UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

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

REPLY BRIEF OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

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To: The Honorable Jacob Leventhal,
Presiding Administrative Law Judge

Pursuant to Rule 706 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.706 (2000), and the briefing schedule established by the Presiding Judge, the California Independent System Operator Corporation ("California ISO" or "ISO") submits its Reply Brief in this proceeding.

I. INTRODUCTION

Southern California Edison Company ("Edison") and the Cogeneration Association of California ("CAC") throughout their Initial Briefs, and in particular CAC in its Executive Summary and Background sections, contend that application of the ISO Tariff to Qualifying Facilities ("QFs")[1] through the *pro forma* Participating Generator Agreement ("PGA") would violate the letter and spirit of the Public Utility Regulatory Policies Act of 1978 ("PURPA'). Such assertions

[1]The ISO notes that many of CAC's and Edison's arguments are not applicable to all QFs, but only to cogenerators.

have also been rampant throughout the prepared testimony and cross-examination in this proceeding. When examined, however, they lack substance.

CAC summarizes four specific alleged violations of PURPA's provisions. First, CAC refers to "provisions" that exempt QFs from regulation applicable to other utilities. The ISO Tariff, however, does not "regulate" QFs. It merely sets forth the conditions upon which QFs can avail themselves of the services provided under the ISO Tariff. Under CAC's interpretation, apparently, the requirement that QFs pay for transmission service itself would violate PURPA – which the Commission has ruled it does not, *ExxonMobil Chemical Company, et al. v. Entergy Gulf States*, 91 FERC ¶ 61,106 (2000).

Moreover, PURPA does not exempt QFs from regulations applicable to utilities. Rather, it *authorizes* – not requires – the Commission, in promulgating regulations for QFs, to exempt QFs from the Federal Power Act and other regulations in whole or in part. Thus, even if the ISO Tariff could be considered a regulation, PURPA would not preclude the Commission's approval of its application to QFs.

Second, CAC asserts a violation of PURPA's "provisions" that require that a QF's obligations to its thermal host be honored. The deficiency with this assertion is that there are no such provisions. The closest CAC can get is the requirement of 18 C.F.R. § 292.307 that a QF not be required to provide energy in system emergencies except by agreement. *See also LUZ Solar Partners III, Ltd.*, et al., 49 FERC ¶ 61,070 (1989); *Small Power Production and Cogeneration Facilities*, Order No. 69, FERC Statues & Regulations ¶ 30,128 (1980). Of

course, the *pro forma* PGA would constitute an agreement to provide such Energy in the manner required by the ISO Tariff, i.e., consistent with the operating limits communicated to the ISO. CAC does not object to the ability of the ISO to call upon QFs in this manner in emergencies.

Even if PURPA did include such provisions, however, subjecting a QF to the ISO Tariff would not violate those provisions. As described in the ISO's Initial Brief and below, neither CAC nor Edison has identified any manner in which the ISO Tariff would currently permit any interference with a QF's obligation's to its thermal host. Further, any changes to the ISO Tariff that would increase the ISO's ability to affect a QF operations would require Commission approval in proceedings in which QFs could raise any objections.

Third, CAC cites provisions prohibiting the imposition of excessive roadblocks to QF interconnection. PURPA's provisions on interconnection are, of course, not specific to QFs, *see* 16 U.S.C. § 824, and the Commission's QF regulations simply require utilities to connect with QFs. 18 C.F.R. § 292.303. Nonetheless, the ISO Tariff provides specific nondiscriminatory interconnection procedures, which no one has alleged are excessively burdensome. ISO Tariff § 5.7 The costs of which Edison and CAC complain in these proceedings are either costs of participating in the ISO's markets or costs of the assurance of reliability. Even if they were considered costs of interconnection, however, there has been no showing that they are excessive or not properly allocated to QFs.

Fourth, CAC points to provisions that prohibit the discriminatory allocation of charges and rates to QFs. In its arguments regarding Issue II.A.5, below, the

ISO shows the fallacy of the claim that its rates and charges to QFs are discriminatory.

More generally, both CAC and Edison assert that the application of the ISO Tariff to QFs through the *pro forma* PGA would be contrary to the mandate of PURPA that the Commission encourage QF power production. This is indeed the mandate of PURPA, but PURPA does not direct the Commission to encourage QF power production at all costs. Indeed, PURPA is very specific that the Commission is to encourage QF power production by rules designed to ensure that electric utilities sell electric energy from qualifying facilities and purchase energy from them. 16 U.S.C. § 824a-3. It does not direct the Commission to exempt QFs from the costs normally associated with assurance of reliable service. It does not direct the Commission to ignore its responsibilities under the Federal Power Act to ensure nondiscriminatory rates. It does not direct the Commission to ignore State directives regarding reliability. Quite simply, encouraging QF power production cannot be a mantra for cost-shifting, unfair advantages, or ignoring reliability concerns.

Neither can CAC and Edison use the need to attract Generation to California as a bludgeon to force unjustified special treatment of QFs. Increasing Generation is critical to California, but efforts to accomplish that goal cannot ignore other concerns. Certainly, for example, more Generators would build in California if exempted from all environmental regulations or if freed from rate supervision. Indeed, more Generators would build in California if they were assured permanent waivers of dispatch, curtailment, and outage protocols, such

as the QFs seek here. Despite the need for more Generation, however, no one suggests that such benefits should properly be given to non-QF Generators.

The issues in this proceeding cannot be decided by simple reference to PURPA's purpose. Rather, the issue is simply whether the ISO Tariff, which the Commission has found just and reasonable, imposes unjust or unreasonable costs and requirements on QF. Because the record reveals no such unjust or unreasonable costs and requirements, the Presiding Judge should find the application of the ISO Tariff to QFs through the *pro forma* PGA just and reasonable.

II. DISCUSSION

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

In its Initial Brief, the ISO explained that its *pro forma* PGA simply ensures compliance with the ISO Tariff, which (except for certain pending issues) has been accepted by the Commission. ISO Br. at 11. As a result, the *pro forma* PGA must be considered *prima facie* just and reasonable. The ISO noted that neither Edison nor CAC have demonstrated that applying the provisions of the ISO Tariff to QFs in general, or to the particular QFs whose PGAs are at issue in this proceeding, would be unjust or unreasonable. *Id*. at 12-13.

CAC's argument in its Initial Brief on Issue I.A. regarding whether the *pro forma* PGA is just and reasonable as applied to QFs,[2] is devoted primarily to distinguishing QF operation from that of other Generators.[3] (Most of the distinctions, however, apply only to cogenerators, not all QFs). It then asserts with conclusory statements that, because of these distinctions, application of the ISO Tariff to QFs would (1) "diminish the ability to operate the industrial site in an integrated manner to optimize thermal and electric energy supply"; (2) "lead to process, safety and health problems on the site" because the Tariff would "reduce the site's control over the curtailment and dispatch of QF Generation"; and (3) lead to placing additional costs on QF-served electric energy consumption as if the electrical energy were served from the grid, thus negating traditional cost-savings of installing QF Generation. CAC Br. at 15. As shown in the ISO's Initial Brief and below, there is no evidentiary support for the first two assertions. There is also no evidence of the degree to which, if at all, any new costs imposed would negate cost savings. In some cases the ISO has shown that the costs are simply the necessary costs required to ensure reliability or for doing business. For other cost components, the propriety of the costs is pending before the Commission in other dockets. In no instances has CAC acknowledged the potential profits from participating in the ISO markets. With

[2]The Commission Trial Staff ("Staff") also supports a QF-specific PGA. Initial Brief of Commission Trial Staff ("Staff Br.") at 2. The discussion of CAC's and Edison's arguments herein address all of Staff's arguments.

