California ISO

White Paper
Proposed Interim Measures to Address Day Ahead Underscheduling Under MRTU

May 23, 2007

Prepared by: CAISO/Market Product Development/jmd
Version: May 23, 2007
# TABLE OF CONTENTS

1. Executive Summary..................................................3

2. Background ...........................................................5

3. Rationale For Two Options...........................................5

4. Forecast Verses Maximum Amount Bid.........................9

5. Interim Scheduling Charge.........................................11

6. Next Steps.............................................................13
1. Executive Summary

In its September 21, 2006 Order conditionally accepting the Market Redesign and Technology Upgrade ("MRTU") ("September 21 MRTU Order"),\(^1\) the Federal Energy Regulatory Commission ("FERC") directed the California Independent System Operator Corporation ("CAISO") to develop and file interim measures that mitigate any potential economic incentive for Load Serving Entities ("LSEs") to underschedule in the Day Ahead Market ("DAM") that may exist prior to implementation of Convergence Bidding.\(^2\)

This directive was repeated in the April 20 FERC Order Granting in Part and Denying in Part Requests for Clarification and Rehearing ("April 20 Order on Rehearing"). In this subsequent Order, the FERC stated that “these interim measures are not intended to prevent LSEs from taking steps to reduce the costs of serving load. Instead, these interim measures should be designed to prevent uneconomic behavior. More specifically, we expect the interim measures should address the problem of persistent underscheduling in the DAM on occasions when energy prices suggest that it would be economic to buy in the DAM.” The CAISO is required to file the interim measures no later than 180 days prior to the effective date of MRTU Release 1.

On April 27, the CAISO posted on its website an Issue Paper, “Proposal for Implementing a Day Ahead Scheduling Requirement under MRTU”. The Issue Paper included four proposed options for complying with the FERC order, and highlighted pros and cons for each option. Stakeholders submitted written comments on May 7, 2007 and the CAISO held a stakeholder conference call to discuss the possible options on May 9, 2007.

After consideration of stakeholder input and further analyzing the potential benefits and implementation feasibility of the four options, the CAISO has narrowed its proposal to two options:

1. "Forecast versus Maximum Amount Bid" (identified as “Option 2” in the first Issue Paper): In this option, the CAISO would conduct a comparison of the LSE’s Day Ahead (DA) forecast, by Load Aggregation Point (LAP), versus the maximum quantity that is bid in the DAM (by LAP) to ensure that a defined percentage (similar or equivalent to the current Amendment 72 scheduling requirements) is bid into the DAM. The LSE could submit Self Schedules or Economic Bids (price-quantity bids) for Energy.

2. “Interim Scheduling Charge” (identified as “Option 4” in the first Issue Paper): In addition to settlement charges already built into the MRTU design, this option includes a proposal for an additional charge to deter underscheduling the DAM.

The CAISO has determined that the “Vertical Demand Bid” (identified as “Option 1” in the first Issue Paper) would not sufficiently meet the FERC criteria outlined in the MRTU Order, and the Order on rehearing, in that this option impedes the economic operation of the DAM, and would prevent LSEs from taking steps to


\(^2\)Convergence bidding is a market feature that involves the submission of bids to buy or sell Energy in the DAM that will ultimately not be consumed or produced in Real-Time, which results in the convergence of Day-Ahead and Real-Time prices. Convergence bids represent financial transactions, are submitted like other bids, and are recognized by system operators as not being physical.
economically reduce the cost of serving load. By imposing a mandatory requirement for self scheduling, the integrity and performance of the DAM may be jeopardized.

Stakeholder Meetings

The CAISO will hold a second stakeholder conference call to discuss these proposed options and implementation details. The conference call will be on May 29, 2007 from 1:00-2:30 PM Pacific Time, and logistical details for this call are posted on the CAISO website.

An in-person stakeholder meeting will also be held on June 6, 2007 at the CAISO, in conjunction with the Market Surveillance Committee (MSC) meeting. Details for this joint MSC-CAISO stakeholder meeting are also posted on the CAISO website. The CAISO plans to post a final White Paper with a straw proposal soon after the June 6\textsuperscript{th} joint MSC-Stakeholder meeting.

