



June 25, 2004

The Honorable Magalie Roman Salas  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, DC 20426

**Re: Electric Creditworthiness Standards  
Docket No. AD04-8-000**

Dear Secretary Salas:

Enclosed for electronic filing please find Comments of the California Independent System Operator Corporation.

Thank you for your assistance in this matter.

Respectfully submitted,

A handwritten signature in cursive script that reads "Sidney L. Mannheim".

Sidney L. Mannheim  
Counsel for The California Independent  
System Operator Corporation

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

**Electric Creditworthiness Standards      )      Docket No. AD04-8-000**

**Comments of the  
California Independent System Operator Corporation**

**I.      Introduction**

The California Independent System Operator Corporation (CAISO) offers the following comments in response to the May 28, 2004 Notice of Technical Conference and Request for Written Comments on Credit-Related Issues for Electric Transmission Providers, Independent System Operators, and Regional Transmission Organizations issued by the Federal Energy Regulatory Commission (FERC). The CAISO welcomes the opportunity to comment on credit policies and believes that the Commission can play an important role in developing and implementing credit standards.

**II.     Executive Summary**

The CAISO believes that the electricity industry can benefit from standardization of the criteria for establishing creditworthiness; limits on the amount of unsecured credit extended to creditworthy entities; definitions of default events; enforcement mechanisms, including penalties, suspension and termination; and associated timelines; billing and settlement; and default provider issues.

Due to the competing interests and diverse nature of market participants, the CAISO has found that the stakeholder process may not be the best means for developing credit policies and believes that the Commission may be better able to balance the interests of all market participants.

While default providers should be held to the same credit standards and requirements that apply to other market participants, suspension and termination of providers of last resort in the event of failure to comply with applicable credit requirements or default, is practically and politically troublesome. The CAISO believes that state and local regulatory authorities must ensure that default providers are creditworthy.

### **III. Comments**

#### **A. Questions Regarding Transmission Providers:**

1. Should credit requirements for wholesale electric transmission services be standardized?

The CAISO believes that some standardization for credit requirements would be beneficial for the industry as a whole due to the complexity of issues and the divergent interests among the market participants. For example, the CAISO must deal with net sellers—the group that benefits more from stringent security requirements—on the one hand, and net buyers—the group that benefits more from more flexible security requirements—on the other hand. The net-buyer group, in turn, includes a diverse set of entities including investor-owned utilities (IOUs), publicly-owned utilities (POUs) and other energy services providers (ESPs) that have divergent interests. In addition, in California, IOUs and POU function as providers of last resort or default providers in contrast to non-utility ESPs. The CAISO has been working on improvements to its credit policies following the 2000/2001 electricity crisis and has found it difficult to move beyond the issue-development stage. One reason stems from the divergent interests among stakeholders, which makes it virtually impossible for consensus to be developed through a stakeholder process. Circumstances such as these can be dealt with more effectively when the Commission balances all the competing interests and prescribes generally applicable policies. Of course, some flexibility must remain with the transmission provider, independent system

operator (ISO) or regional transmission organization (RTO) to reflect differences in service offerings and unique situations of regional markets.

In addition, the criteria for determining creditworthiness in for the electric industry could be standardized in the same manner as specified in the Commission's Gas Credit NOPR.<sup>1</sup> For example, common information and disclosure reporting requirements could be adopted across the industry. However, the criteria for determining the extent to which credit should be extended will need to be dictated by the different products, services and markets offered by transmission providers compared to ISOs/RTOs although we agree the criteria should be objective and transparent as discussed in the Gas Credit NOPR.<sup>2</sup> The CAISO is aware that some other ISOs/RTOs engage in credit scoring to determine creditworthiness and the amount of credit to extend to market participants. Due to the high transaction costs, the CAISO has not elected to conduct credit scoring to date. However, the CAISO does believe that entities with Approved Credit Ratings pursuant to the CAISO Tariff should not have unlimited credit. The Commission's guidance on establishing credit limits would be extremely helpful.

Common flexible<sup>3</sup> standards and timelines should also be encouraged for: (1) settlement, payment and clearing across the industry; (2) definition of default events; (3) timelines for default; and (4) provider of last resort issues. "Default" needs to be clearly defined and cover the following:

- failure to meet a credit reporting requirement
- failure to pay or settle on time
- failure to meet credit worthiness requirements

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<sup>1</sup> Creditworthiness Standards for Interstate Natural Gas Pipelines, 69 Fed. Reg 8,587 (February 25, 2004), FERC Stats. & Regs., Notice of Proposed Regulations, ¶32,573 (2004) (Gas Credit NOPR).