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

prices in the hundreds and thousands of dollars for some hours,[4] a one-time meter cost of $2,500 is fairly trivial and does not warrant the complaint CAC has alleged. Accordingly, there is no basis for concluding that applying the ISO Tariff to QFs would be unjust or unreasonable.

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?

In its Initial Brief, Edison proposes several modifications to the *pro forma* PGA for QFs "intended to ensure that QFs that remain under Power Purchase Agreements ("PPAs") with their Utility Distribution Company ("UDC") do not violate or otherwise impair the UDC's contractual rights as a result of the execution of a PGA." Edison Br. at 2. Edison first proposes adding a provision to the PGA requiring that the ISO notify the UDC when a QF that has a PPA with that UDC seeks to enter into a PGA. Edison also asserts that "procedures are needed in the PGA to address how possible disputes over operating instructions and PPA terms and conditions should be resolved." *Id*. at 4. Edison argues that the ISO's suggestion that QFs can voluntarily provide the necessary information to Edison is "unacceptable." *Id*. at 3.

There is no basis for imposing upon the ISO a burden to police the compliance of QFs with their contracts with Utility Distribution Companies ("UDCs"). The ISO enters into agreements with numerous Market Participants, and cannot, from a practical perspective, undertake to monitor the various

[4] *See San Diego Gas & Electric Co. v. Sellers of Energy and Ancillary Services, et al.*, 93

(footnote continued on next page)

commitments that those entities have made in contracts with third parties. The ISO must be able to assume that Market Participants can act in a commercially responsible manner without the ISO acting as some sort of commercial oversight agent. Moreover, such a responsibility has little relevance to the ISO's goals as a system operator.

Edison has cited no precedent – and indeed the ISO is aware of no precedent – that a jurisdictional agreement may be deemed unjust and unreasonable because it fails to require one party to take actions to ensure that the other party does not violate contracts with third parties. Commission regulations and the terms of the ISO Tariff and the *pro forma* PGA will provide Edison with more than sufficient notice of contractual arrangements between the ISO and QFs: PGAs and revisions to the conditions listed in Schedule 1 must be filed with the Commission, which will notice the filing, Tr. (Shockey) at 478:18-479:7; QF power sale contracts with Edison are listed on Edison's PGA, *id*. at 472:17-473:11, so that the ISO will need to confirm the QF's authority with Edison prior to executing a PGA; and most likely the QF will need to revise its Scheduling Coordinator Agreement with Edison. *Id*. at 475:14-476:15. There is no basis for imposing additional requirements.

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?

FERC ¶ 61,121 at 61,353 (2000).

In its Initial Brief, the ISO explained that it is required by California law and the Commission-approved ISO Tariff to operate the ISO Controlled Grid according to criteria at least as stringent as the standards of the Western Systems Coordinating Council ("WSCC"). ISO Br. at 16-17. That responsibility requires the ISO to maintain reserves for QF behind-the meter Load. *Id*. at 18. In order to maintain such Operating Reserves and properly allocate the costs thereof, the ISO must have real-time information on Loads (by means of Generation telemetry) and metering of Demand. *Id*. at 22-24.

Edison and CAC ask the Presiding Judge to find – in essence – that it is unjust and unreasonable for the ISO to fulfill these responsibilities. They ask the Presiding Judge to disregard the testimony of the only witness qualified to explain the WSCC criteria, to disregard the logic of his explanation, and instead to find that the ISO need not maintain Operating Reserves for behind-the-meter load simply because Edison never did so when it was in charge. Perhaps in recognition of the inherent vulnerability of the "it's-always-been-done-this-way" argument, they also twist federal law to interpret it as precluding the ISO's policies, manufacture a claim of discrimination through inapt comparisons, and argue that QFs should not pay their share of the costs.

As discussed below, CAC's and Edison's best efforts cannot justify a conclusion that the ISO, in fulfilling its statutory and regulatory obligations according to an authoritative and logical interpretation of those obligations, is acting unjustly or unreasonably.

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?

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?

Because the arguments advanced on each these issues by CAC and Edison overlap, the ISO will address them in one section.

The ISO's Determination of Operating Reserve Requirements Based on Behind-the-Meter Gross Load Reasonably Implements WSCC Criteria

As explained in the ISO's Initial Brief, Mr. William Comish, who according to uncontradicted testimony is authorized to interpret WSCC criteria, has testified that the ISO must maintain reserves for behind-the-meter load. ISO Br. at 18. Edison and CAC contend that it would be reasonable for the ISO to disregard the "opinion" of Mr. Comish with respect to WSCC criteria because he lacks knowledge with respect to QF operations and federal and state laws concerning QFs. Edison Br. at 8; CAC Br. at 34-36.

Edison and CAC have offered no qualified testimony that WSCC criteria do not require the ISO to maintain reserves for behind-the-meter load. Edison and CAC – quite ironically, inasmuch as CAC itself asked for a subpoena of a person designated by WSCC to interpret its criteria, and that person was Mr. Comish – instead ask the Presiding Judge to disregard the testimony because it was not approved by the WSCC Board and because Mr. Comish is not familiar with Federal and state law regarding QFs.

As an initial matter, Mr. Comish is an employee of WSCC, who appeared on behalf of WSCC in response to a subpoena and testified to his authority to so speak. *See* Tr. (Comish) at 88:8-5; 158:13-159:8; Ex. ISO-14 at 12:8-13:20. Additionally, Mr. Comish stated that he represented WSCC and had the concurrence of the Executive Director as to the position that he was testifying on. Tr. (Comish) at 158:13-159:3. To the ISO's knowledge the Commission has not established a requirement that the Board of Directors of an organization approve the testimony of a witness speaking on behalf of the organization. There is also no evidence that the Board of the WSCC has established such a requirement. Neither Mr. Minnick nor Mr. Shockey testified that their testimony was approved by Edison's Board; yet the ISO does not suggest that it should therefore be disregarded. Finally, there is no testimony that the WSCC Board has taken any position contrary to the testimony of its authorized witness.

Moreover, Mr. Comish's lack of knowledge regarding QF operations and federal and state laws relating to QFs is completely irrelevant to his ability to testify as to WSCC criteria. All that is relevant to Mr. Comish's interpretation of WSCC criteria are his knowledge of those criteria and their applicability to those Control Areas that comprise the WSCC, including the California ISO Control Area. Accepting Edison's and CAC's argument would be tantamount to concluding that the testimony of a medical doctor that an athlete had broken a bone was suspect because the doctor did not understand the rules of the sport in which the injury had occurred. While federal and state law concerning QF operations may provide arguments in another proceeding that certain WSCC

criteria should be modified, they do not cast any doubt on the validity of Mr. Comish's interpretation in this proceeding, or his authority to offer such an interpretation. *See* Tr. (Comish) at 87:24-88:7.

