff § 11.2.4; ISO Settlement and Billing Protocol, Appendix D; *see* Tr. (Le Vine) at 323:11-22; Tr. (Deluca) at 367:2-5. Moreover, in recognition of the serious adverse impact on ISO Control Area reliability that chronic underscheduling of Load has imposed on the ISO, the Commission has in recent months approved a number of additional charges that are imposed on underscheduled Load, as measured by the deviations between revenue Meter Data and the amount of Load scheduled with the ISO. *San Diego Gas & Electric Co. v. Sellers of Energy and Ancillary Services into markets operated by the California Independent System Operator and the California Power Exchange*, 93 FERC ¶ 61,294 at 62,002-003, 62,020.

If the Commission determines that Loads served by QFs need only net meter, then deviations can be determined against net Schedules. If, however, the Commission agrees with the ISO that the proper allocation of costs requires gross metering, QFs and the Load that they serve must schedule all of their Loads and Generation with the ISO, including behind-the-meter Loads and Generation, in order to match Schedules to the gross Meter Data upon which ISO Settlements will be based. Without Schedules that identify Energy requirements of all of a QF's Generating Units and Loads, the ISO Settlement system would assign real-time charges and credits to that QF or its Loads comparing gross Meters Data with net Schedules, which would yield significant deviations and high charges.

Although there might be alternative means of determining Imbalance Energy charges, it would require unjustified revisions to the ISO Settlement system and special treatment of QFs. There are no significant burdens associated with gross scheduling under such circumstances. CAC argued below that gross scheduling would force a QF to retain a Scheduling Coordinator, which it implies could prove difficult, and would create a "new list of considerations for the retail customer such as line losses and imbalance charges." CAC I.B. at 41. CAC's first contention, that "gross" scheduling of QF Loads and Generation would require QFs to retain Scheduling Coordinators, is only partially correct. Under the ISO Tariff, QFs that are Participating Generators will require a Scheduling Coordinator in order to submit *any* Energy or capacity Schedules or bids into the ISO's markets, regardless of whether those QF Loads and Generation are scheduled on a "gross" or "net" basis. *See* ISO Tariff § 2.1.3. The *only* QFs that will incur an extra burden in retaining a Scheduling Coordinator because of the ISO's policy of "gross" scheduling are those QFs that neither have a PPA nor make sales into the ISO's markets.[19]

As to CAC's concerns over a QF's ability to obtain the services of a Scheduling Coordinator, the ISO notes that a QF could act as its own Scheduling Coordinator, provided that it satisfied the relevant requirements under the ISO Tariff. ISO Tariff §§ 2.2.3 - 2.2.4, 2.5.6. Even if the QF were to use another Scheduling

[19] If a QF has a PPA, the UDC that is the contracting party currently has the obligation to gross schedule the QF Generation and Load because of its obligations under its PGA and the ISO Tariff. Even in the case of QFs that neither have a PPA nor make sales into the ISO's markets, to the extent on-site Load occasionally exceeds QF output, the Load would have to be scheduled and hence would require a Scheduling Coordinator. Thus, in the case of any QF and its on-site Load taking standby service from an IOU, either the QF or the on-site Load should already be represented by a Scheduling Coordinator.

Coordinator, the Scheduling Coordinator would have to either file a rate schedule in order to charge the QF for its services, which the QF could protest, or negotiate a bilateral agreement with the QF, which presumably would be mutually acceptable.

CAC is also correct that QFs that sign PGAs will be subject to Imbalance Energy charges, as are all Loads.[20] The ISO is already providing Imbalance Energy for QF Loads, however, and someone is therefore paying for that Energy. Regardless of whether a QF signs a PGA, if a QF's Generating Unit provides insufficient Energy to serve the behind-the-meter Load plus any off-site sales, the insufficiency will be made up with Imbalance Energy. Under current predominant practice of net meeting and scheduling, unless the Scheduling Coordinator makes up for the difference with unscheduled Generation, the Imbalance Energy will show up as a difference between the SC's Schedule and the metered Demand. Either way, someone will pay for the Energy needed by the behind-the-meter Load. Gross scheduling will not affect the need for the ISO to provide Imbalance Energy or the amount of that Energy that is necessary. Under gross metering and scheduling, Generation and Load deviations will balance each other out, so that the net deviations are the *same* as under net metering and scheduling. Tr. (Le Vine) at 321-23. Thus, if the Commission approves gross metering, gross scheduling avoids, rather than causes, additional Imbalance Energy charges to QFs.

