CALIFORNIA ISO

California Independent
System Operator

SC Credit Policy
CAISO Response to Stakeholder Comments

November 10, 2004

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Scheduling Coordinator Credit Policy Review

CAISO Response to Stakeholder Comments

This section contains the questions CAISO raised on each issue for stakeholders consideration, stakeholder comments/questions, and CAISO responses.

3. Review Process Overview

Stakeholder Responses

City of Santa Clara

Many of the questions put forth by the CAISO are the type of issues that would be best considered and addressed by a stakeholder advisory group on credit issues.

CAISO Response

We believe this is a good idea as well and will consider how to structure such a group.

Northern California Power Administration (Supportive)

Forming a stakeholder advisory group for credit issues is a good idea. I'd recommend it have a good representation of the market participants.

CAISO Response

We believe this is a good idea as well and will consider how to structure such a group.

Automated Power Exchange

We have a general concern that if this proposed credit policy is implemented prior to the payment acceleration process (instead of the two being simultaneously implemented), APX, which is a small privately-held company, could be negatively impacted financially by having to post credit in the first place (based on the proposed credit policy), and then having to adjust the credit posting requirement again when the payment acceleration system is put into operation.

CAISO Response:

We are not clear about the concern expressed by APX here. The changes proposed here may result in some unsecured credit being extended to additional entities who must be 100% collateralized today—this may benefit APX rather than impose an additional burden.

Calpine

In light of the many Credit changes that have been implemented at the other ISOs since November 2003, Calpine recommends that the CAISO reopen its Credit Policy Benchmarking study and reassess what parts of the current CAISO credit policy can be improved and develop specific recommendations.

Also, the CAISO should set-up a standing credit policy stakeholder group, who meets regularly to aid it and its stakeholders in credit related matters. Also, stakeholders should elect other stakeholders to the Chair and Vice-Chair leadership positions. This policy would be consistent with the policies of ERCOT and NEPOOL.

CAISO Response

We believe this is a good idea as well and will consider how to structure such a group.

4. Creditworthiness

4.1. Setting Credit Limits (Supplemental Information in Appendix A)

Stakeholder Questions

The Team believes that changes to eliminate the unlimited extension of credit are necessary, and that the above process is a reasonable approach for accomplishing this. The CAISO invites stakeholders' comments on the following questions:

1. Do you agree with the recommended tiered approach to limiting the credit exposure of SCs with ACRs?
2. Is it reasonable to allow extend some credit to entities with a lower investment grade rating using this tiered approach?
3. Should a percentage of tangible net worth approach be used? What other approaches could be used?
4. Should the CAISO apply this approach to municipal or other governmental entities? If not, what other method could be used?
5. The CAISO is considering using Moody's KMV to obtain an additional, potentially more timely indicator of credit risk than relying on only the national credit rating agencies ratings. Is this approach worthwhile?
6. Should the CAISO implement an additional limit, for example, 35% of the CAISO's total market receivables, as an upper limit to any individual SC's initial limit to avoid concentration of credit risk? If so, what would be an appropriate limit?
7. Do you support implementing a single credit standard that eliminates the separate treatment for GMC obligations?

Stakeholder Responses

Strategic Energy (Supportive)

Credit Limits should be developed using a tiered structure. The ISO could utilize a sliding scale to protect against "cliff-like" credit events.

CAISO Response:

We believe our proposed structure does this.

"Using the proposed inverse of the default probability applied to the 'scale' factor (TNW) as proposed accomplishes this." Jim Herrity Moody's / KMV

For non-rated entities, the ISO should look to the ERCOT/PJM & NYISO models, where unsecured credit can be granted based upon an entity's net worth, total debt/EBITDA, & EBIT/Interest ratios. Many financially strong companies exist that do not have S&P or Moody's ratings.

CAISO Response:

Our revised proposal includes a provision for non-rated entities.

"Other ISO/RTOs implement a series of models based on financial statement ratios, however, no model has the level of validation and transparency of RiskCalc. Additionally, RiskCalc should provide more stable results since it was developed on the largest known private firm default database and tested on separate hold out samples. Furthermore, MKMV obtains new test data from participating institutions quarterly to ensure that the model continues to perform well as economic conditions change." Jim Herrity Moody's / KMV

A combination of Options C and D from Appendix A should be utilized.

CAISO Response:

The CAISO will rely primarily on a quantitative approach initially, and may review incorporating qualitative measures into the unsecured credit assessment process at a later date.

The CAISO never discusses giving a SC more credit capacity if it is on positive credit watch, only negative. This is a double standard. A Company should receive some benefit for an improving credit profile.

CAISO Response:

We will opt to be conservative on this matter, and make an adjustment only for potential downward adjustments, but will continue to consider this matter. Because we are blending the credit ratings that a company has, and a Moody's KMV rating, we believe this provides a fair opportunity for the consideration of improving factors about a company.

The CAISO may want to limit its concentration of credit exposure to any one company. The 35% appears reasonable, but we're unaware if this number has ever come close to existing or being violated. If the value is too high, what is the purpose?