The CAISO plans to make a compliance filing with the FERC on August 3, 2007.
2. Background

The September 21 MRTU Order directs the CAISO in Paragraph 452 to develop and file interim measures, no later than 180 days prior to the effective date of MRTU start up to address the potential economic incentive for LSEs to underschedule in the DAM until the successful implementation of convergence bidding has been achieved. This directive was repeated in the April 20 FERC Order Granting in Party and Denying in Part Requests for Clarification and Rehearing (Paragraphs 118 and 119). The FERC also stated that “these interim measures are not intended to prevent LSEs from taking steps to reduce the costs of serving load. Instead, these interim measures should be designed to prevent uneconomic behavior. More specifically, we expect the interim measures should address the problem of persistent underscheduling in the DAM on occasions when energy prices suggest that it would be economic to buy in the DAM.” The compliance filing is due on August 3, 2007.

On April 27, the CAISO posted on its website an Issue Paper, “Proposal for Implementing a Day Ahead Scheduling Requirement under MRTU”. The issue paper included four proposed options for complying with the FERC order, and highlighted identified pros and cons for each option.

Stakeholders submitted written comments on May 7, 2007 and the CAISO held a stakeholder conference call to discuss the possible options on May 9, 2007. After further research and consideration of stakeholder input, the CAISO has narrowed the options down to two:

1. “Forecast versus Maximum Amount Bid” (identified as “Option 2” in the first Issue Paper): Under this option, the CAISO would conduct a comparison of the LSE’s DA forecast (by LAP) versus the maximum quantity that is bid in the DAM (by LAP) to ensure that a defined percentage (similar or equivalent to the current Amendment 72 scheduling requirements) is bid into the DAM. The LSE could submit Self Schedules or Economic Bids (price-quantity bids) for Energy.

2. “Interim Scheduling Charge” (identified as “Option 4” in the first Issue Paper): In addition to settlement charges already built into the MRTU design, this option includes a proposal for an additional charge to deter underscheduling the DAM.

The following sections of this issue paper include an explanation of why the above options are being considered, details of the proposed options, and next steps.

3. Rationale for Two Options

a. Principles

The CAISO is considering the following principles when evaluating the proposed options to address the issue of potential underscheduling until convergence bidding is implemented:

- The measures can be implemented at the start of MRTU, and they are “interim” until convergence bidding is implemented;

- They do not prevent LSEs from taking steps to reduce the costs of serving load;

- They aim to prevent uneconomic behavior;
• They address “persistent” underscheduling in the DAM on occasions when energy prices suggest that it would be economic to buy in the DAM;

• They do not produce a situation where there is the potential for the exercise of market power on the supply side; and,

• The rules do not negatively influence the integrity of the CAISO markets and grid reliability.

After posting the first Issue Paper, stakeholders commented that any proposed option short of implementation of convergence bidding is far from ideal, and that it is not possible to achieve all of the above-mentioned goals with an administrative solution. As explained in previous filings, it is not feasible for the CAISO to implement convergence bidding at the start of MRTU. The CAISO is therefore working to find an interim solution that can be created and implemented by the start of MRTU to comply with the FERC directives.

b. Why Not the Vertical Bid Option?

1. Background

In the first Issue paper, the CAISO presented Option 1, “The Vertical Demand Bid”. Under the “Vertical Demand Bid” Option, LSEs would Self-Schedule a percentage (e.g. 95 percent) of their Load in the DAM. The LSE would be a price taker for the amount of Load that is Self-Scheduled. In addition, the LSE would submit to the CAISO their forecasted Load data by a set interval (e.g. hourly) prior to the DAM. To ensure compliance, the CAISO would compare the forecasted Load by LAP with the amount that is Self-Scheduled to ensure that the correct amount is Self-Scheduled in the DAM by LAP. The SC would be subject to the Enforcement Protocols in the Section 37 of the MRTU Tariff, which is a general requirement that participants comply with all provisions of the CAISO Tariff.

2. Stakeholder Comments

In addition to the “cons” included in the first Issue Paper, many stakeholders emphasized that this option would harm market efficiency, raise costs, and could potentially result in supply-side market power. Stakeholders also commented that this approach does not address “persistent” underscheduling. Finally, stakeholders conveyed that the MRTU design already includes incentives to schedule in the DAM. Comments are summarized below:

• Costs – This option does not allow parties to take reasonable actions to reduce purchasing costs. It makes no consideration of market results to determine if it was in fact economic to buy in the day-ahead market;

• Market Efficiency - A rule mandating significant self-schedules in the day-ahead market, to the extent this causes optimization problems, will likely distort congestion prices in both the day-ahead and real-time markets. This option may weaken the choices and energy dispatch under the MRTU economic optimization software. Requiring the LSEs to schedule a high percentage in the DAM may increase costs to ratepayers and lower market efficiency;

