UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

San Diego Gas & Electric Company, Complainant v. Sellers of Energy and Ancillary Services Into Markets Operated by the California Independent System Operator and the California Power Exchange	)	Docket No. EL00-95-012
Investigation of Practices of the California Independent System Operator and the California Power Exchange	)	Docket No. EL00-98-000
California Independent System Operator Corporation	)	Docket No. RT01-85-000
Investigation of Wholesale Rates of Public Utility Sellers of Energy and Ancillary Services in the Western Systems Coordinating Council	)	Docket No. EL01-68-000

COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR ON THE COMMISSION'S PROPOSED WEST-WIDE 206 INVESTIGATION AND PRICE MITIGATION IN SPOT MARKETS THROUGHOUT THE WSCC

Pursuant to Rule 213 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213 (2000), the California Independent System Operator Corporation ("ISO") hereby provides comments on the Commission's West-Wide Section 206 Investigation and proposed price mitigation for spot markets in the Western Systems Coordinating Council ("WSCC"), as described in its Order Establishing Prospective Mitigation and Monitoring Plan for the California Wholesale Electric Markets and

Establishing an Investigation of Public Utility Rates in Wholesale Western Energy Markets, 95 FERC ¶ 61,115 (2001) ("April 26 Order").

I. BACKGROUND

On April 26, 2001, the Commission issued an Order establishing a prospective market mitigation and monitoring plan for the California wholesale electric markets. In addition to the price mitigation plan for California markets, the April 26 Order instituted an investigation under Section 206 of the Federal Power Act of the rates, terms, and conditions of public utility sales for resale of electric energy in interstate commerce in the WSCC. The Commission noted it would investigate such sales to the extent they involve: "(1) electric energy sold in real-time spot markets (*i.e.*, up to 24 hours in advance); and (2) take place during conditions when contingency reserves (as defined by the WSCC) for any control area fall below 7 percent." April 26 Order, 95 FERC at 61,365. The Commission explained that it was instituting an investigation because the rates, terms and conditions in the WSCC markets might not be just and reasonable "under current market rules and under certain conditions." *Id*.

The Commission also proposed certain market power mitigation mechanisms for the WSCC region, along the lines of what the Commission had proposed for the California markets. *Id.* at 61,365-66. Among these proposed changes are a must-offer requirement for all non-hydroelectric generators and marketers with available capacity during real time and mitigation of real time spot prices when contingency reserves for any control area are below 7 percent. The Commission also ordered that the authority of public utilities to charge market-based rates be subject to such public utilities not engaging in specified types of anti-competitive behavior. *Id.* at 61,365.

The Commission invited comments on the form of price mitigation to be instituted in the WSCC markets.

II. COMMENTS

In previous filings, the ISO has identified the problems inherent in implementing a mitigation regime that applies only to California markets.[1] Given the degree of integration of electricity markets throughout the WSCC region and California's position as a net importer during significant periods of the year, California-only price mitigation creates incentives for suppliers to withhold supply from California. Moreover, the tight supply conditions that have plagued California are a problem throughout the western region and therefore, as the Commission noted in its Order, spot market sales in non-California markets in the WSCC may not be just and reasonable under certain conditions and should be mitigated. Finally, the ISO previously has discussed a problem described as "megawatt laundering," which means the ability of generators within California to schedule power for export in the forward markets with the intention of selling this power back to the ISO in real time at unmitigated prices.[2]

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[1] *See, e.g.*, Comments of the ISO on the Commission's November 1 Order (*San Diego Gas & Electric Co. v. Sellers of Energy and Ancillary Services Into Markets Operated by the California Independent System Operator and the California Power Exchange, et al.*, 93 FERC ¶ 61,121 (2000)), filed November 22, 2000, at 4, n. 1 and 10; Comments of the ISO on the Commission Staff's Market Mitigation Proposal, filed in Docket No. EL00-95-012 on March 22, 2001, at 39. The California Public Utilities Commission ("CPUC") and the California Electricity Oversight Board ("CEOB") also have noted the inter-relatedness of the California and other WSCC markets. *See* Comments of the CPUC on the November 1 Order, filed November 22, 2000, at 36; and Comments of the CEOB on the November 1 Order, filed November 22, 2000, at xxiv-xxvi.

[2] *See, e.g.*, Comments of the ISO on the Commission Staff's Market Mitigation Proposal at 6, 21, and 39-40. Megawatt laundering also has been discussed in pleadings by the CEOB and the CPUC. *See, e.g.*, Comments of the CEOB on the Commission Staff's Market Mitigation Proposal, filed on March 23, 2001, at 10; Comments of the CPUC on the Commission Staff's Market Mitigation Proposal, filed on March 22, 2001, at 9.

