

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

California Independent System)
Operator Corporation) Docket No. ER00-1365-000
)
)

**ANSWER OF
CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION TO MOTIONS TO INTERVENE,
PROTESTS, AND REQUESTS FOR HEARING**

Pursuant to Rule 213 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213, the California Independent System Operator Corporation ("ISO")¹ hereby submits its Answer to the Motions to Intervene, Protests, and Requests for Hearing submitted in the above-captioned docket.²

The ISO does not oppose the intervention of any of the parties that have sought leave to intervene in this proceeding.

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

² The prohibition in Rule 213(a)(2), 18 C.F.R. § 385.213(a)(2), should not be deemed to apply to these issues. The protestors to whom the ISO responds herein have generally requested rejection of Amendment No. 26, and their filings should therefore be deemed Motions to Reject, to which an Answer is permissible. To the extent this Answer responds to protests, the Commission has also accepted answers to protests, notwithstanding Rule 213(a)(2), that assist the Commission's understanding and resolution of the issues raised in a protest, *Long Island Lighting Co.*, 82 FERC ¶ 61,129 (1998), clarify matters under consideration, *Arizona Public Service Co.*, 82 FERC ¶ 61,132 (1998); *Tennessee Gas Pipeline Co.*, 82 FERC ¶ 61,045 (1998), or materially aid the Commission's disposition of a matter, *El Paso Natural Gas Co.*, 82 FERC ¶ 61,052 (1998). The ISO's Answer will clarify matters under consideration, aid the Commission's understanding and resolution of the issues and help the Commission to achieve a more accurate and complete record, on which all parties are afforded the opportunity to respond to one another's concerns. *Northern Border Pipeline Co.*, 81 FERC ¶ 61,402 (1997); *Hopkinton LNG Corp.*, 81 FERC ¶ 61,291 (1997). The Commission should accordingly accept this Answer.

I. SUMMARY

On January 28, 2000, the ISO filed Amendment No. 26 to the ISO Tariff. Amendment No. 26 is intended to reduce market distortions and inefficiencies that result from the current ISO practice of dispatching Reliability Must-Run (“RMR”) Units after the close of the PX Day-Ahead Market. Because of this practice, the Energy that the ISO dispatches from these units for reliability purposes often appears in real time, unscheduled against Demand. This excess of real time Energy not only increases the volatility of the Real Time Market, but also distorts prices in the PX Day-Ahead Market.

Amendment No. 26 ameliorates these problems by providing for the dispatch of reliability Energy from RMR Units before the close of the PX Day-Ahead Market. RMR Owners that receive a Dispatch notice would have the option of responding to the Dispatch notice with a market transaction or taking payment under the terms of the RMR Contracts. In the latter case, RMR Owners would ensure that the dispatched Energy is scheduled against Demand by bidding the Energy as must-take into the PX Day-Ahead Market.

Protests to Amendment No. 26 raise seven major arguments. None justifies rejection of Amendment No. 26. The ISO does, however, recognize the concerns of RMR Owners that the applicability of the chosen payment option (market or contract) to the entire period of an RMR Dispatch notice would increase their risk that market payments would not cover variable costs. If the Commission prefers, therefore, the ISO would be willing to modify procedures

under Amendment No. 26 to permit different payment options for peak and non-peak periods.

In summary, the ISO's response to the arguments raised by protestors are as follows:

- First, Amendment No. 26 addresses very real existing problems that should not be allowed to persist until the completion and implementation of the review of the ISO's Intra-Zonal Congestion Management system. Amendment No. 26 is not, as some protestors claim, an incomplete fix to a flawed Congestion management system, and should not be deferred or rejected in light of the Commission's recent directive that the ISO conduct a comprehensive review and redesign of its Intra-Zonal Congestion Management procedures. Moreover, because of local market power concerns, it is virtually certain that the ISO will continue to need RMR Units after any redesign of Intra-Zonal Congestion Management. Amendment No. 26 will therefore likely remain relevant after the redesign and there is no reason to delay its implementation.
- Second, Amendment No. 26 maintains the ISO's commitment to rely first on the markets to address reliability concerns and to employ a nonmarket mechanism only when the markets cannot provide the necessary services. Under Amendment No. 26, the ISO is simply providing RMR Owners with early notice of the ISO's reliability needs. The RMR Owners are free to provide those needs through market transactions. Only when the RMR Owners choose not to do so does the ISO require that they provide the reliability Energy under the payment terms of the RMR Contract.
- Third, Amendment No. 26 will reduce volatility in the Real Time Market. The ISO has never claimed, however, that Amendment No. 26 addresses all sources of volatility in the Real Time Market. Rather, the ISO asserts, and has demonstrated in its filing, that current RMR Dispatch procedures are one source of such volatility. Because this source can be eliminated, and volatility reduced, Amendment No. 26 is appropriate.
- Fourth, Amendment No. 26 will indeed likely reduce prices in the PX Day-Ahead Market. This result, however, is not pernicious, but salutary. Prices in the PX Day-Ahead Market are currently inflated by the presence in that market of Demand that will ultimately be matched by Energy from RMR Units. Requiring that such Demand be scheduled against Energy from the RMR Units will cause prices in the

PX Day-Ahead Market to decline and to more accurately reflect actual Demand served by that market.

- Fifth, the ISO has shown in its filing that Amendment No. 26 will yield Supply efficiencies because of more optimal scheduling and dispatch of supply in the PX-Day Ahead Market. These efficiencies are not likely to be negated decreased Demand-side efficiencies. Although the relative elasticity of the PX Day-Ahead Markets and the Real Time Market is not precisely known, common sense alone suggests that Demand in the Day-Ahead Market, with its greater ability to accommodate Demand responsiveness, is more elastic than Demand in the Real Time Market. In addition, proponents of this argument fail to discuss the large size of the Day-Ahead Market relative to the Real Time Market. These factors suggest that the efficiencies that the ISO expects are highly probable.
- Sixth, although Amendment No. 26 would reduce costs to Transmission Owners (primary in their capacity as Utility Distribution Companies), it would not send the wrong price signals concerning the need for transmission improvements. The cost reductions that protestors cite, are applicable to Load in an entire Zone or in the market as a whole. They are not specific to the transmission constraints that RMR Units address, and, if they provide any price signals, those price signals are diffuse. Moreover, any amounts that will be transferred from Generators to the Load are amounts that Generators receive because of the market distortions produced under current practices, not revenues to which they would be entitled in a more efficient market.
- Finally, Amendment No. 26 is consistent with the terms of the partial settlement reached in Docket Nos. ER98-441, *et al.*, concerning the RMR Contracts. In compliance with those terms, the ISO conducted a stakeholder process that provided the RMR Owners more than adequate time to provide input to the development of Amendment No. 26. In addition, the proposal is within the scope of that permitted under the partial settlement. Moreover, to the degree the RMR Owners believe that Amendment No. 26 upsets the balance of risks embodied in the partial settlement, the partial settlement provides their avenue of relief. Unless they have waived the right, the filing of Amendment No. 26 triggers a provision that allows the RMR Owners to file an amendment to the RMR Contracts seeking to increase their fixed option payments if they can establish added costs occasioned by the Amendment.