• Underscheduling - This option is not targeted at “persistent” underscheduling;
• MRTU Design Already Promotes DA Scheduling: There are already incentives built into the MRTU design to encourage DA scheduling. There are settlement implications. In addition, CRRs only hedge against day-ahead congestion. Purchases in real-time have no means to hedge against real-time congestion charges, and this provides an additional incentive to schedule in the day-ahead market; and,

• Market Power – The potential for significant supplier market power could be extremely costly and inefficient. By mandating self scheduling, the vast majority of load would be required to purchase the power irrespective of price.

Stakeholders in favor of this option stated that the CAISO has overemphasized the shortcomings of this option and that the Vertical Demand bid is preferable to launching an unbalanced market with no meaningful measures to address the fundamental incentives that encourage demand underscheduling.

3. CAISO Position on Vertical Demand Bid Option

After careful consideration, the CAISO has determined that the vertical demand bid option does not meet the objectives outlined in the two FERC Orders. This option reduces the value of the DAM, and would prevent LSEs from taking steps to reduce the costs of serving load. In addition, the resources required to implement this option would divert scarce resources at the CAISO from other projects – including the implementation of MRTU and Convergence Bidding.

Furthermore, the input provided by the Department of Market Monitoring (DMM) emphasized the challenges associated with fair implementation of this option. In their comments, DMM stated,

• “The lack of any discretion by the CAISO in assessing any formulaic penalty that might be established in the CAISO tariff for violations of any scheduling requirements established under Options 1 or 2 may make such an approach somewhat problematic for both participants and the CAISO. In addition, in the event that a specific penalty is established that is based on an LSEs DA bids/schedules relative to load forecast, the devotion of resources for the development of a satisfactory mechanism by which LSEs can submit those load forecasts will need to be revisited.\(^3\)

• “Any penalty established in the CAISO tariff that is based on a comparison of DA bids/schedules to forecasts submitted by LSEs may be subject to “gaming” and could be easily circumvented by under-forecasting load. Since such potential gaming of load forecasts would not constitute an “objectively verifiable” violation of the CAISO tariff for which a specific penalty is established in the CAISO tariff, the CAISO’s only recourse would be to refer any such activity to FERC under CAISO and FERC market rules requiring submission of Factually Accurate Information and prohibiting Market Manipulation (e.g. MRTU Tariff Sections 37.5 and 37.7, respectively). Under this scenario, any enforcement actions would then be within the sole authority of FERC”; and,

• “If the CAISO believes some financial incentive to deter underscheduling should be incorporated into the CAISO tariff, that this be done through a settlement charge that is calculated based on a comparison of metered loads to load schedules (Option 4), rather than a penalty based on an SC’s load forecast under Options 1 or 2.”

---

\(^3\) As noted in the April 27 whitepaper, “[i]t is unclear whether or not the CAISO will have an effective tool available for LSEs to submit Load forecasts at the start of MRTU.” The whitepaper further states that “[t]he cost of this functionality is excessive and the time to implement this capability into SIBR could delay the MRTU project” and that “[o]ther lower cost alternative approaches, including use of a secure File Transfer Protocol (FTP), are now being evaluated.”
Finally, the CAISO recognizes that this option would not be compatible with the new Demand Response initiatives to be implemented at the start of MRTU. The three-part bid feature for Participating Loads will not be part of the market design at the start of MRTU, and this functionality will be added in a future release of MRTU. Participating Load, therefore, will need to submit a price sensitive demand curve into the DAM to participate in the Demand Response program.

c. **Why Not Option Three, “Financial Incentives Already Built Into MRTU”**

1. **Existing Charges**

   The premise of Option 3 in the first Issue Paper was to primarily rely on existing charges\(^4\) as a disincentive to underschedule in the DAM. The paper also suggested that the DMM could monitor scheduling behavior, and invoke a “trigger” if a problem was discovered.

   While many LSEs' comments expressed preference for Option 3 in the earlier Issue Paper, it was also pointed out that this option may not be far-reaching enough to accommodate the goals set forth in the FERC Orders. Furthermore, stakeholders expressed reluctance to fully support this option without explicit details about the “trigger” concept.

   Alternatively, some stakeholders were strongly opposed to this option, and they contended in their comments that raising the price of serving Demand in Real Time does not address the “incentive” to under-schedule in the DAM. Furthermore, there is no guarantee that the costs allocated to Real Time demand will be sufficiently onerous to deter under-scheduling.

