CALIFORNIA ISO

California Independent
System Operator

Memorandum

To: Finance Committee

From: William J. Regan, Jr., Chief Financial Officer and Treasurer
Philip Leiber, Director of Financial Planning and Assistant Treasurer

CC: ISO Board of Governors, ISO Officers

Date: March 13, 2000

Re: Scheduling Coordinator Financial Security Change

This memorandum requires Board action.

EXECUTIVE SUMMARY

Market participants have requested that the ISO review and possibly relax its scheduling coordinator (SCs) credit policy, as specified by the tariff. As currently structured, this policy requires that SCs either maintain the highest short-term credit rating, or post financial security in the amount of their outstanding liabilities to the ISO. The broad policy issue to be resolved is to balance appropriately default risk costs (of sellers) and market participation costs (of buyers).

The ISO commenced a stakeholder process to examine this issue and develop alternative proposals. Broadly, three alternatives are possible: (1) reduce the standard in some manner; (2) leave the standard as it is; (3) continue to explore alternatives. While no consensus position resulted from this process, there is substantive support for a reduction in the current standard. Accordingly, Management proposes an alternative that represents a balanced and reasonable change to the credit standard.

> *MOVED, that the definition of an approved credit rating, with respect to market obligations, be revised to include an entity who maintains at least an A2/P2 (or equivalent) short-term issuer credit rating or a A3/A- (or equivalent) long-term credit rating from a national credit rating agency. With respect to GMC obligations, the current requirement that an entity maintain at least an A1/P1 (or equivalent) short-term issuer credit rating shall remain unchanged. Management is authorized to file Tariff language to effect this change.*

BACKGROUND

The tariff requires that SCs post financial security (a letter of credit, surety bond, cash deposit, etc.) to cover their estimated outstanding obligations to the ISO for market activities and GMC, unless they maintain an approved credit rating. An approved credit rating is defined in the tariff as the highest short-term taxable or tax-exempt rating from one of the four national credit rating agencies, or a federal or state agency whose obligations are backed by the US government or State of California. If an entity has such an approved credit rating, they have "unlimited" credit with the ISO.

The approved credit rating requirements have remained the same since the inception of the ISO, except for a 1998 clarification that the governmental agencies noted above were deemed to have met the standard. In October of 1999, market participants proposed a change of the approved credit rating standard to allow broader participation in the ISO markets without the posting of financial security. This proposal was discussed by the ISO at the Market Issues Forum held November 3, 1999. The ISO formed a working group to examine the issue of a possible change in the standard. The issue was assigned to the Settlements Improvement Team, and discussed at a January 11, 2000 meeting. At that time, a revised proposal was presented. Management requested that comments on this proposal and other possible alternatives be submitted by February 11. ISO Management indicated that if appropriate, action on this issue could be taken at the March Board meeting for a tariff amendment in April.

ISSUE STATEMENT

The issue to be decided is whether the ISO should revise its approved credit rating standard to allow a broader range of SCs to participate in ISO markets without posting financial security, while not significantly increasing the credit risk to which other participants would be subject.

If we remain with an objective standard, as provided by a rating from a national rating agency, in essence, we can select a point along the continuum of credit ratings, as illustrated in the table below which summarizes Moody's credit ratings:

	Short Term Rating	Long Term Sr. Unsecured Rating
INVESTMENT GRADE		Aaa
		Aa1
		Aa2
	Prime-1	Aa3
		A1
		A2
		A3
	Prime-2	
		Baa1
		Baa2
	Prime-3	Baa3
SPECULATIVE GRADE	No Rating (NR)	Ba1 and below

ALTERNATIVES TO SOLVE PROBLEM OR DEAL WITH THE ISSUE

Option 1 through 5 reduce the standard in some manner. The table in the Positions of the Parties section of this memorandum outlines some of these options.

OPTION 1

A group of market participants led by AEP, and including APS, Citizens Power LLC, Dynegy, El Paso Energy, Enron Power Marketing, LG&E, PG&E Energy Services, Reliant Energy Services, Williams Energy Marketing & Trading, proposed lowering the standard to allow open credit status for any participant with a short term rating of A2/P2 or an investment grade long-term rating.

OPTION 2

A proposal initially presented by a subset of this group to the ISO in October 1999, would have required an entity to maintain both an A2/P2 and an investment grade long-term rating. This was a higher standard.