The record is not clear regarding the extent to which SCs are currently passing Imbalance Energy charges on to QFs. CAC has provided no explanation,

[20] CAC is also correct that QFs would incur charges for losses. The ISO, however, does not currently charge for losses, except through the Generator Meter Multiplier ("GMM") that is applied to all Generating Units based on an algorithm that takes into account their proximity to Load. *See* Tr. (Le Vine) at 320:8-321:10; ISO Tariff § 7.4.

however, as to why it is not just and reasonable to allocate to QFs and their Loads the charges for Imbalance Energy they require. Indeed, Mr. Ross admitted in prepared testimony that QFs should not be insulated from "economic penalties" such as imbalance charges. Ex. No. CAC-12 (Ross) at 14:20-15:2.

E. The ISO Tariff Provisions Regarding Metering, Scheduling, and Cost Allocation of Ancillary Services Do Not Unduly Discriminate Against QFs. (Issue II.A.5.)

1. Application of the ISO Tariff to QFs Through the *Pro Forma* PGA Would Not Entail Double Charging or Overcharging for Services.

The Initial Decision finds that if the ISO meters, schedules, and procures Ancillary Services for QF on a gross Load basis, there would be an undue rate disparity between QFs and other retail customers, whom it finds to be similarly situated. The Initial Decision bases this finding of undue discrimination on an erroneous conclusion that, under such circumstances, QFs "will end up paying both for standby service to the UDC and costs to the ISO for services based upon gross Load."[21] *Id.* at 65,142.

A review of the scheduling, metering, and procurement provisions of the ISO Tariff demonstrates that, to the contrary, there would be no duplicative costs. Under the ISO Tariff, the Scheduling Coordinator for the QF would be responsible for the QF gross Load. ISO Tariff § 2.2.3. If standby service provided all of the Ancillary Services associated with the gross Load (which, as described above, it does not) or part of those Ancillary Services, the Scheduling Coordinator would identify the

[21] This particular basis for finding discrimination was not argued in any of the post-hearing initial briefs, and the ISO could not, therefore, address it in its post-hearing reply brief.

Ancillary Services provided under the standby service as self-provided Ancillary Services for the Loads.[22] ISO Tariff § 2.5.20.2. The ISO would meter all Load for which the Scheduling Coordinator is responsible, including the gross Load of the QF. ISO Tariff § 10.6.2.1. The ISO would then bill the Scheduling Coordinator only for the amount of Ancillary Services that are *not* self-provided. ISO Tariff § 2.5.1. Thus, to the extent that Ancillary Services for QF behind-the-meter Loads are provided by the UDC under standby service, the Scheduling Coordinator would not be billed for them. There would be no basis for the Scheduling Coordinator to pass on any of the other Ancillary Services charges to the QF. If it did, the fault would not be with the ISO Tariff or the *pro forma* PGA. If, on the other hand, the UDC was not providing the Ancillary Services for the QF, the Scheduling Coordinator would be billed, but the QF would not be paying for Ancillary Services as standby service. In either instance, double billing does not occur.

As the ISO noted in its Initial Brief, the applicability of the transmission Access Charge and the Grid Management Charge to QF transactions is being litigated in other dockets.[23] The Commission will be able to determine in those proceedings whether such charges constitute discrimination, and can address any

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[22] As discussed above, under a recent order of the CPUC, all Generation capacity and Energy charges must be eliminated from standby rates. Any Energy or capacity charges will have to be included in a separate rate. It will therefore be clear on a going forward basis whether, and in what amount, a UDC is providing Ancillary Services for a QF-served Load. The ISO Tariff provisions on self-provision would preclude double charges in such a case.

[23] Docket Nos. ER00-2019 and ER01-313.

discrimination by requiring amendments to the ISO Tariff rather than by carving out a special QF PGA.[24]

In their Initial and Reply Briefs, parties offered other arguments suggesting that it would be discriminatory to preclude metering, scheduling, and cost allocation of Ancillary Services on a net basis for QFs. These parties may offer these arguments again to the Commission as an alternative basis for finding discrimination. None of these arguments, however, has merit.

The ISO Tariff sections regarding metering, scheduling, and cost allocation of Ancillary Services do not distinguish between QFs in general and other Generators, and are therefore per se non-discriminatory vis-à-vis other customers. Nonetheless, in their Initial Briefs, both Edison and CAC attempted to show the ISO's procurement of Operating Reserves for behind-the-meter Loads is discriminatory by

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[24] The Initial Decision might be read, however, to suggest that the transmission Access Charge would constitute double charging. Such a finding would be unjustified.

