

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;
Nora Mead Brownell, and Suedeen G. Kelly.

California Independent System
Operator Corporation

Docket Nos. ER01-313-004

Pacific Gas and Electric Company

ER01-424-004

OPINION NO. 463-B

ORDER DENYING REHEARING AND AFFIRMING IN PART
AND REVERSING IN PART INITIAL DECISION

(Issued November 7, 2005)

1. In Opinion No. 463, the Commission resolved a number of issues concerning the California Independent System Operator Corporation's (CAISO or ISO) unbundled Grid Management Charge (GMC).¹ As relevant here, Opinion No. 463 held that the Control Area Services component of the GMC should be allocated on the basis of gross load (referred to as Control Area Gross Load, or CAGL), but created an exception to gross load allocation for certain so-called "behind-the-meter" costs.
2. In Opinion No. 463-A, the Commission affirmed the basic concept of CAGL cost allocation for the Control Area Services charge with a behind-the-meter exception.² However, in response to requests for rehearing on the issue, the Commission replaced the prior exception with a new one, *i.e.*, that behind-the-meter load served by "generators which are not modeled by the ISO in its regular performance of transmission planning and operation should be exempted from the CAGL charge."³
3. Several parties requested rehearing of Opinion No. 463-A, for the most part raising issues concerning the behind-the-meter exception. Having considered these requests, on November 16, 2004, the Commission issued an order in which it deferred further action

¹ *California Indep. Sys. Operator Corp.*, 103 FERC ¶ 61,114 (2003).

² *California Indep. Sys. Operator Corp.*, 106 FERC ¶ 61,032 (2004).

³ *Id.* at P 20.

on the rehearing requests “pending the compilation of a sufficient record on this issue” and “establish[ed] limited (with respect to both time and subject matter) hearing procedures so that such a record may be compiled.”⁴ On April 15, 2005, the judge presiding over the remanded proceedings issued her Initial Decision.⁵

4. In this order, the Commission denies the requests for rehearing and/or clarification of Opinion No. 463-A, and affirms in part and reverses in part the Initial Decision. In so doing, we hold that having examined the evidence compiled in the proceeding before the administrative law judge, there is substantial evidence supporting an exemption from gross load allocation of Control Area Services charges for load with behind-the-meter generation that is not modeled by the ISO.

5. Because the Commission subsequently approved a revised GMC charge effective on January 1, 2004, today’s decision only governs the three year period between January 1, 2001, and December 31, 2003.⁶

Background

6. On November 1, 2000, as amended on December 15, 2000, the ISO submitted to the Commission its proposed GMC for 2001, including amendments to the ISO Tariff that revised the manner in which the ISO charged the GMC to Scheduling Coordinators.⁷ The ISO proposed to allocate the GMC to three cost categories. One such category was Control Area Services, which includes the ISO’s costs, as the control area operator, associated with ensuring safe, reliable operation of the transmission grid within its

⁴ *California Indep. Sys. Operator Corp.*, 109 FERC ¶ 61,162 at P 2 (2004) (Hearing Order).

⁵ *California Indep. Sys. Operator Corp.*, 111 FERC ¶ 63,008 (2005) (Initial Decision).

⁶ The subsequent GMC was unbundled into seven rate categories, thus allocating the charge with much greater precision. *See California Indep. Sys. Operator Corp.*, 105 FERC ¶ 61,406 (2003).

⁷ Additionally, Pacific Gas and Electric Company (PG&E) submitted to the Commission its proposed Pass Through Tariff, which was consolidated with the GMC proceeding.

control area. The Control Area Services costs include, for example, the cost of scheduling generation, imports, exports and wheeling transactions the day before and the hour before actual operations.⁸

7. The Commission issued an order which accepted the GMC, suspended it for a nominal period to become effective January 1, 2001, subject to refund, and set it for hearing.⁹ On May 10, 2002, the presiding judge issued an Initial Decision which, as relevant here, recommended approval of the ISO's proposal to employ CAGL allocation for the Control Area Services category.¹⁰

8. In Opinion No. 463, the Commission generally affirmed the presiding judge's decision that Control Area Service costs should be allocated on the basis of CAGL.¹¹ However, the Commission determined that customers with behind-the-meter generation who "primarily rely on that generation to meet their energy needs" are allocated too great a share of Control Area Services costs under the CAGL method.¹² Therefore, the Commission explained:

To take into account the more limited impact such customers have on the ISO's grid, the Commission finds that they should be allocated [Control Area Services] costs on the basis of their highest monthly demand placed on the ISO's grid, rather than on gross load. In this manner, their more limited dependence on the ISO grid will be reflected in their allocation of [Control Area Services] costs. Customers eligible for such treatment are those with generators with a 50 percent or greater capacity factor.¹³

⁸ The two GMC cost categories other than Control Area Services for the locked-in period were the Inter-Zonal Scheduling category, which included the ISO's costs of administering congestion management, as well as the auction, monitoring and secondary market monitoring and scheduling of Firm Transmission Rights, and the Market Operations category, reflecting the ISO's costs of market and settlement-related services.

⁹ *California Indep. Sys. Operator Corp.*, 93 FERC ¶ 61,337 (2000).

¹⁰ *California Indep. Sys. Operator Corp.*, 99 FERC ¶ 63,020 (2002).

¹¹ Opinion No. 463 at P 20 - 26.

¹² *Id.* at P 27.

¹³ *Id.* at P 28 (footnote omitted).

9. In Opinion No. 463-A, the Commission denied the requests for rehearing of Opinion No. 463 concerning the CAGL allocation for Control Area Services charges, but granted those contesting the exception for customers who primarily relied on behind-the-meter generation to meet their energy needs. On this issue, the Commission determined that the exception was not supported by record evidence and would create implementation problems.¹⁴ However, we expressed continued support for an exclusion from the Control Area Services charges for certain behind-the-meter generators.¹⁵ Therefore, we ordered that behind-the-meter load served by:

generators which are not modeled by the ISO in its regular performance of transmission planning and operation should be exempted from the CAGL charge. That is, those generators that will not cause the ISO to incur administrative or operating expenses should . . . have the load exempted from the [Control Area Services] charge.[¹⁶]

10. Requests for clarification and/or rehearing of Opinion No. 463-A on the CAGL exemption issue were filed jointly by the Cogeneration Association of California and the Energy Producers and Users Coalition (CAC/EPUC); Modesto Irrigation District (Modesto), Sacramento Municipal Utility District (SMUD), Southern California Edison Company (SoCal Edison), and the Transmission Agency of Northern California (TANC).¹⁷

11. PG&E and Turlock Irrigation District (Turlock) filed requests for rehearing raising issues concerning their interconnection agreement. PG&E also requested rehearing on the Commission's decision that the ISO's Scheduling Coordinators, rather than the ISO itself, should bill Governmental Entities for their behind-the-meter load. Additionally, Turlock filed a response to PG&E's request for rehearing with respect to the interconnection agreement dispute. We address these issues in part II of the Discussion, *infra*.

¹⁴ Opinion No. 463-A at P 19.

¹⁵ *Id.* at P 20.

¹⁶ *Id.*

¹⁷ The City of Santa Clara, California and Silicon Valley Power (collectively, SVP) filed a request for rehearing on the issue, incorporating by reference TANC's arguments.