OPTION 3

Both Moody's and Standard & Poors have indicated that should a change in the credit standard be implemented which would result in less certainty of the collection of the GMC, the ISO credit ratings would be reviewed and likely downgraded. To avoid this, the ISO proposed that should a change in the standard for market transactions be adopted, the current standard should remain in effect for GMC obligations, to allow the ISO to maintain the credit ratings it recently obtained. Accordingly, if an entity did not maintain an A1/P1 short-term rating, it would continue to post financial security sufficient to cover its GMC obligation.

OPTION 4

For discussion purposes, the ISO offered a step function option which would provide different levels of credit depending on an entity's credit rating. (Some entities have a long-term rating, but have not found it necessary to acquire a short-term credit rating.)

OPTION 5

The City of Seattle proposed changing the standard to allow either a short term rating of A2/P2 or a long term rating of A1/A+ (Moodys and Standard & Poors ratings, respectively) or better.

OPTION 6

Maintain or reaffirm the current credit standard. No action would be required, and this would represent the status quo.

OPTION 7

Continue to examine the issue to develop other alternatives. This issue could continue to be discussed until other alternatives which may be more attractive to all parties are developed.

CRITERIA FOR A DECISION

Criteria for a decision on this issue include:

- Savings to buyers in ISO markets from the avoidance of the requirement to post financial security
- Impact of any change in the standard on the confidence of sellers into ISO markets
- Effect of a change in the credit standard on the ISO credit rating

PROS AND CONS OF VARIOUS OPTIONS

Options 1 thorugh 5: Reasons to Consider a Change to Standard

Options 1 through 5 relax the credit standard and are summarized in the table in the Positions of the Parties section below. Several considerations are relevant to these possible options:

- No defaults have occurred since the ISO started operations. The initial standard was set very high as a measure of caution.
- The current single evaluation criteria does not allow several strong, well-known participants open credit status. These and other entities have to post financial security for the full amount of their expected obligations.
- Comparison of the ISO standard with general commercial terms in bilateral transactions is appropriate. For entities that do bilateral trades, they typically do not require posting of financial security to cover the value of the trade in advance. However, it is important to compare these trades, where each party can perform whatever credit review it deems necessary, with the ISO market, where buyers are not known to the sellers.
- Reduced cost of participation in the ISO market may result. Total financial security posted for SC obligations is approximately $70 million. A change in the standard would mean that a portion of this could be eliminated, with an associated cost savings to the party which currently posts it. The cost of the financial security depends on the type of security (letter of credit, surety bond, certificate of deposit, etc.) and characteristics of the entity posting the security. A letter of credit costs approximately 0.2% annually for many entities (less credit worthy entities would pay somewhat higher costs)—at this cost, the entire $70 million of financial security posted with the ISO costs about $150,000 annually.
- The current CAISO standard is higher than that of other ISOs, as illustrated by the table below:

Company	Minimum Long-Term Rating	Minimum Short-Term Rating
CAISO	-	A-1/P-1
NEISO	"Investment Grade" *(would represent BBB- or better long term, A3 or better short term)*	
NYISO	BBB/Baa2	or equivalent
PJM Interconnection	Based on PJM internal scoring system (currently S&P & Moody's ratings are not scored)	
Ontario IMO	BBB*	or equivalent*
	* The financial support obligation of a market participant may be reduced by a monetary value associated with a particular credit rating. AAA = $50,000,000 (CAD); AA = $25,000,000 (CAD); A = $12,500,000 (CAD); and BBB = $5,000,000 (CAD).	

- The default rates for entities that have relatively high credit ratings are extremely low:

Short Term Rating	180 day period default rates for Moody's rated commercial paper (from 1972-1995)	Long Term Rating	Moody's One Year Default Rate (1983-1998)
Prime-1	0%	Aaa	0
		Aa1	0
		Aa2	0
		Aa3	0.10%
		A1	0
Prime-2	.03%	A2	0
		A3	0
		Baa1	0
Prime-3	.17%	Baa2	0.10%
		Baa3	0.30%
Not Prime	.59%	Ba1	0.60%
		Ba2	0.60%
		Ba3	2.50%
		B1	3.60%
		B2	6.80%
		B3	12.40%

Reasons Not to Consider Changes to Standards:

The following factors would argue against a significant (or any) relaxation of the credit standard:

