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July 11, 2006

The Honorable Magalie R. Salas
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Re: California Independent System Operator Corporation
Compliance Filing and Status Report
Docket No. ER06-700-___

Dear Secretary Salas:

The California Independent System Operator Corporation ("CAISO")[1] submits an original and five copies of the instant filing in compliance with the Commission's "Order Conditionally Accepting Tariff Revisions Governing Credit Policy," 115 FERC ¶ 61,170, issued on May 12, 2006 in the captioned docket ("Credit Policy Order"), and the notice of extension of time issued in this docket on June 2, 2006.[2]

In the Credit Policy Order, the Commission stated that it found the CAISO's proposed revisions to the credit requirements and procedures in the ISO Tariff to be generally reasonable, except as discussed in that Order.[3] The

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1 Capitalized terms not otherwise defined herein have the meanings set forth in the Master Definitions Supplement, Appendix A to the ISO Tariff.

2 For the reasons described in footnote 37 below, the CAISO has no objection to the Commission's treating this compliance filing as a filing under Section 205 of the Federal Power Act.

3 Credit Policy Order at P 20.

Commission directed the ISO to make revisions to the ISO Tariff and the ISO Credit Policy & Procedures Guide ("Credit Guide"), file the Credit Guide as an attachment to the ISO Tariff, and explain what provisions of the Credit Guide the CAISO recommends removing from the ISO Tariff.[4] Pursuant to these directives, the instant filing contains two sets of changes. The first set of changes ("First Set of Changes") is provided to conform with the Commission's directives to make revisions to the ISO Tariff and the Credit Guide and to file the Credit Guide as an attachment to the Tariff.[5] The second set of changes ("Alternative Set of Changes") is provided to conform with the Commission's directives to make revisions to the ISO Tariff and the Credit Guide and to explain what provisions the CAISO recommends removing from the ISO Tariff; the Alternative Set of Changes shows what provisions the CAISO recommends including in and removing from the Tariff.[6] In addition, the CAISO provides the Declaration of Philip R. Leiber, Treasurer & Director of Financial Planning for the CAISO, in support of both sets of changes described above.[7]

The two sets of changes are mutually exclusive, *i.e.*, if the Commission accepts the Alternative Set of Changes it should not accept the First Set of Changes, and vice versa. As the CAISO will explain, the Commission should accept the Alternative Set of Changes rather than the First Set of Changes.

The version of the Credit Guide discussed in the Declaration of Philip R. Leiber and included as an attachment to the ISO Tariff in the First Set of Changes has been updated from the version of the Credit Guide previously submitted to the Commission in this docket,[8] pursuant to the Commission's granting of leave to the CAISO to submit an updated version of the Credit Guide in the instant compliance filing.[9] Attachment B-3 shows in red-line format the updates the CAISO has made to the Credit Guide.

The instant filing also provides a report on the status of the CAISO's efforts to work with its stakeholders to develop an alternative measure to

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4 *Id.* at PP 22, 32, 34-36, 42-44, 46-47. The Credit Policy Order also directed the CAISO to add Section A-3 of the Credit Guide, describing the eight-step process by which Unsecured Credit Limits are calculated, to Section 12.1.1 of the ISO Tariff. *Id.* at P 22.

5 The First Set of Changes is contained in Attachment A to the instant filing.

6 The Second Set of Changes is contained in Attachment B to the instant filing.

7 The Declaration of Philip R. Leiber is contained in Attachment C to the instant filing.

8 *See* Motion to Intervene, Protest, and Request for Order Requiring Supplemental Filing of the Cities of Redding and Santa Clara, California, and the M-S-R Public Power Agency, Docket No. ER06-700-000 (Mar. 28, 2006), at Exhibit 1.

9 Notice of Extension of Time, Docket No. ER06-700-000 (issued June 2, 2006).

calculate the Unsecured Credit Limits of non-profit entities, consistent with the Commission's directive in the Credit Policy Order.[10]

I. First Set of Changes

In the Credit Policy Order, the Commission directed the CAISO to make a number of revisions to the ISO Tariff. The CAISO has made these revisions as described below.

