UNITED STATES OF AMERICA88 FERC − 61,221
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: James J. Hoecker, Chairman;
Vicky A. Bailey, William L. Massey,
Linda Breathitt, and Curt H,bert, Jr.

California Independent System Operator Docket No. ER99-3339-000
Corporation

ORDER REJECTING PROPOSED TARIFF REVISIONS

(Issued September 15, 1999)

In this order, we reject tariff revisions filed by the California Independent System Operator Corporation (ISO) to implement a new generation interconnection policy.

Background

On June 23, 1999, the ISO filed Tariff Amendment No. 19, proposing to establish application and cost responsibility rules for the interconnection of new generation (i.e., new generators and existing generators that increase capability) to the ISO grid (NewGen Policy). The ISO proposes that new generators pay the costs to physically interconnect to the grid and be required to mitigate any incremental intra-zonal congestion costs they cause within a zone resulting from the interconnection if the level of congestion (1) exceeds a specified threshold (greater than 5 percent of an overloaded element's rating) and (2) cannot be mitigated through use of competitive adjustment bids (prices used in redispatch) and supplemental energy bids (used in the real-time imbalance market). Under the proposal the new generation has options available for mitigation, including backing down its own generation, paying existing generators to redispatch, paying for system expansion, and paying the ISO's costs for intra-zonal congestion management. The ISO states that after a thorough exploration of the advantages and disadvantages of the NewGen Policy and another proposal, the ISO Board, with large but not unanimous support, adopted the NewGen Policy. The ISO requests an effective date of August 22, 1999.

Notice of Filing and Pleadings

Notice of the ISO's filing was published in the Federal Register, 1/ with motions to intervene and protests due on or before July 27, 1999. The Public Utilities Commission of the State of California (California Commission) filed a notice of intervention. Timely motions to intervene were filed by: Duke Energy Trading & Marketing, LLC (DETM); California Power Exchange Corporation (CalPX); Turlock Irrigation District (Turlock); Independent Energy Producers Association (IEP); Williams Energy Marketing & Trading Company (Williams); Sempra Energy (Sempra); Electric Power Supply Association (EPSA); Duke Energy Moss Landing LLC, Duke Energy Oakland LLC, Duke Energy South Bay LLC, and Duke Energy Morro Bay LLC (Duke Energy); Southern Energy California LLC, Southern Energy Portrero LLC, and Southern Energy Delta LLC (Southern Energy); the City and County of San Francisco (San Francisco); Pacific Gas and Electric Company (PG&E); the Utility Reform Network and Utility Consumers Action Network (TURN/UCAN); Sacramento Municipal Utility District (SMUD); the Coalition Supporting Pro-Competitive Interconnection Policies (the Coalition); Calpine Corporation (Calpine); Transmission Agency of Northern California (TANC); Southern California Edison Company (SoCal Edison); Electric Clearinghouse, Inc. (Clearinghouse); the Cities of Redding and Santa Clara, California and the M-S-R Public Power Agency (Cities/M-S-R); Modesto Irrigation District (Modesto); the California Electricity Oversight Board (Oversight Board); the California Department of Water Resources (DWR); Enron Power Marketing, Inc. (Enron); Metropolitan Water District of Southern California (Metropolitan); Northern California Power Agency (NCPA); San Diego Gas and Electric Company (SDG&E); and Western Area Power Administration (WAPA). Cogeneration Association of California (CAC) filed a timely protest, and DWR filed timely comments. CalPX filed late comments one day out of time.

The ISO, Enron and IEP filed answers to the interventions, protests and comments. Calpine filed supplemental comments and replied to the answers of the ISO, Enron, and IEP. SoCal Edison, PG&E, and SDG&E (Transmission Owners) filed a limited response to the ISO's answer.