- SCs who sell into the ISO markets (and TOs, who receive congestion revenues) do not know who their ultimate counterparty is. They must rely on the standards in place at the ISO to ensure they receive payment for the product they supply. This differs from bilateral trades, where a trader can make their own assessment as to the creditworthiness of their counterparty. Accordingly, the ISO has a fiduciary duty to set and maintain reasonable standards to ensure credit is not extended to parties who present an inordinate risk of default.
- Any financial defaults by SCs who buy from the ISO markets must be borne pro-rata by all of the sellers who would have received payment but for the default.
- Unlimited credit, as extended to those who meet the credit requirement, necessitates that high standards be maintained.
- An entity with a given rating can be assigned a different rating in a short time (downgraded). It is important to set the standard high enough to be protected from rapid downgrades that may indicate significant exposure to default risk.
- The ISO has a first right to collect its GMC from the clearing account through which all market and GMC transactions are settled monthly. The ISO's rating agencies view this as a significant source of assurance as to the collectibility of the GMC. The rating agencies have indicated that any changes to the approved credit rating which would reduce this protection would result in an ISO rating downgrade. Accordingly, we would strongly advise that any change apply only to the market portion of the financial obligation, with the credit standards for the GMC obligation to remain unchanged.
- Cost savings to participants from lower financial security postings, while not immaterial, are not significant either. As noted above, the total direct cost to SCs for posting security probably does not exceed $150,000. While lowering the standard would allow some fraction of these costs to be avoided, entities that would not meet the new standard would continue to have to bear such costs. Lowering the standard to the A2/P2 short-term level (or a long term rating of A3/A- or better) level would save market participants an estimated $40,000, while lowering the standard to short-term A2/P2 level or a long-term investment grade (OPTION 1-see below) would save at least $60,000. These are minimum savings figures calculated by the ISO based on costs we believe that entities which would meet the new credit ratings would be able to avoid.
- In June 2000, when the ISO payment calendar is shortened from approximately 90 days to 70 days, the required financial security postings will be reduced accordingly, about a 22% reduction.

Reasons to Maintain or Reaffirm the Current Credit Standard:

Many buyers would continue to post security to meet their obligations, and would continue to bear the cost of this financial security. Sellers would continue to have a very high level of assurance against defaults.

Reasons to Continue to Examine the Issue to Develop Other Alternatives

It is possible that as other entities explore their financial security practices, additional alternatives will come to our attention. For example, the California PX, which currently has the same financial requirements as the ISO, is also in the process of examining possible credit standard changes for its market participants.

POSITIONS OF THE PARTIES

After a presentation to the Settlements Improvement Team on January 11, market participants were requested to comment on the various alternatives developed to lower the credit standard, offer a proposal of their own, or to reaffirm the current standard. The table below indicates the positions of the parties on the alternatives offered.

Option	Support	Oppose
1) A2/P2 or investment grade	American Electric Power Services (B), APS (S), Citizens Power LLC (S), Dynegy (S), El Paso Energy (S), Enron Power Marketing (S), LG&E (B), PG&E Energy Services (B), Reliant Energy Services (S), Williams Energy Marketing & Trading (S), Cal Polar Power (S), City of Riverside (S) and Public Service of Colorado (supports keeping GMC separate as in 3)	Cal PX (B), Idaho Power Company (S), City of Seattle (S), PPL Montana , PG&E (S), Pacificorp (S), Coral Power (S), Southern Company Energy Marketing (S)
2) A2/P2 and investment grade	Cal PX (B), City of Seattle (S)	
3) A2/P2 AND investment grade with separate GMC standard	Cal PX (B), City of Riverside (S) and Public Service of Colorado with ("OR") rather than "AND"	
4) Step Function (various credit limits depending on credit rating)		Cal PX (B)
5) Other Possible Alternatives (including City of Seattle's Plan)	City of Seattle (S), PG&E Energy Trading (S/B) (supports City of Seattle Plan)	
6) Reaffirm Current Standard	Cal PX (B), PPL Montana, PG&E (S), Pacificorp (S), Coral Power (S), Southern Company Energy Marketing (S), City of Vernon (B), Idaho Power Company (S)	

Legend:
BOLD: Participants initially sponsoring Option 1.
(S)= Net seller from January-November 1999
(B)=Net buyer from January-November 1999

Note: Some parties merely selected one of the options as their preferred choice, while others indicated their willingness to go along with or oppose each alternative.

