California ISO
Your Link to Power

California Independent
System Operator Corporation

Memorandum

To: ISO Board of Governors

From: Philip Leiber, CFO & Treasurer

Date: December 8, 2008

Re: ***Decision on Credit Policy Enhancements***

This memorandum requires Board action.

EXECUTIVE SUMMARY

This memorandum proposes several credit policy enhancements that move in the direction of ISO/Regional Transmission Organization (RTO) best credit practices. Market participants generally support these enhancements. They include:

1. Reducing the maximum unsecured credit limit and the methodology by which unsecured credit limits are set;

2. Allowing guarantees by non- U.S. companies as an acceptable form of financial security;

3. Requiring a guarantor that is guaranteeing the obligations of one affiliate to guarantee the obligations of all affiliates that participating in the ISO market;

4. Reducing the time limit for posting additional financial security;

5. Limiting the portion of available credit that can be used to secure a congestion revenue rights auction; and

6. Imposing disciplinary action, including financial penalties, on market participants who pay invoices late or fail to post additional financial security within the prescribed posting period.

This memorandum will provide the ISO Board of Governors (the Board) an overview of each of the proposed changes and a summary of stakeholder responses, where appropriate.

Additional credit policy enhancements considered during the stakeholder process included a stakeholder proposal to change the way losses from a payment default are allocated. This proposal was deferred to a separate stakeholder process likely to commence after the rollout of MRTU. Two other potential enhancements to reduce the financial impact of a payment default – one to create a market-funded reserve account and another for the ISO to acquire credit insurance – were dropped from consideration due to widespread stakeholder opposition.

MOTION

> ***Moved, that the ISO Board of Governors approves the proposed credit policy enhancements, as detailed in the memorandum dated December 8, 2008, and***
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> ***Moved, that the ISO Board of Governors approves a further reduction in the maximum unsecured credit limit to $50 million upon implementation of Payment Acceleration, and***
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> ***Moved, that the ISO Board of Governors authorizes Management to make all necessary and appropriate filings with the Federal Energy Regulatory Commission to implement the proposed credit policy enhancements.***

SUMMARY OF PROPOSED CREDIT POLICY CHANGES

The proposed credit policy changes fall into three areas: 1) unsecured credit limits, 2) financial security and 3) alternative credit risk mitigation strategies. The general thrust of the proposed changes is to reduce credit risk and enhance the credit policy's effectiveness. Based on comments from three rounds of stakeholder meetings, stakeholders by and large support these proposals although some believe additional tightening measures are warranted, including further reducing unsecured credit limits, shortening the timeframe to post financial security and implementing stricter financial penalties for late payers and for those who fail to post financial security within the prescribed timeframe.

Unsecured Credit Limits

In 2006, Finance changed the way it determined a market participant's creditworthiness for purposes of assigning unsecured credit limits. Prior to the 2006 credit policy amendments, entities that maintained credit ratings above investment grade were provided an unlimited unsecured credit amount. Since 2006, the ISO has based the amount of unsecured credit it granted to an entity on quantitative and qualitative factors including the entity's credit ratings and of tangible net worth (public and private corporations) or net assets (governmental entities). In addition, unsecured credit was capped at $250 million. Finance now proposes the following three changes that will simplify the process used for setting unsecured credit limits, and reduce unsecured credit limits:

- Simplifying the existing eight-step process for assigning unsecured credit limits to use the Moody's KMV Spot Category Rating™ instead of the highly volatile Moody's KMV Estimated Default Frequency™, and use the lowest credit rating agency issuer rating instead of the average of such available ratings. As in the current process, this information would be used to set the tentative unsecured credit limit at a percentage of tangible net worth or net assets (based on a matrix), and that tentative credit limit would be subject to further reductions based on an assessment of qualitative factors.

- Modifying the definition of tangible net worth to exclude certain assets the ISO believes are not generally available to settle a claim in case of a payment default. Such assets include but are not limited to restricted assets, affiliate assets and highly volatile assets such as derivatives.

- Reducing the maximum unsecured credit limit amount from $250 million to $150 million in order to more closely align with limits permitted by peer ISOs and RTOs. Management further proposes that this limit be further reduced to $50 million after payment acceleration is implemented. This is reasonable since the cash clearing cycles and, correspondingly, outstanding liabilities will be reduced by about 70% with payment acceleration (and the reduction from $150 million to $50 million provides a comparable reduction).