<sup>2</sup> The CAISO is aware that other ISOs/RTOs engage in credit scoring to determine creditworthiness and the amount of credit to extend to market participants. Due to the high transactions costs of conducting credit scoring, the ISO has not and the CAISO has not, to date,

<sup>3</sup> The CAISO believes that standards should have some flexibility to allow for regional differences.

- failure to post required collateral

Timing and remedies for these different default events, including timeline for suspension, need to be separately defined and could be standardized across ISOs/RTOs. However, different markets will make standardization of remedies more difficult.

The CAISO further believes that any effort to establish such standards should also specify how they are to be enforced. Credit requirements that cannot be enforced undermine the very purpose of having credit requirements. In this regard, the CAISO urges the Commission and state regulatory authorities to address the treatment of providers of last resort. Suspension and termination are effective enforcement tools for non-utility ESPs but not for IOUs and other load serving entities such as POUs that serve as default providers or providers of last resort. Load served by ESPs can be “returned” to the relevant IOU/POU. Load served by IOUs cannot similarly be returned. State and local regulatory authorities must ensure that IOUs and POUs, as the providers of last resort, are and remain creditworthy.

Finally, the CAISO believes that the Commission should consider providing a “safe-harbor” to the ISO/RTO entity charged with enforcement. Since it is never possible, or cost-effective, to eliminate all risk to market participants and because certain risks are beyond the control of the ISO/RTO (e.g. the creditworthiness of IOUs and other providers of last resort), a “safe harbor” standard should be created to allow ISOs/RTOs to minimize their liability provided the ISO/RTO is operating within the “safe harbor.”

2. Do the existing OATTs and/or credit policies of Transmission Providers contain either unreasonable or unclear requirements for customers?

We believe the existing CAISO credit policy is transparent, specified in reasonable detail and reasonable overall. However, in light of the electricity crisis of 2000/2001, the CAISO is reviewing its existing credit policies and believes that its credit policies can be improved. Areas under consideration include: (1) adoption of credit limits for entities with an “Approved Credit Rating”<sup>4</sup>; (2) enhanced enforcement tools, including penalties for default events<sup>5</sup>; (3) standardized security instruments, such as guaranties, letters of credit etc. These and other issues are discussed in a draft “Credit Policy and Procedure Guide” publicly available on the CAISO’s website.<sup>6</sup> We are currently conducting an internal review of these issues and plan to publish revised proposed credit policies for stakeholder consideration later this year with potential Tariff changes to follow. The CAISO appreciates the Commission’s initiative in this subject area and looks forward to guidance that might inform our effort.

3. Does the pro forma OATT provide sufficient transparency with regard to credit requirements? If not, what problems are caused from that lack of transparency? What changes to the pro forma OATT would be appropriate to consider as a remedy to better facilitate access to markets and therefore market participation?

The CAISO has no comments to offer on the pro forma OATT.

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<sup>4</sup> Entities with “Approved Credit Ratings” under the Tariff have unlimited credit.

<sup>5</sup> The only enforcement tool the CAISO currently has is pursuant to Tariff Section 2.2.7.3, which allows the CAISO to reject a market participant’s schedule if it fails to meet the CAISO’s security requirements.

<sup>6</sup> <http://www.aiso.com/docs/09003a6080/2d/e2/09003a60802de2f0.pdf>  
and <http://www.aiso.com/docs/2003/04/21/2003042117001924814.html>

4. Should the Commission establish creditworthiness standards for the electric industry similar to those that it proposed in the Gas Credit NOPR? What are the relevant differences between the gas and electric industries that need to be taken into account?

As noted above, the CAISO supports efforts to establish creditworthiness standards for the electric industry and believes that criteria for determining creditworthiness in the Gas Credit NOPR can be used for the electricity industry. However, the credit issues in the electric industry are much more challenging than those addressed in the Gas Credit NOPR. For the most part, the credit issues addressed in the Gas Credit NOPR concern the financial obligations for transmission services. To the extent that participants also incurred obligations for the commodity, the asset itself provides a level of security. Electricity is a time-based, non-storable commodity and is consumed as it is provided. Thus, the commodity does not provide any level of security. Even more significant is the fact that gas markets do not have ISOs/RTOs functioning as intermediaries for commodity transactions as well as transmission, and the fact that the amount of credit extended by participants for the non-storable electricity commodity far exceeds the credit required for the transmission service. Thus the magnitude of the credit issue in the electricity industry far exceeds that of the gas industry. When combined with the “safety/security” role of electricity and the “provider of last resort” issue, the challenge is compounded even more.

Collateral requirements and timelines for default in the Gas Credit NOPR are also not appropriate to ISO/ RTO spot energy and ancillary service markets, given price and volume volatilities. Ancillary service obligations also need to be clearly defined in the event that a participant is suspended.

5. For the purpose of credit standards, does it matter who the market participant is (e.g., are there different standards for financial institutions as opposed to municipal entities)?