The Commission directed the CAISO to delete the sixth sentence of Section 12.1.1 of the ISO Tariff and replace it with former Section A-3/updated Section A-2 of the Credit Guide, which contains a detailed eight-step process for determining Unsecured Credit Limits.[11] In the First Set of Changes, the CAISO has made the revision to Section 12.1.1 directed by the Commission.

The Commission directed the CAISO to file the Credit Guide as an attachment to the ISO Tariff.[12] Accordingly, in the First Set of Changes the CAISO has attached the updated Credit Guide to the ISO Tariff.

The Commission directed the CAISO to set the maximum Unsecured Credit Limit at $250 million, and to delete the provision in the ISO Tariff stating that the limit may be further reduced by the ISO Governing Board in its discretion.[13] Accordingly, the CAISO has removed the provision in question from Section 12.1.1 of the ISO Tariff.

The Commission directed the CAISO to submit ISO Tariff language stating that the CAISO will inform a Market Participant in the event that the CAISO takes into account the financial status of a Market Participant's Affiliates in determining the Market Participant's Unsecured Credit Limit.[14] The CAISO has made revisions to Section 12.1.1.1 of the ISO Tariff to comply with this directive.

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10 Credit Policy Order at P 35.

11 *Id.* at P 22. Due to the CAISO's updating of the Credit Guide, described below, some of the section numbers in the Credit Guide have changed. Except where otherwise indicated, this transmittal letter refers to both the former section numbering and the updated section numbering in the Credit Guide, with the two sets of section numbers separated by a backslash ("/"). The red-lined version of the Credit Guide included in Attachment B-3 to the instant filing indicates how the CAISO has modified the former section numbering of the Credit Guide.

12 Credit Policy Order at P 22.

13 *Id.* at P 32.

14 *Id.* at P 34.

The Commission directed the CAISO to file, as part of the Credit Guide, sample calculations showing how Unsecured Credit Limits will be determined for all types of Market Participants and FTR Bidders.[15] In accordance with this directive, the CAISO has included such sample calculations in former Section A-4/updated Section A-2.3 of the Credit Guide.

The Commission directed the CAISO to amend Section 12.1.1.2 of the ISO Tariff to indicate that a Market Participant may notify the CAISO of a Material Change in Financial Condition either directly or by informing the CAISO where the information can be found on the website of the U.S. Securities and Exchange Commission.[16] The CAISO has made the required revision to Section 12.1.1.2.

The Commission directed the CAISO to describe in the ISO Tariff the notification process in the event that any change is made to reduce a Market Participant's or FTR Bidder's Unsecured Credit Limit.[17] The CAISO has modified Section 12.1.1 of the ISO Tariff to comply with this directive.

The Commission directed the CAISO to amend the ISO Tariff to clarify that it plans to request an application for an Unsecured Credit Limit only once and to state how often it intends to review Unsecured Credit Limits.[18] The CAISO has modified Section 12.1.1 of the ISO Tariff to comply with this directive.

The Commission directed the CAISO to modify Section 12.1.2.2 of the ISO Tariff to replace the word "may" with the word "will".[19] The CAISO has made the required revision to Section 12.1.2.2. In addition, Section 12.1.2.2 states that the CAISO treats a financial instrument that does not have an automatic renewal provision and that is not renewed or replaced within 30 days of its date of expiration as being out of compliance with the standards for Financial Security contained in Section 12 of the ISO Tariff. The Commission stated that it has a concern about that provision and therefore directed the CAISO to "explain why it needs 30 days, and not some shorter period, to prevent itself from becoming under-secured."[20] The CAISO based this 30-day provision on a similar provision in the Commission-approved tariff for ISO New England.[21] However, in light of

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15 *Id.* at P 36.

16 *Id.* at P 42.

17 *Id.* at P 43.

18 *Id.* at P 44.

19 *Id.* at P 46.