If transmission Access Charges are assessed against the Scheduling Coordinator for QFs, they could be for three types of transactions: (1) the provision of Energy by the UDC under standby service; (2) on-site Generation serving on-site Load; and (3) market sales by the QF. In the first instance, where the QF and its Load are retail customers of the UDC, the transaction is scheduled on behalf of the UDC and the Scheduling Coordinator for the UDC (who may be the UDC itself) would be billed for the transmission Access Charge, ISO Tariff § 7.1, which would presumably be passed on to the UDC. Because the QF is paying the UDC for such transmission under the standby service, ISO Tariff § 7.1, there would be no basis for the UDC to pass the cost on to the QF. Again, if the UDC did pass the cost on to the QF, the fault would not be with the ISO Tariff.

In the second and third circumstances, the Scheduling Coordinator would be acting on behalf of the QF, and the Scheduling Coordinator for the QF would be billed the transmission Access Charge. ISO Tariff § 7.1. Presumably, the charges would be passed on to the QF. Standby service, however, does not cover the scheduling of the behind-the-meter Load or off-site sales. *See generally* Ex. No. CAC-2 (Ross) at 9-12. There would therefore be no overcharging.

inaptly equating on-site Load with nonexistent Load. Edison asserted that the ISO procures Operating Reserves for customers with no on-site Generation based on their "actual" Demand, but for customers that employ on-site Generation based on the Demand that "could be placed on the system." Edison I.B. at 14-15. CAC contended that the ISO discriminates against QFs by measuring the "actual" Load of standard customers for purposes of procuring Operating Reserves, while measuring the "potential" Load of QFs. CAC I.B. at 42. The fallacy of these arguments is that they presume Edison's and CAC's position on the disputed issue in this proceeding, that the "actual Demand" of a standard customer and the net Demand of a QF are the appropriate measures for determining Operating Reserves. Regardless of whether the "true picture of what QF Load is 'on the system' is a QF's behind-the-meter net, not gross, Load," Edison I.B. at 14, the net metered Load of a QF is not comparable to the actual Demand of other customers for the purpose of maintaining Operating Reserves. The ISO does not procure reserves in order to serve additional "potential" Loads, but to protect against system contingencies (i.e. the loss of expected Generation, such as would occur with respect to a QF Generating Unit Outage). Ex. No. ISO-11A (Deluca) at 6:10-16. Reserves must be based on the forecast of *all* of the Demand that exists at a particular moment in time, rather than just "demand placed on the system," because the ISO must make up for lost Generation regardless of whether that Generation is located on-site or otherwise. QF behind-the-meter Loads are not "potential" Loads for the purpose of Operating Reserves, because they are Loads that must be served if Generation fails.[25] Ex.

[25] Thus, the Initial Decision's conclusion that QF and retail customers are "similarly situated" in that Loads imposed on the transmission system by retail customers and net Loads of

No. ISO-11A (Deluca) at 12:19-13:6, Tr. (Minick) at 451:7-10.[26] Thus, the ISO treats both classes of customers identically: it procures Operating Reserves based on the Loads that must be served if Generation fails.

Edison also attempted to support its discrimination claim by drawing an analogy between station auxiliary Loads, which the ISO allows all Generators to net against Generating Unit output, and QF behind-the-meter Loads, with respect to which the ISO prohibits net metering. Edison I.B. at 16, 25. Edison's assertion that the ISO's net treatment of station auxiliary Loads supports the net treatment of QF behind-the-meter Loads, and discriminates against QFs, is without merit. As ISO witnesses Dozier and Deluca explained at hearing, station auxiliary Loads are not electrically identical to QF behind-the-meter Loads because station auxiliary Loads are largely curtailed at the moment that a Generating Unit fails. Tr. (Dozier) at 145:23 – 146:16; Tr. (Deluca) at 376:20-23. Moreover, no discrimination exists with respect to non-QF Generators because both QF Generators and non-QF

QFs are actual Loads, I.D. at 65,142, is inapt. As explained in the text, QFs are not treated differently from retail customers.

