UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

San Diego Gas & Electric Company,	)	
	)	
Complainant,	)	
	)	
v.	)	
	)	Docket No. EL00-95-045
	)	
Sellers of Energy and Ancillary Services	)	
Into Markets Operated by the California	)	
Independent System Operator and the	)	
California Power Exchange,	)	
Respondents.	)	
	)	
Investigation of Practices of the California	)	
Independent System Operator and the	)	Docket No. EL00-98-042
California Power Exchange	)	
	)	

STATUS REPORT BY THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION REGARDING INFORMATION TO BE FILED WITH THE PRESIDING ADMINSTRATIVE LAW JUDGE

To: The Honorable Bruce L. Birchman, Presiding Administrative Law Judge

I.   INTRODUCTION

In the Commission's July 25, 2001 Order in this proceeding ("Order"), the

California Independent System Operator Corporation ("ISO") was directed to provide a

recreation of the mitigated prices that result from using the Commission's refund

methodology for every hour from October 2, 2000 to June 20, 2001 ("Refund Period").

In addition, the ISO was directed to rerun the settlements process. This Status Report

describes the steps that the ISO is taking to comply with the Commission's directive.

As is described, the most relevant data is being provided to the parties today, with the

balance to be provided on the most feasible schedule. It should be understood that the

ISO is following the methodology prescribed by the Commission without waiving in any

respect its right to seek rehearing of aspects of or limitations to the methodology that

the ISO believes inappropriate.

It is the ISO's considered judgment that to best facilitate an expeditious

resolution of this proceeding, the hearing, in the first instance, should focus on

developing the record necessary to determine the refund amounts owed by sellers into

the ISO markets. That is, the focus should be on the recalculated mitigated market

clearing prices ("MCPs") and the transaction level data (or billable quantities) to which

the mitigated MCPs are to be applied.[1] Until there is a determination of specific refund

amounts, the *allocation* of refunds to purchasers would be premature.[2] As described

more fully below, in order to allocate refund amounts to purchasers, the ISO must rerun

settlements for every hour of the refund period, a process that will take approximately

twenty (20) days. It would be highly wasteful of scarce human and computer resources

to undertake that rerun prior to the determination of refund liabilities.

II.   STATUS REPORT

The Commission's directives present the ISO with at least four distinct tasks.

First, the ISO must recreate the mitigated MCPs for every hour using the methodology

prescribed in the Order (e.g., the ISO must determine the marginal generating unit for

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[1]   The difference between the amounts owed to suppliers by applying the mitigated MCPs to transaction data and the amounts owed to suppliers using the existing market clearing prices and transaction data, will determine the extent of refund obligation.

[2]   In fact, any allocation of refund amounts to buyers is necessarily preliminary prior to final Commission approval of refund amounts.

every 10-minute interval using the maximum heat rate and must apply the appropriate gas price to that marginal generating unit). Second, the ISO must extract the transaction details or billable quantities for every real time Energy and Ancillary Service capacity transaction, for every generating unit, including real time energy instructions for every 10-minute interval (and every bid segment within an interval) during the Refund Period. As opposed to previous ISO analyses based on schedule data (or the expected performance of generators), the transaction details for settlements are based on the actual performance of generators (meter data). Third, the ISO must apply the recalculated MCPs to the transaction data to determine the amount of refunds due per transaction. Fourth, to allocate the refunds per transaction to the purchasers who were overcharged, the ISO must rerun settlements for every hour of the Refund Period.

At this time, the ISO expects to complete each of these tasks in the following time periods: (1) the ISO expects to provide the recalculated MCPs on August 9, 2001 to all parties who have provided the ISO with executed Non-Disclosure Statements;[3] (2) the ISO expects to provide the transaction details or billable quantities for every transaction, for every generating unit, including real time energy transactions for every 10-minute interval (and every bid segment within an interval) during the Refund Period by August 14, 2001; and (3) the ISO can calculate the refund amounts within two or three days from the time the transaction details are available, i.e., by August 17, 2001. With regard to the fourth task described, in order to allocate the refunds to purchasers, the ISO must rerun its settlements process for the entire Refund Period. The ISO has dedicated extra computers or file servers for this task and estimates that it can rerun

these settlements in twenty (20) days once final or recommended refund amounts are established.

A.   Calculation of Mitigated MCPs

In implementing the Commission's directives regarding the calculation of the mitigated MCPs, the ISO's August 9, 2001 submittal includes: (a) a description of the methodology used to calculate the mitigated MCPs, including the heat rates (i.e., the incremental heat rate at the instructed dispatch level for the marginal unit) and gas costs of the marginal units for each 10-minute interval, (c) an attachment showing the heat rate information for each gas-fired unit used in this analysis, and (d) an attachment showing the average daily spot gas prices that were used.[4]

As directed in the Order, the ISO determined the marginal unit by reference to the maximum heat rate of the unit actually dispatched by the ISO in real time. Slip Op. at 33. In addition, the ISO averaged the maximum heat rates for the six 10-minute intervals of each hour and substituted the revised mitigated MCP for each 10 minute period. July 25 Order, Slip Op. at 33, n.68.

