UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

California Independent System Operator Corporation	**)**	**Docket Nos. ER02-1656-___, ER02-1656-___, and ER02-1656-___**

REQUEST FOR REHEARING OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

Pursuant to Section 313(a) of the Federal Power Act ("FPA"), 16 U.S.C. § 825l(a) (1994), and Rule 713 of the Rules of Practice and Procedure of the Federal Energy Regulatory Commission ("Commission"), 18 C.F.R. § 385.713 (2003), the California Independent System Operator Corporation ("ISO")[1] respectfully submits this request for rehearing of the Commission's "Order on Rehearing of the California ISO's Market Redesign" issued on September 20, 2004 in the above-captioned proceeding, 108 FERC ¶ 61,254 ("September 20 Order"). The September 20 Order addressed issues raised on rehearing of the Commission's "Order on Further Development of the California ISO's Market Redesign and Establishing Hearing Procedures" issued on June 17, 2004 in Docket Nos. ER02-1656-017, *et al.* ("June 17 Order").

I. SUMMARY

This request for rehearing concerns the Commission's decision to permit sellers of Ancillary Services ("A/S") in the Day-Ahead Integrated Forward Market ("IFM") to revise and resubmit the associated Energy bids for use by the ISO for

real-time dispatch. The ISO submits that the Commission erred in granting the request for clarification/rehearing of Dynegy/Williams[2] with regard to their argument that such sellers should be permitted to submit revised real-time Energy bids associated with A/S capacity they have sold to the ISO in the IFM. As explained herein, the IFM, as proposed in the context of the ISO's Market Redesign and Technology Upgrade project ("MRTU"), will co-optimize A/S procurement with Energy clearing and congestion management. In contrast to today's procurement of A/S or the procurement of Residual Unit Commitment ("RUC") capacity under MRTU, the IFM must consider Energy bids in the co-optimization process, and such Energy bids will affect the selection of A/S bids and the clearing prices paid to the A/S capacity so procured. Clearly, if the submitted Energy bids cannot be viewed as binding offers when accepted by the ISO in the IFM, the principle of co-optimization that is central to the IFM design will be undermined; *i.e*., what appeared to be the optimal allocation of resources to Energy and A/S based on Day Ahead Energy bids will no longer be optimal when some of those Energy bids are subsequently revised. In this respect, the Energy bids associated with procured A/S capacity are the same as the Energy bids selected to provide Energy in the day-ahead IFM, the acceptance of which by the ISO constitutes a contract between the ISO and the Seller. Any unilateral modification by the Seller of Energy bids accepted in the IFM essentially breaks the contract between the ISO and the Seller. As an example, this filing will show

[1] Capitalized terms not otherwise defined herein are used in the sense given the Master Definitions Supplement, Appendix A to the ISO Tariff.

one significant consequence of allowing a Seller to increase the price of an accepted Day-Ahead Energy bid is that the Seller of A/S can be double-paid for opportunity cost that is included in the forward A/S capacity payment – an unjust and unreasonable result.

With respect to the issue of fuel-cost risk, under the simultaneous optimization approach utilized in the IFM design, the Seller would internalize any fuel-cost risk in their submitted bids. It would be illogical for a supplier to submit Energy bids to the day-ahead IFM without internalizing fuel-cost risk, because those bids could just as well be selected for Energy and, thereby, bind the supplier to deliver such energy at the day-ahead price. Accordingly, prudent and standard business practice would be for a Seller to incorporate fuel-cost risk in the Day-Ahead Energy bids. The Commission erred in accepting the argument that suppliers must be allowed to revise their Energy bids associated with accepted A/S capacity in order for them to manage fuel-cost risk. Managing fuel-cost risk in this manner in a simultaneous optimization market would not be rational business practice.