CAISO Response:

The 35% limit would be expected to have an effect on the amount of unsecured credit granted to participants in the future—so it isn't likely to be "too high". However, we have opted to eliminate this aspect of our initial proposal. We will instead pursue a maximum unsecured limit for individual participants of $200 million (yet to be finalized) or another limit as set by the ISO Governing Board.

The Moody's/KMV model relies heavily on the equity markets and the broader market may unfairly impact a market participant's credit score.

CAISO Response:

We recognize that no measure is comprehensive, and other considerations may not be adequately reflected in a Moody's KMV score. However, we believe this is a move in the direction of considering factors beyond the national credit rating agency ratings, and a move toward the quantitative and qualitative measures as listed in FERC's November 2004 policy statement. We note that Moody's KMV scores are derived from two models. The model for public companies would be applied only to those SCs were the public company has a direct relationship with the ISO—few SCs have this. In most cases a subsidiary of such companies is the SC, and a different

Moody's KMV model (using "RiskCalc") would consider financial data to determine the EDF score. Moody's KMV clarifies here:

"Equity market prices do play a significant role in the MKMV public firm model. The writer implies that the broader market may unfairly impact the firm's equity price, and the resultant MKMV EDF. In essence, the writer implies that the market might not always be efficient. While MKMV does not necessarily assume that the price reflects all the relevant information about a firm we do know that it is difficult to consistently beat the market. For example, over 90% of managed funds were unable to outperform the market in 1998. That is, it is difficult to pick stocks consistently and difficult to know when the market is under- or overvaluing a firm. The market reflects a summary of many investors' forecast and it is unusual if any one individual's, or committee's, forecast is better. Consequently, we believe that the best source of information regarding the value of a firm is the market." Jim Herrity Moody's / KMV

City of Santa Clara (Supportive)

No unlimited credit granted to any SC

CAISO Response:

We agree.

Credit limits should be tiered limits based on a calculated ISO-specific and transparent credit rating.

CAISO Response:

We agree the process should be as transparent as possible, and believe our proposal meets that goal.

Unsecured credit limits should only be available to investment grade (i.e., greater than BBB- or Baa3) rated entities or unrated, but otherwise clearly determined to be credit-worthy.

CAISO Response:

The CAISO is proposing to implement a rule that provides only those entities with default probabilities less than the average lowest investment grade default probability unsecured credit. See the proposed change above and the example in Attachment A.

The use of Moody's KMV default probability models for publicly-traded entities in setting initial (and ongoing) unsecured credit limits is intriguing and deserves more discussion.

CAISO Response:

We have incorporated that approach into our initial and this revised proposal.

We believe that the large rating agencies already include some qualitative factors (management style, etc.) in their long-term ratings. This should for the most part satisfy the FERC's recent Policy Statement and in a manner that is considered more impartial than may occur if the CAISO was to attempt that analysis. It would appear that the KMV default probabilities provide a more rapid but yet completely quantitative analysis of default risk.

CAISO Response:

We agree that the national rating agencies consider both qualitative and quantitative factors in setting limits, and with your statement with respect to FERC's recent policy statement. The Moody's KMV default probabilities come from two models: for public firms, "Credit Edge" looks at stock prices and other factors, and is updated frequently. For non-public firms (or subsidiaries of publically traded firms), "RiskCalc" relies on approximately 10 financial statement metrics, that could be updated once per quarter. The latter is a quantitative approach, while an argument can be made that the former approach does consider qualitative factors to the extent investors as a whole consider these things, which affects stock prices.

There needs to be more specific discussion of how municipal utilities will be treated in a CAISO credit review. The default method appears to be that instead of a blended rating comprised of 50 percent of the Agency Rating and 50 percent of the rating implied by the KMV default probability, public power agencies would be rated strictly on the Agency Rating. This would still provide a transparent and objective method of determining the CAISO's Approved Credit Rating (ACR).

CAISO Response:

If a municipal utility has a credit rating from a national credit rating agency, that would be used as 100% of the determination of which tier of allowable credit they would receive (i.e. no Moody's KMV rating is available for municipals, so a blended rating could not be used.) We have also added a provision to our proposal to potentially provide some credit to municipal utilities without a credit rating.

A limitation on any one individual participant's unsecured credit to no more than some percentage of the CAISO's total market accounts receivable is acceptable. Something in the 30% range should be a reasonable cap. (With lower cap for unrated agencies.)

CAISO Response:

We have rethought the issue of concentration caps and removed this provision in our revised proposal, replacing it with a maximum limit for any entity.

SVP strongly supports one set of credit rating rules used for all charges that eliminates the separate treatment for GMC obligations.

CAISO Response:

Our initial and this revised proposal includes this.

California Department of Water Resources (Supportive)

No entity should be granted unlimited credit.

CAISO Response:

Agreed. Our initial and this revised proposal are based on this view.

It is reasonable to allow some credit to entities with a lower than investment grade rating under the tired approach especially when combined with the use of an alternative scoring model such as the Moody's KMV product.

CAISO Response:

The CAISO is proposing to implement a rule that provides only those entities with default probabilities less than the average lowest investment grade default probability unsecured credit. See the proposed change above and the example in Attachment A.

In theory, the method proposed could allow an entity with a lower than investment grade rating from some national credit rating agency with at least some unsecured credit due to the blending of all of the entity's credit ratings, and further blending this with Moody's KMV default probability .