For gas prices, the ISO used daily spot gas prices. If the marginal unit is located in the North of Path 15 ("NP15") zone, then the ISO used the delivered average daily spot gas price at Malin and PG&E Citygate. If the marginal unit is located in the South

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[3]   Information provided to the parties will simultaneously be provided to Staff and to Judge Birchman.

[4]   The gas price information will be the daily averages that have been calculated from the source materials, not the source materials themselves, as the latter is copyrighted. The ISO purchased the data and presumably the sellers already have done so or can do so. Where a single data point is used, and the information is subject to copyright protection, the data will not be furnished, but the source will be referenced, enabling suppliers to obtain the data directly from the holder of the copyright.

of Path 15 ("SP15") zone, then the ISO used the delivered average daily spot gas price for Southern California Gas large packages. The Order directs the ISO to use the simple average daily spot gas price as reported by *Gas Daily*, *NGI's Daily Gas Price Index* and *Inside FERC's Gas Market Report*. However, *Inside FERC's Gas Market Report* did not publish daily spot prices at Malin and PG&E Citygate until March 9, 2001. As a consequence, for the October 2, 2000 to March 9, 2001 period, the ISO calculated the simple average daily spot gas price in NP15 by averaging the prices reported by *Gas Daily* and *NGI's Daily Gas Price Index*. From March 10, 2001 to June 20, 2001, the ISO calculated the simple average daily spot gas price by averaging the prices reported by *Gas Daily*, *NGI's Daily Gas Price Index*, and *Inside FERC's Gas Market Report*. In SP15, the daily spot gas prices are the midpoint prices in *Gas Daily* for Southern California Gas large packages. July 25 Order, Slip Op. at 35, n.70. For those days in which these publications do not provide prices (weekends & holidays), the ISO utilized their last published prices. July 25 Order, Slip Op. at 35. The propriety of these gas prices may of course be affected by determinations yet to be made in the El Paso proceeding now pending before Chief Judge Wagner, an issue that will have to be addressed when corrected just and reasonable gas prices are known.

Finally, in calculating the mitigated MCPs the ISO is using an O&M adder of $6, is excluding emissions costs, and is applying a 10% creditworthy adder to all mitigated MCPs starting on January 6, 2001.

B.   **Transaction Data**

1.   **ISO Settlements System & Process.**   The settlements process under

the ISO Tariff increases the difficulty of creating the factual record directed by the

Commission within the specified time periods. The ISO settlement process begins with

the submission of meter data 45 days after the Trading Day. Within 38 *business days*

of a Trading Day (or shortly after the ISO receives the meter data), the ISO will issue

SCs a Preliminary Settlement Statement for that Trading Day. No later than 51

business days after a Trading Day, the ISO will issue SCs a Final Settlement Statement

for that Trading Day. SCs may dispute items on settlement statements within eight (8)

business days from the issuance of the Preliminary Settlement Statement and within

ten (10) business days from the issuance of the Final Settlement Statement.[5]

In addition, there are a variety of circumstances that may lead to a recalculation

of Settlement Statements (e.g., an error in the meter data that previously was sent to

the ISO) after the period for notifying the ISO of a dispute for a Final Settlement

Statement ("post-final changes"). Once the ISO knows of and agrees that a post final

adjustment should be made, it must then process that adjustment. The processing of

post-final adjustments always requires a manual effort by ISO settlements personnel.

Once processed, the post final adjustment is incorporated into the next available

Preliminary Settlement Statement.

The potential or need to recalculate Settlement Statements for the Refund

Period will always exist because there is no cut-off point for post final adjustments in

the ISO Tariff. However, once final mitigated MCPs are approved and refund amounts

have been determined in this proceeding, any post-final adjustment will use the

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[5]   For disputes of Final Settlement Statements, the dispute must be a new charge on a Final

mitigated MCPs in processing the adjustment. The ISO reiterates that the Settlement

Statements are to be distinguished from ISO "invoices" which comprise the cash

settlement of all ISO charges and payments on a monthly basis. The invoices are sent

out twice a month; the first invoice is based on Preliminary Settlement Statements and

the second invoice is based on Final Settlement Statements. See, ISO Tariff section

11.9.

For the purposes of determining refunds pursuant to the Commission's refund

methodology, the settlements process described above means there are five categories

of settlement data within the Refund Period: (1) data for Trade Days for which the ISO

has not yet received meter data; (2) data for those Trading Days for which the ISO has

issued Preliminary Settlements Statements; (3) data for those Trading Days for which

the ISO has issued Final Settlements Statements; (4) data for those Trading Days for

which the ISO has determined there is a post final adjustment that needs to made but

has yet to process the adjustment; and (5) data for those Trading Days for which the

ISO has determined there is a post final adjustment that needs to be made and it has

made the adjustment.