  In arriving at the proposed $150 million maximum unsecured credit limit, Management considered the maximum unsecured credit limits of peer ISOs/RTOs:

  - $25 million (Southwest Power Pool)
  - $75 million (ISO-NE and MISO)
  - $100 million (ERCOT)
  - $150 million (PJM)

  NYISO and ISO-NE further limit the amount of unsecured credit for any one participant to 20% of receivables. The ISO's current $250 million limit is higher than peers, but is arguably justifiable given our longer payment cycle. When maximum unsecured credit limits (UCLs) are "normalized" to reflect differences in payment cycles, our UCL in fact appears somewhat low.

ISO	Maximum Unsecured Credit Limit (UCL)	Cash Clearing Calendar Days (maximum)	UCL / Cash Clearing Calendar Days
ISO-NE	$75 million	20	$3.75 million
MISO	$75 million	20	$3.75 million
PJM	$150 million	45	$3.3 million
CAISO – current	**$250 million**	**91**	**$2.75 million**
CAISO – proposed	**$150 million**	**91**	**$1.65 million**
CAISO – proposed with Payment Acceleration	**$50 million**	**25**	**$2 million**

  However, peer ISOs are likely to further reduce their UCLs, and generators would not agree that normalizing the UCLs in the manner shown above is appropriate, and would argue that they still face higher risk, because if a debtor declares bankruptcy they are still exposed to a higher absolute dollar amount for the outstanding transactions.

Management also assessed the historical Estimated Aggregate Liability (EAL) of our market participants in comparison to the maximum UCLs in recent years. The proposed maximum UCL of $150 million is sufficient to cover the highest EAL experienced by that market participant in recent years. We also considered how EALs may change as a result of MRTU, as a result primarily of the addition of a day-ahead market. Although this analysis indicated that the maximum EAL of the participant whose previous EAL would be fully covered by the proposed $150 million UCL, that participant's EAL could increase to around twice that amount based on reasonable expectations of that entity's day-ahead volumes that may be procured in the ISO market.

Based on these considerations, Managements' recommendation to reduce the maximum UCLs from $250 million to $150 million (and further to $50 million upon the effectiveness of Payment Acceleration 3-5 months after MRTU startup) represents an appropriate step toward more conservative credit policies in response to the recent market participant defaults experienced in other ISO markets during 2008 and balances the divergent interests of market participants on this contentious topic.

Financial security

The ISO accepts financial security from entities that are "reasonably acceptable" in accordance with *ISO Tariff* Section 12.1.2. [1] To date, under these provisions, the ISO's general practice has been to grant unsecured credit to and accept financial security from entities based or having operations in the United States or Canada. Increasingly, the ISO market has attracted market participants outside of this geographic area. Also, consolidation in the industry has led to longstanding ISO market participants being acquired by foreign entities. As a result of repeated requests from entities requesting that the ISO accept foreign financial security, Management believes that it is commercially reasonable and now intends to:

- Expand the ISO's "reasonably acceptable" test to allow a foreign entity to back as much as $25 million of an affiliate's obligations using a corporate guaranty based on a set of strict criteria adopted by other ISOs[2].

To reduce the exposure for potential defaults related to thinly capitalized affiliates, the ISO proposes to:

- Require guarantors backing the obligations of one affiliated entity in the ISO market to back the obligations of all affiliates participating in the market. This requirement would only apply if a corporate guarantor secured an affiliate's transactions. Then, the ISO would require the guarantor to enter into a guaranty that covered the obligations of all of its affiliates participating in the ISO market. If the proposed guarantor were not sufficiently creditworthy to cover the estimated aggregate liabilities of all affiliates, the ISO would not accept a corporate guaranty and each affiliate would have to provide its own security, such as a letter of credit, cash collateral, or

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[1]Management is not proposing to modify the tariff in this area. The proposed changes discussed in this section will result in modifications to the *Business Practice Manual for Credit Management*.

[2] Strict criteria related to the guarantor and guarantee itself that limits market exposure to foreign guarantees has been adopted by ISO-NE and PJM and has recently been filed by MISO.

unsecured credit, if the affiliate were creditworthy. This proposal does not require corporate families to use a guaranty, as opposed to other forms of security. In written comments, the investor-owned utilities initially opposed this requirement but after further discussion with ISO staff, realized their opposition was largely due to their misunderstanding of the ISO proposal. The misunderstanding centered on whether the ISO could reach the assets of other affiliates in the event of a default, and whether doing so would be a violation of affiliate transaction laws so that a regulated affiliate would be liable for an unregulated affiliate's obligations. Once the ISO explained that the guaranty was an obligation of the guarantor and that the ISO's recourse under the guaranty was the guarantor, their main concern was addressed.