[26] Consider the following: Industrial Customer A operates a process that can consume up to 45 MW. At a given moment, it is consuming 25 MW. If a Generating Unit on the system fails, the ISO must use balancing Energy from Operating Reserves or some other source to serve the 25 MW "actual" Load, not the 45 MW "potential" Load. Cogenerator B has an industrial process that can consume up to 45 MW. At a given moment, it is consuming 25 MW, which is served by an on-site Generating Unit. Its net Load, what Edison calls the "true picture on what is on the system," is therefore 0 MW. *Yet,* if the on-site Generating Unit fails, the ISO must use balancing Energy from Operating Reserves or some other source to meet the 25 MW Load requirement. The burden placed on Operating Reserves is thus precisely the same for Industrial Customer A and Cogenerator B. *See* Tr. (Minick) at 451:7-10 (admitting that the effect on the system of a QF Generating Unit Outage is the same as that of a non-QF Generating Unit Outage). Both Industrial Customer A and Cogenerator B have a "potential" Load of 45 MW, but the ISO does not contend that such potential Loads are relevant for determining Operating Reserve requirements.

Generators are permitted to net their station auxiliary Loads against their total output.

Edison raised several arguments beyond those discussed above with respect to the issue of the alleged discriminatory treatment of QFs vis-à-vis other customers. First, Edison asserted that the ISO's policies will result in discrimination between QFs who participate in the market versus those that sell Energy only to their UDC and do not execute PGAs. Edison I.B. at 25. Also, Edison contended that it is discriminatory for the ISO to permit on-site Load netting for Generating Units under one MW, but not to allow it for other Generating Units, absent evidence of specific factual differences. Edison I.B. at 25-26. Finally, Edison claimed that the WSCC does not agree with the ISO's 1 MW exemption. Edison I.B. at 26.

These arguments are also without merit. First, with respect to QFs under PPAs, the ISO is required under its Tariff, and consistent with Commission policy, to honor those existing contracts. ISO Tariff § 5.1.5. Thus, to the extent that discrimination exists, it is no more significant than is the case with any other instance of permitted grandfathering of existing contracts. Moreover, QFs that do not wish to comply with the ISO's policies concerning the gross treatment of behind-the-meter Loads can choose to continue to sell Energy to the relevant UDC under a PPA. As for Edison's second argument, the Commission has already concluded that the ISO's one MW netting exemption is just and reasonable, as it only applies to small distribution-level Generating Units that are not participating in the ISO's markets for Ancillary Services and Supplemental Energy. *California Independent System Operator Corp.*, 94 FERC ¶ 61,266 at 61,922 (2001). The ISO made this

distinction in an attempt to balance the costs of compliance with its need to ensure system reliability, and the fact that there is no precise formula to demonstrate why the ISO drew this distinction at the one MW level does not make that distinction either unreasonable or unduly discriminatory. Finally, Edison's argument concerning the WSCC is baseless, because, as Mr. Comish made clear in his testimony, the WSCC is not concerned with how the ISO meters its units, so long as Operating Reserve criteria are satisfied. Tr. (Comish) at 106:23-107:1, 111:11-112:4.

F. Cost Considerations Do Not Render the ISO Tariff Provisions Regarding Ancillary Services, Scheduling, Telemetry, and Metering Unjust or Unreasonable as Applied to QFs Through the *Pro Forma* PGA. (Issue II.B.)

The Initial Decision does not specifically address Issue II.B of the Joint Statement of Issues, which concerned the cost implications of applying the ISO Tariff provisions regarding Ancillary Services, scheduling, telemetry and metering to QFs. Nonetheless, other parties will undoubtedly argue that cost considerations support the Initial Decision's conclusions regarding these matters.

CAC suggested in its Initial Brief that the ISO's "drastic" departure from "net" Load treatment will "considerably increase the costs associated with the installation, interconnection and operation of QF cogeneration." CAC I.B. at 45-46. See also Tr. (Minick) at 446:22-447:15. To the contrary, however, the costs that would be imposed on QFs are justified and reasonable. To the extent that QFs wish to participate in the ISO's markets, as either suppliers or consumers or both, it would be unfair to allow them the benefits of such participation without requiring them to assume their pro rata share of the costs of those benefits. *See* Ex. No. ISO-7A

(Le Vine) at 6:13-17, 10:4-14, 15:1-12; Ex. No. ISO-11A (Deluca) at 16:25-17:8. The *pro forma* PGA simply seeks to insure that Generators, including QFs, that wish to participate in or benefit from the ISO's markets comply with the ISO Tariff and Protocols. These in turn ensure that costs are allocated to Scheduling Coordinators pro rata based on benefits received.