Based on these arguments, the ISO requests that the Commission accept Amendment No. 26 and allow it to go into effect as requested.

II. BACKGROUND

On January 28, 2000, the ISO filed Amendment No. 26 to the ISO Tariff. Amendment No. 26 modifies procedures governing the notice provided by the ISO to Scheduling Coordinators that a specific Reliability Must-Run ("RMR") Unit will be required to provide Energy for reliability purposes during the next day. The purpose of the amendment is to eliminate market distortions and operational problems that are caused by the current timing of notices. Although, as described in the transmittal letter, these distortions and problems were identified in 1998, and the ISO had sought to implement them as part of the negotiations in Docket Nos. ER98-441, *et al.*, concerning the RMR Contracts, the ISO agreed, in a partial settlement in those dockets, that it would defer seeking modification of these procedures until at least October 1, 1999.

Under current procedures, the ISO issues Dispatch notices to RMR Units after the close of the PX Day-Ahead Market. As a result, the Energy supplied in response to RMR Dispatch notices ("RMR Energy") is not scheduled against Demand in that market, but rather appears in real time, unscheduled against Demand. To maintain a balance between Generation and Demand, while ensuring that the RMR Units produce the Energy needed to maintain local reliability, the ISO must reduce the output of other Generation through the Real Time Market. The current practices lead to significant market distortions and

inefficiencies, operational problems that require corrective action in order to avoid adverse effects on reliability, and increased costs to consumers.

As explained in the ISO's transmittal letter and accompanying attachments, the ISO most efficiently and effectively operates the ISO Controlled Grid when decisions on scheduling and commitment of resources are made through Day-Ahead and Hour-Ahead Schedules. This was the original market design. It is premised on the balancing of supply and Load in the forward markets. The current procedures for RMR Dispatch, however, preclude this advance coordination. The ISO is instead forced to rely upon Real Time Market directions to Generators and schedulers of Load, and their prompt and correct response to those directions, to balance Demand and Generation. This approach increases both the reliability risks and costs of operating the ISO Controlled Grid. More specifically, the adverse effects are the following:

- Increased unscheduled Energy into real time and imperfect shifting of Demand into real time in order to take advantage of that increased Energy cause additional volatility in the Real Time Market.
- More frequent adjustments of schedules in real time reduce the ability of Scheduling Coordinators to schedule resources optimally.
- Higher volatility in real time Demand adds to the ISO's Ancillary Services requirements, increasing Ancillary Service costs.
- Higher volatility in real time Demand also raises reliability risks.
- The inclusion in the PX Day-Ahead Market of Demand that, due to system conditions, will have to be met by RMR Units that are not scheduled in that market, leads to overstatement of Demand and increased prices in that market.

- The current procedures create incentives for some RMR Owners to forego the PX Day-Ahead Market under certain circumstances, producing a greater incidence of overstated Demand in that market.
- The current RMR Dispatch protocols are estimated to distort market costs by up to \$110 million per year.

Amendment No. 26 proposes three revisions to the Tariff to address these concerns. The three revisions work in tandem to ensure that RMR Energy dispatched by the ISO appears scheduled against Demand in a forward Market. They do so while preserving the RMR Owner's ability, at its unilateral discretion, to fulfill its responsibility to provide RMR Energy through a market transaction.

- First, under the amendment, the ISO would dispatch RMR Energy prior to the close of the PX Day-Ahead Market, so that the RMR Unit *can* be scheduled in that market. At that point, the RMR Owner can elect payment either by the market or under its RMR Contract.
- The second revision ensures that, if the RMR Owner elects to take payment through the market and assume both market risk and the potential for market reward – an option under the RMR Contracts – and schedules a bilateral transaction or bids into the PX Markets, the dispatched Energy is scheduled against Demand.
 - This revision requires the RMR Owner to take steps to ensure that its bid is successful in the forward markets and to include any RMR Energy awarded in the forward markets in its Preferred Schedules.
 - It also eliminates the ability of RMR Owners under the current RMR Contracts voluntarily to skip the forward markets and take payment through the Real Time Market.
- The third revision ensures that, if the RMR Owner elects to receive the payment specified in its RMR Contract, the RMR Energy will nonetheless be scheduled in a forward market. Under such circumstances, the ISO is, in effect, obligated to buy the Energy, on behalf of the Responsible Utility,³ that, because of system conditions,

³ The pro form Must-Run Service Agreement, accepted by the Commission on May 28, 1999, and the ISO Tariff, Section 5.2.8, denominate the Participating Transmission Owner (“TO”) responsible for paying the costs of an RMR Unit as the “Responsible Utility.” The ISO does not actually purchase such Energy.

cannot be provided by other Resources.⁴ The Demand that must be met by this essential RMR Generation must therefore be “netted out” of the PX Day-Ahead Market in order to ensure a balance between scheduled Loads and Generation and avoid unnecessary distortions in the PX and ISO real time Energy markets. This is achieved by requiring the Owner to bid the Energy into the PX Day-Ahead Market at zero dollars, ensuring that the Energy is actually scheduled against the Demand in that or a later PX market.

On February 5, 2000, the Commission issued a Notice of Filing in the above-captioned proceeding, and on February 17, 2000, the Commission granted an extension of time until February 22, 2000, for filing interventions. Numerous parties filed motions to intervene, many accompanied with comments, protests, or requests for hearing.⁵ As noted above, the ISO does not object to any of the interventions.

⁴ This Energy also includes minimum amounts of Energy that are necessarily produced when another product essential to system reliability (reactive power) is furnished from RMR Units.