   It was also pointed out by stakeholders that Option 3 might not be sufficient to curb the situations when load under-scheduling creates a significant impact on DAM prices.

2. **Problems with a Trigger**

   Option 3 in the first Issue Paper referenced the concept of a “trigger” that could be implemented if the CAISO identified persistent underscheduling in the DAM. The DMM, in particular pointed out the challenges they would face if tasked with identifying whether underscheduling is having a significant impact on DAM prices.

   The reasons they cited include:

   - “The complex interactions between these factors\(^5\) are likely to make any attempt to isolate the impact of load scheduling and bidding practices on price divergences between the DAM and Real Time Market a challenging and controversial exercise.”

   - “In the context of MRTU, participants can be expected to adjust both supply and demand bids in the DAM on a daily basis in response to and in anticipation of market conditions – which could

\(^4\) Includes the following charges: Participating Intermittent Resource (PIR) Allocation (CC 721), Excess Cost Allocation (CC 6486), GMC on Deviations, Real-Time Bid Cost Recovery (6678), RUC Tier 1, Real-Time Energy Component of RUC (CC 6470).

\(^5\) Under MRTU, any divergences between DAM and RTM prices may be driven by a combination of many different factors — supply and demand bidding behavior, modeling errors or limitations in the DAM, HASP market behavior and outcomes, real time market bidding behavior, unscheduled flow, and generation uninstructed deviations, etc.
include the expected behavior of other participants. Thus, any analysis of a counterfactual change in scheduling/bidding behavior of LSEs may require assumptions about a change in behavior of suppliers and other market participants. Moreover, due to the sequential interrelated nature of the IFM, RUC, HASP and real time markets, analysis of a counterfactual change in scheduling/bidding behavior of LSEs in the IFM may require analysis of the resulting changes in the inputs and outcomes for each of these other markets. Due to the large number of assumptions that may need to be made to assess the impact of LSE bidding behavior on overall market prices and outcomes, such analysis is likely to be subject to extensive dispute and controversy.

• “DMM currently does not have a foundation of existing models, tools and experience with MRTU market performance to conduct the type of complex analysis that would be necessary to ensure that DMM could differentiate the impact of market participants’ load bidding/scheduling behavior on market outcomes and prices from other market conditions and activities.”

• “It is a complex undertaking to “define and develop agreement on what constitutes terms such as a “significant” or “detrimental” impact on DAM prices, or “uncompetitively low” DAM prices, etc.”

• “The timeline needed to collect and analyze the data necessary to make a sufficiently definitive determination on the impact of any LSE scheduling/bidding behavior would make it likely that any such determination could only be made well into the first year of MRTU. Under this scenario, any such scheduling charge might be implemented for only a relatively short period of time prior to implementation of convergence bidding.”

Based on this input, the CAISO has concluded that implementation of any financial consequence must be based on simple and transparent metrics. Further discussion of how this can be achieved is now included in the proposed “Interim Scheduling Charge” Option below.

4. **“Forecast versus Maximum Amount Bid” Option**

a. **Background**

The CAISO has narrowed down the proposed options to include the “Forecast verses Maximum Amount Bid” option (Option 2 presented in the April 27th Issue Paper). This option leverages existing and recent changes to Amendment 72 that have already been analyzed and discussed through a stakeholder process. This option is analogous to the “must bid” requirement for resources under Resource Adequacy (RA) obligations and maintains the market aspect of the DAM by allowing SCs to determine pricing for Demand.

The Forecast versus Maximum Amount Bid Option has been expanded upon from the first Issue Paper to include more details on requirements for percentage amounts bid, proposed exemptions, penalties and implementation details.

Under this Option, the CAISO will conduct a comparison of the LSE’s Day-Ahead forecast by LAP versus the maximum quantity bid in the DAM by LAP to ensure that the maximum bid in quantity, including any self-schedules is equal to a minimum of 95% of the DA forecasted demand for peak hours and 75% of the DA forecasted demand for non-peak hours.
b. **Submission of Day-Ahead Demand Forecast**

SCs would submit their Demand forecast for each hour of the trading day by LAP to the CAISO by 10:00 a.m. Pacific Time of the Day Ahead. LSE’s whose peak metered demand for the preceding twelve months is under 1MW would continue to be exempt from the requirement to submit forecast data.