Some other measure of liquidity (such as a working capital ratio or a quick ratio) might provide a better measure.

CAISO Response:

TNW is used as a scaling factor to recognize entities of different sizes and to gauge how much credit to extend after first determining that an entity is likely creditworthy. This is part of a two step process, with the first step consisting of answer the question, should any credit at all be extended. That first step will in many cases consider other financial metrics as suggested (the Moody's KMV score for most SCs will be generated with their "RiskCalc" product which considers approximately 10 financial metrics, including liquidity measures.

" Writer appears uncomfortable with TNW as the scaling factor for the credit limit, questioning it's usefulness vis a vis other alternatives such as working capital. This is also raised by NCPA (also suggests a working capital variant) and PGE (which does not offer an alternative). I agree that TNW may not be the best factor, and appears to have been chosen because it is already in place at some other ISO/RTOs. If the CaISO wanted to engage the MKMV research team, we could examine various factors and suggest the best factor on a validated basis." Jim Herrity Moody's / KMV

A tiered approach should also be used to determine the amount of unsecured credit for municipalities and governmental agencies. Unfortunately, the use of a Moody's KMV score is unavailable for this class of market participant so the supposed benefit of "quickness" of recognition to changes in financial health isn't realized. The CAISO could attempt to compensate for this by having two different scales of % of net worth in initial unsecured credit. For example, for the class of market participants that a Moody's KMV score is available a combined numeric rating score of < 1.5 yields 7.5%. For a municipal or governmental agency where only a long-term bond rating is available, that same numeric rating score of < 1.5 could yield a 7.0% or 6.5%. Maybe this isn't necessary since municipal and governmental agencies have the ability to collect revenues to cover costs but again, the name of the game here is free cash flow and the ability to make payments in a timely manner.

CAISO Response:

This is an interesting issue and a good observation. Either approach would appear to have merit. We have elected to stay with a single table of percentages, even in the absence of a Moody's KMV score for such entities.

The use of the Moody's KMV model is worthwhile.

CAISO Response:

We agree.

The use of a concentration limit is also worthwhile, but feel that 35% may be too high of a limit. 25% or maybe even 20% may be more appropriate.

CAISO Response:

We have rethought the issue of concentration caps and removed this provision in our revised proposal, replacing it with a maximum limit for any entity. We believe this approach will provide adequate protection for suppliers/creditors, and have seen potential problems with administering a concentration cap.

The implementation of a single credit standard for GMC and Market Charges is acceptable.

CAISO Response:

Our initial and this revised proposal include this.

Northern California Power Administration (Supportive)

The ISO suggested using a credit limit based on Total Net Worth. This is a quantitative approach and it does not take into account the qualitative factors as described in FERC's Policy Statement.

Current tangible net worth is an even better indicator if this path is chosen. An entity is not going to sell its plant and equipment to pay monthly bills. The difference between current tangible assets and current tangible liabilities shows the amounts available, in the short-term, for paying bills.

CAISO Response:

Tangible Net Worth is used as a scaling factor to recognize entities of different sizes and to gauge how much credit to extend after first determining that an entity should be eligible for some unsecured credit. This is part of a two step process, with the first step consisting of answering the question, should any credit at all be extended. That first step will in many cases consider other financial metrics (the Moody's KMV score for most SCs will be generated with their "RiskCalc" product which considers approximately 10 financial metrics, including liquidity measures.

Total Net Worth is not a good indicator of an entity's ability to pay a monthly invoice. Tangible net worth works better.

CAISO Response:

We propose to use tangible net worth.

The City of Riverside mentioned using a "cash flow" approach in rating munis since Moody's KMV does not work for munis. A good cash flow forecast – identifying when revenues will be received and when obligations come due – requires a great deal of assumptions and hard work. I'd like more information on how Riverside's cash flow approach would work.

CAISO Response:

We would need more information about that approach to evaluate it fully. We are cognizant of the need to control costs and staffing and we are interested in a solution that will not require significant additional staffing or cost.

We have discussed the method proposed by Riverside's with them briefly and have determined that an alternate approach such as the ERCOT method of calculating unsecured credit for Municipal Utilities or another quantitive approach . Also, a Municipal Utility with an investment grade credit rating will have its average default probability from rating agencies weighted 100% since Moody's KMV does not calculate default probabilities for these entities.

Pacific Gas and Electric Company

What is the process that the CAISO will follow if it can't get KMV default probability for a particular entity?

CAISO Response:

We would use only the national credit rating agency score.

What particular aspects of the proposed policy are consistent with other ISO practices?

CAISO Response:

We have borrowed heavily from the practices at other ISOs, including NYISO and ERCOT, including the fundamental "tiering" concept of looking at factors to determine creditworthiness, then determining how much credit to extend based a matrix.

What is the underlying reason for using Tangible Net Worth as a basis for granting unsecured credit line?

CAISO Response:

We want to have some relatively simple measure that incorporates entity size and overall financial health. Other ISO's (NYISO/ERCOT/PJM/MISO) have used this measure. We recognize that a broader range of measures might provide an even better picture of an entities credit worthiness, but we are trying to balance the benefits that might be derived from a more comprehensive review against the not insignificant costs of administering such reviews in an environment of considerable concern about CAISO administrative costs.