Moreover, granting Suppliers the ability to modify their bids will increase the likelihood of divergence between Day-Ahead and Real-Time Energy prices. To the extent Suppliers manage fuel-cost risk by raising their Energy bids in Real-Time rather than internalizing such risk in their Day Ahead Energy bids, it will systematically lower Day-Ahead Energy prices relative to Real Time. In addition, sellers with a portfolio of resources as well as load can inflate Day-

[2] "Dynegy/Williams" comprise Dynegy Power Marketing, Inc., El Segundo Power LLC, Long Beach Generation LLC, Cabrillo Power I LLC, Cabrillo Power II LLC, and Williams Power

Ahead A/S prices for their self-provided A/S by omitting the fuel-cost risk in their Day-Ahead Energy bids and increasing the opportunity cost component of the A/S clearing price, knowing that they can increase their accepted Energy bids in real time. The Commission has recognized both simultaneous optimization and price convergence to be important features of the MRTU market design. It would be detrimental to the ISO's comprehensive market redesign effort to adopt a re-bidding mechanism that undercuts these objectives.

II. SPECIFICATION OF ERROR

The ISO respectfully submits that the September 20, 2004 Order erred in the following respects:

1. The Commission erred in finding that sellers should be permitted to change their Energy bids associated with Ancillary Service capacity in real time.

III. ARGUMENT

A. The Fuel Cost Risk Associated with Energy Bids Submitted in the Forward Market is the Same, Regardless of whether they are Cleared in the Forward Energy Market or Associated with procured Ancillary Service Capacity

In the September 20 Order, the Commission noted the following argument made by Dynegy/Williams: "Dynegy/Williams notes that the same fuel price risk faced by a seller of RUC capacity is also faced by a seller of day-ahead ancillary services. Dynegy/Williams states that a logical extension of the [June 17] Order would be to afford energy bidding flexibility on ancillary services bids accepted in

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Company, Inc.

the day-ahead market." September 20 Order at P 21. In response, the Commission found that:

> In general, we find that Dynegy/Williams provide a reasonable comparison with regard to fuel cost risk associated with sellers of RUC [Residual Unit Commitment] capacity and sellers of ancillary services. Since fuel costs can increase between the day-ahead and real-time markets, sellers of both RUC capacity and ancillary services should be permitted to submit energy bids that reflect their actual marginal costs of supply in that market.

September 20 Order at P 25.

The analogy between Energy bids associated with A/S capacity and those associated with RUC capacity is not appropriate. Unlike A/S Energy bids, RUC Energy bids are not considered in the optimization process for procuring RUC capacity; rather, the RUC optimization only looks at availability bids, not Energy bids. Thus, as discussed herein, the opportunity to revise the Energy bids associated with A/S in real time undermines the IFM optimization, a problem that does not exist under RUC. Thus, the Commission's decision permitting a re-bid opportunity for RUC Energy cannot serve as the basis for approving a re-bid opportunity for A/S Energy. Further, Dynegy/Williams' comparison with regard to fuel risk fails to withstand scrutiny. The Commission's decision is based on an implausible assumption – that sellers will not internalize their fuel costs in their Day-Ahead Energy bids. There is no additional fuel cost risk associated with A/S capacity in real time because, in submitting their A/S Energy bids, sellers of Energy associated with A/S have already internalized in those Energy bids any fuel cost risk. Unless the seller has explicitly self-provided the A/S, the Energy bid associated with A/S capacity may potentially be cleared in the Day-Ahead

Energy market rather than reserved for A/S and dispatched in real time. Stated differently, because the seller's A/S Energy bid could be accepted in the Day-Ahead market, the seller necessarily must be prepared to provide the Energy at its bid price. Under these circumstances, it is unreasonable to presume that a seller would submit an Energy bid – a bid that might be accepted – that does not reflect its expected cost of providing the Energy. Because the seller cannot submit two sets of Energy bids to the Day-Ahead market, one set if the capacity is cleared for Energy and another if it is accepted for A/S, a rational seller would internalize its fuel-cost risk in its Day-Ahead Energy bids. The fact that the ISO ultimately procures this capacity for A/S does not add any additional risk for the seller. Accordingly, the Commission should reverse its order allowing post Day-Ahead Energy bid changes to reflect fuel cost adjustments is not reasonable.