The Coalition, Calpine, and TURN/UCAN complain that (1) the proposal does not treat existing and new generators comparably; (2) is inefficient and uneconomic (e.g., System Impact Study fails to account for the fact that congestion may last for only a few hours); (3) gives existing generators the equivalent of "super" firm transmission rights ("super FTRs") by making the new generator bear the cost of incremental congestion; (4) creates barriers to entry; (5) mutes inter-zonal congestion pricing by not creating new zones when necessary; (6) inserts a central planning approach administered by the ISO in lieu of

1/ 64 Fed. Reg. 36,350 (1999).

comparability and competitive forces; (7) is inconsistent with the ISO's protocols for intra-zonal and inter-zonal congestion management; (8) enables generators to control congestion and zone creation, substituting for comparable, efficient and transparent transmission pricing; and (9) builds upon the current intra-zonal congestion management which relies upon reliability must-run (RMR) generation instead of market forces as it was designed to do. The Coalition and Calpine further argue that, like the imposition of expansion costs on new generators, the NewGen Policy's other choices for mitigating congestion are no better because they also protect incumbent generators from market forces by raising the costs of bidding competitively into the energy markets. The Coalition, Calpine and TURN/UCAN request that the Commission reject the proposal and remand it for further consideration to the ISO.

Cities/M-S-R take a different point of view by arguing that the proposal does not go far enough in assigning mitigation costs to new generators. Cities/M-S-R state that the proposal improperly shifts the cost of mitigation from the new interconnecting generators to the ratepayers and that the new generators should be required to mitigate all intra-zonal congestion (including that below the 5 percent incremental trigger), inter-zonal congestion, and any other adverse impact on the system.

Other interveners, such as Enron and IEP, strongly support the ISO's proposal as a reasonable means of integrating new generation into the ISO-controlled grid, consistent with the existing market mechanisms and in recognition that, in limited circumstances, those mechanisms may not be well suited to address specific intra-zonal congestion issues. DWR supports the proposal but requests that the Commission accept the proposal conditionally because it may affect transmission and ratemaking issues under development in the Commission's Notice of Proposed Rulemaking in Docket No.
RM99-2-000, 2/ and transmission ratemaking discussions taking place in California.

The Oversight Board states that the NewGen Policy differs from that recently approved by the Commission for the PJM Interconnection 3/ because PJM only requires a generator to pay the cost of grid upgrades that were not included in PJM's regional transmission expansion plan. The Oversight Board notes that the ISO is currently working on a comprehensive process for

2/ Regional Transmission Organizations; Notice of Proposed Rulemaking, 64 Fed. Reg. 31,389 (1999), FERC Stats. & Regs.,

Proposed Regulations − 32,541 (1999).

3/ PJM Interconnection, L.L.C., 87 FERC − 61,299 (1999) (PJM).

long-term planning and development and that the ISO's Market Surveillance Committee will shortly (October 1999) be recommending methods for reducing intra-zonal congestion while providing locational incentives for transmission upgrades and new generation. The Oversight Board recommends accepting the NewGen policy on an interim basis pending the results of these studies and the submission of a more comprehensive transmission planning regime.

CalPX states that the principal deficiency of the proposal is that it does not adequately address the impacts on the energy markets and thus provides an insufficient basis for the Commission to determine if the proposal is in the public interest. In addition, CalPX states that the proposal may conflict with the Commission's proscription against "and" pricing. CalPX requests that the Commission set the proposal for hearing, or at a minimum, convene a technical conference or settlement process through which parties and the Commission can receive more information on the proposed amendment.

NCPA is concerned that the proposal relies on existing congestion management protocols that do not always function well. NCPA raises several issues with the vagueness of the proposal and states that the proposal requires new generators to mitigate intra-zonal, but not inter-zonal, congestion yet offers no explanation of why this should be the case. NCPA requests that the proposal be rejected.

Numerous parties also raise issues regarding specific tariff provisions, argue that the ISO's Planning documents P-101 and P-102 should be included as tariff language subject to Commission review and approval, and assert that coordinating changes in Transmission Owners' tariffs and the Transmission Control Agreement are required.

In its answer, the ISO agrees to make certain minor, non-substantive changes to Amendment No. 19, but does not believe that any of the substantive challenges to the NewGen policy are valid.

Discussion

A. Procedural Matters

Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 4/ the California Commission's notice of intervention and the timely motions to intervene of DETM, CalPX, SDG&E, Turlock, IEP, Williams, Sempra, EPSA, Duke Energy, Southern Energy, San Francisco, PG&E, TURN/UCAN, SMUD, the

4/ 18 C.F.R. 385.214 (1999).