How will the CAISO handle cases in which a non-investment grade counterparty has a large Tangible Net Worth number but has a poor cash flow from operations?

CAISO Response:

That would likely be reflected in the Moody's KMV score, and have an effect on the creditworthiness decision. We should be able to obtain KMV scores for all entities other than governmentally owned utilities.

How will the CAISO take into account an entity's liquidity in granting a credit line?

CAISO Response:

The rating agency scores and Moody's KMV scores should reflect liquidity concerns to a reasonable degree. Liquidity is considered by Moody's KMV in their RiskCalc model, which will be used to determine an EDF for most SCs.

We realize more direct measures of liquidity are possible. Another participant in the stakeholder process discussed with CAISO the use of the following approach:

(1) Net Cash provided by Operating Activities over the past 12 month period

(2) Less: Changes in working capital in the past 12 month period

(3) Add: Working Capital at the end of the 12 month period (current assets less current liabilities)

We recognize this approach also has merit, and might represent an even better measure of an entity's ability to meet its short-term obligations. Our concerns about it include:

- It is a different approach than used by peer ISOs, which use TNW as a basis for scaling.

- Given the need for an “automated” means to collect and calculate the credit limits, this approach may require more manual calculation and analysis.

We would appreciate the views of other parties on such an approach.

What rating is the CAISO planning to use from S&P - senior unsecured debt; senior secured debt; or issuer rating?

CAISO Response:

Our preference is for an issuer rating. If an entity only has a senior unsecured debt rating, we would propose to reduce that rating by one notch for our purposes.

What if a company doesn’t have a senior unsecured debt rating because it has issued no senior unsecured debt – how will the CAISO handle this issue?

CAISO Response:

Such an entity can elect to obtain an issuer rating from the national rating agencies and/or an equivalency rating from Moody’s KMV. Additionally, we have added in this revised proposal a means to consider such an entity’s financial condition and grant some unsecured credit on that basis without a credit rating.

How often will the CAISO perform credit reviews?

CAISO Response:

We will further consider this issue over the next coming months, when we learn more about what systems and tools we will have available to assist in credit management, and the staff that might be dedicated to this function. As an initial thought, we would expect to perform updates at least quarterly for public/private companies and at least annually for municipal utilities.

What will it do if the SC has no S&P rating?

CAISO Response:

An entity may have a rating from one rating agency but not another (such as S&P.) We would use ratings that are available from the national credit rating agencies and weight each available rating to develop a composite rating. See other responses for how we would treat entities with no ratings from national credit rating agencies.

PG&E agrees that credit risk arises from both GMC and market, but would like to know how the CAISO intends to bill these two types of services?

CAISO Response:

Currently, separate invoices are issued for GMC and market charges. Upon implementation of the new SaMC system, a single invoice will be issued for market and GMC charge. This issue is independent of whether there should be separate credit standards for GMC and market charges, but as indicated we are proposing to move to a single standard.

What is the basis for the % of net worth associated with the rating score?

CAISO Response:

We have reviewed the methodologies used by other ISOs including NYISO in establishing such tiers.

What is the basis for the 35% factor to take into account the concentration limit in A/R?

CAISO Response:

NYISO ISO has a 20% concentration limit. We considered that too low based on the number and concentration of participants in the California energy market. However, we have eliminated the concentration cap from this revised proposal.

What is the current concentration in A/R?

CAISO Response:

As would be expected, this changes and has varied widely. At times, the concentration has been significant (in excess of 75%).

What has the highest number been over the last 12 months?

CAISO Response:

See above.

How long did it stay at the number?

CAISO Response:

Concentration has remained high for several months.

Automated Power Exchange (further explanation required)

We do not see a proposed solution to this in the recommendation as it relates to privately-held companies. How would privately-held companies be evaluated and assigned a credit rating? We would be opposed to financial statement-only assessments to determine credit worthiness or credit ratings. We believe our historical activity with the CAISO should be factored into the rating.

CAISO Response:

We have added a provision to potentially provide some credit to entities without a credit rating—as encouraged in FERC's November 2004 policy statement on credit.

A Moody's KMV EFF can be calculated for any company, including privately held companies, with the RiskCalc product. The RiskCalc model requires as inputs approximately 10 financial statement metrics. CAISO will be relying primarily on such a quantitative approach for unrated companies.

We might at a later date incorporate other qualitative measures such as payment history.

4.2 BAID / SCID specific security postings

Stakeholder Responses

City of Santa Clara (Supportive)

SVP supports the CAISO's recommendation for each SC to provide appropriate financial security for all SC IDs for which it is responsible for on a "net" basis.

California Department of Water Resources (Objection)

While it is true that the Department has one SC agreement, the two entities that transact in the CAISO markets are separate legal entities (have two distinct funding sources). The Department would prefer to not aggregate these two entities (the State Water Project and California Energy Resource Scheduling).