20 *Id.*

21 *See* ISO New England Inc., FERC Electric Tariff No. 3, at Original Sheet No. 84.

the Commission's concern and the requirement to change the word "may" to "will" in Section 12.1.2.2, the CAISO has modified the section (and the corresponding portion of Part B of the Credit Guide) to refer to a 7-day period rather than a 30-day period. As explained in the Declaration of Philip R. Leiber, that lesser period is sufficient.

The Commission directed the CAISO to correct a minor typographical error in the definition of "Material Change in Financial Condition" in Appendix A to the ISO Tariff.[22] The CAISO has corrected that definition accordingly.

II. Alternative Set of Changes

The Alternative Set of Changes includes all of the revisions described in Section I, above, except for the following: the Alternative Set of Changes does not include all of the details from former Section A-3/updated Section A-2 of the Credit Guide in the ISO Tariff and presents the Credit Guide separately, as a reference manual that is not intended to be part of the ISO Tariff, rather than as an attachment to the ISO Tariff.[23] As an alternative to incorporating the entire Credit Guide as an attachment to the ISO Tariff, the Alternative Set of Changes contains additional ISO Tariff language taken from the Credit Guide that is not found in the First Set of Changes in order to support the basis for removing the Credit Guide from the ISO Tariff. The CAISO has provided the Alternative Set of Changes in accordance with the Commission's directive in the Credit Policy Order to explain what provisions the CAISO recommends removing from the ISO Tariff.[24] Moreover, in its request for rehearing in this proceeding, the CAISO explained the types of revisions it was going to include in the Alternative Set of Changes:

> The CAISO does believe, however, that it can develop additional detail without filing the eight-step process [contained in former Section A-3.2/updated Section A-2.2 of the Credit Guide] in its entirety or the other detailed provisions of the Credit Guide as part of the ISO Tariff. For example, the CAISO would consider adding a description of the eight-step process to the ISO Tariff while keeping the numbers-heavy details of the eight-step process solely in the Credit Guide. . . . As an alternative to being required to include the

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22 Credit Policy Order at P 47.

23 The numbering of some of the ISO Tariff sections in the Alternative Set of Changes is different from the numbering of the Tariff sections in the First Set of Changes. Therefore, the references in Section I, above, to specific numbered sections of the ISO Tariff are in some cases not applicable to the Alternative Set of Changes. Attachment B-2 to the instant filing indicates how the section numbering is different in the Alternative Set of Changes.

24 *See* Credit Policy Order at P 22.

> Credit Guide in the ISO Tariff, the CAISO therefore requests that the Commission modify the Credit Policy Order and permit the CAISO to make such a filing rather than adding the eight-step process and other provisions of the Credit Guide to the ISO Tariff. The CAISO intends to make a similar proposal in the compliance filing it will submit in this proceeding.[25]

The CAISO believes that the Alternative Set of Changes provides for sufficient credit-related detail to be included in the ISO Tariff. The Alternative Set of Changes satisfies the Commission's "rule of reason" because it incorporates into the ISO Tariff those portions of the Credit Guide that will significantly affect rates, terms, and conditions of service.[26]

Including all of the Credit Guide as part of the ISO Tariff (rather than only those portions the CAISO proposes to add to the ISO Tariff under the Alternative Set of Changes), will create a substantial burden for the CAISO as many of the remaining portions of the Guide contain implementation details that the CAISO may need to adjust in response to changing market conditions and the experience it gains in applying its credit policies. In some cases, portions of the Guide may require updates as frequently as monthly. These pragmatic concerns are described at length in the Declaration of Philip R. Leiber.

The requirement to move the remaining provisions of the Credit Guide to the ISO Tariff will not improve the transparency of the CAISO's detailed credit procedures, but it will limit the ability of the CAISO to make timely revisions to the Credit Guide. Once the entire Credit Guide is part of the ISO Tariff, changes to the Credit Guide would not only be presented for stakeholder review and comment in the normal course of business, but then after the stakeholder process is complete, these changes must be approved by the ISO Governing Board and then must be submitted for Commission approval under Section 205 of the Federal Power Act. Such a Section 205 filing will require 60 days' advance notice unless the Commission grants a waiver of the prior notice requirement and approves the filing more quickly pursuant to a CAISO request for expedited consideration.[27] Accordingly, even a widely-supported update to the tools and

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[25] Request for Rehearing of the California Independent System Operator Corporation, Docket No. ER06-700-002 (June 12, 2006), at 22-23 ("CAISO Request for Rehearing").