The CAISO does not have a software interface under MRTU to receive load forecast data. Since it was anticipated that the requirement for SCs to submit forecast data would end with MRTU, the SIBR (Scheduling Infrastructure and Bidding Rules) software was not scoped to receive forecast data. Since this is an interim requirement until Convergence Bidding is implemented (twelve months after MRTU start-up) it was determined that it would be too costly to add this functionality to SIBR at this point in time. Therefore, another process for forecast data submission to the CAISO would have to be implemented for Option 2 to be feasible. The CAISO is aware of the shortcomings and the concerns SCs have expressed with the current SI system and process for submitting forecast data and will take this into consideration when developing a new process and would take this information into account when designing the new system. However, as this system is only expected to be in place for a one year period, a system that provides all of the functionality requested by SCs may not be justified.

The CAISO is considering using a Secure FTP server to allow SCs to submit forecast data to the CAISO. The FTP server provides security during the transfer of the data between CAISO and the Market Participant. Each SC would have a unique “log-in”, and only that SC would be able to access and view their files. After the SC would log-in, they could submit a file or retrieve a previously submitted file. The submitted files for a particular day would be moved or locked after the 10 AM forecast deadline, such that the file could not be over-written but could continue to be retrieved by the SC.

c. **Bid Floor**

The CAISO does not recommend establishing a minimum bid price as part of this option. The CAISO does not have the experience with MRTU market performance to accurately determine an appropriate price floor to deter underscheduling, and the prevention of uneconomic behavior.

If this option is ultimately selected, the CAISO encourages input from stakeholders regarding the establishment of a minimum bid price.

d. **Exempt Scheduling Deviations and Allowances for Minor Scheduling Deviations**

The CAISO proposes to continue the current allowances from the forward scheduling requirements that exist today under Amendment 72. This includes a threshold for Exempt Scheduling Deviations that is the lower of three MWh or five percent of the Scheduling Coordinator’s demand forecast.

e. **Penalties**

The CAISO does not recommend including a formulaic penalty be applied under Option 2. As mentioned in comments provided from DMM regarding the first Issue Paper, “pursuant to FERC’s previous orders and policy statements on market monitoring, ISOs may only seek to obtain tariff authority to impose penalties for completely “objectively identifiable” violations of tariff provisions for which there are very specific penalty formulas in the tariff.6 “Once such penalties are established in the tariff, the ISO does not have discretion to

---

waive or modify any of these penalties, but may only recommend that the FERC modify or waive a penalty due to “mitigating circumstances” through a formal filing with the Commission”.  

The CAISO, therefore, proposes to continue the process implemented under Amendment 72 and to submit SC’s forecasting and bidding data to the FERC Office of Market Oversight and Investigations. SCs that fail to comply with the 95% peak and 75% off-peak Day-Ahead scheduling requirement may be penalized according to FERC regulations. SCs are also subject to the Enforcement Protocols as referenced in section 37.6 of the MRTU Tariff and would be required to submit Forecast Data on a daily basis.

The CAISO recommends that if a financial incentive to deter underscheduling is required, it should be applied through a settlements charge as described below.

5. **“Interim Scheduling Charge” Option**

Based on input from stakeholders and upon further research, the CAISO also envisions the implementation of an Interim Scheduling Charge (Option 4 in the first Issue Paper) as a potential option for an interim measure until convergence bidding is implemented. This Option is now referred to as the “Interim Scheduling Charge”, and has been further defined.

   a. **Stakeholder Input**

   The concept of creating a new charge to be assessed to Load was presented in the first Issue paper, and stakeholders provided the following feedback:

   - **The Charge Would Have to Be Effective** - The charge would have to be very high to counteract the economic leverage of under-scheduling,

   - **Should only Target Systematic Deviations** - The charge should target only significant and systematic load deviations, and not result in excessive penalties for occasional load forecast errors, or supply deviations due to outages;

   - **Impact on Prices** - The charge should not adversely affect energy bidding and pricing due to the structural, added cost exposure for demand;

   - **Short Term** - It needs to be an interim solution (e.g., the charge codes would be made inactive when convergence bidding is implemented);

   - **Metered Subsystem Agreement (MSSA)** – The charge should not be assessed to a load-following MSSA within their tolerance band; and,

   - **Details** - The CAISO needs to develop details concerning SCs’ under-scheduling behavior, penalties for the under-scheduling behavior, and allocation of any revenue resulting from those penalties.

   b. **Proposed Charge and Allocation**

---

7 **CAISO Department of Market Monitoring Comments on Proposal to Implement a Day-Ahead Scheduling Requirement**
The CAISO has considered this input, and proposes the creation of a new $/MWh charge that would be assessed by multiplying a flat $/MWh rate by net negative uninstructed deviation quantities that are outside of an established threshold. The threshold would be determined by a set percentage of the maximum demand that clears in the DAM. Any revenues from this charge would be allocated to the Grid Management Charge via reduction of the overall annual revenue requirement.