Requests for Rehearing

12. On rehearing, SoCal Edison argues that there was no record evidence supporting the conclusion that load served by unmodeled generation does not cause the ISO to incur costs. Rather, according to SoCal Edison, the record indicated that, while “no generators under 10 MW in size are modeled by the ISO,” there are a number of Qualifying Facility generators which are under 10 MW but sell their excess power to utility distribution companies.¹⁸

13. SoCal Edison maintains that because the Control Area Services charge is based on the load of scheduling coordinators, rather than generation, the focus should be on whether “particular loads cause the ISO to incur costs[.]”¹⁹ In this regard, SoCal Edison observes, “there is ample record evidence that the ISO does not perform [Control Area Services] tasks on behalf of unmodeled *load*.”²⁰

14. TANC argues on rehearing that the exception to the use of CAGL will fail to reflect the stated purpose of the exception, which is to take into account the more limited impact customers with behind-the-meter generation have on the ISO grid. According to TANC, “[t]he inference to be drawn” from the record “is that the ISO would be expected to maintain a position that behind-the-meter generation is included in its studies and is modeled for operational purposes.”²¹ This would result, TANC maintains, in “no generation [being] exempt from the use of CAGL for billing the [Control Area Services] charges.”²²

15. TANC further argues that, by basing the gross load exemption on whether generators are modeled by the ISO, the Commission “has given the ISO unfettered discretion to deny” the exemption to potentially eligible customers.²³ TANC believes that the Commission has abdicated its regulatory responsibility by not setting guidelines

¹⁸ SoCal Edison Request for Rehearing at 4.

¹⁹ *Id.* at 5.

²⁰ *Id.* at 7 (emphasis in original).

²¹ TANC Request for Rehearing at 7.

²² *Id.*

²³ *Id.* at 8.

on this issue. As an alternative, TANC suggests permitting the ISO to charge customers with behind-the-meter load the CAS charge based upon the customers' use of the ISO grid.

16. Modesto argues on rehearing that the revised exemption in Opinion 463-A does not capture the Commission's intent in Opinion No. 463, which recognized the more limited impact that entities which balance behind-the-meter generation and load place on the ISO grid. Modesto requests that the Commission clarify that: (1) the Commission did not grant the ISO authority to implement an eligibility test that results in customers relying primarily on behind-the-meter generation to serve load being denied the rate treatment intended by the Commission in Opinion No. 463; (2) "customer" should be defined as a unique wholesale or retail Load Serving Entity, not narrowly defined as a Scheduling Coordinator; (3) "primarily" serving load from behind-the-meter generation should be defined to apply to a customer that serves a greater portion of its load from a portfolio of behind-the-meter generation than it does from the ISO-controlled grid; and (4) any generator-specific eligibility test should apply after the customer has met the threshold test of "primarily" serving load from behind-the-meter generation.

17. In the event that the Commission denies its request for clarification, Modesto requests rehearing of Opinion No. 463-A. First, Modesto argues that the generator-specific eligibility criterion has the potential to conflict with the Commission's prior express intent for proportionate relief from CAS charges. Specifically, Modesto opines that under certain scenarios, an eligibility test based on modeling could produce unreasonable results, excluding certain behind-the-meter generators because they are no longer deemed to "primarily" serve load from behind-the-meter resources.

18. SMUD argues on rehearing that its behind-the-meter generation resources and Western Area Power Administration generation resources that directly serve SMUD native load qualify for the exception from CAGL-based CAS charges. SMUD asserts that the ISO model simply assumes SMUD-owned behind-the-meter resources as a constant, "always-on" resource, and that the Western Area Power Administration's resources are also considered in the ISO model as a non-variable "given," reflecting their historic output levels as a constant. Thus, SMUD concludes that the ISO does not incur any modeling expenses in accounting for either, because it does not have to monitor, manipulate, or otherwise massage SMUD or Western Area Power Administration.

19. CAC/EPUC request clarification on two issues. First, CAC/EPUC note that the ISO's CAGL billing determinant is load based and it is load in the control area for which the ISO is ultimately responsible to plan. Therefore, CAC/EPUC state that the exemption from the imposition of the CAGL billing determinant should be applied to behind-the-meter load and not generators. Secondly, CAC/EPUC argue that the Commission's

exemption could be misinterpreted by alleging that, because a particular resource or load is modeled by the ISO, the CAGL billing determinant would apply to the otherwise exempt behind-the-meter load. CAC/EPUC propose a clarification that would state that it is a customer's net load which causes the ISO to incur costs and therefore it is only appropriate to assess the ISO's CAS charge to net load.

20. Because the arguments raised on rehearing are inextricably intertwined with those raised on exception to the Initial Decision, the Commission will discuss all of them together.

The Hearing Order

21. On November 16, 2004, the Commission issued its order deferring the requests for rehearing and setting the CAGL exception issue for a limited hearing. In so doing, we made clear that we "continue[ed] to subscribe to the concept of an exception from CAGL based on whether the generator and associated behind-the-meter load are modeled by the ISO."²⁴ However, the Commission explained, the requests for rehearing and clarification "made clear that questions concerning the exemption, as well as the manner in which it would be administered," presented issues of material fact that "cannot be resolved based on the record before us."²⁵ Therefore, the Commission ordered a trial-type evidentiary hearing limited to this issue.

22. In setting the hearing, the Commission listed certain factual questions concerning which it sought additional information:

1. The manner and extent to which behind-the-meter generation was included during the time period at issue in the ISO's transmission and operations planning studies, including a listing of generators that were explicitly modeled in these studies. Additionally, we would like to have the same information for the present time.

2. All relevant factors the ISO has considered when modeling behind-the-meter generators in its transmission and operations planning studies, including: (1) WECC [Western Electrical Coordinating Council] requirements for modeling; (2) the generator size and location on the

²⁴ Hearing Order at P 15.

²⁵ *Id.*

transmission and/or distribution system; (3) load associated with that generation; (4) voltage, stability, and short-circuit concerns; and (5) the impact of the generator on the transmission system.

3. How and to what extent behind-the-meter load netted against unmodeled generation imposes CAS costs, as delineated by ISO witness Lyon, on the ISO.

4. What regulatory controls (if any) are necessary for the ISO to report which generation and associated load it does not model.^[26]

23. The Commission emphasized that, while other factual information might be relevant, the hearing would be limited to the CAGL exemption issue as set forth in Opinion No. 463-A and was not to be treated as an opportunity for the parties to relitigate any other aspect of its decision with respect to CAGL (or any other issue).²⁷

The Initial Decision

24. The Initial Decision began by emphasizing that the Commission's remand "was neither intended to encompass alternatives to the exemption set forth in Opinion No. 463-A, nor was it intended to encompass issues that have already been litigated."²⁸ Thus, the presiding judge rejected arguments made by the parties seeking "an entirely different exemption . . . as outside the scope of this limited proceeding."²⁹

25. Turning to the question of the manner and extent to which the ISO modeled behind-the-meter generation during the relevant time period, the judge observed that the ISO itself did not model generating units per se, but "adopt[ed] the power flow models, including the representations of generating units, which are developed by the investor-owned [Participating Transmission Owners]."³⁰ The judge adopted the ISO's explanation that it used:

²⁶ *Id.* at P 17 (footnote omitted).

²⁷ *Id.* at P 16.

²⁸ Initial Decision at P 38 (footnote omitted).

²⁹ *Id.* at P 39.

