

June 23, 1999

The Honorable David P. Boergers
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

**Re: California Independent System Operator Corporation,
Docket No. ER99-____-000
Amendments to the ISO Tariff To Add New
Generator Interconnection Provisions**

Dear Secretary Boergers:

Pursuant to Section 205 of the Federal Power Act ("FPA"), 16 U.S.C. § 824d, and Section 35.13 of the Commission's regulations, 18 C.F.R. § 35.13, the California Independent System Operator Corporation ("ISO")¹ respectfully submits for filing six copies of an amendment ("Amendment No. 19") to the ISO Tariff and Protocols. Amendment No. 19 would modify the ISO Tariff to implement the ISO's New Generator Interconnection Policy ("NewGen Policy"), which sets forth the obligations and responsibilities of Generating Units requesting interconnection to the ISO Controlled Grid and the procedures and requirements for processing such interconnection requests. Revised tariff sheets reflecting the changes proposed herein are contained in Attachment A.

I. BACKGROUND

The proposed modifications to the ISO Tariff are the product of a lengthy and intensive stakeholder process conducted over the last eleven months. Since last summer, the ISO has been working with Market Participants to develop its policy concerning requirements for new generators requesting interconnection to the ISO Controlled Grid ("New Generators"). These efforts focused on the issue of whether, and the extent to which, New Generators would

¹ Capitalized terms not otherwise defined herein are defined in the Master Definitions Supplement, ISO Tariff Appendix A, as filed August 15, 1997 and subsequently revised.

be responsible for mitigating the incremental Intra-Zonal Congestion created by their interconnection to the ISO Controlled Grid.²

Early in the stakeholder process, the ISO and the stakeholders coalesced around two approaches regarding the responsibility to mitigate new Intra-Zonal Congestion that results from the interconnection of a new generator.³ One approach, referred to as the "No Grandfathering of Transmission Rights" approach, dictated that any incremental Intra-Zonal Congestion created as a result of the interconnection of a New Generator should be mitigated in accordance with the existing procedures in the ISO Tariff. Under the existing procedures, the cost of Intra-Zonal Congestion is spread among all Scheduling Coordinators ("SCs") scheduling within the zone using the Grid Operation Charge ("GOC").⁴ Thus, under the "No Grandfathering" approach, the incremental Intra-Zonal Congestion costs associated with a New Generator would be spread, via the GOC, to all Load in the Zone experiencing the Intra-Zonal Congestion.

The other approach was referred to as the Advance Congestion Cost Mitigation ("ACCM") approach. Under the ACCM, New Generators would be responsible for mitigating incremental Intra-Zonal Congestion under certain circumstances. First, if the Intra-Zonal Congestion could be handled using the ISO's Intra-Zonal Congestion protocols (*i.e.*, if there were sufficient competition in the Adjustment Bid and Supplemental Energy bid markets to resolve the Congestion), the New Generator would not be required to mitigate the increase in Intra-Zonal Congestion resulting from the interconnection. Second, if there were an insignificant increase local Congestion (*i.e.*, local Congestion below a certain level), mitigation would not be required of the New Generator. Beyond these circumstances, a New Generator would be responsible for increases in Intra-Zonal Congestion. In other words, under the ACCM approach, a New Generator would be required to mitigate increased Intra-Zonal Congestion that is significant and that is unable to be addressed using competitive bidding.

² The New Generator interconnection policy contained herein, also applies to existing generators that have changed or increased the capabilities of their generating units.

³ Participants in the stakeholder process included New Generators, owners of existing Generation, marketers, Transmission Owners, State regulatory agencies and representatives of End-User interests.

⁴ The GOC is determined using the Adjustment Bids of the SCs and the resulting charges are allocated to all SCs in the Zone. The ISO recently filed Amendment No. 18 to its Tariff proposing to change the market rules for managing Intra-Zonal Congestion in real time. The changes contained in Amendment No. 18, while extremely important, do not change the allocation of the GOC to all SCs scheduling within the Zone.

While the key issue distinguishing the ACCM approach from the "No Grandfathering" approach is whether increases in incremental Intra-Zonal Congestion should be mitigated by New Generators, it is important to note that certain principles are common to both approaches. Under both approaches: (1) each New Generator requesting interconnection would be responsible for the costs of all transmission expansions and reinforcements necessary to maintain the reliability of the ISO Controlled Grid, (2) each New Generator could voluntarily invest in grid upgrades and would be entitled to any "System Benefits" that arise as a consequence of their investment, and (3) all *Inter-Zonal* Congestion impacts of the New Generator would be managed using the ISO's existing *Inter-Zonal* Congestion management protocols.