CAC also asserts that the ISO's position that its "Control Area firm load" includes QF behind-the-meter Loads is erroneous based on "a review of WSCC definitions." CAC Br. at 23. First, CAC cites the WSCC definition of "load responsibility," which specifies "firm load"; CAC then simply presumes its conclusion. It announces, with no support or even logic, as if by fiat, that behind-the-meter Loads are not firm because they rely on Standby Service and are served when an outage occurs. *Id.* Saying it is so, however, does not make it so. CAC's assertion contradicts the only authoritative interpretation of the term "firm load," by Mr. Comish, who testified that a behind-the-meter Load is firm for the purpose of Control Area reliability[5] unless it automatically and simultaneously disconnects in the event of a Generator failure. Ex. ISO-14 at 12:8-13:20; Tr. (Comish) at 156:11-23. Moreover, CAC's attempt to define "firm load" is illogical. Behind-the-meter Loads are firm from a reliability perspective for the very reason that the ISO must, *at all times,* have Operating Reserves available to serve that Load if the Generation serving it becomes unavailable – regardless of whether the Generation serving it at the time is on-site, is UDC standby Generation, or is "standby" Generation supplied by the ISO, for which the QF may be charged by

[5]Whether the Load is firm for the purposes of the UDC's distribution service is not relevant to this proceeding.

the UDC through its retail rates for standby service. *See* Tr. (Minick) at 436:15-437:3.

CAC follows up its presumed definition of "firm load" by presenting NERC definitions of "load" and "system," as if they were relevant to the discussion. CAC Br. at 24. These definitions were introduced through cross-examination with no effort to provide the context in which NERC uses them. (In fact, NERC's Operating Manual defines Operating Reserves as capacity necessary above *Demand*. *See* NERC Operating Manual, Terms Used in the Policies (approved February 15, 2000) at T-4 (included as Appendix A)). Demand refers not to Load or System, but to a customer's use of Energy. *Id*. at T-2. In addition, NERC states that the regional reliability councils are responsible for determining necessary Operating Reserves. *See* NERC Operating Manual, Policy 1 – Generation Control and Performance (approved March 29, 2001) at P1-1 (included as Appendix B).[6] Indeed, CAC did not question Mr. Comish about the NERC definitions of Load and System other than to ask whether he knew if NERC has a different definition of Load than does WSCC. Tr. (Comish) at 140:1-11; 140:24-141:1. Rather, CAC questioned Mr. Deluca regarding those provisions. Tr. (Deluca) at 574:19-575:3; 575:20-576:3. Absent informationi on

[6]The ISO is uncertain whether a motion for official notice of the provisions of the NERC Operating Manual is necessary, inasmuch as the Commission has referred directly to these procedures in a number of orders. *See, e.g., Carolina Power & Light Co.*, 93 FERC ¶ 61,032 at 61,071 (2000). Nonetheless, in an abundance of caution, the ISO is attaching to this brief a motion requesting that the Presiding Judge take notice of this and other documents.

the relevance and purpose of these definitions, this evidence cannot serve to undermine the sworn testimony of Mr. Comish.[7]

Additionally, CAC argues that the ISO's "alleged reliance on WSCC criteria" does not permit it to violate federal law with respect to diversity and the procurement of reasonable amounts of Operating Reserves. CAC Br. at 34. CAC also asserts that the ISO, in relying on the interpretation of Mr. Comish "is merely deflecting responsibility from itself." *Id*. at 36. CAC bases this argument on the fact that the WSCC has never taken any action against the ISO for its net Load treatment, and that Mr. Comish was not even aware that net metering arrangements existed in California. *Id*. at 36-37. To the extent that CAC is suggesting that the ISO ignore its legal and tariff responsibilities merely because the WSCC has to date not penalized the ISO, that argument is absurd and requires no further response.

If, instead, CAC is suggesting that the WSCC does not prohibit net metering, it's argument is correct but meaningless. The WSCC does not promulgate or enforce metering requirements in the various WSCC Control Areas; its criteria and oversight in this regard are limited to whether applicable Operating Reserve criteria have been met. Tr. (Comish) at 106:23-107:1, 111:16-112:4. In order to ensure better procure Operating Reserves in the absence of adequate information regarding behind-the-meter Load, the ISO

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[7]Moreover, both California State law and the FERC-jurisdictional ISO Tariff require the ISO to "meet planning and Operating Reserve criteria *no less stringent* that those established by WSCC *and* NERC." ISO Tariff § 2.3.1.3.1; Cal. Pub. Util. Code § 345 (emphasis added). Thus,

(footnote continued on next page)

procures Operating Reserves slightly in excess of that required by its Load forecast. Tr. (Deluca) at 385:13-24.[8] This practice, however, is not adequate for two reasons: First, it may result in under- or over-procurement, threatening reliability and WSCC sanctions or increasing costs. Second, it means that the costs of this additional procurement are not borne by the behind-the-meter Loads that necessitate it, but rather by the rest of the Market Participants.[9] ISO Br. at 23.

Finally, Edison also argues that the entire basis of the ISO's position regarding the need for telemetry, metering, and scheduling is because the WSCC requires it. Edison Br. at 7. This argument is simply inaccurate. In his prepared testimony, Mr. Deluca explicitly stated that it was necessary to procure Ancillary Services for QF behind-the-meter Loads because of the effect that

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to the extent that either organization mandates criteria of a more stringent nature than those promulgated by the other, the ISO must comply with the more stringent set of criteria.

[8]Thus, Edison's assertion that the ISO forecasts its Control Area Load in "virtually the same manner" that Edison did, and that this forecast, using QF net Loads, reflects the probability that a portion of QF Generation will be off-line in any given hour, Edison Br. at 12, misses the point. The issue is the amount of Load that must be met in the case of Generator Unit failure, not just the portion of that Load that is currently being served by Energy from Generators that are not on-site.

[9]Based on a chart of PG&E hourly retail Loads and Standby Service on August 4, 1999, CAC claims that the ISO's gross Load proposal "emphasizes precision at the expense of accuracy." CAC Br. at 32-34. This evidence is irrelevant. First, there is no information to conclude whether this is a typical day. Second, quantities of Standby Service Load that must be served on any particular day (which result from unplanned or planned outages and thus may or may not represent the Load that Operating Reserves are designed to meet) cannot appropriately be compared with errors in Load forecasts (from which Operating Reserves are calculated taking only a small percentage). Finally, the purpose of reserves is to have available the maximum amount of standby Energy that may be required due to unplanned outages. In fact, if the estimate of approximately 400 MW of QF behind-the-meter Load in SCE's Service Area is applicable to PG&E, approximately 3% of those Loads were served by Standby Service. If all the Standby Service identified in the chart were unplanned and represented a typical set of outages, this suggests that obtaining reserves in the 5 to 7% range is quite reasonable. Of course, in the absence of all of these assumptions, that data is useless.

those facilities have on the ISO Controlled Grid. Ex. ISO-11A (Prepared Direct Rebuttal Testimony of David Deluca) at 12:14-13:6. Moreover, the ISO does not base its need for gross revenue metering and scheduling on the need to satisfy WSCC criteria. Data on QF behind-the-meter Loads (through Generation telemetry) is sufficient in that respect. *Id.* at 17:10-20. As the ISO explained in its Initial Brief, however, gross metering and scheduling are necessary in order to fairly apportion the costs of services provided to QFs. ISO Br. at 24-25.