CAISO Response:

The operative legal document is the SC Agreement. Where two entities are scheduled by one SC with a single SC Agreement, one of the entities has, in effect, appointed an agent—the party to the SC Agreement—for its transactions. As noted earlier, the CAISO is willing to except separate security instruments, which could represent the obligations of different entities, provided the instruments were unconditional. As a further alternative, each entity could enter into separate SC Agreements. Each entity would then have its own posting requirements and would be treated separately by the CAISO.

Automated Power Exchange

The recommendation proposed by the CAISO will change our current relationship with our SCIDs and provides a barrier in the ease of entry into the California energy market. Specifically, we currently have an individual SCID who has credit posted directly with the CAISO, but we are not required by the CAISO to post any credit for any of our other SCIDs. In essence, this particular SCID takes responsibility directly with the CAISO for its own security. This protects the SCID that has their own credit posted directly with the CAISO in case any of our other SCIDs default on payment to the CAISO, and vice versa.

If the proposed policy goes into effect, can we post multiple letters of credit as security under one scheduling coordinator?

CAISO Response:

Part 1: The current situation with APX is anomalous and the CAISO has requested that APX rectify the situation. The CAISO has a direct relationship with its SCs and not the SC's customers. It is up to an SC to manage the credit risk of its clients or portfolio.

Part 2 : Yes. Multiple security instruments may be posted provided the security instruments are unconditional with respect to applying to an overall SC.

4.3 CAISO Approved Security Agreements (Supplemental Information in Appendix B) [Sidney to respond to stakeholder comments]

<u>Stakeholder Questions</u>

1. Should CAISO require the use of standard forms? If yes, should exceptions be allowed, and under what circumstances?

Stakeholder Responses

Strategic Energy (Supportive)

Surety Bonds should continue to be an acceptable form of credit support.

CAISO Response:

We are not proposing to eliminate surety bonds as a form of security.

A standard form for L/C's, guarantees, etc. is reasonable if the form of the document is "common in the industry". For example, the ERCOT form of guaranty is impossible and its L/C will only be issued by one bank in our bank group.

CAISO Response:

The CAISO intends to use forms that are commercially reasonable.

City of Santa Clara (Supportive)

It is reasonable for the CAISO to require that security agreements all conform to California law and venue, and to accept fewer deviations from standard forms.

CAISO Response:

We agree.

It is reasonable that any such necessary action be arbitrated or litigated in a California venue.

CAISO Response:

We agree.

Prior to a security agreements expiration, is the CAISO monitoring to determine if a guarantor is still viable on an on-going basis (i.e. between expirations)?

CAISO Response:

Yes, we periodically review credit ratings of guarantors, and would do so under our proposed revisions to the credit policy.

Pacific Gas and Electric Company

How will the CAISO reach agreement with its stakeholders on a standard form L/C?

CAISO Response:

Like other ISOs/RTOs, the CAISO is considering submitting forms to the FERC as part of its credit polices. Whether the CAISO submits specific forms to FERC for approval or not, the CAISO would post them for stakeholder comment. The CAISO's goal in this respect is not necessarily to "reach agreement" with its stakeholders, but to develop commercially reasonable forms that are generally acceptable to stakeholders while meeting the interests of the CAISO and the interests intended to be protected by the CAISO's security policies.

4.4 Security Agreement Expiration and Liability Obligation Coverage Limitation Issue

Stakeholder Questions

1. Should the CAISO consider a shorter lead-time in advance of a security agreement's expiration, (i.e., 20, 15 or 10 days)?
2. What other alternatives could address this issue, such as requiring "evergreen" agreements that renew automatically unless cancelled with advance notice?

Stakeholder Responses

Strategic Energy (Supportive)

The concept of a security agreement having zero value 30 days before expiration is reasonable for L/C's only. Any form of guaranty accepted by the CAISO should include language stating that obligations incurred prior to the expiration date remain obligations after the expiration date if the guaranty is not extended.

CAISO Response:

The CAISO form guaranty currently in use includes language that provides that obligations incurred prior to the expiration date remain obligations after the expiration date. The purpose of reducing the value to zero ensures for timely extension of the guaranty or timely substitution of another credit instrument for going forward obligations. Thus, the CAISO's proposal is also appropriate for guaranties.

California Department of Water Resources (Supportive of suggested approach)

We also agree with the wisdom of having an alternative or replacement form of security in place 30 days prior to the expiration of the existing form as a way to protect market participants. I believe what we are thinking here is a type of "evergreen" agreement – with the goal of not having a lapse in the form of security as long as some form of security is required.

CAISO Response:

We encourage "evergreen" agreements. The 30-day issue is to address parties that do not provide evergreen agreements.

4.5 Credit Insurance (Supplemental Information in Appendix C)

Stakeholder Responses

Strategic Energy (Interested in the concept)

This is an interesting idea. Can this insurance be provided at a reasonable cost? Please provide an update to market participants on how discussions progress with Aon.

CAISO Response:

As soon as the CAISO finds out more information related to costs and insurance structure, we will advise market participants.

City of Santa Clara (Objection – only because Payment Acceleration should be implemented first.)

This should only be considered after more effort has been made to shorten settlement periods and consider other security requirements.