[26] *See* Credit Policy Order at P 21; *Prior Notice and Filing Requirements Under Part II of the Federal Power Act*, 64 FERC ¶ 61,139, at 61,988 (quoting *City of Cleveland v. FERC*, 773 F.2d 1368, 1376 (D.C. Cir. 1985)).

[27] *See* CAISO Request for Rehearing at 7. The Commission has indicated that it will expedite the issuance of orders in order to correct a market flaw that will "materially adversely impact the market." *Guidance Order on Expedited Tariff Revisions for Regional Transmission Organizations and Independent System* Operators, 111 FERC ¶ 61,009 (2005). Changes to the CAISO's credit policies are unlikely to meet this threshold.

detailed procedures in the Credit Guide could take many months to implement as a result of the requirement to move the entire Credit Guide to the ISO Tariff.

For these reasons, the Commission should accept the Alternative Set of Changes rather than the First Set of Changes and allow the remaining provisions of the Credit Guide, which contains only implementation detail and examples, to be removed from the ISO Tariff.

Specifically, in the Alternative Set of Changes, the CAISO has included in Section 12.1.1 of the ISO Tariff a description of the means by which the CAISO determines Unsecured Credit Limits for four types of Market Participants and FTR Bidders (Rated Public/Private Corporations, Unrated Public/Private Corporations, Rated Governmental Entities, and Unrated Governmental Entities). That description in Section 12.1.1 is the same as the description at the beginning of former Section A-3/updated Section A-2 of the Credit Guide. The CAISO has also included in Section 12.1.1 of the ISO Tariff a description of the eight-step process the CAISO uses under former Section A-3.2/updated Section A-2.2 of the Credit Guide for calculating Unsecured Credit Limits for entities other than Unrated Governmental Entities, and a description of the process the CAISO uses under former Section A-4/updated Section A-2.3 of the Credit Guide for calculating Unsecured Credit Limits for Unrated Governmental Entities.

The CAISO believes these descriptions provided in Section 12.1.1 contain sufficient detail regarding how the CAISO calculates Unsecured Credit Limits, without including an amount of numerical detail in the ISO Tariff that is excessive and is not similar to the type of numerical detail found anywhere else in the Tariff. As the CAISO explained in detail in its Request for Rehearing, requiring the CAISO to file the eight-step process used for calculating Unsecured Credit Limits unnecessarily and inappropriately limits the CAISO's flexibility to modify the eight-step process based on experience. Such flexibility is required in order to permit the CAISO to balance qualitative and quantitative factors in determining credit risk, consistent with the Commission's *Policy Statement on Electric Creditworthiness* and its recently issued *Notice of Proposed Rulemaking, Preventing Undue Discrimination and Preference in Transmission Service.*[28] In particular, the Commission has explained, in considering whether to require transmission providers "to incorporate the creditworthiness and security methodologies into their OATTs," that a balance must be drawn "between the burden . . . of adding these methodologies to . . . [OATTs] and the need for Commission review and approval if methodologies frequently change."[29] The

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28 CAISO Request for Rehearing at 3-13, 14-17 (citing *Policy Statement on Electric Creditworthiness*, 109 FERC ¶ 61,186 (2004), and *Notice of Proposed Rulemaking, Preventing Undue Discrimination and Preference in Transmission Service*, 115 FERC ¶ 61,211 (2006) ("OATT Reform NOPR")).