As of August 8, 2001, the ISO has: (1) received all the initial meter data through

June 20, 2001; (2) issued Preliminary Settlement Statements through June 14, 2001;

(3) issued Final Settlement Statements through May 28, 2001; (4) known post final

adjustments through Trading Day April 29, 2001; and (5) processed all known post final

adjustments through Trading Day December 22, 2001. The factual record to be

developed can proceed as directed by the Commission, but it will be necessary to

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Settlement Statement or a change from a Preliminary Settlement Statement.

determine how to incorporate: (a) the results of Final Settlements Statements that have yet to be issued, (b) those known post-final adjustments that have yet to be processed by the ISO, and (c) any post-final adjustments that become known in the future.

2.   Extraction of Transaction Data, Calculation of Refunds, and Refund Methodology.   As alluded to earlier, the ISO must extract the transaction details or billable quantities for every transaction, for every generating unit, for every 10-minute interval (and every bid segment within an interval) during the Refund Period. The previous ISO analyses that were the subject of the settlement proceedings before Chief Judge Wagner were based upon schedule data (or the expected performance of generators). However, the Commission's July 25 Order requires development of a factual record based on the actual transactions that occurred during the Refund Period. The actual performance in the ISO markets is based on meter data and it is the meter data that allows the ISO to measure the performance of resources (i.e., the comparison of expected performance based on schedules to actual performance based on meter data).

Extraction of Transaction Data. The transaction level detail will apply to several different types of transactions:, Ancillary Service transactions, Imbalance Energy transactions, Out-of-Market ("OOM") transactions, and Uninstructed Imbalance Energy transactions (i.e., the real time changes in generation or demand other than what was expected in final schedules or instructed by the ISO). While the ISO has the transaction level details for all of these transactions, the settlement statements summarize a particular charge type, for a particular hour and interval, for a generating unit per day, and the invoices aggregate the charge type totals for the month into a net

due-to-the-ISO or a net due-to-the-SC amount. Therefore, the ISO must extract additional sub-settlement statement level details from the data files.

In addition, the refund obligations must be determined per-transaction, per-interval, per-hour for the entire Refund Period. Moreover, the ISO must extract sub-interval or "bid segment" information for each generating unit, for each 10 minute interval, for the Refund Period.[6] A failure to disaggregate by bid segment could understate a supplier's refund obligation by masking bids that exceed the MCP.

While the underlying transaction data by interval is contained in the ISO settlement system as the basis for determining amounts owed to generators, the ISO does not publish bid segment details in its settlement statements. The settlement statements summarize a particular charge type, for a particular hour and interval, for a generating unit per day and the invoices aggregate the charge type totals for the month into a net due-to-the-ISO or a net due-to-the-SC amount. Therefore, the ISO must extract the sub-settlement statement details from the data files. The ISO expects to provide this disaggregated data for the Refund Period by August 14, 2001.

Refund Calculations. Once the ISO has the transaction data or billable quantities for every transaction in the Refund Period, it can apply the mitigated MCPs to the transaction data. The payments and charges using the mitigated MCPs can then be compared to the actual payments and charges to produce the refund obligation per generating unit, per transaction, for the entire Refund Period. The ISO can calculate the refund amounts within two or three days from the time the transaction details are

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[6]   For the ISO's Ancillary Service and Imbalance Energy markets, resources must submit bids in a staircase function composed of up to 11 ordered pairs of quantity/price information ($/MW for capacity and $/MWh for Energy). See, e.g., ISO Tariff, Schedules and Bids Protocol, §§ SBP5.1 and SBP6.2.

available, or by August 17, 2001.

Refund Methodology. The Commission's July 25 Order requires development of a factual record based on the actual transactions that occurred during the Refund Period. While the ISO had proposed to calculate refunds using an assumed economic dispatch of generating units, the Commission disagreed with the ISO's proposal. July 25, Order, Slip. Op. at 33.[7] In determining the refund amounts based on what was actually dispatched and what charges were assessed on purchasers, the ISO will calculate the refund amounts using only those assessed charges that are higher than the mitigated MCPs.

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[7]   This is an issue on which the ISO will seek rehearing of the July 25 Order.

III. CONCLUSION

It should be clear from the above that the July 25th Order imposes significant resource-intensive responsibilities on the ISO, and that the ISO is discharging those responsibilities on the most expeditious schedule possible.

Respectfully submitted,

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August 9, 2001

Certificate of Service

       I hereby certify that I have this day arranged for the foregoing document to be served electronically upon the designated person that has signed a Non-Disclosure Statement, that will be receiving the data in Docket Nos. EL00-95-045 and EL00-98-042.

       Dated at Washington, D.C., this 9th day of August, 2001.

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                     Edward Berlin