CAISO Response:

Currently, the CAISO is focusing on implementing the major recommendations addressed in this document. Due to the limited human resources associated with this undertaking, the insurance issue has slowly progressed. As the assessment of credit insurance is further reviewed in the near future, the Credit Policy Team will ensure that the effects of a shortened settlement cycle are taken into consideration.

It is premature for CAISO to be seeking insurance quotes, as appears to be the case, before implementing any of the other credit policy improvements. The costs of the policy would become just another pass-through GMC charge anchored at a high price quote that then voids the serious effort of improving CAISO settlement structure and credit policy. SVP would submit that unnecessarily high GMC costs create barriers to market entry.

CAISO Response:

We have explored two options, the second of which would not be paid for at all by the CAISO. We recognize cost recovery is a significant issue for the "pool coverage" approach (Option 1) and will proceed cautiously on this issue. We do note that the November 2004 FERC policy statement did encourage the consideration of this issue, but raised issues similar to those City of Santa Clara has raised.

Pacific Gas and Electric Company's

What does the CAISO expect would be covered with credit insurance – all unsecured credit, all A/R, a portion of A/R, etc?

CAISO Response:

As soon as the CAISO finds out more information related to costs and insurance structure, we will advise market participants.

Automated Power Exchange

Structure 1 - Would this be coverage for all SCIDs? It looks like cost recovery is still an issue.

CAISO Response:

As soon as the CAISO finds out more information related to costs and insurance structure, we will advise market participants.

Has there been any further progress made on a resolution?

CAISO Response:

Progress is slowly continuing, but we have nothing of substance to report on this at this time.

How will this process be managed?

CAISO Response:

See other responses above.

In other words, is this a blanket cost for all participants in the CAISO or only for participants required to post credit?

CAISO Response:

That is yet to be determined and is the essence of the "cost recovery issue". Upon a move to payment acceleration, the outstanding receivables to the CAISO market will decrease significant, and the cost of insurance will decrease correspondingly, making the cost recovery issue less important.

5. Liability Obligation Calculations and Security Posting Requirements

Stakeholder Responses

City of Santa Clara (Supportive however it desires the implementation of a stakeholder advisory group to assist with the development of SCALE policy.)

SVP would recommend the creation of a well-represented stakeholder advisory group to discuss the refinements to and accuracy of SCALE, the number of days to include in a liability calculation, the price volatility problems, and what level of security postings above the estimated aggregate liability is still appropriate if SCALE is refined. CAISO should be prepared to provide empirical evidence related to the different recommendations to the stakeholder advisory group.

The advisory group would also be able to assist the CAISO Finance Department develop the credit management functionality in the SaMC system.

CAISO Response:

After reviewing the practices of the other ISO's we find the stakeholder advisory group concept to be interesting and worthwhile to explore. We look forward to reviewing proposals submitted by stakeholders on this issue.

Pacific Gas and Electric Company's

What risk would the CAISO take on if it used a simple method to compute exposure for posting?

For example, use 2 times (once the new system goes in) the highest settled amount from the previous 12 months. The formula would then be [2*Highest Monthly Bill less the Unsecured Credit Line – posted collateral = Collateral to post]. The formula could be set every 12 months unless there was a sharp increase in monthly charges incurred by the SC.

CAISO Response:

Historically, the CAISO has worked toward calculating each SC's liabilities based on the most recent operational data available. Over the years the process has gotten more sophisticated and complex, and the accuracy level of the estimation process has improved significantly. Simpler approaches are possible, if one is willing to accept two drawbacks, because a simpler approach is likely to result in a less accurate estimate of an SC's liability. These drawbacks are that the SC will either be forced to maintain more security than is necessary to cover their obligations, or the ISO market creditors will be exposed to potential default risk from an under-secured participant.

With the existing approach, if an SC wants to avoid frequent collateral adjustments, they have that ability: post sufficient collateral to cover their highest outstanding obligations.

What would some of the benefits be if the CAISO went to a simplified approach?

CAISO Response:

See above.

What would be some of the pitfalls?

CAISO Response:

See above.

5.1 Liability Obligation Requirements for New SCs

Stakeholder Response

Strategic Energy

A new SC should have to post collateral equal to its forecast MWh's over a 30-day time frame multiplied by the average on-peak price for the past 30 days.

CAISO Response:

We will adopt an approach that is generally consistent with this in that our approach will rely on: (1) a forecast of requirements by the SC (2) recent energy and A/S prices. We are also willing to permit the collateral to increase as transactions are incurred (ramp up period.) We are not looking at substantive changes to our current approach on this matter.

City of Santa Clara (Supportive)

When a new entity without an ACR is certified as an SC, it is reasonable to allow the new SC to ramp up its obligation at the current number of days of participation plus 30 initial days, eventually ramping to the maximum obligation.

CAISO Response:

Agreed, and see our response above.

California Department of Water Resources (Supportive)

With respect to new SC's we agree with the CAISO recommendations to require the SC to post security to cover 14 days of estimated charges, increasing postings as needed as well as with the use of the simplified spreadsheet to estimate obligations.

CAISO Response:

Agreed, and see our response above.

5.3 Refinements to SCALE

Stakeholder Responses

California Department of Water Resources (Supportive)

The CAISO should use more conservative assumptions to provide greater assurance that SCs with a financial security posting obligation are adequately secured.