⁵ California Electricity Oversight Board; Cities of Redding and Santa Clara, California and the M-S-R Public Power Agency; Modesto Irrigation District; Northern California Power Agency; Sacramento Municipal Utility District; Transmission Agency of Northern California; and Turlock Irrigation District moved to intervene without substantive comment. California Public Utility Commission; Metropolitan Water District of Southern California; and Southern California Edison Company moved to intervene (or filed a notice of intervention) and expressed support. The California Department of Water Resources moved to intervene and asked the Commission to condition approval on rulings (1) that the approval would not prejudice resolution of unresolved issues in Docket Nos. ER98-3760, *et al.*, and (2) that the approval would not preclude revisions to the ISO market implementation or design. Automated Power Exchange, Inc. (“APX”); California Power Exchange (“CPX”); Calpine Corporation and Geysers Power Company (“Calpine”); Duke Energy North America, L.L.C., *et al.* (“Duke”); Dynegy Power Marketing, Inc. (“Dynegy”); Independent Energy Producers Association (“IEP”); Pacific Gas & Electric Company (“PG&E”); Reliant Energy Power Generation, Inc. and Williams Energy Marketing and Trading Company (Joint) (“Reliant/Williams”); Sempra Energy (“Sempra”); Southern Energy California, L.L.C., *et al.* (“Southern”); and Western Power Trading Forum (“WPTF”) moved to intervene and filed protests. In addition, Duke submitted an affidavit of Michael J. Doane and David S. Sibley, Reliant/Williams

III. RESPONSE TO PROTESTS

A. AMENDMENT NO. 26 SHOULD BE IMPLEMENTED INDEPENDENTLY FROM THE ISO'S REVIEW OF ITS INTRA-ZONAL CONGESTION MANAGEMENT PROGRAM

Some protestors argue that Amendment No. 26 is only a partial solution to flaws in the ISO's Intra-Zonal Congestion Management practices and should be withdrawn or rejected in light of the Commission's January 7, 2000, Order directing the ISO to conduct a comprehensive review of those procedures.

California Independent System Operator Corp., 90 FERC ¶ 61,006 (2000) The ISO believes it is neither necessary nor prudent to delay the implementation of Amendment No. 26 until after the review and redesign of the ISO's Intra-Zonal Congestion Management. In fact, the problems that Amendment No. 26 seeks to address – market distortions and inefficiencies resulting from current RMR Dispatch procedures and their impact on operations – will likely not be resolved through the redesign of Intra-Zonal Congestion Management.

First, the ISO has made a commitment to undertake a comprehensive review of its Intra-Zonal Congestion Management, with a goal of completing that review and presenting any necessary revisions to the ISO Tariff to the Commission by October 31, 2000. The Commission's acceptance of proposed changes to the ISO Tariff will take a minimum of two additional months, and, in practice, implementation of any substantial changes that require software revisions will take at least a few more months. As a result, the ISO will not likely be able to implement any changes until early 2001. There is no reason for the

submitted a report by Michael Schnitzer and Frank Huntowski and Southern submitted an affidavit of Alan L. Madian.

market to continue to suffer the distortions and inefficiencies of current RMR Dispatch practices until that time.

Second, regardless of the approach taken to Congestion Management, there are likely to be occasions when the market itself cannot effectively resolve the reliability concerns to be addressed by an RMR Unit. The ISO will need a mechanism to address local reliability concerns in areas where there exists locational market power. Under such circumstances, the ISO will have to exercise its authority to redispatch units.⁶ Even the most ardent critics of the ISO's current procedures for Intra-Zonal Congestion Management acknowledge that RMR Units will remain necessary for at least the near future to address local market power. Timing the Dispatch of such units in a manner that avoids market inefficiencies and distortions will remain critical.

Amendment No. 26 is not a "patchwork" solution to flaws in the Intra-Zonal Congestion Management System. Rather, it implements a critical refinement to the ISO's procedures for addressing local reliability concerns and is necessary if those procedures are to perform at their maximum potential.

B. AMENDMENT NO. 26 IS CONSISTENT WITH MARKET FIRST PRINCIPLES

A number of protestors assert that Amendment No. 26 represents a departure from the ISO's "market-first" principles, whereby the ISO relies first upon the markets to provide necessary services, and only when the markets

⁶ See, generally, Regional Transmission Organizations, Order No. 2000, FERC Stats. and Regs., Reg. Preambles, ¶ 31,089 (December 20, 1999), slip op. at 318, 341-42.

cannot provide those services does the ISO employ non-market mechanisms.⁷

As a practical matter, Amendment No. 26 is unlikely to affect the provision of RMR services through the market. The real impact of Amendment No. 26 will be on RMR services that would not have been procured in the market.

Under Amendment No. 26, RMR Owners will continue to have the option to elect the market path, i.e., to comply with an RMR Dispatch notice by making the required Energy available through a market transaction. Further, RMR Owners will continue to have the incentive to select the market path when they would expect their bids to clear the market. The ISO expects that virtually all of the RMR requirements currently scheduled in the market would continue to be scheduled under the market path.

The calculus for RMR Owners will be the same as before Amendment No. 26. Under current procedures, RMR Owners presumably enter the market when they believe the Market Clearing Price will be greater than their operating and start-up costs. If they enter the markets, and are subsequently needed for RMR services, they receive the market payment. RMR Owners can also enter the market after an RMR call, though they cannot enter the Day-Ahead Market, which has closed by the time RMR Units are dispatched under current procedures. If Energy is required from an RMR Unit for reliability purposes, but the RMR Owner has not scheduled the Unit through the market, and does not subsequently do so, it will be paid under the RMR Contract.

⁷ See, e.g., Calpine at 4, Duke at 6, IEP at 3, Reliant/Williams at 24, Southern at 9, WPTF at 5.

Under Amendment No. 26, the RMR Owner will know about the need for RMR Energy before the PX Day-Ahead Market closes. The decision whether to enter the markets, however, will *still* depend on whether the RMR Owner believes that the Market Clearing Price will be greater than its start-up and operating costs. As under current practice, the RMR Owner that does not enter the market will be paid under the terms of the RMR Contract.

The ISO does recognize the concern, expressed by certain protestors, that having the chosen payment option apply to the entire period of the RMR Dispatch notice complicates the decision whether to choose the market or contract path. As a result, if considered desirable by the Commission, the ISO would be willing to modify the proposed procedures such that RMR Owners would be free to choose one payment option for peak periods and a different payment option for non-peak periods.