³⁰ *Id.* at P 40 (footnote omitted).

the models provided to it by the [Participating Transmission Owners] to conduct studies that examine the effects of different conditions under which the transmission system may have to operate and to determine the effects of the conditions on the transmission system. Using specialized software, the ISO may alter the data and test different scenarios to determine their effect on the transmission system. The ISO also noted that not every ISO study use[d] all of the data in the base cases[,] but explained that the selection of the data used in running a particular model depend[ed] upon the purpose of a given study project.^{31]}

26. As evidence of what generation the ISO included in its studies, the presiding judge relied on a list provided by the ISO “of the generating units that were included in the models that the ISO used to conduct its transmission and operations planning studies” during the relevant period, which was entered in the record as Exhibit ISO-55.³² In the judge’s view, the evidence supported a finding that Exhibit ISO-55 “accurately reflects the universe of generating units” on which the ISO based its studies.³³

27. In so ruling, the judge rejected SMUD’s contention that the ISO’s definition of modeling did not comport with the Commission’s requirement that only “explicitly modeled” generation be allocated on a gross load basis, and that such explicit modeling must include “active manipulation and varying of generation data” rather than “mere representation in a base case.”³⁴ Rather, the judge concluded that the ISO’s use of the Participating Transmission Owners’ base case models to conduct studies examining the effects of different conditions under which the transmission system may have to operate constituted modeling within the meaning of the Commission’s inquiry.

28. The judge went on to deny SMUD’s related contention that because the ISO treats SMUD and Western Area Power Administration generation as “always-on” in its

³¹ *Id.* at P 42. For these findings, the judge relied on the CAISO Initial Brief at 4, which in turn cited Tr. at 153:10-122 & Exh. S-79 at 9:14-22.

³² *Id.* at P 43. In this context, the judge relied on the testimony of ISO witnesses Mr. Lyon (Exh. ISO-54 at 6:1-3) and Mr. Arikawa (Tr. at 82:13-83:14).

³³ *Id.* at P 45.

³⁴ *Id.* at P 46, quoting SMUD Initial Brief at 8 (internal quotation marks omitted).

Reliability Must Run planning studies, the ISO does not “actively study or manipulate” -- that is to say, “model” – SMUD’s generation resources.³⁵ As she elaborated:

[T]he use of a constant, fixed output (*i.e.*, the historical output level) in a study shows that the unit *is* being modeled. It does not negate the reality that the ISO in fact considers the effects of that generation on its system, and, thus, incurs some costs directly related to SMUD’s generation units being modeled in the base case(s) used by the ISO. . . . [I]n any event, [the ISO’s] [Reliability Must Run] studies are in no way representative of the manner in which the ISO treats SMUD’s and Western [Area Power Administration]’s generation in studies conducted for any other purpose.³⁶

29. The Initial Decision likewise rejected SVP’s related argument that, as a Metered Subsystem entity (*i.e.*, its generators were metered prior to SVP’s entering into a Metered Subsystem Agreement with the CAISO), SVP was wholly responsible for all load and generation within its retail service territory, so that the CAISO would not have conducted any operating and planning studies for SVP’s behind-the-meter generation and associated load. Rather, the judge held that SVP’s generators were properly included in Exhibit ISO-55.

30. The judge agreed with several parties that most behind-the-meter generation of the parties disputing the CAISO’s definition of modeling are included in Exhibit ISO-55 and thus ineligible for the Opinion No. 463-A exemption. However, she concluded that such a limited exemption was consistent with the Commission’s view that the ISO’s control area services benefit the entire grid, and limited cost shifting.

31. The Initial Decision then turned to the issue of the relevant factors the ISO has considered when modeling behind-the-meter generators in its transmission and operations planning studies, in accordance with the Hearing Order’s second question. On this issue, the presiding judge specifically relied on Commission Staff’s explanation that the Participating Transmission Owners submit data to the WECC area planning coordinator. Thus, the judge found that the WECC then compiles the data to form base cases, and makes them available to all WECC members, including the ISO, which in turn uses these

³⁵ *Id.* at P 47 (footnote omitted).

³⁶ *Id.* (footnotes omitted).

base cases to conduct its studies examining “the effects of different conditions under which the grid may have to operate, and determine the effects of these conditions on the grid.”³⁷

32. In order for the CAISO to fulfill its control area responsibilities, the judge explained, the studies must take into account all generation based on the impact on the control area transmission system and the ISO-controlled grid, not based on differing criteria according to the type of load served.³⁸ With respect to behind-the-meter generation, then, the ISO would expect to model behind-the-meter generation that (1) may deliver excess energy to the transmission system in the wholesale market arena; (2) would remain connected and continue to draw power from the transmission system in the event the behind-the-meter generation tripped or was curtailed; and (3) is of such size, nature, and character or connected at a critical point within the transmission system such that it could have a pronounced and significant effect on the performance of the transmission system with respect to transient stability, voltage collapse, local area power quality, fault current contribution or coordination of protective devices.³⁹

33. In view of this evidence, the Initial Decision concluded that the ISO’s expectations concerning what the Participating Transmission Owners model “are reasonable because they generally coincide with the WECC criteria on which the [Participating Transmission Owners] place their emphasis.”⁴⁰ The judge also agreed with SoCal Edison’s observation that “[t]he focus on the transmission system leaves numerous unmodeled generators which, by implication, are all or almost all located on the distribution system of the various utility distribution companies.”⁴¹ Moreover, the judge relied on evidence introduced by Staff indicating that generators that were not modeled “were primarily small sizes (typically less than 10MW) and connected at a voltage of 12kV.”⁴²

³⁷ Initial Decision at P 60 (footnote omitted).

³⁸ *Id.* at P 61.

³⁹ *Id.* (footnote omitted), citing Exh. ISO-54 at 7:10 – 8:4.

⁴⁰ *Id.* at P 63.

⁴¹ *Id.* at P 63 & n.164, *citing* SoCal Edison Initial Brief at 8.

⁴² *Id.* at P 70 (footnote omitted). On this point, the judge relied on Exh. S-79 at 16-17.

34. The Initial Decision then addressed the issue of how and to what extent behind-the-meter load netted against unmodeled generating imposed Control Area Services costs. The judge concluded that, “[b]ecause of the complexity of the task of attempting to identify the extent to which behind-the-meter load netted against unmodeled generation imposes [Control Area Services] costs, neither the ISO [n]or any other party [was] able to present quantifiable evidence on this issue.”⁴³ However, she observed,

the ISO acknowledges that behind-the-meter load benefits less directly from transmission planning, maintenance and outage coordination, and numerous other administrative functions than from other ISO Control Area Services, such as the ISO’s assurance of adequate reserves, the monitoring and operating efforts by the ISO to ensure the safe and reliable operation of the ISO control area, and the administrative costs of dispatching energy to balance generation and load.^[44]

35. The judge refused to approve arguments by various parties that this informational deficiency supported either a more expansive exception to cost allocation for behind-the-meter generation, or none at all. Similarly, she rejected contentions by certain parties that the lack of evidence supported distinguishing between wholesale and retail behind-the-meter generation. On the latter point, the judge acknowledged SoCal Edison’s contention that behind-the-retail-meter load is not scheduled by the ISO, is not the ISO’s load responsibility, and that the activities that cause the ISO to incur CAS costs are largely not performed to serve behind-the-retail-meter load.⁴⁵ Nonetheless, the judge concluded that,

because the ISO expends time and resources to ensure that the system is operating, which benefits all load – including retail behind-the-meter load – some share of the [Control Area Services] charges should be passed on to such customers based on the loads the behind-the-meter generation serves.^[46]

⁴³ *Id.* at P 85 (footnotes omitted).

⁴⁴ *Id.* (footnotes omitted). For this point, the judge relied on Ex. ISO-54 at 14:2-6.

⁴⁵ *Id.* at P 90 (citations omitted).

⁴⁶ *Id.* (footnote omitted).