B. Permitting Sellers to Change their Energy Bids Associated with Ancillary Service Capacity in Real Time Constitutes a Modification of Contracts without the Consent of the ISO, which is a Party to the Contract

In the Day-Ahead IFM, sellers will submit Energy bids, A/S capacity bids, and other bid components allowed in the MRTU bid structure. The IFM will then accept some of those Energy bids by either (a) clearing such bids for Energy and scheduling them to provide the given quantity of cleared energy at a Day-Ahead price (which is calculated by the IFM based on accepted Energy bids), or (b) procuring Ancillary Service from the capacity associated with those Energy bids. In either case, the ISO's acceptance of the Energy bids essentially constitutes a contract to which the ISO and the seller are parties. In case (a) the contract is a firm commitment by the supplier to provide the quantity of cleared

Energy at the Day-Ahead price; in case (b) the contract is an option the ISO can exercise to procure up to a specified quantity of Energy in real time in accordance with a strike price schedule (*i.e*., the Energy bid curve) that was specified at the time the contract was entered and was instrumental in the ISO's decision to enter that contract. In that regard, the ISO accepts A/S bids based on an optimization of the capacity bid and the Energy bid. If the Commission were to permit sellers to change their accepted Energy bids in real time, that would constitute a modification of the contracts without the ISO's consent – an unreasonable result. Indeed, the Commission has previously ruled, in the context of approving the ISO's bidding rules for the new market design, that "bid prices that are accepted in one market time frame are contractual commitments that cannot be altered in a subsequent timeframe." *California Independent System Operator Corporation*, 105 FERC ¶ 61,140, at P 44 (2003) ("October 28 Order"). In this instance, the ISO has accepted Day-Ahead bids based in whole or in part on the submitted Energy bid. Permitting the supplier to re-bid its accepted Energy bid constitutes reneging on an accepted contract and is inconsistent not only with the Commission's findings in the October 28 Order, but with basic contract law.[3]

It is axiomatic that an agency must conform to its prior practice, policy, and decisions or explain the reasons for its departure from such precedent. *See United Municipal Distributors Group v. FERC*, 732 F.2d 202, 210 (D.C. Cir. 1984); *Greater Boston Television Corporation v. FCC*, 444 F.2d 841, 852 (D.C.

[3] When the ISO accepts a supplier's bid in one market, that acceptance constitutes an obligation for the supplier to furnish energy at the agreed-upon price that cannot be raised.

Cir.), *cert. denied*, 403 U.S. 923 (1971) (agency must give reasoned analysis for departures from prior agency practice). The Commission has failed to conform to that mandate.

C. Permitting Sellers to Change their Energy Bids Associated with A/S Capacity in Real Time will Undermine the Simultaneous Optimization of the Energy, Ancillary Services, and Congestion Management Markets

In an order issued earlier in this proceeding, the Commission agreed with the ISO's proposal to "replace the separate optimization of congestion management and ancillary services with a simultaneous optimization of energy, congestion management, and ancillary services market[s]." *California Independent System Operator Corporation*, 100 FERC ¶ 61,060, at P 109 (2002). The Commission noted that the ISO's proposal was "an important step towards an efficiently functioning market." *Id.* Therefore, the Commission directed the ISO to file a detailed version of the proposal. *Id.* at P 114. The ISO did so. In the October 28 Order, the Commission approved the ISO's IFM proposal recognizing, *inter alia*, that it would "make the best use of transmission and generation resources to serve load and provide system reserves on a least cost basis." October 28 Order at P 48. The simultaneous optimization of markets is the central design concept of the IFM the ISO plans to implement in the context of MRTU. Moreover, the simultaneous optimization of Energy, A/S, and Congestion Management constitutes the Commission's preferred market design. *See Remedying Undue Discrimination through Open Access Transmission Service and Standard Electricity Market Design*, 100 FERC ¶ 61,138, at P 257 (2002).