Provider of last resort issues aside, creditworthiness is a characteristic that can and should be measured independently of the nature of the entity evaluated and should be the same. In addition, although credit rating agencies' standards may not be the same, the information reporting requirements can clearly be the same (as per the Gas Credit NOPR). Moreover, for determining and applying standards, the CAISO does not believe that it should matter how or who the market participant is. The CAISO is concerned primarily with ensuring that it will be able to settle obligations incurred with sellers behalf of the buyers. A dollar of obligation is a dollar of obligation, regardless of the entity incurring the obligation. Accordingly, credit standards should apply universally to all market participants, regardless of the public or private status of the entity.

B. Questions Regarding ISOs/RTOs:

6. Are credit requirements and costs related to creditworthiness negatively impacting market participation in ISO/RTO markets and liquidity levels?

For market participants with outstanding obligations, the CAISO's current credit standard is currently an "either-or" approach. An entity with an "Approved Credit Rating" (a high quality credit rating from one of the national credit rating agencies, or obligations that are backed by the full faith and credit of state or federal government) currently receives unlimited credit. All other entities must post security for all of their outstanding obligations to the CAISO. Certain entities that have not met these standards have nonetheless indicated that they believed their financial position warranted an extension of credit by the CAISO, taking the view that the current standard is too strict in denying any credit to such entities.

On a related note the CAISO's long payment calendar (60-90 days), is a factor that increases market participants' credit requirements when compared to a shorter payment calendar. The CAISO has undertaken an initiative to significantly shorten the payment cycle, which will reduce market participants' collateral requirements without compromising the security of the transaction. With Commission approval, implementation is planned for late 2005.

Concerning the sellers' side of the market, the CAISO understands that some prospective market participants have indicated that they have limited their participation in the CAISO's markets because of concerns that the markets may not be adequately secured. The impetus for this concern appears to relate primarily to the 2000/2001 electricity crisis and fears that nothing has been implemented to prevent the crisis from reoccurring and not from any concern that the CAISO's markets are currently under secured. As noted above, the creditworthiness of the State's default providers is beyond the CAISO's control and the CAISO urges the Commission and the State regulatory authorities to address creditworthiness issues associated with default providers.

Further, as noted above, the CAISO believes that the Commission is the appropriate entity to determine how the balance should be struck between net-buyers, who want to minimize the credit costs and sellers, who want the market to be fully secured. Accordingly, it would be extremely helpful for the Commission to adopt standards in this area.

7. What cost-effective steps can be taken to minimize exposure to risk among market participants (e.g., shortening settlement periods, or evaluating credit on a net obligation basis)?

We believe that shortening the settlement period is the most important step we can take to minimize exposure to credit risk. As noted above, the

CAISO is undertaking to significantly reduce our payment timeline (currently longer than other ISOs) with the deployment of a new settlements system in mid-2005. In addition, the CAISO already requires posting on a net obligation basis for obligations through the CAISO. We are also aware of efforts to implement payment clearing that would consider obligations across multiple markets and regions, and believe such an approach has merit. However, such initiatives are still in the development stage.

Another option for future consideration is a national clearing system, such as has been proposed by NYMEX or NECC, which would bring with it the ability to evaluate credit on a “net “ basis, reducing credit requirements. The nature of such an approach would also require much shorter credit periods, further reducing credit risk.

8. Are there elements of existing market rules that can be improved to reduce unnecessary credit requirements?

As stated previously, reducing the CAISO settlement cycle will be the single most significant change to the market for reducing credit requirements. In addition, credit requirements can be reduced by establishing market rules and incentives to encourage Scheduling Coordinators (SCs) to transact as much energy and ancillary services among themselves, rather than through the CAISO’s markets. In California, efforts to establish resource adequacy requirements, currently being led by the California Public Utilities Commission, should increase incentives for suppliers and consumers to contract for resources between themselves ahead of CAISO market timelines. To the extent that they contract for resources separate from CAISO’s markets, their credit requirements within the CAISO will be reduced.

Some pending market rule changes in the CAISO’s markets may reduce credit requirements somewhat. For example, credit requirements may be reduced to the extent that real time economic dispatch, scheduled for

implementation this Fall with other “Phase 1B” elements, produces lower-cost solutions to real time imbalance energy needs. However, other market rule changes needed to improve the efficiency of the market, may increase credit requirements. SCs’ congestion revenue rights (CRRs) holdings or Day-ahead energy purchases, for example, both of which are scheduled to be implemented with the remaining MD02 design elements, could create increased SC credit requirements.