29 OATT Reform NOPR at PP 455-56.

CAISO anticipates that the detailed eight-step process may need to change, if not frequently, then at least often enough that the CAISO should not be required to keep the process in the ISO Tariff. As the Commission has recognized in the past, "[t]he credit policies of other established energy markets have undergone continual refinements to better reflect the needs of all affected parties."[30] Moreover, based on the descriptions of the eight-step process that the CAISO proposes to include in the ISO Tariff, Market Participants and FTR Bidders can be assured that the CAISO cannot change the basic means of how those calculations are done without receiving approval from the Commission pursuant to a filing under Section 205 of the Federal Power Act.[31]

In order to explain the meanings of the defined terms the CAISO has included in Section 12.1.1 of the ISO Tariff as part of the Alternative Set of Changes, the following defined terms to Appendix A to the ISO Tariff: "Average Rating Default Probability," "Credit Rating Default Probability," "MKMV Default Probability," "Nationally Recognized Statistical Rating Organizations," "Net Assets," "Rated Governmental Entity," "Rated Public/Private Corporation," "Tangible Net Worth," "Unrated Governmental Entity," and "Unrated Public/Private Corporation." The definitions of these terms substantially (and, in most cases, exactly) follow the definitions of those terms in the Credit Guide.

In the Alternative Set of Changes, the CAISO has included in new Section 12.1.1.1 of the ISO Tariff the credit strength indicators contained in the first two paragraphs of former Section A-2.3/updated Section A-1.3 of the Credit Guide. The CAISO does not believe that the rest of the provisions in former Section A-2.3/updated Section A-1.3 need to be included in the ISO Tariff because they are very similar to provisions in the ISO Tariff that are cross-referenced in updated Section A-1.3 and to the definition of "Material Changes in Financial Condition" contained in Appendix A to the ISO Tariff. The CAISO has also made a pair of modifications to the definition of "Material Changes in Financial Condition" in the ISO Tariff, to include a needed reference to "Net Assets" and to add a minor clarification.

In the Alternative Set of Changes, the CAISO has included in new Section 12.1.1.2 of the ISO Tariff the provisions regarding Financial Statements that are contained in former Section A-2.1/updated Section A-1.1 of the Credit Guide.

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30 *Midwest Independent Transmission System Operator, Inc.*, 108 FERC ¶ 61,163, at P 432 (2004) (quoted in CAISO Request for Rehearing at 16-17).

31 Further, the CAISO believes that, since the detailed formulae for calculating Unsecured Credit Limits, which may need to be updated from time-to-time, should not be included in the ISO Tariff, the examples of Unsecured Credit Limit calculations contained in former Section A-3.3/updated Section A-2.4 of the Credit Guide also should not be included in the Tariff.

In the Alternative Set of Changes, the CAISO has deleted the provision in former Section 12.1.1.3 regarding the transition from credit provisions that were in effect prior to the effective date of Section 12.1.1, *et seq.* The transition period described in former Section 12.1.1.3 is now past and therefore that section can and should be deleted from the ISO Tariff. A corresponding provision has also been deleted from the updated Credit Guide.

In the Alternative Set of Changes, the CAISO has included in new Section 12.1.2.1 of the ISO Tariff provisions regarding additional procedures applicable to certain types of Financial Security. These provisions are based on the provisions contained in the fourth, fifth, and sixth paragraphs of Part B of the Credit Guide.

In the Alternative Set of Changes, the CAISO has included in new Section 12.4.1 of the ISO Tariff provisions regarding review of a CAISO request for an additional Financial Security Amount. These provisions are based on the provisions contained in the second paragraph of Section C-5 of the Credit Guide.

In the Alternative Set of Changes, the CAISO has included in new Section 12.4.2 of the ISO Tariff provisions regarding the dispute process applicable to a CAISO request for an additional Security Amount. These provisions are based on the provisions contained in Part E of the Credit Guide.

The CAISO believes that none of the following provisions of the Credit Guide need to be included in the ISO Tariff: former Section A-2/updated Section A-1, former Section A-5/updated Section A-3, the portions of Part B for which the CAISO has added cross-references to the ISO Tariff, and all of Part D. All of these provisions are the same as or very similar to language already contained in the ISO Tariff sections cross-referenced in those sections of the Credit Guide, as a side-by-side comparison of the Credit Guide provisions and the cross-referenced ISO Tariff provisions shows.