36. The Initial Decision went on to conclude that “were the Commission to find that certain behind-the-meter load modeled by the ISO” should be exempt from gross load allocation of the Control Area Services charge, the record indicated that “the extent to which behind-the-meter load netted against unmodeled generation imposes [Control Area Services] costs is less for behind-the-meter *retail* load than for behind-the-meter *wholesale* load.”⁴⁷ While the judge acknowledged that this finding was beyond her mandate from the Commission, she suggested that “the Commission may choose to reflect this distinction in its final determination of the methodology to be applied in calculating the actual [Control Area Services] charges for behind-the-meter load.”⁴⁸

Briefs on Exceptions

37. Briefs on exceptions were filed by the CAC/EPUC; the California Department of Water Resources State Water Project (SWP); Modesto, SMUD and SVP. Briefs opposing exceptions were filed by CAC/EPUC, the CAISO, SoCal Edison and Commission Staff.

38. On exceptions, Modesto contends that the Initial Decision erred by failing to find that the ISO does not model generation. According to Modesto, the judge failed to recognize that the evidence “presented in this proceeding did not support the modeling-based exemption,” as such an exemption “does not satisfy the Commission’s finding that both wholesale and retail behind-the-meter-entities deserve relief from [Control Area Services] charges based on CAGL.”⁴⁹ Thus, Modesto urges the Commission to rule on the requests for rehearing of Opinion No. 463-A.

39. Modesto believes that confusion arose from the judge’s definition of behind-the-meter. According to Modesto, the judge failed to recognize that its behind-the-meter operations were solely governed by its Interconnection Agreement with PG&E, rather than any contract with the ISO. Under the Interconnection Agreement, Modesto maintains, “all [Modesto] generation resources are contractually behind-the-meter.”⁵⁰ However, Modesto complains, none of its generation resources are considered behind-the-meter under the exemption adopted by the Initial Decision.

⁴⁷ *Id.* at P 92 (emphasis in original).

⁴⁸ *Id.*

⁴⁹ Modesto Brief on Exceptions at 17.

⁵⁰ *Id.* at 36.

40. Modesto attacks the Initial Decision for discarding the term “modeled” as used by the Commission, and substituting a new definition entirely based on the ISO’s use of base case models provided by the Participating Transmission Owners to conduct studies of transmission system conditions. Reiterating its position that what the ISO does is not modeling, Modesto points out that although ISO witness Lyon mentions that the ISO may change generation models under special circumstances, he did not identify any specific instance where the ISO changed a Participating Transmission Owner model of a generation resource. Modesto concludes that the ISO’s use of models “inherited from the [Participating Transmission Owners]” to conduct internal studies of “the effects of different conditions under which the grid may have to operate,” and “to determine the effects of the conditions on the grid and transmission system,” is not modeling as defined by the Commission in Opinion No. 463-A.⁵¹

41. Modesto further contends that because the presiding judge did not define modeling correctly, she failed to consider any relevant factors that would support a behind-the-meter exemption from CAGL. Any consideration of relevant factors was negated, Modesto believes, in view of the fact that the ISO does not model generating units. Moreover, the judge should have found that the base cases provided by the Participating Transmission Owners are unsupported. For example, evidence was not presented concerning the size and location on the transmission and/or distribution system and load associated with that generation (two of the relevant factors identified by the Commission).

42. Modesto argues that the Initial Decision erred in failing to find that no cause and effect relationship exists between modeled generation resources and the ISO’s operating and administrative expenses. Indeed, Modesto asserts, the ISO failed to provide evidence quantifying the Control Area Services costs it incurs from behind-the-meter load netted against unmodeled generation. Rather, Modesto contends, the facts indicate only that behind-the-meter load benefits less directly so that the ISO incurs less administrative costs associated with behind-the-meter generation.

43. Finally, Modesto argues that the Initial Decision erred by finding that the extent to which behind-the-meter load netted against unmodeled generation imposes CAS costs is less for retail than wholesale behind-the-meter load. Modesto maintains that this finding is dicta that should be rejected as beyond the scope of the matters set for hearing.

44. Like Modesto, SMUD contends that the judge did not follow the definition of modeling used in Opinion No. 463-A and the Hearing Order, “[b]y nullifying the

⁵¹ *Id.* at 33 (footnote omitted).

Commission's use of the modifier 'explicitly,'" and thus adopting a definition "that amounts to 'capable of being modeled.'"⁵² By taking this course, SMUD contends, the presiding judge,

completely misses the Commission's clear message that its modeling test is founded on cost causation principles – that if the ISO is not exerting significant effort and cost in "explicitly" modeling a behind-the-meter generation unit, the behind-the-meter load served by that unit should not pay the full ISO [Control Area Services] charge.^[53]

45. SMUD goes on to contend that, as a result of the presiding judge's fallacious definition of modeling, her proposed exemption "necessarily excludes all wholesale generation."⁵⁴ Thus, SMUD observes, "the only generation units eligible" for the judge's exemption are "retail behind-the-meter generation served by [Participating Transmission Owner] standby contracts."⁵⁵ SMUD concludes that this result undermines the Commission's mandate of an exception to CAGL for wholesale and retail customers.

46. SMUD agrees that the ISO incurs some (at least trivial) costs related to modeling SMUD and Western Area Power Administration generation serving the SMUD native load. However, SMUD contends, "the record does not support the finding that the ISO has proved it incurs costs of any significance in studying generation represented as a fixed constant," – such as SMUD's native load – "in its transmission and operation studies."⁵⁶

47. According to SMUD, the judge supported her extremely restricted CAGL exemption by a mistaken belief that any greater exemption would result in cost shifting. However, SMUD explains, this reasoning ignores cost causation principles. The proper perspective, according to SMUD, is that a more expansive exemption is properly

⁵² SMUD Brief on Exceptions at 14.

⁵³ *Id.* at 16. SMUD likewise asserts that the judge erred by ignoring the Commission's admonition that the modeling must be in the ISO's "regular performance" of its operations. *Id.* at 17.

⁵⁴ *Id.* at 18.

⁵⁵ *Id.*, citing Exh. SMD-39; Tr. at 84:5-24, 86:15-25. This evidence demonstrates, SMUD informs us, that the Initial Decision's exemption "would create a mere 1,000 MW exemption" of the entire 48,000 MW of CAGL. *Id.* at 20.

⁵⁶ *Id.* at 22, citing Exh. SMD-37 at 4.

“reallocating . . . some [Control Area Services] costs from load served by generation that is not explicitly modeled by the ISO” to load that is served by generators that are so modeled.⁵⁷

48. SMUD goes on to attack the judge’s rejection of its testimony concerning the ISO’s Reliability Must Run studies, demonstrating that the ISO never studies generation serving SMUD load (treating it as a non-varying constant). Rather, SMUD believes, the judge improperly relied on Exh. ISO-55, which SMUD views as merely listing generators in the base case the ISO may or could have studied, but not providing any evidence that they were.

49. SWP asserts that the Initial Decision erred in relying on the ISO list of modeled generators in Exh. ISO-55 as an evidentiary basis. Moreover, SWP contends, the judge mistakenly relies on Exh. ISO-55, even as she concedes that it is inaccurate and unreliable. SWP points out that based on the testimony of Mr. Lyon, it is readily apparent that the ISO’s list of modeled generators under-represents the quantity of generators which are included in the Participating Transmission Owner’s WECC base cases.