The ISO believes that all these problems are serious threats to the ability of the ISO and other control areas in the WSCC to meet demand at just and reasonable prices during the coming summer. Accordingly, unless the modifications discussed below are undertaken, the Commission's proposed 206 investigation and WSCC-wide price mitigation will fall far short of meeting the Commission's statutory duty of ensuring just and reasonable rates in the western region.

The ISO's comments and recommendations in this filing are founded on a single underlying principle:

> ***Price mitigation will be effective only if there are no opportunities for suppliers to circumvent the mitigation and sell energy at unmitigated prices.***

The problems identified above are all rooted in the fact that the mitigation measures applied thus far have left opportunities for suppliers to sell at unmitigated prices under circumstances when that supply is most needed (*i.e.*, circumstances where mitigation has been determined to be necessary and appropriate). The mechanics of megawatt laundering illustrate an important case in point. Megawatt laundering does not require the same entity to perform both the export and import components of the export-import cycle. California generators simply can sell power forward to marketers at high prices, and the marketers can in turn offer the power to California at even higher prices in real time. Therefore, a price mitigation regime that allows marketers to cost-justify high real time offer prices on the basis of high forward power purchase prices would be ineffective at mitigating megawatt laundering (and, accordingly, would be deficient legally). The recommendations discussed below are aimed at foreclosing megawatt laundering and other opportunities to circumvent price mitigation.[3]

A. Recommended Modifications to the Parameters of the Commission's 206 Investigation

The ISO recommends two specific modifications to the proposed scope of the West-Wide 206 Investigation stated in the Commission's April 26 Order.

First, the designation "real-time spot markets" should be expanded to include any transactions executed in the time period running from the day ahead through real time, rather than just 24 hours in advance of the operating hour, as the April 26 Order provides. The reason for this modification is that a major share of spot transactions in the western region are executed in the early morning hours (5 a.m. to 8 a.m., Pacific Time) for the entire 24-hour period of the following day. Some of the operating hours to which such transactions apply will be more than 24 hours after the transaction occurred. Additional spot transactions typically occur after this early morning time period, including trades executed within the operating day all the way up to the operating hour. All of these transactions are spot market transactions (as distinct from forward transactions)

[3] It is not clear in the Commission's April 26 Order whether the bids from entities importing generation (*i.e.*, bids from "resources located outside of California") as well as a marketer's bids are subject to justification and refund. *See* April 26 Order at 61,359, 61,360. Assuming that all import bids (whether from marketers or others) must be justified, the Commission allows the justification to occur based on "*the prices they paid for power*." *Id.* at 61,360. The price paid for power can be the result of the last of several intervening transactions or trades for the power. *See id.* at 61,359 (recognizing that marketers often sell energy "numerous times"). Justification based on the cost basis of the last trade provides no price mitigation if the price can be raised by selling and reselling the power prior to bidding it into the ISO's real time market. Moreover, such conduct could be solely the result of the Commission's mitigation rules and would not require any collusion by generators.

and the Commission's proposed investigation and price mitigation rules should apply to all of these transactions.[4]

Second, the Commission should monitor and apply mitigation to all hours in which spot market transactions occur, not just hours in which reserves in a WSCC control area fall below 7 percent of that control area's load. The primary reason for this is the timing of transactions in these markets. As noted above, substantial quantities of energy are traded before it can be known definitively whether or not contingency reserves will fall below 7 percent in real time. In these markets, suppliers are setting prices for their offered energy – and often exercising market power in so doing – in anticipation of real time system conditions that may or may not qualify ultimately as reserve-shortage conditions. As a result, by limiting its investigation and mitigation to hours of contingency reserve shortage, the Commission will overlook significant instances of the exercise of market power by suppliers and will underestimate the frequency and degree to which suppliers have raised prices to levels that are not just and reasonable.