The essence of the change in procedures under Amendment No. 26 is that the ISO would be announcing its reliability needs before the Day-Ahead Market closes; the opportunity for RMR Owners to enter into market transactions to satisfy their RMR obligations would remain. The ISO is also committed to relying upon the market to meet as much of the reliability needs as the market is capable of providing. Amendment No. 26 is simply ensuring that the remaining “extra marginal Energy” that would not otherwise be scheduled through the markets is, in effect, “netted out” of Demand that is met through the Day-Ahead Market.

For these reasons, arguments that Amendment No. 26 runs afoul of the Commission's proscriptions in Order No. 2000 are misplaced.⁸ In Order No. 2000, the Commission affirmed the need for a Regional Transmission Organization ("RTO") to have the authority to redispatch units for reliability needs when market mechanisms are inadequate. The Commission emphasized, however, the primacy of market mechanisms and the requirement that Generators be permitted, in the first instance, to satisfy reliability needs through market commitments.⁹ Amendment No. 26 is entirely consistent with those directives. Rather than displace market opportunities, Amendment No. 26 will provide the Generator with better knowledge than is available to it today. By receiving a Dispatch notice prior to the close of the Day-Ahead Market, the RMR Owner will know with certainty that its unit will be called, for what minimum level of service, and for what duration. At that point, the owner, *at its unilateral discretion*, can elect to satisfy the ISO's reliability need through a market transaction or to accept payment under the contract.

Dr. Madian (on behalf of Southern) questions whether the ISO can properly determine RMR needs without knowing the quantity of reliability enhancing Generation that will be provided through the market by non-RMR Generation. The question inaccurately assumes that the amount of non-RMR Generation affects the ISO's evaluation of RMR needs. Rather, RMR requirements currently are set shortly prior to each operating day primarily based

⁸ See Southern at 7.

⁹ Order No. 2000, slip op. at 318.

on the amount of RMR capacity that the ISO anticipates it will need to have on-line to ensure that the ISO can meet Local Reliability Criteria.

The ISO determines its RMR requirements through the ISO's Day-Ahead Demand Forecast, any special transmission system conditions in effect, and operating procedures that specify how much additional Generation is required to ensure reliability in a particular local area for a given area Demand. The ISO then assigns those RMR requirements to specific RMR Units. With the exception of one Load pocket, RMR Units are the only resources that can satisfy those requirements.

Dispatch prior to the operating day is necessary in the event that a unit may be needed and must be started up for the following day. If, considering the amount of market Energy being generated, a greater amount of Energy from dispatched RMR Units is needed due to actual Load conditions, the RMR requirement may be adjusted in real time. Thus, while the level of market Generation may affect the ultimate amount of Energy that the ISO dispatches from RMR Units, the ISO does not use the level of market Generation initially to determine its area reliability requirements. Accordingly, Amendment No. 26 will change neither the ISO's method for determining its area reliability requirements nor the requirements themselves. The ISO will still allocate that need to Generating Units based on variable cost, effectiveness, and contract service limits.

Contrary to the arguments of some protestors,¹⁰ the ISO does not believe that the requirement that the payment option apply to all Energy and all hours would force RMR Owners onto the contract path. Amendment No. 26 does not alter the generator's ability to elect the contract path for the minimum Generation requirement after receiving a Dispatch notice, and subsequently schedule or sell additional Energy from an RMR Unit in any of the different Energy markets. In general, RMR Units are scheduled at levels above their minimum operating level only when Loads and market prices are relatively high. When market prices are high, RMR Owners are likely to anticipate that fact and thus to choose the market path. As noted earlier, however, the ISO is willing to revise the proposed payment procedures so that an RMR Owner may select different payment options for peak and non-peak periods.

Protestors also incorrectly assert that Amendment No. 26 constitutes an effort by the ISO to expand its authority to call Generators out-of-market.¹¹ Amendment No. 26 applies only to the ISO's right to call upon units *with which it has RMR Contracts*. It does not expand the ISO's authority under the contracts; neither does it expand the frequency of the ISO's exercise of that authority. Amendment No. 26 simply implements revised ISO scheduling and Dispatch practices to increase the likelihood that the use of that authority will not distort or interfere with the efficiency of the markets.

¹⁰ See, e.g., Dynegy at 13-14.

¹¹ See, e.g., Southern at 14.

C. AMENDMENT NO. 26 WILL REDUCE REAL TIME MARKET VOLATILITY

A number of protestors claim that Amendment No. 26 should not be implemented because it does not address certain drivers of real time volatility and strategic under-scheduling of Demand in the Day-Ahead Market and may increase some incentives to underschedule. The ISO does not contend that Amendment No. 26 is a panacea that will eliminate all real time volatility. Rather, the ISO believes that Amendment No. 26 would reduce – but not eliminate – strategic “underscheduling” of Load in the Day-Ahead Market by ensuring that all RMR Energy provided under the contract path is offered in the Day-Ahead Market, rather than appearing unscheduled against Demand in real time.

The protestors further argue that “Load levels and prices, not RMR, determine buyers incentives which are the primary drivers of buyer scheduling in the PX Day-Ahead Market.”¹² In light of the complaints, discussed below, that Amendment No. 26 will reduce PX Day-Ahead prices, these statements support, rather than refute, one of the key benefits of Amendment No. 26 cited throughout the ISO’s filing: Amendment No. 26 will provide an incentive for more Demand to be scheduled in the Day-Ahead Market because the scheduling of RMR Energy in that market will increase supply and thereby reduce prices relative to the Real Time Market in which any unscheduled Demand must be met. Indeed, the analysis presented by Schnitzer and Huntowski (on behalf of Reliant/Williams) supports – rather than refutes – the ISO’s contention that current RMR protocols encourage (along with other factors) strategic underscheduling of Demand.

Figure 2 of their analysis (reproduced as Attachment A) shows a clear positive correlation between incremental RMR and underscheduling in the Day-Ahead Market over the period from June to August 1999. Both of these factors are, in turn, correlated with high Demand and high prices in the Real Time Market. Thus, while Load levels and prices may be the primary drivers of buyer scheduling in the PX Day-Ahead Market, the data presented by Schnitzer and Huntowski (as well as the statistical analysis in the Department of Market Analysis (“DMA”) Report accompanying the ISO’s transmittal letter) also support the conclusion that current RMR procedures contribute to underscheduling in the Day-Ahead Market.