50. SWP further asserts that because neither the ISO nor any other party has quantified the extent to which behind-the-meter load causes the ISO to incur Control Area Services costs, cost causation cannot be established by substantial evidence. SWP therefore concludes that there is insufficient evidentiary foundation for implementation of the exemption. SWP urges that, to the extent the Commission grants an exemption from CAGL based on Exh. ISO-55, it should establish “additional eligibility criteria” to ensure “that the exemption complies with the cost causation principle.”⁵⁸

51. SWP goes on to argue that the presiding judge’s recommendation of an exemption distinguishing between wholesale and retail modeled load contradicts both the Commission’s rulings in Opinion Nos. 463 and 463-A.⁵⁹ Additionally, SWP attacks this finding as completely unsupported, because no credible evidence was presented on any cost distinction between wholesale and retail behind-the-meter load. In this regard, SWP

⁵⁷ *Id.* at 23.

⁵⁸ SWP Brief on Exceptions at 11.

⁵⁹ *Id.* at 12.

argues that “the assessment of the [Control Area Services] charge on a basis other than gross load for certain customers would be unduly discriminatory to other customers,” absent evidence demonstrating “less cause causation by the exempted customers.”⁶⁰

52. CAC/EPUC argue on rehearing that the modeling standard established by the Initial Decision is inconsistent with the Commission’s intent to lessen the impact of Control Area Services charges on customers with behind-the-meter generation who rely on that generation for their energy needs.⁶¹ CAC/EPUC observes that the ISO does not model “either Distributed Generation (*i.e.*, generators) or Retail Customer Load (*i.e.*, the customer load served by those generators).”⁶² Rather, it is the utilities that do this modeling. In CAC/EPUC’s view, this means that retail customers pay for modeling and planning and their appropriate share of the Control Area Services charge through their retail standby rate. Thus, Cogeneration/Energy Producers conclude that the exception in Opinion No. 463-A should apply to all retail behind-the-meter load.

53. However, CAC/EPUC complain, because virtually all of their retail customer generators are included in Exh. ISO-55, none of their retail behind-the-meter load associated with those generators will be eligible for the exception contained in Opinion No. 463-A. CAC/EPUC argue that such a result is contrary to the Commission’s intent to lessen the impact of the Control Area Services charge on these customers.

54. CAC/EPUC also argue that the Initial Decision’s exemption would unfairly impose costs upon customers that do not cause those costs to be incurred. In this regard, CAC/EPUC contend, the record shows that the CAISO does not incur for retail customers served by behind-the-meter generation the two basic types of administrative costs recovered in the Control Area Services component of the GMC: (1) costs for dispatching energy to balance generation and load, and (2) costs beyond the moment-to-moment monitoring and operation of the ISO grid and real-time delivery of energy requirement.

55. The record further demonstrates, CAC/EPUC contend, that the ISO does not dispatch retail behind-the-meter generation to serve retail behind-the-meter load, so “retail customers have not imposed any administrative costs on the ISO associated with the dispatch of behind-the-meter generation to serve behind-the-meter load.”⁶³

⁶⁰ *Id.* at 14.

⁶¹ CAC/EPUC Brief on Exceptions at 6.

⁶² *Id.* at 7 (citation omitted).

⁶³ *Id.* at 14 (citation omitted).

56. Finally, CAC/EPUC assert that that the exemption established by the Initial Decision is contrary to recent Commission precedent stating that such customers should be charged on a net metered basis.⁶⁴

57. SVP also challenges the accuracy of Exhibit ISO-55. More specifically, SVP argues that the presiding judge erred by finding that the four behind-the-meter generators SVP identified in Exhibit ISO-55 were ineligible to receive the exemption from the Control Area Services charge.

Discussion

A. Behind-the-Meter CAGL Exemption

1. General Framework of the Exemption

58. Before addressing the arguments on exceptions or rehearing, it will be helpful to set out the exact terms of the exemption proposed by Opinion No. 463-A, and how that proposal has been informed by the facts assembled in the record. In Opinion No. 463, the Commission established that for the purpose of the allocation of the Control Area Services charge, “all load serving entities should pay for these administrative [Control Area Services] costs comparably on the basis of their gross load.”⁶⁵ The foundation of our decision was that it is equitable for “all customers using [the] grid [to] share in all costs of the grid, because they all benefit.”⁶⁶ This holding stands and we are not revisiting it.

⁶⁴ *Id.* at 16-22, citing *PJM Interconnection, L.L.C.*, 107 FERC ¶ 61,113 at P 3-4, 7, 27, 29 (2004) (*PJM*); *California Indep. Sys. Operator Corp.*, 104 FERC ¶ 61,062 (2003) (July 2003 Order); *California Indep. Sys. Operator Corp.*, Opinion No. 478, 109 FERC ¶ 61,301 at P 100-103, 105 (2004).

⁶⁵ Opinion No. 463 at P 23 & n.32, quoting *California Indep. Sys. Operator Corp.*, 99 FERC ¶ 63,020 at 65,111 (2002).

⁶⁶ *Id.* at P 21 & n.28, quoting *California Indep. Sys. Operator Corp.*, 99 FERC ¶ at 65,109, quoting *Midwest Sys. Operator, Inc.*, Opinion No. 453-A, 98 FERC ¶ 61,141 at 61,412 (footnote omitted), *reh'g denied*, 99 FERC ¶ 61,258, *modified on other grounds*, 101 FERC ¶ 61,113 (2002). Opinion No. 453-A was subsequently affirmed by the United States Court of Appeals for the District of Columbia Circuit. *Midwest ISO Transmission Owners v. FERC*, 373 F.3d 1361 (2004).

59. Opinion No. 463 also determined that “[c]ustomers with behind-the-meter generation who primarily rely on that generation to meet their energy needs” would be allocated too great a share of Control Area Services costs if subject to the gross load methodology.⁶⁷ However, as discussed above, our attempt in Opinion No. 463 to craft such an exception was not successful.

60. Thus, in Opinion No. 463-A, the Commission rescinded its former definition, and replaced it with one that described the relevant class as behind-the-meter load served by “generators which are not modeled by the ISO in its regular performance of transmission planning and operation[.]”⁶⁸ Our reasoning was that because such generators are not seen by the ISO, they could not cause the ISO to incur administrative or operating expenses reflected by the Control Area Services charge. The problem was that because there was no record evidence with respect to the ISO’s generator modeling, we had no factual basis upon which to test our reasoning. The Initial Decision on review here provides that factual basis.

61. Having evaluated the judge’s decision, the administrative record, and the briefs of the parties, the Commission hereby finds that: (1) the ISO, using models provided by the Participating Transmission Owners, conducted studies concerning transmission planning and operation during the locked-in period; (2) the generating units included in these studies were modeled by the ISO during the locked-in period, and thus the ISO incurred costs recovered by the ISO’s Control Area Services charge; (3) there is record evidence that unmodeled behind-the-meter generation did not impose Control Area Services costs because it was not taken into account by the ISO’s transmission planning and operations; (4) Exh. ISO-55, however, does not provide a sufficiently accurate basis for determining which generators were modeled.

62. Before the Commission addresses the factual underpinnings of these conclusions in more detail, as well as the arguments raised on rehearing and exceptions, a few more general comments are in order. The major difficulty in establishing an exemption from CAGL has been identifying and defining the subset of behind-the-meter generators which incur no Control Area Services costs (or only de minimis costs). First, there has been some confusion about defining what “behind-the-meter” means. Of course, all generation is behind somebody’s meter. But as ISO witness Mr. Lyon explained, and as adopted by the presiding judge, in the present context the term refers “to situations in which a Load’s electrical consumption cannot be distinguished from a Generating Unit’s simultaneous production of electricity, because both are measured with only one

⁶⁷ *Id.* at P 28.