Coalition, Calpine, TANC, SoCal Edison, Clearinghouse, Cities/M-S-R, Modesto, DWR, the Oversight Board, Enron, Metropolitan, NCPA, and WAPA serve to make them parties to this proceeding. Given the early stage of this proceeding and lack of undue prejudice or delay, we will allow CalPX's late comments.

Although answers to protests and answers are prohibited under 18 C.F.R. 213(a)(2), we nevertheless find good cause to allow the ISO's, Enron's and IEPA's answers, Calpine's reply, and the Transmission Owners' limited response, because they provide additional information that assists us in the decision-making process.

B. Congestion Management in California

The ISO uses a zonal approach for congestion management. The zonal boundaries represent congested paths, and transactions crossing the zonal boundaries (inter-zonal transactions) are subject to a Usage Charge. The Usage Charge allocates limited inter-zonal transmission capacity to those that place the highest value on it. It also causes the energy prices in the zones to differ by the amount of the Charge. For example, a Usage Charge of 5 mills/kWh would result from market clearing energy prices of 35 mills/kWh in the exporting zone and 40 mills/kWh in the importing zone. This model assumes that there is little or no congestion within the zone. In those circumstances where there is intra-zonal congestion, it is managed through adjustment bids, i.e., redispatch is accomplished by relying on market bids specifying the prices at which generators will change their dispatch schedules. The net amounts paid by the ISO to adjustment bidders are passed on to all transmission customers in the zone through an uplift charge.

Under the existing ISO congestion management approach, if congestion increases significantly within a zone and there is workable competition in the generation market on both sides of the transmission constraint, the ISO is expected to create new zones, thereby placing the congested facilities under the inter-zonal congestion management scheme. Under the existing model, other than certain grandfathered transactions (Existing Rightsholders), no transactions are sheltered from inter-zonal congestion costs, i.e., Usage Charges. In January, the ISO will begin to auction FTRs and customers purchasing FTRs will be sheltered from inter-zonal congestion costs. Initially, there will be no FTRs available on a long-term basis.

C. NewGen Policy

In this docket, the ISO proposes to change the congestion

management rules in certain circumstances involving a new generator interconnection. If the ISO determines that the new generator is not likely to cause additional intra-zonal

congestion, the ISO will adhere to the existing model, i.e., it will allow the generator to interconnect and transact on the same terms as all existing generators within the zone. If the ISO determines that the new generator may cause additional intra-zonal congestion, but there is a competitive supply of redispatch bids, the congestion will be alleviated through existing procedures and protocols. 5/ However, if the ISO determines that there is not a competitive supply of redispatch bids at that location, the ISO will require the generator to mitigate additional congestion above a specified threshold 6/ (by limiting its output, by paying the ISO's net incremental costs of redispatch, by paying others to reduce their output, or by paying for expansion of the transmission grid).

Some parties argue that a superior mechanism for managing the congestion would be to create a new zone and manage the additional congestion through inter-zonal management. The ISO contends that, while the ISO Tariff requires the creation of new zones when there is significant intra-zonal congestion and a competitive supply of redispatch bids, there are circumstances where the creation of new zones "would do more harm than good." The harm to which the ISO alludes is a reduction in the market clearing price for the newly formed export zone.7/ The ISO states that generation developers have informed the ISO that the possibility that the creation of future zones will reduce the

5/ Under the ISO's Planning Procedure P-101, adjustment bids are considered to be competitive if no single entity's generating units provide more than 20 percent of the adjustment bids.

6/ The level of congestion that would trigger the creation of a new zone is different from the threshold that would trigger the requirement proposed in Amendment No. 19 for a new generator to mitigate intra-zonal congestion. Specifically, the threshold for creating a new zone is triggered when annual intra-zonal redispatch costs for managing an intra-zonal transmission path exceed 5 percent of the annual zonal transmission access charge. The threshold under Amendment No. 19 is triggered when flows on an overloaded element would exceed the rated capacity of the element by at least 5 percent.