Further, none of the following provisions of the Credit Guide need to be included in the ISO Tariff: former Section A-2.2/updated Section A-1.2, former Section A-3.1/updated Section 2.1, the last paragraph in former Section A-3/updated Section A-2, the third paragraph of Part B, all of Part C (except for the second paragraph in Section C-5), Appendix 1, Appendix 1A, and Appendix 2. As explained further in the Declaration of Philip R. Leiber, all of these provisions contain implementation details that are too granular for inclusion in the ISO Tariff or provisions that the CAISO may need to adjust in response to changing market conditions and the experience it gains in applying its credit policies. As explained in the CAISO Request for Rehearing, the Commission's "rule of reason" only requires the CAISO to file those practices that "affect rates and service significantly" and that are "realistically susceptible of specification."[32] The provisions of the Credit Guide listed above in this paragraph should not be required to be filed, pursuant to the rule of reason test. The level of detail contained in Section 12 of the ISO Tariff, especially with the additions proposed in this Alternative Set of Changes, is sufficient to satisfy the requirements of the rule of reason.[33]

III. Declaration of Philip R. Leiber

The Declaration of Philip R. Leiber addresses (i) the updates that the CAISO has made to the former version of the Credit Guide and (ii) the material in the Credit Guide that is appropriate to be included in the ISO Tariff and the material that the CAISO should not be required to include in the ISO Tariff. As mentioned above, the Declaration supports both the First Set of Changes and the Alternative Set of Changes. However, as discussed herein and for the further reasons set forth in Mr. Leiber's Declaration, the Commission should accept the Alternative Set of Changes rather than the First Set of Changes.

IV. Report to the Commission Regarding Alternative Measures for Calculating Unsecured Credit Limits of Non-Profit Entities

In the Credit Policy Order, the Commission "strongly encouraged" the CAISO to work with its stakeholders to develop an alternative measure, to be included in the Credit Guide, for calculating the Unsecured Credit Limits of non-profit entities. The Commission directed the CAISO to report to the Commission the progress made in this regard on an informational basis.[34] As described in the answer the CAISO submitted in this docket on June 26, 2006,[35] the CAISO has worked with stakeholders to develop an alternative measure applicable to Local Publicly Owned Electric Utilities as well as an alternative measure applicable to unrated governmental entities. The CAISO posted drafts of these proposed alternative measures on the ISO Home Page on June 26, 2006. On July 5, 2006, the CAISO conducted a conference call with stakeholders to discuss the proposed measures. The CAISO has been working to revise the proposed measures in light of comments provided by stakeholders, but the proposed measures are still under development and thus were not ready in time

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32 CAISO Request for Rehearing at 19 (quoting *City of Cleveland v. FERC*, 773 F.2d at 1376 (emphasis omitted)).

33 *See* CAISO Request for Rehearing at 19-20.

34 Credit Policy Order at P 35.

35 Answer of the California Independent System Operator Corporation to Motion for Clarification or, in the Alternative, for Temporary Stay and Request for Expedited Treatment, Docket No. ER06-700-000 (June 26, 2006).

to be submitted in the instant compliance filing. The CAISO will file the proposed alternative measures as soon as practicable. The CAISO estimates that it will be able to make that filing in the very near future.

V. Listing of Materials Provided in the Instant Compliance Filing

The instant compliance filing consists of this transmittal letter and the following attachments:

- Attachment A, which includes Attachments A-1, A-2, and A-3 to reflect the First Set of Changes.
  - Attachment A-1 contains clean ISO Tariff sheets showing the First Set of Changes (including the updated Credit Guide shown as an attachment to the ISO Tariff that is designated as Appendix Z to the ISO Tariff).[36]
  - Attachment A-2 shows the First Set of Changes in red-line format (including the entire updated Credit Guide shown in red-line, because in the First Set of Changes it has been attached as Appendix Z to the ISO Tariff).
- Attachment B includes Attachments B-1, B-2, and B-3 to reflect the Alternative Set of Changes.
  - Attachment B-1 contains clean ISO Tariff sheets showing the Alternative Set of Changes.
  - Attachment B-2 shows the Alternative Set of Changes in red-line format. (In Attachment B-2, the unshaded red-lined text indicates changes that are the same as those found in the First Set of Changes,