With respect to Ancillary Services, because the ISO must procure Operating Reserves based on calculations that include all firm load, including QF behind-the-meter Loads, and because it is the operation by the ISO of its Ancillary Service markets that provides for reliable service to all firm load, including QF behind-the-meter Load, it is appropriate that the ISO allocate the costs of those services in a pro rata fashion to those Loads. As explained above, the ISO does this by assessing Ancillary Services charges to Scheduling Coordinators based on the metered Demand of the Load represented by each Scheduling Coordinator, which would include Scheduling Coordinators representing QF Loads.[27] To do otherwise would unfairly shift costs to other Scheduling Coordinators, and ultimately to other retail electric customers. Ex. No. ISO-7A (Le Vine) at 6:13-17.

Significantly, under the ISO Tariff, QFs can avoid costs associated with Ancillary Services that are procured through the ISO's markets by self-providing some or all of their Ancillary Services requirements. Ex. No. ISO-11A (Deluca) at 8:16-18; ISO Tariff § 2.5.20.2; cf. Tr. (Minick) at 443:16-445:5 (witness arguing that

[27] The ISO does not determine the manner in which the Scheduling Coordinator passes those costs through to its end-use customers. Although the ISO has, in other proceedings, indicated its belief that allocation to end-users should avoid cost-shifting, it is the responsibility of the relevant regulatory body to determine the appropriate allocation method. Ex. No. ISO-7A (Le Vine) at 6:17-7:5.

self-provision does not allow entities other than QFs to avoid costs). For example, Midway Sunset has a capacity of more than 225 MW, and an estimated behind-the-meter Load of only 65 MW. Ex. No. ISO-17 (Schedule 1); Tr. (Ross) at 491:1. By withholding only 4.6 MW of excess capacity from the market, Midway Sunset could satisfy the Operating Reserve requirements for its behind-the-meter Load.

In addition, a QF could under certain circumstances self-provide Regulation services. This would require the installation of a Remote Intelligent Gateway, with one-time equipment costs in the range of $38,000 plus $25,000 to $100,000 for installation.[28] All Generators providing Regulation to the ISO are required to incur the costs of that equipment. *See* ISO Tariff § 5.1.3(d). Having installed this equipment, a QF could recover these costs through the sale of additional Regulation services in the ISO's markets. *See* ISO Tariff §§ 2.5.6, 2.5.8, 2.5.14. Because sellers of Regulation can limit the extent to which the ISO can adjust the operating levels of their Generating Units, QFs can participate in the Regulation market without concern for the impact on behind-the-meter Load or any operational limitations that may need to be addressed due to the thermal host's processes for a cogeneration QF. *See* ISO Tariff § 2.5.14.

Regardless of whether a QF self-provides Ancillary Services for its Loads or those Loads purchase them, it would be unjust to excuse Scheduling Coordinators for QFs Loads from responsibility for those costs. As long as the WSCC requires

[28] Tr. (Dozier) at 169:2-8; Ex. No. SCE-7. QFs would not be required to bear this cost if the QF does not wish to provide Regulation. The ISO has developed a lower-cost alternative for obtaining real-time Generating Unit telemetry data known as a Data Processing Gateway, the one-time installation costs of which are estimated to be $10,000 to $15,000 for the equipment, plus installation costs in the range of $20,000 to $50,000. Tr. (Dozier) at 169:8-14; Ex. No. SCE-7.

the ISO to maintain Operating Reserves on behalf of QF behind-the-meter Load, and as long as such Load benefits from the Ancillary Services provided through the ISO, those costs should be borne by the beneficiaries thereof. *See, e.g., Orange and Rockland Utilities, Inc. v. FERC*, 905 F.2d 425, 428 (D.C. Cir. 1990). (noting the principle that regulators should allocate costs to those who cause them to be incurred).

The metering requirements of the Metering Protocols of the ISO Tariff will also impose additional costs on QFs. The Metering Protocols, however, have been accepted by the Commission. Furthermore, the ISO's Meter Service Agreement for ISO Metered Entities, which requires compliance with those protocols, was the subject of an Uncontested Settlement, to which CAC was a party.[29]

CAC has stipulated that it has the burden of proof in challenging the existing Metering Protocols as applied to QFs. Joint Stipulation of the California Independent System Operator Corporation, the Cogeneration Association of California, and ARCO CQC Kiln and Withdrawal of Motion to Strike by the California Independent System Operator Corporation, filed in Docket Nos. ER98-997-000, *et al.* (Dec. 1, 2000). Neither CAC nor Edison, however, have introduced any evidence in this proceeding that the costs of installing the metering and telemetry required by the ISO Tariff are excessive in the context of any QF's revenues and operating costs, particularly taking into account additional revenues a QF may receive through its expanded ability to participate in the ISO's markets after signing a PGA.