Despite assertions to the contrary, Amendment No. 26 is not likely to increase volatility by enhancing gaming opportunities for either large buyers or Generators. Schnitzer and Huntowski argue that Amendment No. 26 will increase the ability of large buyers to influence prices by increasing the slope of the supply curve, increasing the number of zero price hours, and increasing the ability of large buyers to force the Day-Ahead Market to clear at zero. No specific explanation is given for the allegedly steeper slope of the supply curve with Amendment No. 26 versus the curve without Amendment No. 26 depicted in Figure 3 (reproduced as Attachment B). As shown in Figure 5 of the DMA Report (reproduced as Attachment C), the requirement that RMR Generation supplied under the contract path be bid at a price of zero should not increase the slope of the supply curve over the range at which Demand typically intersects

¹² Reliant/Williams at 16.

supply. Because RMR Energy bid into the PX under the contract path would be expected to have a variable cost higher than the Market Clearing Price, the effect of bidding this capacity in at a price of zero (versus a price higher than the Market Clearing Price) should – absent other changes in bidding behavior – merely shift the supply curve, rather than change the slope of the curve at the point where Demand intersects supply.

A review of publicly available actual market data dispels any concerns that Amendment No. 26 will increase the ability of large buyers to force the Day-Ahead Market to clear at zero and increase the number of zero price hours.¹³ In 1999, the PX cleared at a price of zero during only 12 hours. During 10 of these 12 hours, Demand scheduled in the Day-Ahead Market exceeded actual Load in real time, so that the Market Clearing Price of zero cannot be attributed to under-scheduling of Loads by large buyers (see Table 1 in Attachment D). Moreover, during the 30 hours in 1999 during which the PX market cleared at a price less than or equal to one dollar, scheduled Demand exceeded actual Loads in 28 hours. Thus, there is no evidence that large buyers have even attempted to cause the PX to clear at zero by under-scheduling of Loads. Figure 1 included in Attachment D further illustrates this market trend by showing the amount of Load under or over-scheduled during each hour in 1999 that the PX market cleared at a price less than or equal to ten dollars.

In contrast, another protestor asserts that Amendment No. 26 will allow RMR Owners to game the market by bidding RMR Units into the PX Day-Ahead Market at an inflated price, thereby increasing the Market Clearing Price for the

remainder of an RMR Owner's portfolio. The RMR Owner would have a motive to do so if the non-RMR portfolio "would benefit more from inflated prices than any loss the RMR Units might suffer if day-of or real-time market prices were lower."¹⁴ The protestor asserts that this is the same incentive that existed under the former "B" Agreements that were supplanted by the current RMR Contracts. The incentive for this type of gaming, however, would be less under Amendment No. 26 than under either current practices or the former "B" Agreements cited by the protestor. Under the "B" Agreement, if an RMR Owner bid Energy from the RMR Unit into the PX Day-Ahead Market at an inflated price and the inflated price failed to clear, the RMR Owner would still receive its variable costs if it receives an RMR Dispatch notice. Thus, the RMR Owner, if it expected the RMR Unit to be called, could try to inflate the Market Clearing Price for its whole portfolio, and rely on the RMR Contract to pay for the RMR Unit's variable costs if the attempt were unsuccessful. Under current practices, the RMR Owner has the same option. Under Amendment No. 26, because of the portfolio bidding in the PX Day-Ahead market and the requirement that RMR Energy bid into the market must be scheduled if the bid is successful, the RMR Owner has far less incentive to follow this course because it risks being shut out of the market and is not assured of recovering its variable costs. Under PX practices, bids in the Day-Ahead market are not unit-specific. If the RMR Owner chooses the market path, it bids an amount of Energy equal to the combination of the RMR Energy and the Energy it is willing to supply from the remainder of its portfolio. Suppose, for

¹³ See, e.g., Calpine at 6; Reliant/Williams at 17.

¹⁴ PG&E at 5.

example, an RMR Owner attempted to inflate the Market Clearing Price for its whole portfolio by bidding the amount of the RMR Energy (X MWh) at Z dollars and bid the amount attributable to the rest of its portfolio (Y MWh) at Z-50 dollars. Under Amendment No. 26, if only Y MWh were successful in the market, the RMR Owner would have to schedule X MWh of that Energy as Energy from the RMR Unit, leaving part of its portfolio unscheduled, or forfeit all payment for the RMR Energy. In other words, by bidding its RMR Energy at an inflated price, the RMR Owner risks having all or some of its non-RMR portfolio shut out of the market. Moreover, to the extent that an insufficient portion of its portfolio clears the Day-Ahead Market to accommodate the RMR Energy, it must bid the remainder of the RMR Energy into the later markets as must-take – without the assurance it will receive variable costs.

Two protestors suggest that the ISO could reduce real time volatility without the procedures included in Amendment No. 26 by using decremental Adjustment Bids to make room for the RMR Energy prior to the issuance of Final Day-Ahead Schedules. Rather than “netting out” Demand met by RMR Generation from the Day-Ahead Market, this proposal would, in effect, allow Generators to “buy back” non-RMR Energy sold in the Day-Ahead Market at a lower price in the Hour-Ahead Market, in order to schedule RMR Energy against Demand prior to the Day-Ahead Market.

In addition to imposing unnecessary costs on consumers, this proposal would require removal of the ISO’s market separation constraint, which requires that Adjustment Bids be submitted in pairs of incremental and decremental bids

from the same Scheduling Coordinator. The market separation constraint represents a key feature of the current California market design.

D. AMENDMENT NO. 26 WILL REDUCE MARKET DISTORTIONS

Various protestors complain that Amendment No. 26 will “artificially depress” PX Day-Ahead prices.¹⁵ As discussed in the transmittal letter and the accompanying DMA Report, the ISO acknowledges that Amendment No. 26 will likely reduce existing PX Day-Ahead prices. That is not determinative of the issue, however, because the existing prices are artificially *inflated* by the presence in the Day-Ahead Market of Demand that will necessarily be met by reliability Energy from RMR Units.¹⁶ If this Generation is already being paid outside the Day-Ahead Market (as is the case under existing practices, and would be the case under the contract path in Amendment No. 26), the level of Demand that it necessarily will serve does not belong in the Day-Ahead Market. Protestors have failed to demonstrate any reason why existing practices, whereby this excess Demand increases prices, should be the “baseline” for evaluating appropriate PX Day-Ahead prices.