The advantages and disadvantages of the ACCM approach and the "No Grandfathering" approach were explored thoroughly in the stakeholder process. Each approach was described in detail and presented for consideration at the ISO Board of Governors meeting on March 25, 1999. The ISO Board memorandum and the detailed set of attachments that were presented to the ISO Board are contained in Attachment B.⁵ The criteria used to compare the two approaches consisted of the following: (1) accurate locational price and cost signals; (2) avoidance of disincentives to developing new Generation; (3) avoidance of opportunities for the exercise of market power; (4) providing signals for efficient use and expansion of the transmission system; (5) reliance upon competitive markets; (6) consistency with, and improvement of, the ISO Market Design; (7) equitable treatment of existing and new Generators; (8) consistency with cost causation principles; (9) compensation for System Benefits provided by the New Generators; and (10) ease of implementation and administration.

By a large majority, the Board adopted the ACCM approach. The Board directed ISO management to develop the details and present the proposal to Board at its next meeting in May. The details were to include: (1) the priority given to interconnection requests and (2) the appropriate assessment and consideration of the System Benefits attributable to system expansions for which a New Generator might pay.

⁵ The memorandum is dated March 18, 1999 and contains five attachments, two of which describe each approach in detail (Attachments B and C to the memorandum), another attachment contains the attributes used to compare the two approaches developed by stakeholders and ISO staff (Attachment D to the memorandum), and another attachment uses the attributes to compare the two approaches (Attachment E to the memorandum).

The ISO developed draft Tariff language to implement its NewGen Policy. In addition, to assist the Market Participants in evaluating the Tariff proposals, the ISO developed two sets of planning procedures. The procedures describe the guidelines for conducting System Impact and Facility Studies needed as a result of an interconnection request and the process to be used by the ISO for determining the extent to which a New Generator should be compensated for System Benefits associated with transmission reinforcements for which it pays. These documents were presented to Market Participants at the Market Issues Forum held on May 12. The draft Tariff language and planning procedures were extensively discussed with stakeholders and subsequently revised based on stakeholder input. The ISO Board of Governors approved the revised Tariff language to implement the NewGen Policy at the Board meeting held on May 27 and directed management to file the proposal at the Commission.

II. THE PROPOSED AMENDMENT

The Tariff revisions implementing the NewGen Policy consist of proposed changes to Sections 3.2 and 5.7 of the ISO Tariff and of certain definitions to be added to the Master Definitions Supplement in Appendix A to the ISO Tariff. Revised Tariff sheets are provided in Attachment A to this filing. The changes are set forth in blackline format in Attachment C. The ISO's NewGen Policy provides procedures for New Generators to obtain interconnection with the ISO Grid, establishes priorities among applications, and allocates cost responsibility for the Interconnection.

Under the NewGen Policy a New Generator has the responsibility to mitigate Congestion only when the following circumstances are present: (1) the required System Impact and Facility Studies demonstrate that the requested interconnection will cause a significant increase in Intra-Zonal Congestion (*i.e.*, if the increased flow on the overloaded element is greater than five percent (5%) of the element's rating), and (2) the incremental Congestion cannot otherwise be mitigated through the use of competitive Adjustment Bids or Supplemental Energy bids. New Generators that are required to mitigate Intra-Zonal Congestion may do through a variety of means (where feasible), including the following:

- Paying for transmission system expansions necessary to eliminate the incremental Congestion;
- Implementing an acceptable Remedial Action Scheme (RAS) that will

eliminate the incremental Congestion;

- Committing to pay the ISO's costs for Intra-Zonal Congestion management for such incremental Congestion;
- Entering into an agreement with another Generating Unit or Participating Load, under terms which the ISO accepts, to redispatch the other Generating Unit(s) or Participating Load to eliminate the incremental Congestion;
- Committing to curtail its own output to mitigate the incremental Intra-Zonal Congestion; or
- Choosing to site the generator at another location that does not cause incremental Congestion.