Permitting sellers to change their Energy bids associated with A/S capacity in real time would undermine the simultaneous optimization of the Energy, A/S, and Congestion Management Markets, which constitutes the Commission's preferred market design and which the Commission has approved for the ISO. The following example illustrates how simultaneous optimization would be undermined. Assume that the ISO has a need for 160 MW of Energy and 20 MW of A/S. Also assume that two generating units having the same generating capacity submit bids for Energy and A/S as follows:

- Unit 1 (100 MW capacity) submits an Energy bid of $30/MWh and an A/S bid of $2/MW/h.
- Unit 2 (100 MW capacity) submits an Energy bid of $40/MWh and an Ancillary Service bid of $15/MW/h.

Under simultaneous Energy and A/S optimization (*i.e.*, the least bid-cost solution), the Energy and A/S amounts selected by the ISO will be as follows:

- Unit 1 is selected to provide 80 MW of Energy and 20 MW of A/S.
- Unit 2 is selected to provide 80 MW of Energy and 0 MW of A/S.

This A/S award to Unit 1 is made not only because Unit 1's A/S bid is less than that of Unit 2; the ISO has to look at both the Energy and the A/S bid costs in determining the awards. Unit 1 also is able to provide less expensive Energy than Unit 2, yet not all of Unit 1's less expensive Energy is selected. The following comparison shows why:

- If Unit 1 were selected to provide 100 MW of Energy, then Unit 2 would provide 60 MW of Energy and 20 MW of Ancillary Services. The total bid cost would be ($30*100) + ($40*60) + ($15*20) = $5,700.

- With Unit 1 selected to provide 80 MW of Energy and 20 MW of A/S, however, Unit 2 provides 80 MW of Energy. The total bid cost is ($30*80) + ($40*80) + ($2*20) = $5,640.

Now, under this least-cost solution, the Market Clearing Prices ("MCPs") are as follows:

- The Energy MCP (*i.e.*, the marginal cost of producing the next MWh of Energy) is $40/MWh.

- The A/S MCP is $12/MWh. (To get the next MW of A/S from Unit 1 would require shifting 1 MW of Energy from Unit 1 at $30/MWh to Unit 2 at $40/MWh, with a total cost increase of $2 + ($40 -$30) = $12; this is still less expensive than getting the next MW of A/S from Unit 2 at $15/MWh.)

Note that the A/S payment to Unit 1 in this market (the Day-Ahead Market) is not only its A/S bid cost of $2/MW/h, but also includes an additional "energy opportunity cost" of $10/MWh to compensate for the fact that it would have earned the $40/MWh Energy MCP, which was $10 above its Energy bid, on each MW of its A/S capacity if that capacity were cleared for Energy instead of procured for A/S.

If Unit 1 is allowed to change (increase) its Energy bid associated with A/S capacity after the supplier's bid is selected, it can increase its Energy bid up to just below $40/MWh and still win out over Unit 2 in real time. Suppose Unit 1 submits an Energy bid at $39/MWh for real time associated with its 20 MW A/S capacity, and that all 20 MW of that capacity are dispatched for Energy in real time and set the real-time LMP. Unit 1 would then be double-paid for $9/MWh of its $10/MWh Day-Ahead opportunity cost, once in the form of the opportunity cost it received in the Day-Ahead A/S market and once in the Real Time Energy market.

Further, consider a situation in which fuel costs increase, resulting in a commensurate Energy bid cost increase of $9/MWh. Had the bidder internalized its fuel-cost risk in its Day-Ahead Energy bid (*i.e.*, had it bid $39/MWh instead of $30/MWh), as it would be expected to do in such a situation, the IFM would still have procured 20 MW of A/S from Unit 1 and 80 MWh of Energy each from Units 1 and 2. Unit 1 would still have been paid the MCP of $40/MWh for its 80 MW of Energy, but would have received only $3/MW/h for its selected A/S capacity ($2 for the Ancillary Service bid plus $40 - $39 = $1 for the Energy opportunity cost) instead of $12/MW/h. The impact of this difference is relevant not only to this particular seller, because it affects the A/S clearing price paid to all sellers of the particular service in the Day-Ahead A/S market. The significance of this impact for price convergence between Day-Ahead and real time is discussed in the next section.