[29] The ISO's Meter Service Agreements were before the Commission in Docket Nos. ER98-1499-000, *et al.*

The most that CAC has attempted to show is that the ISO's requirements relating to metering and telemetry for QFs will impose excessive costs because the ISO "would require the separate metering of all Load points and all generators and the separate telemetry of all generators." CAC Br. at 39. Actually, the testimony cited makes no such statement. Rather, it supports the conclusion that the ISO Tariff *authorizes* the ISO to impose such a requirement. Tr. (Le Vine) at 261:12-264:12; Tr. (Ross) at 505:12-19. Nothing in the ISO Metering Protocols themselves requires the installation of a separate meter on each Generating Unit, generating output, or separate Load point. *See* ISO Metering Protocol. The ISO can, in fact, allow the aggregation of certain portions of a facility, reducing significantly the number of meters. Tr. (Le Vine) at 261:12-262:16. If a QF wishes to contest the reasonableness of the ISOs decision to require additional meters, the ISO Tariff provides for arbitration of the issue. ISO Metering Protocol § 5.1.7; Tr. (Ross) at 506:8-13. In addition, as part of the Settlement in the Meter Service Agreement proceeding, the ISO explicitly agreed to work with CAC in order to bring CAC QF projects into compliance with those requirements while observing certain cost constraints. Offer of Settlement, filed in Docket No. ER98-1499 (Sept. 10, 1999). That Settlement also provides that, if the parties are unable to reach agreement, a QF may seek relief from the Commission pursuant to Section 206 of the Federal Power Act. Id. Nonetheless, rather than work through the procedures established by the Settlement, CAC in this proceeding attempts to obtain a blanket exemption for QFs from the applicability of the Metering Protocols.

Moreover, subsequent to the Settlement, the ISO has taken steps to relieve certain small Generators from costs where the ISO concluded that the benefits of telemetering or metering those Generators did not justify the costs. Amendment No. 35 to the ISO Tariff provided that Generating Units under 10 MW are exempt from having to install telemetry and direct control equipment if they do not participate in the ISO's markets, and those under 1 MW are permitted to undertake "net" metering configurations.

CAC's case boils down to a request that the Commission conclude (1) in the absence of any information about the costs and revenues of QFs, that the metering costs will be excessive; (2) that the ISO will unreasonably require more meters than are necessary, and (3) that an arbiter or the Commission will uphold the ISO's unreasonable requirements. There is simply no basis for concluding that the ISO metering and telemetry requirements impose excessive costs.

The two other primary charges that the ISO levies on Market Participants, the transmission Access Charge, and the Grid Management Charge, are before the Commission in Docket No. ER00-2019 and ER01-313 respectively. Ex. No. ISO-7A (Le Vine) at 13:3-4, 18:2-3; California Independent System Operator Corp., 91 FERC ¶ 61,205 (2000) (accepting the ISO's Access Charge methodology as proposed in Amendment No. 27 for filing, and establishing hearing and settlement judge procedures); California Independent System Operator Corp., 93 FERC ¶ 61,337 (2000) (accepting the ISO's Grid Management Charge methodology for filing, and establishing hearing procedures). Both CAC and Edison are parties to those proceedings, and have raised arguments concerning the justness and

reasonableness of those charges as applied to QFs therein. *Id.* These issues concern charges under the ISO Tariff that impact numerous Market Participants, and thus, they are more properly resolved in proceedings concerning the ISO Tariff than in a proceeding concerning an agreement that primarily serves a vehicle to ensure compliance with the ISO Tariff. Ex. No. ISO-7A (Le Vine) at 4:13-17. Moreover, exemptions from the ISO Tariff provisions in this regard, like most other exemptions that CAC requests, will impose additional costs on other Market Participants. Such exemptions should therefore be considered in proceedings, such as Docket Nos. ER00-2019 and ER01-313, in which the various parties affected by the charges are participating and the Commission can have the benefit of all such viewpoints.