⁶⁸ Opinion No. 463-A at P 20.

meter.”⁶⁹ While we agree with this definition, a clearer way of making the same statement is that behind-the-meter generation is that generation serving load to which it is directly connected over private wires.⁷⁰

63. There has also been some uncertainty about the size of the exemption the Commission intended. Because of the nature of the gross load allocation which we approved in Opinion No. 463, the Commission has assumed that the category of generators which would not incur Control Area Services costs would be extremely limited. A hypothetical situation which we believed indicated the need for an exemption was a behind-the-meter 10 MW generator which served its own load except for two weeks a year when it was off-line for maintenance. During those two weeks, the load would be served by the ISO grid, and the Control Area Services charge is appropriate on a net basis. However, the great majority of the time, such a generator and an equivalent amount of behind-the-meter load would not be seen by the ISO, and not receive any such services. This situation was described by SoCal Edison witness Mr. Minick earlier in this proceeding. Mr. Minick explained that because

the CAISO admits that it knows very little about the behind-the-meter load served by on-site generation, it is hard for me to understand how such load causes the CAISO to do any work. When such loads are not served by on-site generation, that is, when they are served over the utility’s transmission and distribution facilities, is when they cause the CAISO to do work, such as ensuring operating reserves; but at these times, the CAISO sees these loads and appropriately assesses them the [Control Area Services] charge.^[71]

It is the generators serving this load unseen by the ISO -- for which the ISO obviously does not provide Control Area Services -- for which the Commission has been trying to craft an exemption.

⁶⁹ Exh. ISO-54 at 5.

⁷⁰ SoCal Edison uses this definition (SoCal Edison Brief Opposing Exceptions at 8-9 n.8), but limits it to “behind-the-retail-meter loads.” As we discuss below, the Commission is not distinguishing between wholesale and retail loads in adopting the CAGL exemption, though we understand that it is primarily generators associated with retail load that will be included in the exemption.

⁷¹ Exh. SCE-7 at 20-21. This explanation is elaborated on by SoCal Edison witness Mr. Shockey in Exh. SCE-56.

2. Rehearing Requests

64. To a significant extent, the parties' requests for rehearing on the CAGL exemption issue have been rendered moot by the subsequent hearing. SoCal Edison's argument that there is no record evidence to support the conclusion that unmodeled generation does not cause the ISO to incur costs falls within this category, as well as the concern of TANC and Modesto that the ISO would have unsupervised discretion to determine what generation would be included in the exception.

65. To the extent that the parties' contentions concerning the behind-the-meter exception have not been rendered moot, the Commission denies rehearing.

66. At the outset, the Commission believes that disputes growing out of the use of the terms generation or load are essentially semantic. Our goal here has been to exempt from the Control Area Services charge that load associated with those generators which are not modeled by the ISO.

67. The Commission denies requests for rehearing seeking an exemption based on distinguishing wholesale and retail load. With respect to whether Control Area Services costs are incurred, we have previously determined that there is no distinction to be made on this basis.⁷²

68. Turning to more specific claims, we reject SMUD's contention, also made in its Brief on Exceptions that its behind-the-meter resources must qualify for the exemption because they would be considered constant in any ISO model. Whether or not SMUD's behind-the-meter generation is considered a constant is irrelevant. What is relevant is whether its generation is in the model studied by the ISO. If it is, it causes the ISO to incur Control Area Services costs and is not eligible for the exemption.

69. SMUD's contention that generation which does not vary causes the ISO to incur no modeling expenses is based on two false assumptions. First, the costs at issue here are not merely for "modeling," but for Control Area Services costs generally, which include all of the ISO's costs relating to its safe and reliable operation of the transmission grid within its control area. Second, as we will discuss in more detail below, our view is that CAGL allocation is appropriate for any generation included in the ISO's transmission planning and operation studies. If SMUD's generation is so studied (and, as we find below, it is), it makes no difference whether it is considered "always on" in the model.

⁷² Opinion No. 463 at P 34.

70. The Commission rejects Modesto's requests for clarification. Essentially, Modesto seeks to impute the framework of the discarded CAGL exemption established in Opinion No. 463 into the new exemption based on modeling. For example, Modesto seeks to have the modeling exemption apply to customers with behind the meter generation who primarily rely on that generation to meet their energy needs. However, the Commission in Opinion No. 463-A specifically discarded an exemption based on whether customers "primarily" relied on behind the meter generation as difficult, if not impossible, to administer, in favor of an exemption based simply on whether particular generation was modeled by the ISO.

71. We also deny Modesto's alternative request for rehearing. The generator specific exemption established by Opinion No. 463-A does not conflict with our intent, which was to implement an extremely limited exemption to the gross load allocation concept for Control Area Services on behalf of generation which would not cause the ISO to incur such costs. As discussed below, the Commission today finds that the modeling exemption sufficiently accomplishes this goal.

3. Exceptions to Initial Decision

72. With respect to the exceptions taken to the Initial Decision, the first issue concerns the definition of modeling. As described above, the Initial Decision defined a model as "a quantitative representation of the facilities that constitute the grid, and their physical limitations."⁷³ The judge further explained that "[t]he initial accumulation of data that constitutes the model may be referred to as a 'base case.'"⁷⁴ Finally, the judge adopted the ISO's explanation that it does not itself model generating units; rather, it uses the models provided by the Participating Transmission Owners "to conduct studies that examine the effects of different conditions under which the transmission system may have to operate and to determine the effects of the conditions on the transmission system."⁷⁵

73. The judge's conclusions in this regard are supported by evidence in the record, particularly the expert testimony of Staff witness Mr. Gross on which she relied. As Mr. Gross explained:

⁷³ Initial Decision at P 40 (footnote omitted).

⁷⁴ *Id.* (footnote omitted).

⁷⁵ *Id.* at P 42 (footnote omitted).

I consider a model to be, as used in the context of this case, a reasonably accurate numerical representation of the physical equipment, and its limits, that comprises the electric grid, the interrelations between the equipment (that is, how the pieces are ‘wired’ together), and the information on the real world limitations of such equipment.^[76]

“The combined data,” Mr. Gross went on describe, “are in sum total, the ‘model’ which is often referred to as a ‘base case.’”⁷⁷ This data is then studied by means of a specific type of computer software which, employing the laws of physics and the system components loaded into it, “simulate[s] various scenarios which can be reasonably expected to occur.”⁷⁸ The evidence given by Mr. Gross is consistent with and corroborated by other record evidence concerning modeling, also cited by the presiding judge.⁷⁹

74. The judge further found that the ISO does not itself create models of generating units, but uses those provided by the Participating Transmission Owners to conduct studies concerning transmission planning and operation. This process was described in the testimony of ISO witness Mr. Lyon⁸⁰ and by Staff witness Mr. Gross (who relied on ISO discovery responses).⁸¹ Indeed, this fact does not appear to be in dispute, although its significance is.

75. In view of these findings, the Commission rejects the contention of SMUD and Modesto that because the ISO does not actually construct the base-case models, but rather employs for its studies those assembled by the Participating Transmission Owners, it does not “model” generation. The important fact is that the generators were included in

⁷⁶ Exh. S-79 at 5.

⁷⁷ *Id.* at 6.

⁷⁸ *Id.* Mr. Gross goes on to describe in some detail how such studies are employed by the electric power industry, as well as an example of a specific study. *Id.* at 7-8.

⁷⁹ Exh. ISO-54 at 8 (testimony of ISO witness Mr. Lyon); Exh. S-80.