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[36] On March 22, 2006 (*i.e.*, subsequent to the initiation of the above-captioned proceeding, Docket No. ER06-700), the CAISO re-filed its entire Simplified and Reorganized ("S&R") Tariff as a "Third Replacement" version of the ISO Tariff. The tariff sheets included in the Third Replacement version of the ISO Tariff have different numbering than the tariff sheets included in the previous ("Second Replacement") version of the ISO Tariff. As a result, the clean ISO Tariff sheets included in Attachments A-1 and B-1 to the instant filing have different numbering than the clean tariff sheets the CAISO has previously submitted in the above-captioned proceeding. In Attachment D to the instant filing, the CAISO is providing the clean tariff sheets that the CAISO has filed previously in Docket No. ER06-700 and that the Commission has accepted; the only difference between the clean ISO Tariff sheets included in Attachment D and the versions of those sheets that the Commission has already accepted is that the tariff sheets in Attachment D are numbered in accordance with the Third Replacement version of the ISO Tariff (rather than the Second Replacement version of the ISO Tariff, as was the case when those tariff sheets were originally submitted).

and the shaded red-lined text indicates changes that are different from those found in the First Set of Changes.)

- Attachment B-3 shows in red-line format the updates the CAISO has made to the Credit Guide. In the version of the Credit Guide contained in Attachment B-3, the red-lining indicates text in the Credit Guide that is different from the text in the version of the Credit Guide provided to the Commission previously in this proceeding.[37] As discussed above, under the Alternative Set of Changes, the Credit Guide itself will not be included as an attachment to the ISO Tariff, although many provisions of the Credit Guide will be added to the ISO Tariff.

- Attachment C contains the Declaration of Philip R. Leiber.

- Attachment D contains the clean ISO Tariff sheets described in footnote 36, above.

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[37] The red-lined changes to the Credit Guide in Attachment B-3 are described and explained in Attachment C (the Declaration of Philip R. Leiber). In the motion for extension of time the CAISO submitted in this docket on May 31, 2006, the CAISO stated that it would "clearly indicate in the compliance filing the differences between the current version of the Credit Guide as posted on the ISO Home Page and the updated version of the Credit Guide in the compliance filing. If the compliance filing contains any such changes, the CAISO will have no objection to the Commission's treating the compliance filing as a filing under Section 205 of the Federal Power Act." Motion for Extension of Time to Submit Compliance Filing, Docket No. ER06-700-000 (May 31, 2006), at 6. Accordingly, because the CAISO has updated the Credit Guide as shown in the red-line in Attachment B-3, the CAISO has no objection to the Commission's treating the instant compliance filing as a Section 205 filing.

Two additional copies of this filing are enclosed to be date-stamped and returned to our messenger. If there are any questions concerning the filing, please contact the undersigned.

Respectfully submitted,

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ATTACHMENT A

ATTACHMENT A-1

12 CREDITWORTHINESS.

12.1 Credit Requirements.

The creditworthiness requirements in this section apply to the ISO's acceptance of Schedules, to all transactions in an ISO Market, to the payment of charges pursuant to the ISO Tariff (including the Grid Management Charge), and to establish credit limits for participation in any ISO auction of FTRs. Each Market Participant (including each Scheduling Coordinator, UDC, or MSS) or FTR Bidder shall secure its financial transactions with the ISO (including its participation in any auction of FTRs) by maintaining an Unsecured Credit Limit and/or by posting Financial Security, the level of which constitutes the Market Participant's or FTR Bidder's Financial Security Amount. For each Market Participant or FTR Bidder, the sum of its Unsecured Credit Limit and its Financial Security Amount shall represent its Aggregate Credit Limit. Each Market Participant or FTR Bidder shall have the responsibility to maintain an Aggregate Credit Limit that is at least equal to its Estimated Aggregate Liability.