The advantages of using the ACCM approach can be summarized as follows:

First, the requirement that New Generators be responsible for the mitigation of Intra-Zonal Congestion where the Congestion resulting from a requested interconnection is significant and cannot be mitigated through the use of competitive Adjustment Bids or Supplemental Energy bids is consistent with basic cost causation principles.⁶ The Commission recently reaffirmed the applicability of these principles to interconnection costs in *PJM Interconnection L.L.C.*, 87 FERC ¶ 61,299, slip op. at 19 (June 17, 1999) ("*PJM*"). The alternative would be to spread the costs associated with the incremental Intra-Zonal Congestion caused by a New Generator interconnection, and which cannot be addressed through competitive market mechanisms, to all Loads within that Zone. Such an alternative is contrary to the goal of assigning additional market costs to the Market Participants that cause them. Where a New Generator seeks to interconnect at a site that will result in additional Intra-Zonal Congestion costs that cannot be deferred by a competitive market for Adjustment Bids or Supplemental Energy, it is preferable to allocate those incremental costs to the New Generator that creates such costs.

Second, ACCM sends more appropriate locational price signals to Generation developers when they are making siting decisions. As the Commission noted in *PJM*, slip op. at 19, assigning the costs of mitigating Intra-Zonal Congestion to New Generators will provide an incentive to site new

⁶ See *California Independent System Operator Corp.*, 86 FERC ¶ 61,122 at 61,423-24 (1999); *California Power Exchange Corp.*, 85 FERC ¶ 63,007 at 65,122 (1998) (ALJ decision discussing the Commission's long-standing policy of basing rates on cost causation principles).

Generation in areas with minimal Congestion, increasing the efficiency of the grid and reducing the overall costs of managing Congestion. An alternative that would spread the costs associated with incremental Intra-Zonal Congestion would mute the price signals and cause the Load in the Zone to pay regardless of the location of the New Generator.

Third, ACCM provides New Generators with greater certainty before the fact as to both price and the ability to deliver output, which should encourage Generation development. If the ISO were to adopt an interconnection policy that did not require New Generators to mitigate incremental Congestion caused by their interconnection under any circumstances, there would be significant uncertainty as to future energy transportation costs within the affected Zone. The uncertainty of a New Generator's future energy transportation costs would add a significant element of risk to new generation projects, increasing financing costs and discouraging investment in such projects.

Furthermore, if additional generators could interconnect at any time in the future without mitigating incremental Congestion, they could create enough Congestion such that the creation of new Zones would be triggered. This would, in turn, result in the assessment of Inter-Zonal Congestion costs, in the form of Usage Charges, against all Scheduling Coordinators transporting energy over the congested path. The creation of new Zones could create opportunities for the exercise of market power. Lack of available resources in a Zone can also lead to additional Reliability Must-Run areas and higher Reliability Must Run costs. Moreover, the creation of Zones based on overall market activity is more conducive to an efficient market than basing such actions on the siting decisions of individual Generators. In sum, the ACCM approach avoids these issues because the possibility of creating new Zones is reduced by mitigating the Congestion that would otherwise lead to their creation.

Fourth, addressing Congestion concerns up front provides New Generators with greater protection against curtailments. The protection is enhanced by the provision to the New Generator of any Firm Transmission Rights attributable to system enhancements for which the New Generator pays.

Finally, ACCM assists transmission siting and expansion and long term planning. Because each proposed project requires a grid assessment consistent with existing conditions, grid expansion would be tied to need - based on studies for actual projects being constructed. The requirements and costs of upgrades will be more transparent and can be figured into the planning process.

A. System Benefits

In addition to requiring that a New Generator pay for system expansions necessary to accommodate its interconnection, cost causation principles require compensation to the New Generator for System Benefits provided by the expansion beyond those necessary to accommodate the New Generator.⁷ The Tariff language provides that any NewGen upgrade obligation shall be net of the value of System Benefits produced by a transmission expansion required to interconnect.⁸

A Generating Unit can only receive System Benefits with respect to the benefits of transmission expansion. Benefits associated with the location or siting of the New Generator (*i.e.*, reduction in losses, deferral on PTO transmission investments) must be captured through the competitive phase of the ISO's overall grid planning process. The New Generator will also receive any Firm Transmission Rights revenues generated as a result of a system expansion for which it pays in full, and a commensurate share of Firm Transmission Right revenues in other circumstances.⁹

B. Interconnection Priority

Under the ISO's proposed NewGen Policy, applications for interconnection to the ISO Controlled Grid are queued as of the date and time the New Generator submits the application to the ISO (*i.e.*, the "Completed Application Date"). All interconnection requests submitted during a given calendar month will be processed simultaneously, effectively assigning them the same queue position. The proposed Tariff revisions describe this queuing priority and establish certain milestones that must be met for a New Generator to

⁷ The interconnection policy recently approved by the Commission in *PJM* includes such compensation. *PJM*, slip op. at 14-15.