D. Permitting Sellers to Change their Energy Bids Associated with Ancillary Service Capacity in Real Time Creates the Potential for Divergence between Day-Ahead and Real-Time Energy Prices

In addition to undermining the simultaneous optimization of markets, permitting sellers to change their Energy bids increases the potential for divergence between Day-Ahead and Real-Time Energy prices. To the extent Suppliers raise their Energy bids in real time for capacity that was procured through the IFM simultaneous optimization in the forward time frame, it will systematically increase Real-Time Energy prices relative to Day-Ahead. With regard to the A/S market, allowing sellers to change their Energy bids in real time can inflate Day-Ahead A/S prices. As shown in the previous example, such a

provision could result in an increase in the A/S clearing price from $3/MW/h to $12/MW/h. Suppose this supplier also serves load and self-provides some A/S from other resources in an amount that exceeds its own share of the A/S requirement. The seller would then receive a net payment for its self-provided A/S in excess of its A/S obligation at the rate of $12/MW/h rather than the rate of $3/MW/h, which more accurately reflects rational management of fuel-cost risk by sellers.

These results would undercut the Commission's market design goals. For example, earlier in this proceeding, the Commission expressed its concern that "the present CAISO proposal to limit the ability of Constrained Output Generators to set the clearing price in the forward markets is not consistent with its approach to real-time pricing *and may prevent the convergence of prices in these markets*." *California Independent System Operator Corporation*, 105 FERC ¶ 61,140, at P 89 (2003) (emphasis added). Further, the Commission found implementing virtual bidding procedures would have the benefit of promoting the convergence of Day-Ahead and real-time prices. *Id.* at PP 147, 151. In the June 17 Order, the Commission again noted this purported benefit, and directed the ISO to submit, in its filing to comply with the order, either tariff sheets to implement virtual bidding simultaneously with the implementation of the Day-Ahead Market, or a full explanation of why this should not be done. June 17 Order at PP 155, 159. It is arbitrary and capricious for the Commission to require the ISO to submit virtual bidding and lumpy generator proposals that promote the convergence of Day-Ahead and Real-Time prices, but then direct the ISO to adopt an A/S re-bidding

procedure that will promote the divergence of Day-Ahead and Real-Time prices. Further, the Commission has referred to price convergence as a "market benefit" for other ISO and RTOs. *See, e.g.*, *Midwest Independent Transmission System Operator, et al.*, 108 FERC ¶ 61,163, at P 447 (2004); ("we agree with commenters that virtual trading provides benefits by increasing liquidity and price convergence between Day-Ahead and Real-Time Markets"); and *PJM Interconnection, L.L.C.*, 104 FERC ¶ 61,309, at P 20 (2003). Again, the Commission has deviated from its past practice and policies without explanation.

IV. CONCLUSION

WHEREFORE, for the above-stated reasons, the ISO respectfully requests that the Commission grant rehearing of the September 20 Order, and that the Commission further find, determine, and order as described above.

Respectfully submitted,

/s/ David B. Rubin

Charles F. Robinson
General Counsel
Anthony J. Ivancovich
Senior Regulatory Counsel
The California Independent
System Operator Corporation
Tel: (916) 351-4400
Fax: (916) 608-7296

David B. Rubin
Bradley R. Miliauskas
Swidler Berlin Shereff Friedman, LLP
3000 K Street, N.W.
Washington, D.C. 20007
Tel: (202) 424-7500
Fax: (202) 424-7643

Dated: October 20, 2004

CERTIFICATE OF SERVICE

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

Dated at Folsom, California, on this 20th day of October, 2004.

/s/ Anthony J. Ivancovich
Anthony J. Ivancovich