CAISO Response:

We will continue to attempt to appropriately balance the need to have a conservative estimate of obligations to protect market creditors, with the avoidance of unrealistically high estimates resulting in costly collateral postings by purchases. Accuracy is the goal we will continue to strive for. We may periodically "fine tune" the SCALE process to best achieve this objective.

5.5 Number of Days Included in Liability Calculation

Stakeholder Response

Strategic Energy

We like the idea of having a SC select the period of time used in the cycle (70 -102 days).

CAISO Response:

We will provide flexibility, but have decided to limit this, as described in the proposal. .

California Department of Water Resources (Supportive)

Permitting SCs the discretion to post security for either a fixed period or a variable period is acceptable.

CAISO Response:

See above.

5.6 Price Volatility and Forecasted Liabilities

Stakeholder Responses

California Department of Water Resources (Supportive)

We agree that the CAISO should revisit this issue and implement a volatility adjustment if a significant increase in price volatility is seen.

CAISO Response:

We will continue to monitor this issue.

5.7 Liability Obligation Calculation and Security Posting Requirements for Special Circumstances

Stakeholder Questions

1. Is five percent of the net absolute value of historical charges an acceptable base requirement amount for SCs leaving the market or with substantial activity level changes? If not, what would be an acceptable percentage?

Stakeholder Responses

California Department of Water Resources (Supportive)

What constitutes "substantially reduced participation" in the CAISO markets? This needs to be quantified prior to adoption of the recommendation to hold a 5% residual security posting for a period of one year. Upon implementation of a new settlement system in 2005, revisit the one-year residual security posting holding period if a shorter holding period is warranted.

CAISO Response:

We agree that defining terms precisely is always desirable, but in this case it may not be possible to quantify this matter further. We will continue to consider this issue.

5.8 Security Posting Requirements by Individual Trade Months

Stakeholder Responses

Strategic Energy

A SC's potential collateral posting should include all debits/credits. To exclude a company's long position in the marketplace would unfairly punish the SC.

CAISO Response:

We agree, and we believe the FERC Policy Statement on credit has spoken on this matter—balances are to be netted to the extent possible.

California Department of Water Resources (Supportive)

The continuance of the policy that allows net creditor months to offset net debtor months is preferred.

Should this policy be applied across the board equally? This seems like a perfect place to follow the November 19 FERC Order and "consider qualitative and quantitative factors" and possible exercise the discretion to not make this policy the same for all market participants.

CAISO Response:

We prefer a consistent approach to the extent possible, but as suggested, may need to exercise discretion in appropriate circumstances.

Bonneville Power Administration

From the seller's perspective, buyers from the CAISO must be fully secured at all times. Accommodations in the EAL calculation that increase the risk of default by purchasers are undesirable. If the CAISO practice of settling each month independently requires additional security from purchasers, then purchasers should post sufficient security for each month regardless of any prospective offsets, as long as the CAISO continues this settlement practice.

CAISO Response:

We appreciate this perspective—it is why we raised the issue. We do believe at this time however, that the risk of any loss from this situation is very remote (allowing balances of different months to offset means at worst, a participant doesn't pay month 1's bill and no security is available because they are a creditor in month 2. We can apply funds they would have received in month 2 to their month 1 balance.) As we will be moving to a substantially reduced number of days transactions outstanding in 2005, this issue will largely be resolved anyway. Further, see comment on FERC Credit Policy statement on netting above.

5.10 Payment Acceleration Effects on Liability Obligation Calculations and Security Posting Requirements

Stakeholder Responses

City of Santa Clara (Supportive)

SVP supports the highest priority being given to reducing the numbers of days for which settlement is outstanding.

Also, improve the system for allocating partial payments, such that it does not require "up to 5 days" to re-allocate.

CAISO Response:

We will continue to focus resources on the items that providing the greatest benefit to stakeholder—we believe payment acceleration meets this criteria.

The Settlements and Market Clearing system being developed currently will significantly automate the market clearing process, including allocating partial payments (if any).

Northern California Power Administration (Supportive)

Shorter payment cycles are the best way to reduce the liability. The easiest way to shorten the payment cycle is to bill on estimates. A second billing cycle would true up the difference between the estimated bills and actual bills.

CAISO Response: We agree. The ISO payment acceleration team is working to do exactly that.

6. Enforcement

Stakeholder Responses

City of Santa Clara (Supportive)

Any enforcement discussion should include a discussion of the market participants due process rights. Some charges may be too difficult for a market participant to estimate before settlement. Penalties without a cure or "safe-harbor" right may be too harsh.

A charge penalty could reasonably be assessed if an SC were to exceed its approved credit limit and /or financial security in excess of a reasonable bandwidth percentage.

With respect to Late Payment Penalties, the question not being discussed in this section is why there is a "delay of up to five days in the distribution of payments" because of a failed payment by any SC. Has the system become so convoluted that what should be an automatic recalculation and pro-rata takes days to run?

What will the CAISO do with the Late Payment penalties, above and beyond interest, collected? Will it be used to fund a reserve account or some other offset to the benefit of all the market participants?