⁸ The ISO has developed procedures to guide the assessment of such System Benefits under the terms of the revised Tariff. These procedures are set forth in the document entitled "CAISO Planning Procedure P-102: Assessment of System Benefits Associated with a Generator's System Reinforcement Beyond the First Point of Interconnection" which is posted on the ISO Home Page. This document is also submitted as Attachment D to this filing in order to provide the Commission with further information related to the proposed Tariff changes.

⁹ The Commission noted the importance of the assignment of Firm Transmission Rights in *PJM*. *Id.* at 16.

maintain its queue position. The primary queuing milestone to be met is satisfaction of the data adequacy requirements of the applicable state generation siting authority or applicable Local Regulatory Authority within six months of the Completed Application Date.

A New Generator's responsibility to mitigate incremental Intra-Zonal Congestion is based on the order in which the ISO considers interconnection applications. A New Generator is only responsible for mitigation of the Intra-Zonal Congestion which exceeds that which was already present, based on the evaluation of all prior interconnection applications. By grouping applications according to the calendar months, the Tariff provisions minimize the possibility for a New Generator to avoid the costs of mitigating Intra-Zonal Congestion by "piggy backing" on a system expansion for which a recent applicant and other Market Participants (by virtue of System Benefits payments) have paid.

C. Procedures

Under the proposed Tariff revisions, a New Generator requesting interconnection must submit a Good Faith Deposit, which will be returned with interest if the ISO determines that the New Generator is not responsible for any interconnection costs other than study costs; if the New Generator withdraws its interconnection application; or if the New Generator has paid the ISO and Participating TO all applicable costs associated with its interconnection application.

Necessary System Impact Studies and Facilities Studies will be performed by the Participating TO, in coordination with the ISO, according to deadlines set forth in the Participating TO's Tariff.¹⁰ An applicant may sponsor its own studies, but the ISO and Participating TO must approve such studies. As the entity with the ultimate responsibility for maintaining the reliability of the ISO Controlled Grid, the ISO will make the final determination regarding the adequacy of any studies.

¹⁰ The specific details of the studies will of course depend upon the circumstances of the proposed Interconnection. The ISO has developed procedures for Participating TOs to follow in conducting such studies. These are set forth in the document entitled "CASIO Planning Procedure P-101: System Impact and Facility Study Procedures" which is submitted as Attachment E to this filing in order to assist the Commission in evaluating the proposed Tariff changes. The ISO submits Procedures P-101 and P-102 for informational purposes, and seeks Commission approval only of the proposed Tariff revisions. The details of the two procedures are continuing to be refined through the stakeholder process. These procedures will be made publicly available on the ISO Home Page.

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The Tariff revisions also establish that the ISO will maintain certain Operating Procedures for all Generating Units interconnected to the ISO Controlled Grid. These procedures will be posted on the ISO Home Page.

III. EFFECTIVE DATE

The ISO requests that the Commission make the proposed amendment effective sixty days after the instant filing, on August 22, 1999.

IV. NOTICE AND SERVICE OF DOCUMENTS

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

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The ISO has served copies of this letter, and all attachments, on the Public Utilities Commission of the State of California, the California Energy Commission, the California Electricity Oversight Board, and on all parties with effective Scheduling Coordinator Service Agreements under the ISO Tariff. In addition, the ISO is posting this transmittal letter and all attachments on the ISO's Home Page.

V. SUPPORTING DOCUMENTS

The documents supporting this filing, in addition to this transmittal letter, are listed in below. In addition, a notice of this filing, suitable for publication in the Federal Register, is attached and is also provided in electronic format.

Attachment A	Revised Tariff Sheets
Attachment B	March 18 ISO Board Meeting Memorandum
Attachment C	Black-lined Tariff provisions
Attachment D	Planning Procedure P-102

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Attachment E Planning Procedure P-101
Attachment F Notice of filing

An additional copy of this filing is enclosed to be marked with your filing stamp and returned to our messenger. If there are any questions concerning this filing, please contact the undersigned.

Respectfully submitted,

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