7/ All sellers in a zone receive the market clearing price. For example, if generators A and B are located in a single zone and are dispatched on the basis of their bids of 35 mills/kWh and 40 mills/kWh, both sellers receive 40 mills/kWh. If the zone is split in two and the generators

are separated, the market clearing price in one zone is 35 mills/kWh and the market clearing price in the other zone remains at 40 mills/kWh.

market clearing price in their newly created zones creates uncertainty and impairs their ability to secure financing. The ISO states that one of the primary purposes of the proposed amendment is to provide a level of price certainty so that generation developers can obtain financing. The ISO states that the second purpose of the proposed amendment is to send enhanced price signals to generators as to where to locate as compared to implementing the existing intra-zonal congestion management approach which spreads the costs of congestion among all transmission customers and, therefore, provides no locational price signals.

The proposal is supported by many parties, many of which own existing generation and would be sheltered from additional intra-zonal congestion costs (higher uplift charges) under this proposal. Supporters emphasize the benefits of certainty that this proposal provides. A number of intervenors argue that this model is unreasonable and inconsistent with the tenets of the California restructuring model because it treats new and existing generators differently. They also argue that the proposal creates barriers to entry by new generators, and creates opportunities for the exercise of market power. Intervenors contend that the ISO's proposal will allow existing generators to act in a manner that will artificially inflate congestion costs, leading to higher prices and inefficient expansion.

The ISO responds that the proposal has the support of a majority of those stakeholders that participated in the development of the policy and represents an appropriate and fair balance of interests as between existing and new generators. The ISO contends that it is not discriminatory to charge a new customer a rate that reflects incremental costs, noting that the Commission has approved similar proposals in other ISOs.8/ The ISO denies that its proposal creates barriers to entry since it eliminates the uncertainty that is needed by developers and otherwise unavailable. The ISO disputes the intervenors' contention that the ISO has an option of creating a new zone, noting that the ISO Tariff permits it to create a new zone only upon "a determination that a workably competitive Generation market exists on both sides of the Inter-zonal Interface for a substantial portion of the year." 9/ The ISO notes that the new proposal will only apply when congestion cannot be relieved through a workably competitive market and new zones are not an option under the existing tariff. Finally, the ISO challenges the intervenors' conclusion that its proposal will allow existing inefficient generators to inflate the congestion costs. While the ISO does not dispute that existing generators will have the

8/ ISO Answer at 11, citing PJM.

9/ ISO Answer at 18.

incentive to inflate the congestion costs in the manner described by the intervenors, the ISO contends that this potentiality is mitigated by the fact that the new generator has several options to mitigate congestion costs besides paying existing generators to back down their output, e.g., they may curtail their own generation to eliminate congestion, or they may expand the transmission grid.

D. Commission Determination

Under the proposal, a new generator who chooses to locate in an area where there is not a competitive supply of redispatch bids and where it will cause significant congestion and who does not elect to back down its generation, will be assigned the responsibility to mitigate that congestion through either paying existing generators to redispatch or by paying for a network expansion. There are several ways that redispatch could be effectuated. One way suggested by the ISO is for the new generator to pay an existing generator to back down. For example, if the market clearing price is 40 mills/Kwh, an existing generator with running costs of 35 mills/Kwh might agree to back down provided it is paid its opportunity cost, 5 mills/Kwh. This is the margin that the existing generator would make had it made the sale at a clearing price of 40 mills/Kwh. However, when the new generator locates in an area where there is not a competitive supply of redispatch bids, there will be insufficient competitive forces to discipline the payments the existing generators demand to back down. For example, if the 35 mill/Kwh generator is the only existing generator at the location where a new generator with a total cost of 25 mills/Kwh wishes to locate, the existing generator will be able to demand a payment close to 15 mills/Kwh rather than its actual opportunity cost of 5 mills/Kwh. In this example, the existing generator will be able to artificially set the congestion costs up to 10 mills/Kwh above competitive levels by usurping from the new generator most of the benefits which its low cost 25 mill/Kwh dispatch bid created.