¹⁵ See, e.g., Calpine at 8, Reliant/Williams at 14, Southern at 23.

¹⁶ Duke argues that particular Demand is not matched up with particular supply, and that the ISO calls upon RMR Units for reliability, not to meet unmet Demand. Duke misreads the ISO’s statement that RMR Generation is necessary to serve a certain Demand. The ISO did not intend to imply that it calls upon a unit to meet unmet Demand. Rather, the problem arises because the Demand in question has already been met in the PX Day-Ahead Market. When the ISO calls upon a unit, such as South Bay, that unit must be generating if a particular contingency occurs. A particular Load (even if met in the absence of the contingency) must continue to be served during the occurrence of the contingency. Thus, the RMR Energy is called only because of that Load. In other words, if there exists an amount of scheduled Demand equal to X, and because of reliability needs, an amount of Generation equal to Y will necessarily be called and paid for outside of the Day-Ahead Market, then the proper Demand to be met by Generation in the Day-Ahead Market is X-Y. If the Day-Ahead Market meets Demand equal to X, then an amount of Demand equal to Y is excess.

Dr. Madian suggests that the Supply purchased in the Day-Ahead Market to meet this Demand is not excess because it is more often than not needed in real time. While many factors contribute to the shifting of Demand to real time, the ISO believes that market design features that distort the market by creating positive incentives to shift Demand to real time should be redressed. Rather than representing a benefit, the net effect of having RMR Energy appear unscheduled against Demand in the Real Time Market is to distort the market by creating incentives to shift Demand (imperfectly) to real time. The Real Time Market was designed as a balancing market for unanticipated Demand and supply deviations; reliability Energy that the ISO knows well in advance has to be produced is not a “deviation” and its appearance therefore distorts that market.

A related complaint about PX Prices in the protests is that Amendment No. 26 will increase the number of hours that the PX Day-Ahead Market Clearing Price will be zero.¹⁷ This argument is based on the premise that if RMR Generation should be bid at non-zero price because it should be accorded a lower priority than Generation that is bid into the PX at a zero price for contractual reasons, or other thermal Generation not required for reliability reasons that is bid into the PX during off-peak hours at a price of zero due to operating constraints.

Zero price bids are appropriate for resources when the marginal cost of serving Demand with the resource is zero. This would include both resources with zero incremental operating costs, such as solar resources, or those that will run regardless of whether they are in the market. It is likely that much of this

other Generation bid into the PX at zero involves non-zero marginal costs, because of production that could be avoided. Regulatory Must-Run Generating Units include hydro resources that are required by Federal and State law to maintain flow to support fish, water quality, irrigation and water supply. Regulatory Must-Take units bid into the PX include nuclear plants (which may indeed have a zero operating cost during off-peak hours), but also include Qualifying Facilities and pre-existing power purchase agreements which may have minimum Energy take-requirements, but are not required for reliability reasons and do not have actual operating costs of zero. As noted by one protestor, “additionally, other resources may be bid at zero, including imports, inter-schedule coordinator trades and Generation that must be on-line for other operational and contractual reasons.”¹⁸

Because RMR Generation is required for local reliability reasons, this Energy will serve Demand regardless of price, in the same manner as must-take resources.¹⁹ This Energy will serve Demand regardless of whether the competitive markets pay for it. Bidding this Energy at zero is fully consistent with the recommendation of the PX Market Compliance Unit, cited by one protestor,

¹⁷ See, e.g., Calpine at 7, WPTF at 6.

¹⁸ Calpine at 6.

¹⁹ IEP states that Regulatory Must-Take Generation is bid into the PX at zero dollars in order to honor existing statutory and regulatory commitments and to play a role in the recovery of utility stranded costs. It points out that these are interim measures, because the commitments will expire and recovery will be completed. It argues that it is therefore inappropriate to provide RMR Units a similar status in the PX Day-Ahead Markets. As noted in the text, however, because RMR Energy is required for local reliability reasons, this Energy will serve Demand regardless of the price, in the same manner as must-take resources. Moreover, the ISO is on record regarding its intention to eliminate the need for RMR Units. Indeed, to the extent that reliability needs can be met by the market, Amendment No. 26 will not require that they be bid as must-take into the PX Day-Ahead Market.

that units that must be run for “system reasons” should be treated as must take.²⁰ Thus, to the extent that bidding RMR Generation into the PX as “must-take” during these off-peak hours does lower prices, it merely provides a more efficient price signal for other Generation which – unlike RMR Generation – could ultimately be curtailed if market prices fall below incremental operating costs.

In contrast to the complaint that Amendment No. 26 will “artificially depress” PX prices, Doane & Sibley (on behalf of Duke) criticize the amendment on the basis that “the price effects from predispach and scheduling of RMR in the Day-Ahead Market that are predicted by the ISO are unlikely to occur.”²¹ As noted by Doane & Sibley, in a “setting of perfect arbitrage”, prices in the PX and Real Time Markets would not be affected by scheduling RMR in the Day-Ahead Market. For instance, if prices did decrease in the PX market and increase in the Real Time Market, “the likely increase in supply from non-RMR Units [in the Real Time Market] would lead to declines in the real-time price projected by the ISO.”²²

The ISO acknowledges the possibility that perfect arbitrage would exactly offset any price impacts of the amendment, but also recognizes that there are many factors other than RMR Energy that affect Demand in the forward markets and in the Real Time Market, and, because Market Participants will never have perfect knowledge regarding these factors, perfect arbitrage is an unrealistic paradigm. Significant and systematic differences in the prices in these two

²⁰ Calpine at 7. The ISO notes that the only portion of Amendment No. 26 that the CPX protested was the effective date.

²¹ Doane & Sibley, p.8

²² *Id.*

markets have in fact existed during many periods of time during the ISO's first two years of operation.