B. The Must-Offer Requirement

The ISO supports the Commission's proposal to require non-hydroelectric generators and marketers in the WSCC with energy operationally and contractually available in real time to offer that energy for sale in the various spot markets, which may

[4] The Commission often has described the day-ahead and hour-ahead markets of the ISO and PX as "spot markets". *See, e.g.*, April 26 Order at 61,361, which describes the price mitigation contained in the December 15, 2000 Order (*San Diego Gas & Electric Co. v. Sellers of Energy and Ancillary Services Into Markets Operated by the California Independent System Operator and the California Power Exchange, et al.*, 93 FERC ¶ 61,294 (2000)), as addressing only the real time and spot markets of the ISO and PX.

or may not include the ISO's real time market. The ISO notes, however, that it may not be possible to monitor compliance with such a requirement by focusing exclusively on spot market transactions. To appreciate the reasons for this, it is helpful to understand the nature of spot market transactions that take place outside of the ISO. Most spot transactions in the WSCC that occur outside the ISO's real time market are bilateral trades conducted in a decentralized fashion by loads, generators and intermediaries (marketers or traders) without the structure of a formal market or exchange.[5] In many instances, the sellers in spot transactions are marketers that are one or more transactions removed from the actual owner or operator of the generation that ultimately will supply the energy to fulfill the transaction. As a result, these spot transactions cannot in general be tied to specific generating resources. Moreover, the spot "prices" reported for the WSCC are not true market clearing prices like the 10-minute prices in the ISO's real time market or the hourly prices in the day-ahead market formerly operated by the California Power Exchange. Rather, spot prices in the WSCC are estimated by firms who gather prices and quantities for a sample of spot trades, average the data to form hourly spot prices and publish the prices for the market, associated with specific delivery points in the WSCC region (*e.g.*, California Oregon Border (COB), Palo Verde (PV), and Mid-Columbia (Mid-C)).

To monitor compliance with the WSCC-wide must-offer requirement, given the features described above, the Commission will need to focus on the generators themselves rather than on actual spot transactions. The ISO proposes that the Commission require weekly reports to the Commission by all generators in the region,

[5] The one exception to the decentralized paradigm is the Automated Power Exchange ("APX"),

indicating their total portfolio nameplate capacity, their hourly available capacity, an explanation of any significant differences between nameplate and available capacity, and an hourly breakdown of how their available capacity was offered to the market. These reports would enable the Commission to (1) ensure that all available capacity is being offered to the markets in the region to serve load, and (2) identify any constraints that may be limiting available capacity, such as emissions constraints.

C. Conditioning Market-Based Rate Authority

The ISO supports conditioning the market-based rate authority of sellers selling in the WSCC region so as to ensure that they do not engage in the identified types of anti-competitive behavior. Consistent with the principle stated above of foreclosing opportunities for market participants to circumvent mitigation in some WSCC spot markets by trading in others, any behavioral conditions the Commission places on sellers' market-based rate authority should apply regardless of where in the WSCC the participant trades. Any inconsistencies within the region will create opportunities and incentives for suppliers to avoid markets where conditions apply in favor of markets where they do not apply.

D. Price Mitigation for the WSCC Region

As discussed above, to be effective, price mitigation must be applied to ensure that during conditions the Commission has found warrant mitigation there are no opportunities for suppliers to circumvent the mitigation and sell energy at unmitigated prices. Such opportunities create incentives for suppliers to withhold supply from

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which operates a formal exchange that facilitates spot bilateral contracting between buyers and sellers.

mitigated markets when they are able equally to sell into unmitigated markets, and to "launder" their megawatts by exporting their power out of the control area in which they are located for eventual resale, either by themselves or by another entity, back into that control area at unmitigated prices.[6]

The ISO believes that the simplest and most effective way to foreclose such opportunities is to mitigate all spot transactions, whether or not they occur within a formal market. The mitigated prices (discussed below) should apply to all bilateral trades in the WSCC region executed in the time period from the day ahead up to real time. This would include the ISO's real time market as well as the out-of-market transactions in which the ISO has had to engage at various times to obtain energy that was not available at mitigated prices in order to avoid curtailing firm load.[7]

The underlying principle stated above may now be restated as follows: When suppliers realize there are no opportunities to sell power at unmitigated prices in the "spot" time frame in the WSCC, there will be no reason to withhold supply (either in the forward market or the early hours of an operating day) to exploit their market power to drive up spot prices further. In conjunction with the must-offer requirement, a price mitigation regime that follows this principle provides strong incentives for suppliers to enter forward contracts with buyers at just and reasonable prices. At the same time, buyers also have strong incentives to enter such forward contracts. If buyers wait until

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[6] Again, price mitigation that allows cost justification to be based on the prices paid for power offers no mitigation due to the business practices of marketers and others in the WSCC.

[7] The ISO notes that there are some transactions, such as exchange agreements, that may not be subjected easily to price mitigation since there is no explicit price involved. Under such transactions, for example, party A may provide one MW to party B during peak hours, for which party B provides 2 MW to party A during off-peak hours. Such transactions often involve a pumped-storage hydro resource as party A. At this time, the ISO can not provide an estimate of the significance of such trades to the WSCC spot markets.

the spot markets to procure the energy they need to serve their loads, they will have no ability during mitigated hours to compete with other control areas for limited supplies, since trades in spot markets are limited to mitigated price levels across the entire region. These buyers will thus risk not having adequate supply to serve their loads.