Our order here does not overturn the Commission's pricing model 10/ which allows a transmission provider to charge a new firm transmission customer the incremental grid cost for redispatch or expansion, whichever is less. However, as illustrated above, under this proposal the customer is relying on a market-based bid for redispatch where there is not a

10/ See Pennsylvania Electric Company, 60 FERC − 61,034 (1992) and Public Service Company of Colorado, 62 FERC − 61,013 (1993).

competitive supply of redispatch bids. 11/ As a consequence the customer is facing the wrong price for redispatch, and therefore the wrong price for expansion. We cannot approve a proposal that inflates the congestion cost where there are insufficient competing suppliers to discipline the bids. Before the submittal in this docket, the excessive redispatch costs would have been included in the ISO's uplift charge and assessed to all loads in the zone. The proposal before us assigns the costs directly to the new generator, but does nothing to address the heart of the problem the excessive payments themselves. Given that this proposal is the result of a stakeholder process, we would entertain the proposed policy absent this single flaw.

As to the ISO's notion that creating a new zone would do more harm than good, we observe that creating a new zone at the point of congestion in the above example would reduce or eliminate the ability of the existing generator to set noncompetitive congestion costs. In effect, the creation of the new zone would eliminate the use of adjustment bids for inducing generators to back down (which was the means of the existing generator to exercise market power); instead, lower energy prices in the new exporting zone would induce higher-cost generators to back down. Congestion charges would reflect the difference in the energy clearing prices between the zones. The price in each zone would be the same for all generators in the zone, and compensation to new generators would not be depressed by excessive payments to existing generators to back down. This result would enhance incentives for new generators to enter the market and increase competition. It would also benefit consumers by lowering the price that they pay in the newly created zone and by providing credits to their access charges derived from the new inter-zonal congestion revenues and future FTR auction revenues. By contrast, Amendment No. 19 would maintain artificially high prices to consumers on the export side of the constraint and discourage new loads from locating there, thus perpetuating the constraint.

The ISO has chosen to maintain a single zone only when it has fewer suppliers in the zone and, therefore, discipline of the ability of these generators to inflate adjustment bids is most needed. While we are sympathetic with the ISO's goal of protecting existing transmission users from these excessive costs, this cannot be accomplished by simply assigning them to the new entrant. We recognize that the ISO is striving for price certainty that would aid new generators to obtain financing. However, the ISO's proposal emphasizes price certainty at the

11/ Use of market-based bids is different from the method used

to compute redispatch costs under an individual transmission provider's tariff where redispatch is equal to actual out-of-pocket costs.

expense of price accuracy, i.e., that the proposal is based on prices exacted by existing generators in noncompetitive markets which may be too high and may lead to poor economic decisions (e.g., inefficient transmission expansion). As interveners have suggested, there are other ways to create certainty, for example by the issuance of long-term FTRs. Thus, we direct the ISO to reconvene the stakeholder process to redesign its proposal so as to provide adequate safeguards against noncompetitive prices.

Enron argues that creating new zones would subject generators to uncertainty because they would be exposed to higher inter-zonal congestion charges. Enron's critique is misplaced, however, because the consequent uncertainty is part and parcel of the existing California zonal model. Thus, Enron's argument is a belated attack on the zonal model that we have approved and which requires the establishment of new zones whenever significant intra-zonal congestion arises.

Finally, we note that the Commission's October 1997 Order 12/ directed the ISO to file a report by January 1, 1999 that evaluates the effectiveness of the criterion for creating or modifying zones. The ISO requested an extension of time until November 30, 1999 to file that report. We will grant that request.

The Commission orders:

(A) The ISO's proposed tariff amendment is hereby rejected, as discussed in the body of this order.

(B) The ISO is hereby directed to reconvene its stakeholder process to redesign its new generation interconnection policy, as discussed in the body of this order.

(C) The ISO's request for an extension of time to file a report evaluating zone creation, as discussed in the body of this order, is hereby granted.

By the Commission.

(S E A L)

Linwood A. Watson, Jr.,
Acting Secretary.

12/ Pacific Gas and Electric Co., et al., 81 FERC − 61,122 at 61,484 (1997).