Procuring Operating Reserves Based for QF Behind-the-Meter Loads Results in a More Reliable System

In their respective Initial Briefs, both CAC and Edison explicitly state that *all* witnesses in this proceeding agree that the practice of procuring Operating Reserves based on the net Load of QFs has not impaired the ability of the ISO to operate the Control Area, and that it did not impair the ability of Edison and the other IOUs to operate their former Control Areas.[10] Neither the written testimony filed in this proceeding nor the testimony provided at hearing, however, support such a sweeping conclusion. Mr. Deluca, in his prepared testimony, when asked the question "why should the ISO include on-site and over-the-fence load in determining its Ancillary Services requirements," explained that "these Loads are located within the metered boundaries of the Control Area." Ex. ISO-11A

[10] *See* CAC Br. at 18 ("[N]ot one witness in this proceeding testified that the current net treatment of QF on-site Generation and load currently impairs the ISO's reliable center area operation of the California grid or that net Load treatment ever impaired the utilities' reliable operation of the California grid when the investor-owned utilities were the Control Area operators."); Edison Br. at 10 ("Every relevant witness is in agreement that the practice of procuring Operating Reserves for QFs' behind-the-meter load on a net basis has worked; that is, netting historically has not resulted in reliability problems for SCE or the ISO.")

(Deluca) at 12:14-18. At hearing, Mr. Deluca testified that he believed that the system, under Edison, was "running reliably," but also that he thought there was a potential that WSCC criteria were not being met. Tr. (Deluca) 381:10-17.

Mr. Comish testified that *as far as he knew*, Edison was operating its Control Area reliably. Tr. (Comish) at 110:18-23 (emphasis added). However, Mr. Comish also clarified that the WSCC can not closely supervise conformity with operating criteria because the WSCC "does not have knowledge of the details of every system." Tr. (Comish) at 126:4-10. Moreover, Mr. Comish clarified that the WSCC is not concerned with the methodology in which a Control Area operator procures Operating Reserves, so long the total amount procured is consistent with WSCC criteria. Tr. (Comish) at 106:23-107:1. Neither witness adopted the sweeping conclusion suggested by CAC and Edison.

Of course, inasmuch as the purpose of Operating Reserves is to address contingencies, Ex. ISO-11A (Deluca) at 6:10-16, a system will run reliably unless a contingency occurs such that there are insufficient reserves to respond. The fact that a utility is lucky enough historically to have avoided a system breakdown does not prove that the risk was acceptable. The determination of the amount of tolerable risk is precisely the reason that Operating Reserves standards are created by the applicable reliability councils with input from all of the Control Areas.

Although Edison is correct that restructuring has not altered the determination of the quantity of Operating Reserves because the creation of a "market" has not changed reliability standards, Edison Br. at 12, *see also* CAC

Br. at 19, the more relevant fact is that it has changed the manner in which the Control Area operator can procure such services and thereby satisfy those criteria. As a vertically-integrated utility that owned Generation facilities during a period of significantly lower Demand, Edison on any given day likely had unused Generation capacity available to meet behind-the-meter Load in excess of what it deemed required reserves. *See* Ex. ISO 11A (Deluca) at 12:5-11. The ISO has no such luxury; it must ensure that contingencies are met using Operating Reserves that it procures through its markets for Ancillary Services. *Id*. at 6:23-7:4. What this means is that the ISO has far less control over the resources in its Control Area than Edison did when it owned those resources – resulting in a need to engage in contingency planning with greater scrutiny and care.

Additionally, because the ISO's "gross" method of assessing reserve requirements will ultimately result in the procurement of reserves based on *all* Control Area loads, rather than just a percentage of those Loads as is the case under a "net" regime, it is simply inaccurate to characterize that result as "no more reliable." A contingency can occur with respect to any portion of a QF's behind-the-meter Load. Therefore, a system that ensures that all Loads have been factored into reserve calculations is certainly more reliable than one that does not.

Edison also asserts that data on QF behind-the-meter Loads is not really critical to ensuring reliability, because if it was, the ISO would not have allowed exemptions from its gross metering policy, as it has done with those QFs that have entered into PGAs with the ISO to date. Edison Br. at 11. Despite Edison's

best efforts to paint it as such, however, this issue is not so simple. Although the ISO seeks to obtain the most accurate information on all Loads and Generation in its Control Area, on a pragmatic level, it recognizes that QFs have not previously been operating in a manner consistent with the process mandated in the ISO Tariff, and that a certain period of adjustment is necessary to allow those QFs to work with the ISO towards eventual compliance. Tr. (Deluca) at 342:22-343:13. This explanation is supported by the purely temporary nature of all of the existing metering exemptions at issue.

The Standby Service Provided to QFs by Edison (and other IOUs) Does Not Relieve the ISO of its Obligation to Procure an Appropriate Amount of Operating Reserves for QF Loads

Edison asserts that the ISO's position on the procurement of Operating Reserves for QF Loads "fails to account for the fact that QF behind-the-meter loads take Standby Service from the UDC with whom they are interconnected." Edison Br. at 16. Edison states that its divestiture of Generation does not affect the relevancy of its standby contracts with QFs because Edison "still schedules its own Generation to meet its own Loads, to the extent that it has sufficient resources, and its Loads include its standby customers." Edison Br. at 17 (footnote omitted). The evidence in this proceeding, however, demonstrates that Edison's Standby Service is woefully inadequate to ensure the maintenance of appropriate Operating Reserves, which is the ISO's, not Edison's, responsibility. *See* Tr. (Minick) at 435:7-20; Ex. ISO-11A (Deluca) at 12:9-12.

That Edison schedules in a manner that includes Standby Service Customers does not reveal anything about amount of reserves, if any, that

Edison sets aside to serve unplanned outages of its Standby Service Customers. As described in the ISO's Initial Brief, under Edison's previous practices, it would set aside only 5.6 MW of the 25 to 28 MW that are required under WSCC criteria to meet total QF behind-the-meter Loads of 400 MW (at 5 to 7% of Load). There is nothing in the record, however, that suggests that Edison today is setting aside even that amount. Scheduling with the ISO the amount of Energy that Edison expects to provide as Standby Service accomplishes nothing – the ISO does not procure reserves based on Schedules, which, in general, significantly understate actual Demand. *See, e.g., San Diego Gas & Electric Co. v. Sellers of Energy and Ancillary Services*, et al., 93 FERC ¶ 61,121 at 63,361 (2000) (noting that the record in the San Diego investigation indicated a "chronic pattern of underscheduling Load and Generation" and that as a result "reserve capacity has been diverted from its intended purpose – protecting against the loss of a component of the system"). The fact that the amount of Energy that Edison provides through Standby Service will be included in the Load (though telemetered Generation) for which the ISO procures Operating Reserves does not change the fact that the behind-the-meter Load will not be included. Because the ISO must obtain reserves for the latter, Standby Service is irrelevant.[11]

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[11]This conclusion is reinforced by the proposed order of the CPUC in Docket No. 99-10-025, which was attached to CAC's Initial Brief. Under that Order, if approved, UDCs must remove charges for back-up Energy and Generation capacity from standby rates. *Order Instituting Investigation Into Distributed Generation*, CPUC Docket R.99-10-025 (March 19, 2001) at § 7, p. 62. The order allows a separate charge for electricity procured in order to serve a QF, *id.*, it does not even make mention of charges for Generation capacity procured. Inasmuch as standby "backup" service would be reduced by this order to distribution and transmission services, it would not be even a partial substitute for the Operating Reserves to meet system reliability needs.