Edison contended below that the ISO's policies with respect to QFs will discourage QFs from participating in the market and decrease Energy supplies. Edison I.B. at 26. *See also* Ex. No. CAC-2 (Ross) at 18:17-23; Ex. No. SCE-2 (Minick) at 4:19-5:2. Although the ISO has consistently admitted that QFs that sign PGAs will likely realize increased costs associated with Ancillary Services, metering, and telemetry, *see* ISO I.B. at 27-31, neither CAC nor Edison presented any evidence demonstrating that those increases would be "excessive" with respect to any actual QF facility. Additionally, these costs would be offset by the revenue the QF receives by selling into the ISO's markets. For example, with high prices for some hours,[30] a one-time meter cost of $2,500 is fairly trivial and does not warrant

[30] *See generally San Diego Gas & Electric Co. v. Sellers of Energy and Ancillary Services, et al.,* 95 FERC ¶ 61,418 (2001).

the level of concern expressed by CAC. This fact seems to have escaped any discussion by CAC and Edison. Therefore, all of CAC and Edison's arguments regarding the isolation of QF Generation due to "excessive" ISO-imposed costs remain speculative.[31]

Edison also argued that the procurement of unnecessary reserves would, in turn, increase prices for both reserves and Energy. Edison I.B. at 26. While Edison is correct in stating that the procurement of additional reserves may affect the price of Ancillary Services and real-time Energy, Edison apparently fails to realize that the ISO cannot ignore reliability criteria because of speculation over price increases. *See* ISO Tariff § 2.3.1.3.1; Cal. Pub. Util. Code § 345 (requiring the ISO to meet WSCC and NERC reliability criteria). It is undoubtedly true that the ISO could effect a downward adjustment in prices by simply ignoring its reserve obligations altogether. No one, however, could reasonably advocate such irresponsible conduct.

Edison and CAC also failed to consider that, to the extent the QFs were to self-provide their Ancillary Services, there would be no cost increase to the market. ISO Tariff Sec. 2.5.20.2. Moreover, the ISO's procurement of reserves on the basis of more accurate information regarding gross Load could even result in the procurement of a lesser amount of Ancillary Services to the extent that the ISO's current procurement, which is slightly in excess of that required by its Load forecast (in an attempt to account for the current lack of complete information on Control

[31] Mr. Minick testified on behalf of Edison that he personally knew of QFs that had already decided not to participate in the ISO's markets because of the ISO's policies. Ex. No. SCE-2 at 16:2-9. Edison notes that the ISO did not rebut this assertion. However, Mr. Minick

Area gross Load) is actually greater than the amount that the more accurate information on QF behind-the-meter Load would show the ISO actually needs to procure to meet WSCC reliability criteria. Nevertheless, as the WSCC has made its reliability criteria perfectly clear with respect to the issues in this proceeding, the ISO is obligated to meet those criteria to the best of its ability.

No more valid is CAC's argument below that the ISO has an "incentive to over-procure ancillary services to the financial detriment of every other party." CAC I.B. at 49. CAC does not explain exactly what "incentive" the ISO has to over-procure, but assuming that it involves avoiding WSCC penalties, the ISO would note that it does have the authority to pass such penalties through to Market Participants. ISO Tariff § 2.5.26.5. In addition, any such "incentive" is irrelevant to this proceeding unless it is related to the ISO's ability to obtain information on QF behind-the-meter Load. In fact, having more accurate information on QF behind-the-meter Load would reduce any "incentive" the ISO might have to over-procure Ancillary Services to cover the unavailability of that information.

Finally, Edison below presented evidence that the ISO's forecast Load during a specific period regularly exceeded, by varying amounts, its actual Control Area Load. Edison asserted in its Initial Brief that the deviation between the ISO's forecast Load and its actual Control Area Load would not be reduced by adding in QF behind-the-meter Loads. The ISO has never asserted that such a reduction was a benefit of including QF behind-the-meter Loads in Load forecasts. Ex. No. ISO-11A (Deluca) at 16:10-16. Instead, the ISO explained why Edison's arguments

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never specifically identified any such QFs, and thus, it is difficult for the ISO to rebut such an unsubstantiated statement.

concerning over-forecasting are irrelevant. Simply stated, without information on behind-the-meter Loads, the ISO cannot accurately procure reserves for those Loads. *See* Tr. (Minick) at 459:7-460:18. While there may be periods in which the existing deviation between forecast and actual Load may result in the ISO procuring adequate reserves for QF behind-the-meter Loads, there may very well also be periods where this is not the case. *See id.* For example, if there existed 1000 MW of QF behind-the-meter Loads, and the ISO had "under-forecasted" an amount of 800 MW and procured reserves on this basis, then the ISO, according to WSCC criteria, would have under-procured by 5 to 7% of the 200 MW difference (10-14 MW of Operating Reserve). Inclusion of behind-the-meter Loads will allow the ISO to ensure more effectively that adequate Operating Reserves are maintained at all times.