The CAISO recommends the following values for the rate, threshold, billable quantity, and exemptions:

1. **Rate**: The proposed rate would be $250 / MWh. This is consistent with the Residual Unit Commitment (RUC) bid cap to be in place at the start of MRTU. This value would be sufficiently onerous to deter underscheduling, and encourage scheduling and bidding in the DAM.

2. **Threshold**: The CAISO recommends a threshold, or bandwidth of “15% of the Cleared DA Bids”. By basing the threshold on a value that is directly related to cleared DA bids, this reduces the potential leverage that LSEs might have to keep prices low in the DAM. By making the threshold 15%, there would be adequate leeway, so as not to result in excessive penalties for occasional load forecast errors and to allow room for the DAM to economically function.

3. **Billable Quantity**: The billable quantity would be based on the amount of net negative uninstructed deviations, per ten minute interval, outside of the threshold.

4. **Exemptions**: Following the guidelines already established in Amendment 72, there would be an exemption for one MW of demand.

5. **Applicability**: This potential charge would apply to SCs with cleared Demand bids, which includes Economic Bids and Self Schedules).

In addition, the CAISO recommends the following with regard to allocation, settlements, and duration:

1. **Allocation**: The revenues received from this charge would go to reduce the GMC. By allocating to the GMC, the revenues are spread fairly throughout the market.8

2. **Settlements**: To increase simplicity, the charge would be levied monthly. The allocation of revenues would be done annually.

3. **Duration**: The charge would be terminated when convergence bidding is initiated.

c. **Example**

An example of how this would be implemented is as follows:

**Threshold**: If an SC has 400 MWs of cleared Demand in an hour of the DAM, their threshold is 60 MW for that hour. For each ten minute interval during that hour, therefore, the SC’s threshold is 10 MWs.

---

8 While the CAISO did consider creating a new allocation to LSEs who schedule within the threshold, the CAISO cannot build a new specialized charge type by the start of MRTU. The other possible option is to allocate to measured demand on a monthly basis.
**Interim Charge:** If the SC’s net negative deviations are 11 MWhs for one interval of the hour, then the SC would be assessed the “Interim Scheduling Charge” for 1 MWh, or $250.00.

**Interval and Settlement:** The dollar values, per ten minute interval, would be added over the course of one month and then settled monthly.

**Allocation:** The $250.00 collected would reduce the overall Annual Revenue Requirement on which the GMC is based.

d. **Advantages of The Interim Scheduling Charge Option**

The advantages of this approach are as follows:

- This option provides an incentive to schedule in the DAM by virtue of the charges applied to underscheduled Load.
- This option is directly related to “cleared” Demand bids, thus encouraging economic bidding in the DAM, and deters suppliers from exerting leverage to keep the prices low in the DAM.
- This method is simple, specific, and transparent. It is not arbitrary, thus enabling fair implementation.
- This proposal is not too complex (e.g. requires more upstream data), and can be implemented at the start of MRTU.
- LSEs would not have the additional burden of submitting forecast data.

6. **Next Steps**

The two options, “Forecast verses Maximum Amount Bid” and “Interim Scheduling Charge”, are potential solutions for the development of interim measures to address the potential economic incentive for LSEs to underschedule in the DAM until the successful implementation of convergence bidding has been achieved.

The CAISO seeks stakeholder input on the two options presented in this issue paper. The CAISO will hold a stakeholder conference call on May 29th, 2007, from 1:00 PM to 2:30 PM Pacific Time to review the proposed options. Written comments should be submitted by May 31, 2007 to Jacqueline DeRosa at jderosa@caiso.com.

There will be a joint stakeholder and MSC meeting on June 6, 2007, to further discuss these proposed options. After the June 6th meeting, the CAISO plans to develop a straw proposal and issue a final White Paper. The CAISO will also post draft tariff language in July 2007, and will schedule another stakeholder conference call to review tariff language. The CAISO plans to make a compliance filing with the FERC on August 3, 2007.