The ISO's report on the potential impacts of predispatch and scheduling of RMR in the Day-Ahead Market is designed to provide an indication of the potential magnitude of impacts of Amendment No. 26 on market prices. The two scenarios in the report are based on explicit assumptions outlined in the report about the degree to which both Demand and Supply may shift imperfectly between the PX and Real Time Markets. The ISO recognizes the uncertainty involved in any projection of the impact of Amendment No. 26 on market prices, but experience indicates that arbitrage between these two markets is imperfect, so that predispatch is likely to have some impact on PX prices.²³

E. AMENDMENT NO. 26 WILL INCREASE MARKET EFFICIENCY

The ISO's report and filing notes that predispatch and scheduling of RMR Energy is likely to increase economic efficiency by allowing more efficient unit commitment, scheduling and operating decisions based on Day-Ahead Schedules rather than real time adjustments in supply. Doane & Sibley correctly note that whether aggregate total surplus increases or decreases, total producer and consumer surplus depends on the relative price elasticities of Demand in the two markets. Analysis of potential price impacts in the PX and Real Time Markets in the DMA's report assumes total Demand (or the sum of Demand in the Day-Ahead and Real Time Markets) is inelastic, so that any Demand not met

²³ Of course, if Doane & Sibley are correct, and the impact on PX prices is minimal, this will not affect the major purposes of Amendment No. 26 – reduced real time volatility and increased economic efficiency. Rather, the lack of any impact on PX prices will simply defuse any complaints from RMR Owners that Amendment No. 26 will depress those prices.

in the Day-Ahead Market is met in the Real Time Market. To the extent that the same level of Demand is met through a more efficient mix of supply resources, overall efficiency (or producer plus consumer surplus) would increase.

Doane & Sibley acknowledge that “[i]f the PX price elasticity of Demand is higher than the real time elasticity of Demand, the lower PX price [from Amendment No. 26] increases total surplus by more than the higher real-time price decreases surplus,”²⁴ but suggest that there is insufficient information to demonstrate that this would be the case. However, demand-side programs currently being proposed by UDCs are designed to be driven by prices in the Day- Ahead Market, in recognition that Demand can be more easily reduced based on Day-Ahead price signals than in real time. Indeed, there is every reason to believe real time Demand is far less elastic than Demand on a Day-Ahead basis. For example, many large industrial customers are willing to alter their consumption patterns in response to price signals on a Day-Ahead basis by adjusting or shifting operating procedures or processes. In the Real Time Market, however, these same customers typically lack any means to significantly reduce loads other than by curtailment or altering their operations in a manner than entails a much higher cost. This would suggest that Demand in the Day-Ahead Market would, in fact, be more elastic than Demand in the Real Time Market. The Commission should assume that practices, like predispatch, that shift Demand to more price-sensitive markets are beneficial and increase overall economic efficiency.

²⁴ Doane & Sibley at 12.

In addition, any change in consumer and producer surplus from price changes in the PX and Real Time Markets would depend not only on the relative Demand elasticities in these markets, but also on the relative volume traded in each of these two markets. Because the volume of Demand met in the PX Day-Ahead Market is typically at least 10 to 20 times greater than the volume of Demand met in the Real Time Market, any decrease in the PX price would be most likely to result in an increase in surplus. In order for a price decrease in the PX to reduce surplus, as suggested by Doane & Sibley, the elasticity of Demand in real time may need to be 10 to 20 times greater than the elasticity of Demand in the PX Day-Ahead Market. Consideration of price elasticity, therefore, indicates that Amendment No. 26, by reducing PX Day-Ahead prices, would increase rather than decrease total producer and consumer surplus. When both of these factors are considered, the arguments put forth by these protestors, in fact, support Amendment No. 26.

F. AMENDMENT NO. 26 SENDS APPROPRIATE PRICE SIGNALS

According to some Protestors, Amendment No. 26 sends inappropriate price signals regarding the costs of Intra-Zonal Congestion.²⁵ One such argument is that the ISO's proposal, by forcing more RMR Energy into the Day-Ahead Market in the zone with the greatest need for transmission and Generation upgrades, will reduce Congestion costs in the area with the need for transmission improvements.²⁶

²⁵ See, e.g., Calpine at 9, Duke at 8, Reliant/Williams at 8.

²⁶ See, e.g., Duke at 8, Reliant/Williams at 8.

In the first place, because Congestion costs reflected in the PX Day-Ahead Market prices are zonal, not local, any such price signal will be diffuse, at best.²⁷ Even so, such price signals are unlikely. To the extent these protestors suggest that requiring RMR Owners to bid zero dollars into the PX Day-Ahead Market will lower the Market Clearing Price, as initially determined by the PX Day-Ahead Market, for the local area with import Congestion, reducing the incentive to make investments necessary to eliminate the Congestion, they are incorrect. Unconstrained PX-Day Ahead Market Clearing Prices are not determined zonally; if Inter-Zonal Congestion exists, the ISO Usage Charges will be subsequently factored in to create zonal prices.

Protestors are correct that the presence of additional RMR Energy in the PX Day-Ahead Market will, in the case of Congestion, reduce prices in the constrained Zone. This argument, however, ignores the fact that RMR Energy that will be in the markets under Amendment No. 26, but would not be in the markets under current practices, will be Energy for which the RMR Owner chooses the contract path. This is likely to occur only when a lack of Demand produces low prices. Under such circumstances, Inter-Zonal Congestion (and Zonal prices) is unlikely. In addition, when the contract path is chosen, the Responsible Utility on whose system the reliability requirements arise will pay the RMR costs – precisely the correct price signal.

Another argument advanced in protests is that Amendment No. 26 reduces incentives to build transmission facilities by transferring profits from

²⁷ Moreover, the citation in the Reliant/Williams argument at 8 implies an assumption that *Intra-Zonal Congestion Management* affects PX Day-Ahead pricing. It does not.

RMR Owners to Responsible Utilities, i.e., by reducing the costs that the local Participating Transmission Owner bears for RMR services and for Energy purchased in the PX Day-Ahead Market.²⁸ This is nothing more than a thinly disguised claim that RMR Owners are entitled to retain subsidies they get under the current flawed design. Amendment No. 26, however, is not intended to reduce the cost of RMR services or to reduce the revenues that an RMR Owner receives for RMR services (except to the extent that the RMR Owner may receive artificially high PX Day-Ahead Market Clearing Prices). As under existing procedures, the RMR Owner can elect payment under the RMR Contract or through the market. An RMR Owner who chooses carefully can thus receive the greater of variable costs or the Market Clearing Price, in addition to the fixed payment. As under existing procedures, the RMR Owner bears some risk that it will be paid less than its variable costs if it chooses to go into the market²⁹ or that it will lose the difference between those costs and the Market Clearing Price if it chooses the payment under the RMR Contract. To the extent that RMR Owners believe that Amendment No. 26 increases this risk, and imposes a quantifiable opportunity cost, they can seek an increase in the Fixed Option Payment as provided in the Stipulation and Agreement, if they have not waived their right to do so.