Federal and State Law Does Not Prohibit Procuring Operating Reserves or Requiring Metering, Telemetry, and Scheduling on a Gross Basis for QFs

Both Edison and CAC assert that the ISO's "gross" policies with respect to QFs are inconsistent with both federal and state law. CAC argues that FERC rules concerning the provision of maintenance and back-up services "implicitly require net metering."[12] CAC Br. at 27

This argument that the ISO is violating FERC precedent by procuring reserves for all behind-the-meter Loads was addressed in the ISO's Initial Brief. The ISO does not assume simultaneous reductions in QF Generation any more than it does with respect to other Generating Units in its Control Area. ISO Br. at 19, n. 7. Order No. 69 states that "probabilistic analyses of the demand of qualifying facilities will show that a utility will probably not need to reserve capacity on a one-to-one basis to meet back-up requirements." *Small Power Production and Cogeneration Facilities*, Order No. 69, FERC Statutes & Regulations ¶ 30,128 at 30,889 (1980). Because the ISO only proposes to procure Operating Reserves equal to 5 to 7% of the QF's behind-the-meter Load, consistent with WSCC requirements, it will not be procuring those reserves on a one-to-one basis. *See* Tr. (Comish) at 123:9-126:3 (explaining that procuring Operating Reserves for QF behind-the-meter Loads does not assume simultaneous outages).

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[12]Citing the CPUC Proposed Decision in Docket R.99-10-025, CAC asserts that "California's standby tariff design is consistent with the requirements articulated in the FERC Rules." CAC Br. at 28-29. Beyond the fact that the decision has not been adopted by the CPUC, CAC's reliance on that decision, as described in note 11, *supra*, is inapt.

Edison also cites to two Commission decision which Edison asserts demonstrate a FERC mandate for net metering arrangements. The first case, *PJM Interconnection, LLC, et al.*, 94 FERC ¶ 61,251 (2001), simply held that a generator could net its station power requirements (i.e. station auxiliary power) against that facility's output when it was self-supplying that power. *Id.* at 61,882. As discussed in greater detail below, the net treatment of station auxiliary power does not logically compel the net treatment of QF behind-the-meter Loads.[13] In the second case discussed by Edison, *MidAmerican Energy Co.*, 94 FERC ¶ 61,340 (2001), the Commission refused to declare that PURPA preempted an Iowa Public Utility Commission policy that required a utility company to offer net billing arrangements for certain facilities. *Id.* at 62,216. The decision dealt solely with the issue of preemption of retail rate arrangements; it did not address the substantive merits of procuring Operating Reserves, and requiring metering and scheduling, based on QF behind-the-meter Loads.

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?)

In its Opening Brief, CAC argues 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

[13]Additionally, the ISO already allows for net treatment of auxiliary power.

Tariff *authorizes* the ISO to make such a requirement. Tr. (Le Vine) at 261:12-264:12; Tr. (Ross) at 505:12-19. As the ISO fully explained in its Initial Brief, to the extent that the ISO attempted to impose unreasonable requirements, a QF could bring a challenge before the Commission at that time. ISO Br. at 30. Moreover, the ISO has entered into a binding settlement to work with QFs to keep metering costs down. *Id.* at 29-30.

CAC also "note[s] that the ISO Staff's interpretation of its tariff is relatively recent." CAC Br. at 39. However, the cited current testimony reflects nothing more than some ISO Staff confusion over the metering requirements of the ISO Tariff during "the early days of [ISO] operations." Tr. (Dozier) at 201:10-18. Regardless of ISO delays in implementing the metering requirements, the ISO Tariff's explicit prohibition on net metering has been consistent. It is regrettable that any efforts by the ISO to ease the transition to compliance with the ISO Tariff requirements are being used against it.[14]

Issue II.A.4: Is it Just and Reasonable to Require QFs That Enter Into PGAs to Gross Schedule Generation and Load?

In its Initial Brief, the ISO explained that it was necessary for a QF entering into a PGA with the ISO to schedule all of its Load and Generation with

[14]CAC also correctly notes 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 Br. at 40. If a QF has in place equipment to accomplish such a disconnection in the event of a Generating Unit failure, the ISO would not need to procure Operating Reserves for the behind-the-meter Load that had been served by that QF. The circumstances under which disconnection might otherwise occur are unclear, and could be expected to be rare. Such a disconnection might cause the ISO to overprocure Ancillary Services. Nevertheless, the QF could employ the means provided under the ISO Tariff to challenge any allocation of Ancillary

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the ISO on a “gross” basis in order for the ISO to properly allocate to that QF its share of real-time Energy charges and credits. ISO Br. at 25-26. Edison argues that the ISO’s contention that gross metering is necessary to avoid cost-shifting is erroneous because cost shifts will not occur if the ISO procures Operating Reserves only for net Loads and allocates its costs in the same manner. Edison Br. at 18-19. Edison is incorrect. Cost shifts would still occur because behind-the-meter Loads would still be benefiting from the ISO and the reserves that it procures in order to maintain reliability. *See* Ex. ISO-11A (Deluca) at 12:14-13:6 (explaining that in the event of a QF outage, that facility would automatically be served with energy from the ISO Controlled Grid). There is no distinction from a procurement standpoint as to which reserves are procured for which loads. The end result under Edison’s suggestion would simply be that the ISO would procure less reserves, therefore operating less reliably, and all Loads other than behind-the-meter Loads would be paying the full costs of those reserves, despite the fact that on-site loads would benefit equally from those reserves. However, even assuming, arguendo, that Edison is correct, its assertion carries little force because, as the ISO has explained a number of times, it must, pursuant to WSCC mandate, procure reserves based on calculations that include QF behind-the-meter Loads. ISO Br. at 16-18.

CAC argues that “gross” scheduling would force a QF to retain a Scheduling Coordinator ("SC"), which it implies could prove difficult, and would

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Services costs to its disconnected behind-the-meter Load under such circumstances. *See* ISO Tariff SABP § 4.4.

create a "new list of considerations for the retail customer such as line losses and imbalance charges." CAC Br. at 40-41. 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 § 2.1.1. 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 do not have a PPA and make no sales into the ISO's markets.[15]

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 SC, the SC 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. To date, the Commission has not approved an SC services tariff. *See Pacific Gas & Electric Co.*, 90 FERC ¶ 61,010 (2000) (setting PG&E's SC services tariff for hearing, but suspending

[15]If a QF has a PPA, the UDC who 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.

that hearing pending the resolution of the PG&E Transmission Revenue Balancing Account proceeding).

The ISO concedes that QFs that sign PGAs will be subject to Imbalance Energy charges, as are all Loads.[16] Gross scheduling, however, does not affect the need for the ISO to provide Imbalance Energy. If a QF's Generator provides insufficient Energy to serve the behind-the-meter Load plus any off-site sales, the insufficiency will be made up with Imbalance Energy. Unless the SC makes up for the difference with unscheduled Generation, the Imbalance Energy will show up as a difference between the SC's schedule and metered demand. Either way, someone will pay for the Energy needed by the behind-the-meter Load. Gross scheduling simply allows for the proper allocation of cost.

CAC has provided no explanation as to why it is not just and reasonable to allocate to QFs charges for Imbalance Energy it requires. Indeed, Mr. Ross admitted in prepared testimony that QFs should not be insulated from "economic penalties" such as Imbalance charges. CAC-12 (Ross) at 14:20-15:2.