CAISO Response:

We agree the due process rights are important and will be addressed. These are essential, and are in fact a primary reason why we have found this to be a particularly challenging issue. We also agree that some charges are can be difficult to assess, and this makes the "safe harbor" approach of value.

With respect to the delay in distribution of payments because of a failed payment by an SC, the current system has become quite complicated. This will be improved with the deployment of a new Settlement and Market Clearing System later this year.

Late payments penalties would likely be used in a manner as suggested above. Precise details are yet to be determined.

6.1 Unsecured Obligation Penalties

Stakeholder Questions

1. Should the CAISO implement penalties for failure to comply with financial security policies?
2. What would be an appropriate level of penalty (as a percentage of the difference between obligation and posted security)?
3. Should a "safe-harbor" be provided to waive penalties if an SC had complied with the CAISO's security posting requests?
4. What alternative approaches would encourage compliance with the posting requirements?

Stakeholder Responses

California Department of Water Resources (Supportive)

A penalty for an unsecured obligation and a "safe-harbor" or avoidance of penalties is acceptable.

However a different standard between a municipal or governmental agency and a private entity when it comes to the number of days allowed between a CAISO posting request and receipt of such request. Unequal treatment can be rationalized by following FERCs words in its November Order where it said to consider the "nature of the organization and operating environment".

CAISO Response: We will further pursue a penalty approach with a safe harbor, as discussed above.

We recognize that some entities have internal procedures and controls that make prompt responses more difficult. We will need to further consider this issue. We are not aware of difference response types by entity type at other ISO/RTOs. In any event. we hope that we have provided enough collateral options (including prepayments) that all entities can use a method that best suites their situation.

Pacific Gas and Electric Company

How complicated would this penalty process be to administer?

CAISO Response: This proposal is only in the conceptual stage currently. We believe it can be implemented and administered with reasonable efforts, but will continue to carefully consider expected costs and benefits. We do think the benefits are meaningful in terms of providing appropriate incentives for participants to be adequately secured.

How likely is this to result in compliance with CAISO requests?

CAISO Response: We think it will improve compliance. Penalties will work well in light of the following: (a) SC has primary responsibility to post adequate security, but ISO must also monitor balances and request security as appropriate. (b) If SC believes the ISO estimate is inappropriate, SC can invoke the "Appeal Procedure" (as documented in existing Credit Policy Guide). (c) If SC turns out to be incorrect and is undersecured, a penalty would be applied for the amount of the unsecured portion of their obligation.

How would the simplified Security Requirement calculation method mentioned above alleviate the need for a penalty process?

CAISO Response: In one sense, it might help. It might help in the sense that there would be no need for the ISO and an SC to debate whose estimate was correct. If the posting requirement was for example "the highest two months bills in the past 12 months", this would be objective and transparent. The downside is that wouldn't necessarily be a good indicator of a current obligation. Market creditors would be exposure to credit risk in the event of a default by an undersecured SC, or that SC may have to post more security than is necessary based on their current activity.

This is an issue in which only various trade-offs appear possible. There is no single solution that solves all objectives. Payment acceleration does make all of this much less significant.

Bonneville Power Administration

Whatever method the CAISO chooses for notification that an SC's balance is reaching or has exceeded the amount of posted security, that notification must be delivered promptly to sellers so that they can adjust their marketing in response their assessment of the risk that they won't be paid. If the CAISO limits access to information that an SC's purchases are not fully secured, as in the current proposal to distribute notice to financial contacts rather than posting the notice on the web, it is misleading sellers by failing to inform them of this risk. Even posting the notice on the web requires sellers to monitor CAISO postings; the appropriate action by the CAISO would be to actively notify all SCs rather than passively post the information and leave it to affected parties to discover it.

CAISO Response:

CAISO staff carefully considered various options with respect to making information available to market participants about "undersecured SCs" during 2003, and encountered numerous potential obstacles, such as (1) the need for very accurate information prior to being sufficiently confident of making such an announcement (2) legal claims if such a publication was found to be inaccurate (3) other factors.

We believe that the various reforms noted in this document, including penalties for undersecured SCs will reduce the likelihood of SCs participating in the ISO markets while undersecured.

We will continue to carefully consider this issue.

6.2 Late Payment Penalties

Stakeholder Questions

1. Are the suggested penalty amounts appropriate?
2. What other approaches should the ISO consider to encourage SC compliance with the payment deadlines?

Stakeholder Responses

Northern California Power Administration (Supportive if the penalty amount is higher than a participants cost of capital)

The ISO mentioned using a 1% penalty for late payments with a maximum amount of $10,000. If an entity's cost of money, the cost of obtaining money to pay the invoice, exceeds the penalty, it will not be an effective penalty.

CAISO Response: We agree with your point that the penalty must exceed the cost of funds to be effective. We think the proposed penalty would be effective because it is 1% per day, not 1% per year.

6.3 SC Suspension, Disconnection and Termination Policy Revision

Stakeholder Questions

1. Is there a suspension, disconnection and termination policy / structure implemented at another ISO that the CAISO could use as a basis for resolving this issue?
2. How could these procedures be further improved to reduce the risk of payment defaults and losses to CAISO market creditors?

Stakeholder Responses

None received.