Schnitzer and Huntowski argue, however:

Every instance of an RMR owner guessing incorrectly would lower the costs to the transmission owners of maintaining reliability

²⁸ See Calpine at 9, Schnitzer and Huntowski at 7.

²⁹ Under existing procedures, if the RMR Owner “substitutes” a market transaction for RMR Dispatch notice (i.e., decides to supply the RMR Energy through the market after receiving a Dispatch notice), it must bid into the Hour-Ahead Market or Real Time Market at zero.

through RMR Generation. If the RMR Owners incorrectly choose the contract path, they would forfeit the margin otherwise earned in excess of variable cost. If they incorrectly choose the market path, they can be forced to produce at a loss.³⁰

Any transfer of costs that occurs because of these “incorrect guesses,” however, benefits the market, not the Responsible Utility. It is true that current Responsible Utilities, which are also UDCs, would benefit from these “losses” (if they actually occur and do not engender increased Fixed Option Payments), as well as from the lower PX Day-Ahead Prices that result from netting out. Schnitzer and Huntowski argue that the savings attributable to these lower costs, when netted against the costs of the RMR Contracts, may reduce the net costs of RMR Contracts below the costs of transmission improvements.³¹ Even if this were a likely scenario, which the ISO does not believe, higher PX Day-Ahead prices are not an efficient means for providing a price signal to Transmission Owners. The entire market, not just a local Participating Transmission Owner, is hurt by artificially high PX Day-Ahead prices. Inducement to Transmission Owners to build facilities should not occur at the expense of the rest of the market.

³⁰ Schnitzer and Huntowski at 6. Schnitzer and Huntowski also point to the requirement that a payment option apply to the entire period of the Dispatch notice as increasing the likelihood that the RMR Owners’ compensation will be reduced by Amendment No. 26. As noted elsewhere, if the Commission considers it desirable, the ISO is willing to modify its procedures so that different payment options apply to peak and nonpeak periods.

³¹ In discussing the net cost of RMR Contracts, Schnitzer and Huntowski fail to take into account the fact that lower PX Day-Ahead prices will reduce the market payments that the Responsible Utilities receive for Energy that they pay for under the RMR Contract.

G. AMENDMENT NO. 26 IS FULLY CONSISTENT WITH THE RMR STIPULATION AND AGREEMENT

Some protestors assert various reasons why Amendment No. 26 is inconsistent with the RMR Stipulation and Agreement. The first assertion is that the ISO failed to conduct the required stakeholder process.³² As the ISO noted in its transmittal letter, the ISO presented all major aspects of the proposal to stakeholders at a Market Issues Forum on August 11, 1999. This discussion followed a previous presentation on July 29, 1999. The ISO did not circulate proposed language until October 1999, and did not file Amendment No. 26 until January 2000. Stakeholders, including RMR Owners, thus had over two months to comment on the proposal before the ISO even circulated draft language, and another three months thereafter to express their views. Thus, regardless of whether the RMR Owners believe that they had a “meaningful” opportunity to provide comments during the Market Issues Forums, they certainly had more than adequate opportunity thereafter.

One protestor also asserts that Amendment No. 26 goes beyond the scope of the tariff filing permitted by the Stipulation and Agreement to the extent that it requires RMR Owners to select the market path or contract path for the entire period of the Dispatch notice.³³ The ISO believes that the adaptation of existing market substitution procedures to the new timing of Dispatch notices is integral to the issuance of such notices prior to the close of the PX Day-Ahead

³² See Dynegy at 5, Southern at 20.

³³ See Southern at 21.

Market. Nonetheless, the ISO has noted above its willingness to allow different payment options for peak and non-peak periods.

Finally, one protestor asserts that Amendment No. 26 “takes a sledgehammer to the delicate balance of interests that was achieved in negotiating the revised RMR Agreements.”³⁴ This comment ignores the fact that a fundamental part of that “balance” was the right of the ISO to file an amendment to provide for the Dispatch of RMR Units prior to the close of the Day-Ahead Markets. Among the matters cited is the increased cost of default because of the RMR Owner’s need to replace Energy that it scheduled through the PX Day-Ahead Market. Of course, the RMR Owner bears this risk for all non-RMR transactions, so that the changed risk because of Amendment No. 26 is negligible. Nonetheless, the Stipulation and Agreement – as part of the “balance” – also provides for a corresponding right of the RMR Owners to file for an increased fixed option payment in response to the ISO’s exercise of its right to seek amendment of Dispatch procedures. These options are part of the negotiated balance. If RMR Owners believe that the balance will be disturbed under Amendment No. 26, and results in actual costs to them, the procedure for addressing those concerns is specified.

H. OTHER PROTESTS

Two protestors assert that the requirement under Amendment No. 26 that RMR Energy provided under the contract path be bid into the PX Day-Ahead Market at zero dollars discriminates against other power exchanges by inhibiting

³⁴ See Dynegy at 7.

their ability to compete after the California Public Utility Commission's mandate that the major UDC's trade in the California PX expires.³⁵ The ISO believes that this is a legitimate concern. This concern is most appropriately addressed, however, at the time the mandate expires, rather than by modifying the ISO Tariff now to address circumstances that do not exist.

One protestor asks solely that the Commission delay the effective date of Amendment No. 26 until the earlier of June 1, 2000, or the California PX's completion of software necessary to track the modifications made by Amendment No. 26.³⁶ The ISO has requested an effective date for Amendment No. 26 on the later of March 28, 2000, or ten days after the completion of software modifications for its implementation. The ISO believes that this effective date adequately addresses the concerns expressed.

³⁵ See Dynegy at 21, APX at 3.

³⁶ Cal PX at 3.

IV. CONCLUSION

For the foregoing reasons, the Commission should accept Amendment No. 26 to the ISO Tariff and permit it to go into effect as requested.

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Dated: March 9, 2000

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon all parties on the official service list compiled by the Secretary in the above-captioned proceeding, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Washington, D.C. this 9th day of March, 2000.

Michael E. Ward