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.

Both Edison and CAC asserted that the ISO's procurement of Operating Reserves for behind-the-meter Loads is discriminatory. Edison asserts that the ISO procures Operating Reserves for customers with no on-site Generation

[16]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

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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 Br. at 14-15. CAC contends 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 Br. 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. Of course, if one accepts that assumption, then there is no reason to advance the discrimination argument.

Contrary to Edison's and CAC's arguments, and 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 Br. at 13-14, 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. 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-

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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.

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. Ex. ISO-11A (Deluca) at 12:19-13:6, Tr. (Minnick) at 451:7-10.

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 Operating Reserves 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 Operating Reserves 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. (Minnick) at 451:7-10 (admitting that the effect on the System of a QF generator outage is the same as a non-QF generator outage).[17]

CAC presents several examples which it asserts demonstrate this "discrimination." CAC Br. at 42-45. It provides the following assumptions:

[17]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.

	Customer A	Customer B
Example 1	20 MW on-site Generation; Potential 20 MW consumption; 20 MW being served by on-site Generation	Potential 20MW consumption; 10 MW being served from grid
Example 2	20 MW on-site Generation; Average annual 20 MW consumption served entirely from onsite Generation	20 MW maximum consumption; 10 MW annual consumption service by UDC
Example 3	Plant run by steam turbine, electric motor back-up	Plant run by electric motor; Standby Service back-up

With respect to example 1, CAC is correct that the ISO would measure the Load for Plant B as 10 MW and Plant A as 20 MW for purposes of procuring Operating Reserves; this is not discriminatory because, in the event of a Generating Unit outage, Plant A would require 20 MW of reserves delivered from the grid, while Plant B would require only 10 MW. In example 2, because Plant A required 20 MW of reserves and Plant B required 10 MW of reserves, the cost allocation is nondiscriminatory. Example 3 simply does not raise issues related to this proceeding. Operating Reserves are procured to address Generation and transmission contingencies, not failures of industrial processes. *See* Ex. ISO-11A (Deluca) at 6:10-16. If the steam turbine of Customer A is operating, a Generating Unit failure will not affect Customer A, and reserves are not required. If Customer A is relying upon electrical service, then its Load will be included in the ISO's forecasts, and the ISO will procure Operating Reserves for it.

Edison also attempts 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 Br. 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 QF Generators are also permitted to net their station auxiliary Loads against their total output.

Edison raises 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 asserts 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 Br. at 25. Also, Edison contends 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 Br. at 25-26. Finally, Edison claims that the WSCC does not agree with the ISO's 1 MW exemption. Edison Br. 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 FERC 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 was just and reasonable, as it only applied to small distribution-level Generating Units that were 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.

Issue II.B: Are There Financial and Commercial Implications of the ISO's Proposed Policy That Affect the Justness and Reasonableness of the ISO's Proposed Policy, and, if Yes, What Are Such Effects?

The ISO, in its Initial Brief, stated that the costs that would be imposed upon QFs as a result of signing the ISO's *pro forma* PGA would be just and reasonable. ISO Br. at 27. With respect to Ancillary Services, the ISO explained that costs to QFs would be reasonable because the ISO was obligated by WSCC criteria to procure such services for QF behind-the-meter Loads. *Id.* at 27-28.

The ISO also explained that metering and telemetry costs would not be excessive based on the ISO's explicit commitment to work with QFs to limit those costs. *Id*. at 29-32. Finally, with respect to Access and Grid Management Charges, the ISO urged the Presiding Judge to decline to address issues relating to those costs in this proceeding, as they are before the Commission in other pending cases. *Id*. at 32.

CAC suggests 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 Br. at 45. Similarly, Edison contends that the ISO's policies with respect to QFs will discourage QFs from participating in the market, decrease Energy supplies, and lead to the procurement of unnecessary reserves which would, in turn, increase prices for both reserves and Energy. Edison Br. at 26. 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 Br. at 27-31, neither CAC nor Edison has 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. This fact seems to escape 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 qualitative.[18]

The arguments that Edison and CAC raise with respect to increased costs due to the procurement of Operating Reserves on a gross basis are also flawed. While Edison and CAC are correct in stating that the procurement of additional reserves may affect the price of Ancillary Services and real-time Energy, they apparently fail to realize that the ISO cannot ignore reliability criteria because of speculations 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. Such a result, however, would be ludicrous.

Edison and CAC also fail to consider that, to the extent the QFs were to self-provide their Ancillary Services, there would be no cost increase to the market. 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 correct procurement slightly in excess of that required by its Load forecast (in an attempt to account for the current lack of complete information on Control Area gross Load) is actually greater than the amount that the more accurate information on

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[18]Mr. Minnick 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. SCE-21 at 16:2-9. Edison notes that the ISO did not rebut this assertion. However, Mr. Minick never

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QF behind-the-meter Load would show the ISO actually needs to procure to meet WSCC reliability criteria. 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 that the ISO has an "incentive to over-procure ancillary services to the financial detriment of every other party." CAC Br. at 48. 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, with respect to Edison's assertion that the deviation between the ISO's forecast Load and its actual Control Area Load will not be reduced by adding in QF behind-the-meter Loads, the ISO has never asserted anything to the contrary. Ex. ISO-11A (Deluca) at 16:10-16. Instead, the ISO has explained why Edison's arguments 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. (Minnick) at 459:7-460:18.

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specifically identified any such QFs, and thus, it is difficult for the ISO to rebut such an unsubstantiated statement.

While there may be periods in which the 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).

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.

In its Initial Brief, the ISO explained that there is nothing in the dispatch provisions of the ISO Tariff or Protocols that would unduly harm a QF's ability to provide for its on-site industrial processes while retaining the option to sell Energy into the market because, except in emergency situations, the ISO is limited to dispatching those units according to bids into the ISO's markets. ISO Br. at 33-35. The ISO also explained that QFs are also protected by their ability to identify operating "limitations" to the ISO through Schedule 1 of the *pro forma* PGA and on a daily basis through Outage scheduling, and the ISO's obligation to act in accordance with Good Utility Practice. *Id*. at 35-36.

CAC argues that the ISO's Tariff provisions regarding Generation dispatch and curtailment "entirely ignore the integrated nature of QF Generation and the Load it serves" and in order for the PGA to be just and reasonable "ISO dispatch procedures (including curtailment) must explicitly recognize . . . that unduly interfering with the level of output for cogenerating facilities can adversely impact

the industrial process supported by the cogenerator and create severe hardship for the integrated QF operation." CAC Br. at 50. CAC maintains that this need can be addressed by “carving out from a cogenerator’s total electrical output that portion of the electrical output that is fully participating in the energy markets.” CAC contends that such a limitation is reasonable because the ISO lacks sufficient expertise to ensure that a QFs steam host and related industrial Load are safely operated. CAC also cites several Commission decisions for the proposition that the ISO may not dispatch or curtail Generation that the QF has not made available to the Energy markets. CAC Br. at 51-52.

CAC’s continued exhortations about the importance of the industrial process, however, cannot hide the simple fact that CAC has failed to posit any circumstances under which compliance with the ISO Tariff would interfere with the industrial process. In this context, it is useful to examine the specific findings that CAC asks the Presiding Judge to make.