⁸⁰ Exh. ISO-54 at 6.

⁸¹ Exh. S-79 at 9-10.

the models which the ISO examines and on which it bases its studies. As the ISO puts it, the Initial Decision recognized that “the relevant factor” was “*whether* a particular Generating Unit was modeled, and not *who* modeled the Generating Unit in question.”⁸²

76. SMUD’s related claim that its generation was not “explicitly modeled” because it is considered always on also runs afoul of record evidence. As Mr. Gross explained:

The concept of a fixed output first shows that the unit IS modeled and does not negate the fact that the CAISO considers the effects of that generation on its system, thus incurring some costs directly related to SMUD’s generation units being modeled in base case(s) used by the CAISO.^[83]

This was confirmed by the ISO itself, which stated that while it “may treat Western [Area Power Administration] resources as a ‘non-variable given’” for some purposes, “it would examine the effects of an interruption of [these] resources when examining the effects of different grid contingencies in north-central California.”⁸⁴

77. The presiding judge also appropriately relied on record evidence in rejecting SMUD’s contention that its Reliability Must Run generation was not modeled. For example, ISO witness Mr. Lyon specifically explained that Reliability Must Run units occupy “a fairly significant part” of the ISO’s transmission planning and operations engineering studies.⁸⁵

78. Having established how we are defining modeling, the question arises of whether the record establishes that that generation which is not modeled does not incur Control Area Services costs. On this point, the judge based her finding that behind-the-meter load was entitled to an exemption from CAGL solely on Mr. Lyon’s testimony to the effect that behind-the-meter load “benefits, although less directly” from services covered by the Control Area Services charge.⁸⁶ The Commission reverses this finding by the

⁸² ISO Brief Opposing Exceptions at 11 (emphasis in original).

⁸³ Exh. S-79 at 23 (emphasis in original).

⁸⁴ *Id.* at 24, quoting Ex. S-87 (discovery response by the ISO).

⁸⁵ Tr. at 154.

⁸⁶ Exh. ISO-54 at 15.

judge. We agree with the parties who argue that this is an insufficient basis on which to carve out a specific exception to gross load allocation from a cost causation perspective. We also agree that a specific quantification of the extent to which behind-the-meter load does not incur costs was not introduced into the administrative record.

79. However, the testimony of ISO witness Mr. Price provides the missing link.⁸⁷ Mr. Price explains that for on-site behind-the-meter generation, the ISO has no information and must make estimates to figure gross load allocation.⁸⁸ Thus, while there is no specific quantification in the record concerning Control Area Services costs for this behind-the-meter generation, there is evidence that the ISO does not “see” this generation, as Mr. Minick puts it, and “does no work” for it, *except* when it is actually using the ISO grid (and is charged for Control Area Services). In other words, as the Commission predicted, there is indeed a small subset of generators for which the ISO incurs no Control Area Services costs whatsoever. It is these generators whose load should not be assessed Control Area Services costs on a gross load basis. Rather, the customers should only pay the Control Area Services charge when they actually use the ISO’s grid. Thus, the load of our hypothetical behind-the-meter 10 MW generator discussed above would only incur the Control Area Services charge during the two weeks a year it relied on the ISO-controlled grid rather than on site generation.

80. This brings us to the much-contested accuracy of Exh. ISO-55, which is the record evidence demonstrating which generating facilities were modeled by the ISO and are thus not able to be exempted during the locked-in period. While the ISO described in detail how the list of generating units was compiled,⁸⁹ the Commission finds that the concerns some parties raise about the accuracy of Exh. ISO-55 are well-founded. For example, PG&E provided a list containing a number of transmission level facilities (60 kV and above) that should have been but were not included in Exh. ISO-55.⁹⁰ At the very least, such evidence indicates that the list of modeled generators in Exh. ISO-55 is incomplete.

81. The Commission therefore reverses the judge’s finding that Exh. ISO-55 was sufficiently accurate in and of itself to provide the basis for the CAGL exemption. To resolve this problem, we direct the ISO, in cooperation with the Participating

⁸⁷ Exh. ISO-12.

⁸⁸ *Id.* at 6.

⁸⁹ *See* Exh. S-81 (ISO’s discovery response to SoCal Edison).

⁹⁰ Exh. S-88 (PG&E response to Staff data request).

Transmission Owners, to correct the deficiencies of Exh. ISO-55 and make a compliance filing reflecting the total universe of modeled generation for the locked-in period. As the judge indicated, the WECC requirements provided the foundation for the base cases submitted by the Participating Transmission Owners to the ISO. Thus, the universe of modeled generation should be consistent with WECC requirements.⁹¹

82. The Commission, however, rejects the various attacks by parties on Exh. ISO-55 on the grounds that it is too inclusive. Thus, SMUD and SVP contest the validity of Exh. ISO-55 because certain of their generators, which they consider behind-the-meter, are included in the exhibit. However, the generators in question are not behind-the-meter as the Commission has defined it here. For example, SMUD's purported evidence on this point is that PG&E did not respond to its request to remove certain SMUD and Western Area Power Authority generation from the list it prepared for the ISO. The fact that PG&E did not, however, logically indicates that the generation in question was indeed modeled by it and is therefore properly included in Exh. ISO-55.

83. SVP's related claim that certain of its generators were erroneously included because, as a Metered Sub-System, it was responsible for its own load and resources similarly begs the question. SVP's responsibility in this regard does not in any way cancel out the ISO's provision of CAS services, as the Commission found in Opinion No. 463. Thus, SVP's contention provides no basis for excluding the contested generators as behind-the-meter.

84. A few remaining issues deserve attention. The Commission rejects the presiding judge's recommendation that, if an exemption to gross load based on modeled generation is appropriate, there is evidence that retail behind-the-meter load imposes fewer costs than wholesale behind-the-meter load. First, as the judge recognized with respect to other alternate exemptions proposed by the parties, this finding is beyond the scope of the issues set for hearing. Second, the notion that retail load and wholesale load should be distinguished is contrary to our finding on this issue in Opinion No. 463. Third, and perhaps most importantly, the judge's reasoning is based on the misconception that Control Area Services costs are not incurred for retail behind-the-meter load. As Opinion No. 463 determined, Control Area Services as defined by the ISO cannot be self-provided by any load-serving entity.⁹² This finding was not set for hearing and no longer subject to rehearing. Thus, the judge's recommended exemption is, in effect, a collateral attack on a decision made in Opinion No. 463.

⁹¹ See Exh. S-79 at 12.

⁹² Opinion No. 463 at P 22.

85. CAC/EPUC cites precedent to support assessing Control Area Services charges on a net basis, a conclusion which Opinion No. 463 has already rejected. In any event, none of the precedent cited by CAC/EPUC contradicts our decision on this issue. First, *PJM* involves a different regional operating organization with a different set of rules developed by its stakeholders. Second, neither Opinion No. 478 nor the July 2003 Order, which both deal with the CAISO's Transmission Access Charge, hold that a net charge is appropriate in that context. Rather, as Opinion No. 478 makes clear, the Commission has deferred any decision about whether gross load allocation for the Transmission Access Charge should be subject to an exemption until after a final decision in the instant proceeding.⁹³

B. PG&E and Turlock Issues

1. Requests for Rehearing

86. PG&E requests rehearing or clarification with respect to two issues. First, PG&E seeks clarification of the Opinion No. 463-A's holding that, pursuant to a settlement, PG&E could pass through the GMC charge only to extent that Turlock "leaned on" the ISO controlled grid, *i.e.*, to the extent that Turlock's actual load exceeded the resources it scheduled to meet that load.⁹⁴ PG&E states that the settlement which amended its Interconnection Agreement with Turlock was limited to charges arising from the ISO's Market Operations component of the GMC charge associated with positive and negative deviations. PG&E maintains that the relevant amendment to the Interconnection Agreement "only discusses deviations" because the settlement which led to the amendment was for a "complaint . . . filed specifically to address deviation-related charges."⁹⁵ Thus, PG&E requests clarification that, while it is precluded from passing through GMC Market Operations costs associated with positive deviations, and permitted by settlement make the GMC charge for negative deviations, it may otherwise pass through to Turlock those portions of the ISO's GMC charge that are entirely unrelated to deviations. In particular, PG&E requests clarification or rehearing to confirm that it can pass through to Turlock the Control Area Services component of the GMC, as well as the Market Operations GMC component unrelated to deviations.