For the mitigated price calculation, the ISO believes it is important to tie mitigated prices to actual variable operating costs. This is appropriate even where there are no formal markets that pay all suppliers a market clearing price, because all trades will tend to gravitate toward the mitigated price, much as the quoted spot prices in the WSCC region over the past year have tended to follow the level of price caps in the ISO markets.

The ISO recommends using a WSCC-wide proxy price based on variable costs, as the Commission has ordered for the California markets. April 26 Order at 61,358-59. The proxy price should be based on a reference heat rate and gas price, with an adder for variable operations and maintenance costs. The reference heat rate should not be the highest heat rate of thermal generation in the region, but should be set to be greater than or equal to the heat rates (at or near maximum load) of 90 percent of the thermal generators in the region. The reference gas price should be a weighted average of spot gas prices at the major delivery points in the WSCC region, excluding California delivery points. Because 10 percent of the generators can be expected to have heat rates higher than the reference, the Commission should allow trades to occur at prices higher than the proxy price, but only when the seller can justify the higher price based on the variable operating costs of a specific generating unit, and subject to Commission review and possible refund.[8]

Under this approach, marketers must not be allowed to justify a higher price based on their purchase cost. Otherwise, the whole market power mitigation plan falls apart.

Any generators/marketers concerned about not recovering all of their costs (purchase costs in the case of marketers) at such a proxy price would be able to avoid the proxy price simply by trading prior to the spot market time frame. Buyers would have a strong incentive to pay above the proxy price in a forward transaction so as not to run the risk of a real time supply shortage, which could occur if they waited until real time to make their purchases. Under a WSCC-wide proxy price, they would have no ability to compete for supply in real time through bidding up the price. Thus, the elements of the monitoring and mitigation regime proposed in this filing would serve to create a system of balanced incentives for buyers and sellers in the WSCC region to increase the volume of forward contracting and reduce their reliance on spot market transactions. This goal, as all parties well know by now, is an essential piece of the solution to the power crisis plaguing California and threatening the rest of the WSCC.

[8] As a general matter, the ISO urges the Commission to expand the quarterly reporting requirements for public utility sellers that have market-based rate authority. Until such time as the West can move to a more uniform and transparent market pricing regime (perhaps with the advent of a West-wide Regional Transmission Organization), the ISO believes that it is imperative that the Commission require expanded reporting requirements for bilateral transactions consummated under Commission granted market-based rate authority. Moreover, the Commission should ensure that such reports are aggressively reviewed and improper conduct identified and sanctioned. While the Commission historically has relied on the fact that such transactions are "arms length" deals where both parties are willing and knowing participants, it is now clear that the opaque bilateral market creates ample opportunities for gaming and that the daisy-chain transactions that result are anything but reasonable for the end-use customer forced to pay artificially inflated prices.

III. CONCLUSION

Wherefore, the ISO requests that the Commission accept these Comments on the structure of its proposed West-Wide 206 Investigation and price mitigation for the WSCC region.

Respectfully submitted,

Charles F. Robinson General Counsel Roger E. Smith Senior Regulatory Counsel Beth Ann Burns Regulatory Counsel The California Independent System Operator Corporation 151 Blue Ravine Road Folsom, CA 95630 Tel: (916) 608-7135	Kenneth G. Jaffe David B. Rubin Julia Moore Swidler Berlin Shereff Friedman, LLP 3000 K Street, N.W., Suite 300 Washington, DC 20007 Tel: (202) 424-7500

May 7, 2001

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Washington, DC, this 7th day of May, 2001.

Julia Moore
(202) 295-8357

May 7, 2001

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

Re: ***San Diego Gas & Electric Company v. Sellers of Energy and Ancillary Services Into Markets Operated by the California Independent System Operator and the California Power Exchange*, *et al*.**
Docket Nos. EL00-95-012, *et al*.

Dear Secretary Boergers:

Enclosed please find an original and fourteen copies of the Comments of the California Independent System Operator Corporation on the Commission's Proposed West-Wide 206 Investigation and Price Mitigation in Spot Markets Throughout the WSCC in the above-captioned matter. Also enclosed are two extra copies of the filing to be time/date stamped and returned to us by the messenger. Thank you for your assistance.

Respectfully submitted,

Julia Moore
(202) 295-8357

Counsel for the California Independent System Operator Corporation