Any lowering of the credit standard will result in additional risk to the sellers into the ISO, but will also result in cost savings to some buyers. It may also enhance the ability of qualified participants to transact business on an opportunistic basis, contributing to market efficiency. These different viewpoints are important to consider in forming an overall opinion as to the desirability of a change. It is interesting to note that sellers, who would bear any increase in risk, are generally supportive of a lower standard. However, among this group, there are differences of opinion as to what the appropriate standard should be. There is also considerable opposition to a lower standard, both in general, and specifically to any proposal that would allow the lowest investment grade rated companies (BBB- /Baa3) to have unlimited credit at the ISO.

	Lower Standard	Maintain Standard	No opinion expressed
All SCs and TOs	24%	12%	64%
Net Sellers into ISO Markets: (Percentage of SCs/TOs who were net sellers from January-November 1999 who express each view)	21%	15%	65%
Dollar Weighted Views of Net Sellers into ISO Markets: Based on transactions from January-November 1999	36%	19%	45%

An Updated Proposal:

While OPTION 1 has sizable support by from both sellers and buyers, Management does not believe that providing unlimited credit to entities at the lowest level of the long-term investment grade category (BBB-/ Baa3) is appropriate. Overall, we believe that a short-term rating is the most relevant measure for consideration, as it gauges an entity's ability to meet current obligations such as the ISO market payments, and reflects an entity's ability to obtain liquidity from banks or other sources. However, we recognize a very strong long-term rating provides significant assurance as to an entity's overall creditworthiness, and ought to be acceptable. A long-term rating requirement at the A-/A3 or better level would provide protection against the possibility that rapid rating downgrade of an SC could leave other ISO market creditors exposed to significant credit risk of an entity with a below-investment grade rating. Accordingly, allowing for a short-term rating of A2/P2 or better, or a long term rating of A-/A3 or better would represent a reasonable overall standard. An example of how this proposed standard would effect entities with various ratings follows:

Example of Proposed Standard

Participant	Credit Rating	Market Obligation	GMC Obligation	Security-Market Obligation	Security-GMC Obligation	Total Security Required
A	ST: - LT: *BBB-*	$1,000,000	$500,000	$1,000,000	$500,000	$1,500,000
B	ST: A2/P2 LT: *A*	1,000,000	500,000	0	500,000	500,000
C	ST: - LT: *BBB-*	(1,000,000)	500,000	0	0	0
D	ST: *A1/P1* LT: *AA*	1,000,000	500,000	0	0	0

Notes:
Participant A does not meet the new standard and is required to post financial security for both market and GMC obligations. Participant A also posts the same security under the current standard.

Participant B meets the new standard for market obligations, and does not post security for these transactions, but is required to post security for the GMC obligation. Under the current standard, B is required to post security for $1,500,000.

Participant C is owed funds by the market. To the extent these offset the GMC obligation, no security posting is required. Participant C would not be required to post security under the existing standard, or the proposed standard.

Participant D is not required to post security for market or GMC transactions, under either the current or proposed standard.

This proposal was presented at the March 8 Market Issues Forum. Feedback received from market participants on this proposed standard was generally positive, and this proposal draws support from most of the supporters of a relaxation in the existing standard (OPTIONS 1-5 above). Parties opposed to any change from the current standard, however, are likely to continue to oppose this proposal.

Additionally, as a matter of clarification, we propose to include in the tariff definition of an approved credit rating the limitation that the rating shall be a stand-alone issuer (also known as a counter-party) rating, without the benefit of credit enhancement. Credit ratings may be assigned to either (i) an issuer, on a stand-alone basis, or (ii) on debt which may be backed by credit enhancement provided by a third party. The second type of credit rating is not relevant to credit decision by the ISO, as credit enhancement only provides assurance of repayment to holders of a particular debt obligation. Accordingly, the appropriate measure for the assurance of payment of an unsecured obligation such as the ISO market obligations (and GMC) is the stand-alone credit rating.

MANAGEMENT RECOMMENDATION

Management recommends the updated proposal presented in the prior section. We propose lowering the credit standard to a short-term rating of A2/P2 (or equivalent) or a long-term of A3/A- (or equivalent) or better for market transactions, while maintaining the current A1/P1 credit requirement for GMC obligations. Tariff language that would effect this change is attached as an appendix to this memorandum.

This proposal would:

- Align our requirements more closely with the practice at other ISOs;
- Allow other highly rated entities to participate in ISO markets with open credit status;
- Leave California ISO credit ratings unchanged;
- Maintain a high standard to protect the interests of all sellers into ISO markets