CAC states that a QF must have the opportunity to provide the ISO with operating instructions that address the following:

(1) the minimum operating limit below which the ISO may only require reductions in a QF’s output in the event of an emergency;

(2) the procedures for implementing reductions in the event of an emergency to prevent damage to equipment, harm to operating personnel, or risk to public health and safety;

(3) Information regarding contacts within the QF's control room, or in the case of remote operators the contact information to be utilized by the ISO in the event of an emergency;

(4) Specific operating instructions regarding differences that a QF contract may have with the terms of the ISO tariff, including any provisions regarding outage scheduling; and

(5) Operational requirements to assure the integrated operation of the QF with respect to thermal energy output.

CAC Br. at 53.

CAC also requests contractual provisions that prohibit the ISO from knowingly issuing dispatch orders that: require a QF to reduce its Generation below the delineated minimum operating limits other than in an emergency; conflict with operating instructions provided by the QF; or result in damage to the QF's equipment, provided that such equipment limitation is provided to the ISO and incorporated in the QF's operating instructions. *Id.*

These concerns should be evaluated in light of the following provisions of the ISO Tariff, in addition to the matters noted in the ISO's Initial Brief.

Section 5.1.3. . . . Each Participating Generator shall [provide]: . . .

> c) notification to the ISO of the persons to whom an instruction of the ISO should be directed on a 24-hour basis, including their telephone and facsimile numbers; and
>
> (d) the provision of communications, telemetry and directed control requirements, including a direct link from the control room of the Generator to the ISO in a manner that ensures that the ISO will have the ability, consistent with the ISO Tariff and Protocols, to direct the operations of the Generator

as necessary to maintain the reliability of the ISO Controlled Grid.

DP 2.6 In issuing the Dispatch Instructions, the ISO will not intentionally request . . . Participating Generators . . . to exceed any inherent plant rating or local restriction imposed by the plant operator . . . in order to protect the design and/or operational integrity of its plant or equipment. . . .

DP 6.1 The ISO shall operate the ISO Controlled Grid in accordance within the limit of . . . established operating limits and procedures.

DP 9.2.1 All Participants within the ISO Control Area shall comply fully with the ISO's Dispatch Instructions unless such operation would impair public health or safety. . . .

DP 9.4.2 Where a [QF] has entered into an agreement with a PTO before March 31, 1997 for the supply of energy to the PTO (an "Existing Agreement"), the ISO will follow the instructions provided by the parties to the Existing Agreement in the performance of its functions related to outage coordination, and not require a QF to take any action that would interfere with the QF's obligations under the Existing Agreement. Each QF will make reasonable efforts to comply with the ISO's instructions during a System Emergency without penalty for failure to do so.

Because the *pro forma* PGA requires the ISO to abide by the ISO Tariff, all of these protections would apply to cogenerators that sign PGAs. It is difficult to conceive what protections a congenerator would require in addition to the Tariff limitations on the ISO's ability, in normal conditions, to dispatch Generating Units other than in accordance with bids and Schedules, the limitations imposed by operating instructions included in Schedule 1 of the PGA (which, as demonstrated by Exh. ISO-17, are not limited to technical characteristics),[19] the

[19]The ISO's "expertise" or alleged lack thereof is irrelevant, because the ISO would rely upon the QF operators to provide, through their bids and facility limitations listed in Schedule 1 of the PGA, sufficient information to avoid situations in which dispatch orders conflicted with the QF's on-site industrial obligations. *See* Ex. ISO-5 (Prepared Direct Testimony of Michael Dozier)

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requirement that the ISO operate in accordance with Good Utility Practice, and the ISO Tariff provisions cited above.

Finally, CAC contends that the PGA must define "emergency" in a manner that precludes the ISO from exercising emergency control over a QF Generating Unit for economic emergencies and market manipulation. CAC Br. at 52. Examples of emergencies that CAC would preclude are Congestion Management, the selection of large units to solve Voltage Support because of ease of operation, or other economic decision making processes. *Id*. The ISO Tariff, however, already limits the definition of System Emergency to conditions "beyond the normal control of the ISO that affect the ability of the ISO Control Area to function normally." ISO Tariff, definition of "System Emergency." Economic decision making processes do not fall within that definition. *See, e.g., California Independent System Operator Corp.,* 91 FERC ¶ 61,026 (2000) (ISO cannot exercise its authority to dispatch units out of market in order to address market conditions).

Issue III.B: Is the Application to QFs through the PGA of the ISO Tariff Provisions Regarding Outages Scheduling Just and Reasonable?

The ISO demonstrated, in its Initial Brief, that the application to QFs, through the *pro forma* PGA, of ISO Tariff provisions regarding outage coordination is just and reasonable because nothing in the ISO's Outage

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at 7:11-16. Moreover, except for a QF Generating Unit supplying Regulation to the ISO -- and therefore placed by the QF on ISO Automatic Generation Control -- a QF Operator always retains the ultimate discretion whether to operate its QF, Generating Unit in compliance with any particular ISO dispatch instruction.

Coordination Protocol denies QFs substantial flexibility in scheduling Outages. ISO Br. at 38-39. In its Opening Brief, CAC's only argument is that cogenerators must coordinate outages with their industrial processes and that there may be situations in which a QF "cannot await ISO approval of an outage without experiencing significant losses in production." CAC Br. at 54. Surprisingly, CAC fails to address the fact – as thoroughly explored in testimony and cross-examination – that the ISO's only current authority to reject a planned outage is with regard to changes requested within seven days of the outage, that the ISO must approve or reject the change by the afternoon following the request, and that the ISO can only reject such a request for reasons of System Reliability. ISO Tariff §§ OCP 4.4.2, OCP 4.4.4, OCP 4.4.10. Further, the Outage Coordination Protocol already includes provisions to address situations which require that a Generating Unit be removed from service or restricted in its operation to avoid a Forced Outage, which is defined as an outage "for which sufficient notice cannot be given to allow the Outage to be factored into the Day-Ahead or Hour-Ahead Market Scheduling Process." ISO Tariff § OCP 6; ISO Tariff definition of "Forced Outage." There is simply no basis, evidentiary or logical, to exempt QFs from the ISO's current outage protocols.

As described by both the ISO and CAC, amendments to the ISO Tariff that are currently pending before the Commission would expand ISO control over the outage schedules of all facilities. ISO Br. at 39-40; CAC Br. at 55. Even though CAC has raised its arguments regarding proposed amendments in the pending proceedings before the Commission, it nonetheless asks the Presiding Judge to

decide that QFs should be exempt from whatever outage protocols the Commission approves. If the Commission agrees with CAC, there is no reason for such an exemption. If the Commission does not, such a exemption would, of course, simply allow CAC, and force the Commission, to revisit all of the same arguments when the Commission reviews the Presiding Judge's Initial Decision. The Presiding Judge should not indulge CAC in this manner.

Issue III.C: Is the Application to QFs through the PGA of the penalties set forth in the ISO Tariff Just and Reasonable?

