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FINAL

Opinion of California Independent System Operator Market Surveillance Committee Respecting Phased Increase in BEEP and Ancillary Services Caps

At the request of Jeffrey Tranen, Chief Executive Officer, of the California Independent System Operator (ISO), the ISO's Market Surveillance Committee (MSC) is providing the ISO's Governing Board with its opinion with respect to whether the current $250/MWH cap on bids accepted for real-time energy (the "BEEP cap") should be extended. In this opinion, we recommend that the ISO raise the current BEEP cap from $250 to $2500 over the next ten months as a part of a broader redesign of the ancillary services and real-time energy markets.

Our understanding is that the authority the ISO has under its applicable FERC tariffs to maintain the BEEP cap (currently at $250/MWH) will expire at such time as the software modifications necessary to handle higher bids are in place. ISO staff anticipates this will occur in late December, at which time there will be no constraint on the maximum bid the ISO is required to accept for real time energy. The authority to maintain the $250/MWH cap on ancillary service bids will remain in place, as will the current $2500 cap on day-ahead PX bids.

In our view, simply allowing the BEEP cap to terminate in late December is problematic in several respects: First, it occurs at the beginning of winter when loads within California are likely to be unpredictable and when supply from outside of California may be curtailed by high demand outside California and weather-related fuel supply, generation and transmission problems.

Second, removing the cap on real-time energy while retaining the cap on ancillary services may severely disrupt the already thin auction markets for ancillary services, leading to greater bid insufficiency, higher prices, and greater reliance on RMR units. This is a concern because the day-ahead energy, real-time energy, and the four ancillary services markets are largely served by the same generation units. Removal of the cap in the real-time energy market may make that market more profitable than the ancillary services markets still subject to price caps, potentially drying up bids into the latter markets, particularly in situations where bidding behavior may be distorted by RMR contract incentives to withhold capacity.[1/]

[1/] An alternative means of coordinating the two caps would be to remove the ancillary services cap rather than temporarily retaining the BEEP cap. As we noted in our August 1998 Preliminary Report, on the ancillary services market, this action must await implementation of several key market reforms, including implementation of the rational buyer protocol and reform of the current RMR contracts.

Third, the cap on the real-time energy price serves as an effective constraint on the level of bids in the PX day-ahead market. The ISO would be ill-advised to remove the BEEP cap without assurance that market power cannot be exercised in the PX day-ahead market and that incentives for withholding under the current reliability-must-run (RMR) contracts have been remedied. The PX Market Monitoring Committee's review of the performance of the PX give us concern that removing the BEEP cap could exacerbate the effects of the RMR contracts on withholding of capacity from the day-ahead market.

For these three reasons, we recommend that the $250/MWH BEEP cap be kept in place until the end of the 1999 winter season, and that it thereafter be raised as part of a broader set of coordinated changes in the ISO's auction markets and in the RMR contracts. Our specific recommendations are:

(1) <u>Temporary Authority for "Damage Control" Cap</u>.-- In order to provide the ISO the flexibility to deal with market power concerns through the summer of 1999, the ISO should seek authority from FERC to set a damage-control cap for real-time energy, comparable to its current authority to set a damage-control cap for ancillary services. The cap would have to be set in the $250-2500 range. The temporary authority of the ISO Board to set a cap within this range would expire October 1, 1999. After that date, a fixed cap of $2500 would be applicable and would remain in effect until changed in accordance with the Federal Power Act.

(2) <u>Retain $250/MWH Real-Time Energy Cap (Winter 1999)</u>.-- If the temporary authority for the damage control cap is granted, the ISO would keep a cap on real-time energy at the current level ($250/MWH) through the 1999 winter season and until the market redesign measures described in paragraph (3) take effect. The $250 MW cap on ancillary services would be retained for the same period.

(3) <u>Implement Key Market Redesign Measures</u>.-- The $250/MWH caps on ancillary services and real-time energy should remain in place until implementation of the following key elements of the ISO's market redesign: the rational buyer protocol and reform of the current RMR contracts. These changes need to be in place to ensure that the auction markets could function effectively under the higher caps recommended below. Specifically:

(i) <u>Rational Buyer Protocol:</u> The MSC in its August 1998 Preliminary Report, recommended the implementation of "a rational buyer protocol". The protocol needs to be in place before the ancillary service caps are raised.

(ii) <u>Reformed RMR Contracts:</u> Studies by both the MSC and the ISO's Market Surveillance Unit suggest that the current RMR contracts provide incentives for withholding generation from the PX and perhaps the ancillary services markets. If these conclusions are borne out by further analysis, then the new RMR contracts should be modified to eliminate or substantially reduce incentives for withholding before the higher caps are allowed to become effective.

(4) Intermediate Cap (Summer 1999).-- Once these two market redesign measures are in place, summer 1999 caps for real-time energy and ancillary services would be set at levels significantly above their present levels to test the operation of the various auction markets without the current $250 caps. This intermediate price cap should be sufficiently high to allow the market to allocate scare generation resources during the highest demand hours of the summer. It should also be set sufficiently low to prevent any software deficiency or significant market imperfection that could not be adequately dealt with by the start of the summer of 1999 and which could result in excessively high market prices. Our preliminary suggestion would be to set the real-time energy damage control cap at $750, and the ancillary services cap slightly below it (to reflect the fuel-cost component of providing energy rather than capacity).

(5) Raise Caps to $2500 on October 1, 1999.-- Effective October 1, 1999, the damage control caps for ancillary services and real-time energy should be replaced with higher fixed caps set at $2500 (the level of the PX cap). During the summer of 1999, any remaining software deficiencies or significant market imperfections are expected to be corrected, so that such a level for the price cap is warranted. The ISO would reserve the right to file at FERC for lower caps if experience, either in the summer of 1999 or thereafter, showed that the market design measures described above were insufficient to counter market power and to ensure that its auction markets function efficiently. At some point in the future, the $2500 cap could be eliminated entirely if experience showed it to be unnecessary.

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