9. How can the mutualized default risk in ISOs/RTOs be reduced?

As discussed above, shifting transactions from SC-to-CAISO to SC-to-SC will reduce market volumes and, as a result, market risk for default. As far as loss sharing is concerned, there are several approaches, including: (1) reduction in payments to net suppliers for losses; (2) recovery of losses from all market participants; and (3) allocation of losses to load. Losses can result from non-credit worthy entities that default after posting insufficient collateral, or from a credit-worthy entity that defaults with no collateral posting requirement. With respect to the first potential source of defaults, tighter standards would reduce risk of defaults and loss sharing. With respect to the second, better monitoring of obligations and enforcement of collateral posting obligations are important. However, the issue of default providers is also raised here as the IOUs in California defaulted on their payment obligations while they still retained their higher credit rating. As discussed above, enforcement that involves default providers require careful coordination between the ISOs/RTOs, the Commission, and, primarily, a commitment from state and local regulatory authorities that providers of last resort remain financial sound.

Finally, the timing and method for calculating estimated liability needs to reflect current market activities. The CAISO has recently improved its estimations by incorporating more real-time data and more accurate estimations so that estimated liabilities are more accurate.

10. How can barriers to entry, if there any, be minimized, while preserving adequate collateral to protect markets?

There are no easy solutions to the need to strike a balance between the important goal of minimizing potential defaults with adequate credit standards and security posting requirements and providing sufficiently flexible standards to encourage participation. Factors to minimize the burden include:

1. Providing for a range of collateral posting options.
2. Providing accurate estimates of liability and hence posting requirements.
3. Reducing the payment timeline.

We should however be cognizant of the fact that if these markets had credit requirements similar to commodity markets, entities would be required to pay soon after the obligation is incurred. So the credit requirements should be no more costly than cash payments at time of obligation.

11. For the purpose of credit standards, does it matter who the market participant is (e.g., are there different credit standards for investor owned participants with physical assets, financial institutions, and municipal entities)?

The CAISO has not conducted a thorough analysis of this issue, but recognizes that regulatory, contractual and operational differences among various entities are considered in the assignment of credit ratings by the national credit rating agencies. Such differences affect an entity's ability to meet its obligations under a variety of "stressed" scenarios. To the extent that ISO/RTO credit standards are to be based on measures other than the rating of a national credit rating agency, it would appear appropriate to consider these differences.

See also response to Question 5.

12. How should a load serving entity that is the provider of last resort be treated in the event of a default?

As discussed above, State and local regulatory entities should ensure that default providers (providers of last resort) remain creditworthy so that default cannot occur.

13. Is there a need to allow for regional variations among RTOs/ISOs with regard to credit policies? If so, what level of standardization may be achieved?

As discussed above, the CAISO supports development of standards while recognizing that some flexibility will be appropriate.

C. Questions regarding credit-related solutions with potential applicability to Transmission Providers and/or ISO/RTO markets:

14. Can clearing be applied to the electricity industry with respect to Transmission Providers and/or non-ISO/RTO markets, as it has been in other sectors (for instance, equity and fixed income clearing is performed by the Depository Trust Clearing Corporation for trading on the New York Stock Exchange, American Stock Exchange, and NASDAQ)? If so, what type of new or existing entity would provide the clearing services and does it need to be granted a franchise monopoly for any or all of its services?

We support efforts to develop clearing solutions that may be usable by ISOs/RTOs. CAISO's new Settlement and Market Clearing system is designed to interface to a clearinghouse if required in the future. We have heard presentations by several entities that are working on such services and believe progress is being made on overcoming potential barriers. However, we believe that such solutions are not yet practical.

15. What options are available to either insure or otherwise outsource risks currently self-insured or mutualized by market participants (e.g., insurance, credit default swaps)?

We have investigated credit insurance and understand that two other ISOs have procured it. The CAISO is planning to present the issue to our participants for further consideration. Issues to be considered and resolved are:

- Who should pay for the cost of the credit insurance?  
Options include:
  - Suppliers
  - Credit worthy debtors who don't post collateral
  - All market participants through a general ISO/RTO administrative charge.
- Cost versus benefit of the coverage available.

Exposure reducing trades between market participants is one way of participants being able to reduce their mutualized risks. The ISO/RTO could provide an electronic interface to accept such trades either from other exchanges or clearing houses or participants directly.

16. What are the benefits and costs of the preceding credit-related solutions (i.e., clearing and insurance) or other such solutions? Are they cost-effective? How would the benefits and costs of these solutions be allocated?

As noted above, we believe the issue of allocating the costs of these solutions is important, and to date, we do not yet have a recommended approach. We would be interested in the views of participants and other ISOs/RTOs on these matters. Costs of implementing exposure reducing trades would be relatively small from an ISO perspective.

#### **IV. Conclusion**

The CAISO looks forward to working with the Commission and other ISOs/RTOs on the development of electric creditworthiness standards.

June 25, 2004

Respectfully submitted,

A handwritten signature in cursive script that reads "Sidney L. Mannheim".

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