Alternative credit risk mitigation strategies

In the stakeholder process, Management presented a number of other credit risk mitigation strategies. We propose the measures below as a result of benchmarking the ISO's credit policy against other ISOs and RTOs, and needing targeted and effective enforcement tools to motivate compliance with *ISO Tariff* provisions in the areas of late payments and timely posting of financial security. We propose the following changes:

- Reducing the time allowed to post additional financial security from five to three business days

- Limiting the amount of financial security that a candidate congestion revenue right holder can allocate to an auction to 90% of available credit versus 100%, to maintain an adequate reserve for other market activity

- Establishing progressive discipline measures, including financial penalties for market participants who are late in paying invoices or who fail to post additional financial security within the prescribed posting period. The progressive discipline program for each will be implemented as soon as practicable, while the implementation of the financial penalties component will not occur until after the release of MRTU. The first $5 million of financial penalties so assessed would fund a market reserve account that could be used to cover payment defaults. Any funds assessed in excess of $5 million (and still available in the reserve account) would be used to reduce the grid management charge revenue requirement in the following year. Management and most stakeholders agree using financial penalties to fund a market reserve account and reducing grid management charges is a reasonable compromise proposal. However, while the investor-owned utilities support penalties, they propose that all such penalties be used to reduce the grid management charge.

As stakeholders did not support some of the additional credit risk mitigation measures discussed in the stakeholder process, they are not presented here for approval. Examples of these issues include two proposals that could potentially reduce the severity of a payment default. Market participants generally agreed that since the costs of these proposals outweighed the benefits, they should not be implemented at this time:

- Establishing a market reserve account to be funded by ongoing assessments of all market participants to serve as a funding source in the event of a payment default

- Obtaining credit insurance or establishing another credit facility to serve as an additional funding source in the event of a payment default.

STAKEHOLDERS DESIRE ADDITIONAL CHANGES, INCLUDING EVEN TIGHTER CREDIT POLICIES

Although stakeholders generally support the credit policy enhancements presented here, many believe credit standards should be tightened further. Specifically, many stakeholders (including suppliers, marketers and certain municipalities) desire more conservative credit policies to reduce what they believe is a disproportionate share of the credit risk of participating in the ISO market caused by:

- High unsecured credit limits
- Exposure to payment defaults
- Long settlement cycles
- Uncertainty and potentially increased risks to net creditors with the release of MRTU

Supporters of more conservative credit policies desire lower or no unsecured credit limits, a loss sharing methodology that would spread the risk of payment default to all market participants rather than net sellers in any settlement period or shorter settlement cycles, as provided for in payment acceleration, implemented concurrent with the release of MRTU.

The most contentious issue discussed in the stakeholder process was a change in the loss sharing methodology in the event of a payment default. Presently, net creditors in the month of the default (generally suppliers and marketers) assume all the risk of a payment default. A broader loss sharing approach, where suppliers and load share the loss (as used in other ISOs and RTOs), has drawn expected support from suppliers and opposition from load. Certain suppliers have hypothesized that if the ISO experienced a significant unsecured default under today's loss-sharing methodology, it would be in their interest to manage their exposure to the ISO by ceasing further sales in the day-ahead and real-time markets, and to potentially start buying from the ISO day-ahead and real-time market(s) to offset their receivable position. If this situation were to coincide with a peak load day, credit issues could potentially escalate to reliability issues. Certain significant suppliers have expressed that this critical issue must be resolved prior to MRTU go-live. Conversely, net buyers (i.e., load) do not support a change where they would assume any risk of a payment default.

In the last stakeholder meeting, Management committed to continued evaluation of this issue and recommended that it be further considered in a separate stakeholder process. This would allow parties the opportunity to fully consider alternatives on this matter and other risk mitigating measures that might address residual supplier concerns.

Short of implementing a loss sharing methodology that shares losses among all market participants before the launch of MRTU, many stakeholders desire a significantly lower unsecured credit limit than the $150 million being proposed by the ISO and/or shorter settlement cycles. Although neither alternative is currently under consideration in conjunction with the deployment of MRTU, Management will review these proposals along with the loss-sharing proposal in a separate stakeholder process. Management believes both objectives will be fulfilled with the rollout of payment acceleration, which we have currently scheduled to implement three to five months after the release of MRTU.

MANAGEMENT RECOMMENDATION

Management recommends the Board approve these credit policy enhancements, which represent reasonable and appropriate strengthening of the ISO credit policy since the last major policy changes were adopted in 2006. The changes move in the direction of ISO/RTO best practices on credit, and are generally supported by market participants. While certain market participants would have preferred even more conservative standards, these recommended enhancements are changes in the right direction and are appropriate for adoption at this time.