⁹³ Opinion No. 478 at P 103.

⁹⁴ Opinion No. 463 at P 32.

⁹⁵ PG&E Request for Rehearing at 3.

87. PG&E additionally requests rehearing regarding the Commission's finding that Scheduling Coordinators and not the ISO should bill Governmental Entities directly for their behind-the-meter loads. PG&E notes that the Initial Decision and Opinion No. 463 both held that the ISO should bill both Qualifying Facilities and Governmental Entities directly for their behind-the-meter loads. PG&E states that the ISO, in its request for rehearing, set forth two arguments against direct billing: (1) it would be administratively difficult to prepare the bills; and (2) the Scheduling Coordinators have direct contractual relationships with Governmental Entities, whereas the ISO does not. PG&E asserts the Commission erred in granting rehearing on the basis of these arguments. Specifically, PG&E argues that ISO would not face an overwhelming administrative burden were it required to bill directly because it would only need to prepare bills for four Governmental Entities.⁹⁶ PG&E argues that the ISO would not incur undue administrative costs in billing these Governmental Entities directly because it already generates bills for behind-the-meter load that it sends to Scheduling Coordinators, including PG&E. PG&E opines that the ISO has two choices: it can either bill directly a Governmental Entity with which it has no privity of contract, or it can bill a Scheduling Coordinator that has no privity of contract with the Governmental Entity for the unscheduled, behind-the-meter load. PG&E concludes that it is clearly more equitable and logical for the ISO to bill the Governmental Entities directly.

88. On rehearing, Turlock requests that the Commission clarify that PG&E is required to file a refund report and pay refunds, with interest, for any GMC pass-through charges to Turlock that exceed that permitted by the settlement approved by the Commission in Docket No. EL99-48-000 (February 1999 Settlement).

2. Commission Determination

89. As mentioned above, Turlock filed a response to PG&E's Request for Rehearing or Clarification. Rule 713(d)(1) of the Commission's Rules of Practice and Procedure⁹⁷ prohibits an answer to a request for rehearing and we reject Turlock's answer on this basis.

90. With respect to whether PG&E should be permitted to charge Turlock additional GMC charges above that provided for in the February 1999 Settlement, we first examine whether that settlement includes any provisions that would dictate a particular result. We note that the complaint proceeding that culminated in the February 1999 Settlement involved more than just negative deviation charges under the Interconnection Agreement.

⁹⁶ PG&E notes that it is not seeking rehearing regarding the Commission's finding that the Scheduling Coordinators, and not the ISO, bill Qualifying Facilities.

⁹⁷ 18 C.F.R. § 385.713(d)(1) (2005).

Our review of the complaint proceeding indicates that it primarily involved overcharges related to firm power sales, denoted as Obligation Service and Contract Firm Service, from PG&E to Turlock under the existing, long-term Interconnection Agreement.

91. Furthermore, the notable benefit of the February 1999 Settlement to Turlock was a significant reduction in the charges for its firm power purchases from PG&E and an expansion of the Deviation Band in which to match scheduled resources to load. PG&E received the early termination of the Obligation Service and Contract Firm Service, effective January 1, 2001, which was valuable to PG&E because of its stated intent to divest much of its generating facilities. On the other hand, the February 1999 Settlement provisions regarding payments when Turlock's scheduled resources were less than or greater than Turlock's actual load, which included specific reference to the ISO GMC charge, resolved the appropriate charges or payments for under and over scheduling. In our view, they were a significant part of, but not the primary focus of, the settlement. The silence of the February 1999 Settlement with respect to the possibility of PG&E charging Turlock additional ISO GMC charges such as Control Area Services charges that are unrelated to positive and negative deviations reflects the uncertainty at that time of future charges by the ISO. Thus, we conclude that PG&E is correct that the settlement was ambiguous as to the future treatment of other ISO GMC costs.

92. Turlock's support for its position relies on the content of the February 1999 Settlement and the purported fact that PG&E knew in 1999 that the ISO was going to file in the future an unbundled GMC charge and still PG&E limited its recovery of GMC costs solely to negative deviations associated with under scheduling. We find this evidence is not persuasive. A review of the record in December 2000 when PG&E initially filed the proposed pass-through of the GMC charges to existing contract customers, including Turlock, indicates that Turlock did not protest PG&E's filing based on the protection afforded it in the then relatively recently approved settlement. Rather, Turlock's initial protest to PG&E's proposed pass-through of ISO GMC costs focused on one issue: whether there should be an adjustment for duplicative charges that were already being recovered by PG&E under the Interconnection Agreement for services such as Scheduling, Regulation, Voltage Regulation, and Reactive Power. It was not until later in the proceeding that Turlock raised the provisions of the February 1999 Settlement as grounds for barring PG&E recovery of other ISO GMC costs, unrelated to positive or negative deviations. The Commission therefore finds that the evidence supports the position that the settlement did not address or even contemplate the recovery of these other ISO GMC-related costs.

93. We also note that section 8(c) of the February 1999 Settlement confirms that PG&E retained its rights to file with Commission for authorization to impose charges on its provision of transmission service to Turlock as may be authorized in the future

pursuant to changes in the ISO Tariff or protocols. Thus, we find no bar in the February 1999 Settlement to PG&E to recovering these other GMC charges. Accordingly, consistent with our findings in Opinion No. 463 regarding the provision of a new service, we clarify that PG&E is authorized to charge Turlock for other ISO GMC charges incurred during the locked-in period as the Scheduling Coordinator for Turlock.

94. With respect to the PG&E's rehearing regarding whether it or the ISO should bill Governmental Entities for behind-the-meter billing, the Commission rejects PGE's argument that the ISO, rather than PG&E as Scheduling Coordinator, should bill government entities. While PG&E may not schedule energy for behind-the-meter load at all times, there are times when behind-the-meter generation is unavailable and PG&E will indeed schedule energy for these loads. Thus, it is reasonable for the Scheduling Coordinators to bill Governmental Entities for this load, rather than having a piecemeal approach to billing, based on whether particular behind-the-meter generation is operational.

95. Finally, as a result of our decision, Turlock's request for rehearing is moot.

The Commission Orders:

(A) The requests for clarification and/or rehearing of Opinion No. 463-A are hereby denied, as discussed in the body of this order.

(B) The Initial Decision is hereby affirmed in part and reversed in part, as discussed in the body of this order.

(C) The ISO is hereby ordered to make a compliance filing reflecting the conclusions contained in the body of this order, within 30 days of its issuance, unless any request for rehearing of this order is filed, in which case the compliance filing should be made within 30 days of the issuance of a final order in this proceeding.

By the Commission.

(S E A L)

Magalie R. Salas,
Secretary.