G. There Is No Basis for Requiring the ISO to Include in a PGA for QFs the ISO Tariff Provisions Regarding Dispatch and Curtailment of Generation. (Issue III.A.)

Upon review of the evidence, the Initial Decision concluded "I do not find that the requirement of the PGA that the QFs abide by the ISO Tariff provisions governing the ISO's ability to dispatch or curtail generation . . . are not just and reasonable." I.D. at 65,145.[32] The Initial Decision nonetheless found that "[o]n balance" incorporating the provisions of the ISO Tariff in a QF-specific PGA is the better outcome. *Id.* The Initial Decision's conclusion is not a sufficient basis for directing a modification of the *pro forma* PGA in this regard.

[32] An apparent typographical error repeating the words "the provisions of the ISO Tariff" has been omitted in the quotation.

The burden on the ISO is simply to show that the *pro forma* PGA is just and reasonable. *New England Power Company*, 52 FERC ¶ 61,090 (1990). The ISO is not required to show that other provisions are not, "on the balance," preferable. *Id.* There is no basis for requiring the modification of a portion of a filed rate that the proponent has shown to be just and reasonable.

Moreover, inclusion of the ISO Tariff provisions in a QF-specific PGA makes little sense in light of the Initial Decision's conclusion that it is just and reasonable for the provisions of the ISO Tariff to prevail in the case of conflicts with the PGA. I.D. at 65,148. Under such circumstances, if the ISO revised the ISO Tariff provisions regarding dispatch and curtailment, they would control over the earlier version incorporated in the PGA. The incorporation in the PGA would serve no purpose. Further, in order to correct the inconsistency, the ISO would have to file an amended PGA for every QF. There is no reason for such inefficiency – particularly when there has been no finding that the *pro forma* PGA is unjust or unreasonable in this regard.

H. The Application to QFs Through the PGA of the Penalties Set Forth in the ISO Tariff is Just and Reasonable. (Issue III.C.)

CAC argued below that the *pro forma* PGA should be modified for QFs to exempt them from penalties in the ISO Tariff for disregarding an ISO direction to operate below the QFs minimum operating level. The Initial Decision found that CAC has not shown that the ISO Tariff currently provides an onerous penalty. It noted CAC concerns about any future penalties but concluded that "this is not the same as demonstrating that the penalties in the ISO Tariff are not just and reasonable" and that "any amendment to [the ISO] tariff must be approved by the Commission with an opportunity to be heard." *Id.* at 65,145.

The logical ruling based on these findings is that the application through the PGA of the penalties set forth in the ISO Tariff is not unjust or unreasonable. The Initial Decision ruled, however, that "the application through the PGA of the penalties set forth in the ISO Tariff is not necessary." *Id.* at 65,145. The ISO presumes that this ruling reflects a typographical error. Regardless of the cause, however, the Commission should correct the ruling to reflect the logical result of the findings in the Initial Decision – that the application through the PGA of the penalties set forth in the ISO Tariff is just and reasonable.

I. It Is Not Necessary in Order for the *Pro Forma* PGA to Be Just and Reasonable That the *Pro Forma* PGA Specify That the Execution of the PGA Does Not Deprive a QF of Any Unexpressed Legal Right. (Issue IV.D.)

In the proceeding below, CAC sought inclusion in the QF PGA of a provision indicating that the execution of a PGA does not deprive the QF of any existing legal rights. CAC I.B. at 61-62. The ISO asserted that such a provision was unnecessary. The Initial Decision concluded that there is no substantive disagreement among the parties, but that such a provision "does not impose any new obligation on the ISO while it would afford CAC a protection it believes it should have." I.D. at 65,148.

If the Initial Decision is correct that the provision places no additional obligation on the ISO – and the ISO believes it is – then the provision is redundant. CAC had the opportunity through these proceedings to identify any particular legal right that it was concerned about waiving, and failed to do so. The absence of a redundant provision cannot render the *pro forma* PGA unjust or unreasonable, even if CAC "believes it should have" such a provision. Moreover, if the Commission agrees with the ISO regarding the other issues discussed above, requiring a

separate modification solely to include a redundant provision would appear most inefficient.

VI. Conclusion

For the reasons described above, the Commission should reject the Initial Decision's findings described in the ISO's Exceptions above.

Respectfully submitted,

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