In its Initial Brief, the ISO explained that neither the ISO Tariff nor the *pro forma* PGA provides for penalties in the circumstances that CAC had identified,[20] and any amendment to include such penalties would be subject to Commission approval in a proceeding in which all interested parties could participate. Edison concurs with the ISO's position on this issue in its Initial Brief. Edison Br. at 34-35. In its Opening Brief, CAC simply states that "[f]ailure to exempt QFs from punitive penalties and charges would effectively negate the QF protections afforded by this Commission to permit QFs to provide electric and thermal energy to fulfill its commercial, industrial, and contractual obligations fir prior to the sale of any surplus energy to the grid." CAC Br. at 56. The ISO believes that its discussion of this issue in its Initial Brief constitutes an adequate response to this unsupported conclusion.

[20]CAC expressed concern that the ISO would impose penalties on a QF for operating at its minimum operating level despite receiving a Final Schedule from the ISO that required it to operate below that level. Ex. CAC-2 (Prepared Direct Testimony of James A. Ross) at 30:1-7.

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?

In its Initial Brief, the ISO explained that there is no reasonable basis for exempting PGAs executed by QFs from federal law requiring Commission approval of the termination of jurisdictional contracts. ISO Br. at 41-42. The only justification that CAC suggests in its Opening Brief is that requiring Commission approval in order for a QF to exercise its right to terminate a PGA would waste Commission resources. CAC Br. at 56. CAC reasons that because a QF, unlike a "regulated utility," has no obligation to remain interconnected with the grid, a termination proceeding before FERC would "serve no practical purpose other than to provide the Commission with notice of termination." *Id*. CAC states that it would not object to a "notice provision" in the *pro forma* PGA. *Id*.

As the ISO explained in its Initial Brief, however, the Commission has explicitly established by rule the requirement that it approve the termination of all service agreements entered into by jurisdictional entities; this includes contracts with nonjurisdictional entities. ISO Br. at 42. Apparently, therefore, the Commission has already concluded that such oversight is not a waste of its resources. Moreover, if the Commission, as CAC suggests, has no authority to require a QF to remain interconnected and take service under a PGA, then the ISO is unclear why a QF would object to retaining this provision in the PGA.

CAC suggests that it would be an inefficient utilization of a QF's resources to create a docket with the Commission "every time a QF terminates its PGA in order to seek Commission approval." CAC Br. at 57. The cost to an individual QF should be relatively de minimis, however, considering the limited scope of the proceeding and the fact that termination would presumably be a one-time event for an individual QF. More importantly, regulation always imposes certain costs on regulated parties; these are simply a part of the cost of doing business in a regulated industry. CAC's arguments are simply another example of CAC's attempts to exempt QFs that sign PGAs – in order to participate in the markets and reap the benefits thereof – from bearing the costs borne by other Market Participants.

CAC also reiterates in its Opening Brief the argument that "the ISO should be required not to oppose or take any action that is not fully supportive of the termination agreement before FERC or any other regulatory agency." CAC Br. at 57. As with other such demands, CAC fails to provide any justification whatsoever for this assertion. As the ISO explained in its Initial Brief such a requirement without adequate justification, would unduly discriminate against Generators who have not been offered similar guarantees. ISO Br. at 43.

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?

In its Initial Brief, the ISO explained that the Commission's prerogatives and the need to address changing circumstances in the California electricity markets dictate that the ISO have the ability to propose changes to its Tariff that would apply to QFs by virtue of the PGA. ISO Br. at 44-45.

CAC argues that the "lack of contractual security" arising from having the ISO Tariff control over the terms of the PGA "is harmful to cogenerators whose situation does not fit the model of a merchant plant and may want to negotiate terms that accommodate its unique circumstances." CAC Br. at 58. CAC also notes that the ISO has conceded that a QF would have greater contractual security with fixed terms that were not subject to the ISO Tariff as it currently exists or may be amended. *Id*.

Indeed, the ISO does not deny that a QF would possess greater security with fixed terms. From a commercial law perspective, this is undoubtedly true. Nevertheless, CAC's arguments are not convincing. Contractual security is not, and cannot be, the sole consideration in assessing the justness and reasonableness of electric utility service agreements. The electric industry is structured around the concept of providing service under open-access Tariffs. This allows a utility to offer consistent and non-discriminatory terms to all customers that wish to take services offered by the utility. Moreover, as the ISO explained in its Initial Brief, providing service in this manner allows it the flexibility to make necessary adjustments in response to changing circumstances in the industry. ISO Br. at 44-45. CAC, while it aptly describes the unique requirements of QFs, offers no convincing reason why they are more deserving

of contractual security than other entities that take service from the ISO. It is certainly true that greater contractual security might encourage more QFs to participate in ISO markets; the same, however, could be said of any Market Participant. QFs have the same ability as other Market Participants to protect their interests regarding amendments to the ISO Tariff. Ex. ISO-5 (Dozier) at 11:20-24. There is no basis for providing special protection.

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?

In its Initial Brief, the ISO clarified that, as a corporation formed under the laws of the State of California, it is required to abide by federal and state law, and therefore, no provision in the PGA is necessary to impose upon it that responsibility. ISO Br. at 46. The ISO also stated that if a QF is concerned that, by signing a PGA, it is waiving some pre-existing right, or if a QF is seeking a requirement that the ISO honor some right of the QF that the ISO is not otherwise obligated to honor, the QF may identify such rights and obligations in Schedule 1 of the PGA. *Id.*

In its Opening Brief, CAC argues that such a provision is, in fact, necessary because "the ISO lacks the level of understanding necessary to ensure that QF rights are not violated." CAC Br. at 60. By way of support, CAC points to two excerpts from the hearing transcript. The first involves the admission of ISO witness Deborah Le Vine that although she did not recall reading a particular section of the California Public Utilities Code, that it had, in

fact, been read to her by someone at an earlier CPUC hearing. Tr. (Le Vine) at 309:6-21, 318:10 – 319:5. The second excerpt involves Ms. Le Vine's misunderstanding with respect to the provision of the ISO Tariff which requires the ISO to honor QF PPAs, which she subsequently corrected. Tr. (Le Vine) at 241:12-15, 255:14-16.

CAC's argument is illogical and utterly unconvincing. Ms. Le Vine, not being an attorney, was not proffered by the ISO as an expert with respect to California state law. The ISO maintains both in-house and outside counsel to ensure that the ISO complies with applicable legal standards. Therefore, to the extent that ISO personnel are charged, as Ms. Le Vine is, with encouraging cogeneration, they work alongside counsel to ensure that the requirements of both federal and state law as to that issue are satisfied. As for the second excerpt cited by CAC, Ms. Le Vine subsequently clarified the source of her confusion with respect to her first answer. Tr. (Le Vine) at 255:21 - 256:19, 257:7-15. (ETCs vs. PPAs). A misunderstanding by a witness regarding the subject of a series of questions is hardly indicative of a general lack of understanding on the part of the ISO, or on the part of Ms. Le Vine. Indeed, the remainder of Ms. Le Vine's testimony clearly demonstrates her competence with respect to her responsibilities and matters well-beyond.

Finally, even if CAC were correct that the ISO lacks the "level of understanding" necessary to respect its rights, there would still be no logical nexus between its diagnosis and its remedy. Redundant contractual provisions add no protections.

III. CONCLUSION

WHEREFORE, the California ISO requests that the Presiding Judge rule on the issues in this proceeding in accordance with the discussion above.

Respectfully submitted,

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Dated: June 13, 2001

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the restricted service list compiled by the Presiding Administrative Law Judge in the above-captioned proceeding.

Dated at Washington, D.C. this 13th day of June, 2001.

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Michael Kunselman