12.1.1 Unsecured Credit Limit.

Each Market Participant or FTR Bidder requesting an Unsecured Credit Limit shall submit an application to the ISO in the form specified on the ISO Home Page. The ISO shall determine the Unsecured Credit Limit for each Market Participant or FTR Bidder in accordance with the procedures set forth in the ISO Credit Policy & Procedures Guide posted on the ISO Home Page. The maximum Unsecured Credit Limit for any Market Participant or FTR Bidder shall be $250 million. In accordance with the procedures described in the ISO Credit Policy & Procedures Guide, each Market Participant or FTR Bidder requesting or maintaining an Unsecured Credit Limit is required to submit to the ISO or its agent financial statements and other information related to its overall financial health as directed by the ISO. Each Market Participant or FTR Bidder is responsible for the timely submission of its latest financial statements as well as other information that may be reasonably necessary for the ISO to conduct its evaluation. The ISO shall determine the Unsecured Credit Limit for each Market Participant or FTR Bidder as described in subsections 12.1.1A, 12.1.1A.1, 12.1.1A.2 and 12.1.1A.3.

12.1.1A Unsecured Credit Limit Calculation.

An Unsecured Credit Limit (UCL) for each Public/Private Corporation or Governmental Entity that requests an unsecured limit is calculated as follows:

1. **Rated Public/Private Corporations** – the UCL is the lesser of $250 million or an amount equal to the Market Participant's or FTR Bidder's Tangible Net Worth (TNW) multiplied by a calculated percentage of TNW. The TNW percentage is comprised of 50 percent (50%) of the Market Participant's or FTR Bidder's Credit Rating Default Probability and 50 percent (50%) of the MKMV Default Probability.

2. **Unrated Public/Private Corporations** – the UCL is the lesser of $250 million or an amount equal to the Market Participant's or FTR Bidder's Tangible Net Worth (TNW) multiplied by a calculated percentage of TNW. The TNW percentage is comprised of 100 percent of the MKMV Default Probability.

3. **Rated Governmental Entities** – the UCL is the lesser of $250 million or an amount equal to the Market Participant's or FTR Bidder's Net Assets (NA) multiplied by a calculated percentage of NA. The NA percentage is comprised of 100 percent of the Market Participant's or FTR Bidder's Credit Rating Default Probability.

4. **Unrated Governmental Entities** – the UCL is the lesser of $250 million or an amount equal to a given percentage of the Market Participant's or FTR Bidder's Net Assets if the Market Participant or FTR Bidder has a minimum of $25 million in Net Assets and its Times Interest Earned, Debt Service Coverage and Equity to Assets ratios meet or exceed specified minimums.

The $250 million hard cap on UCLs specified in the ISO Tariff has been set with respect to the length of the current ISO payment calendar, i.e., a maximum of 95 days of charges outstanding. Upon implementation of Payment Acceleration (scheduled for 2008), we expect to recommend a reduction in the $250 million hard cap. Any changes to the $250 million cap will require FERC approval of an amendment to the applicable provisions of the ISO Tariff.

12.1.1A.1 Maximum Percentage of TNW and NA.

For Rated and Unrated Public/Private Corporations or Rated Governmental Entities, the maximum percentage of TNW or NA is 7.5 percent (7.5%) if the Market Participant's or FTR Bidder's Combined Default Probability is less than or equal to 0.06 percent (0.06%).

The Maximum Allowable Percentage of 7.5% is for the highest quality firms; that is, those Market Participants and FTR Bidders with a CDP of 0.06 percent or less. The TNWP or NAP that a Market Participant or FTR Bidder qualifies for will be reduced as its credit risk increases.

For Unrated Governmental Entities, the ISO may provide an Unsecured Credit Limit of up to 5 percent (5%) of NA.

With respect to either of these potential maximum percentages, a lesser amount of unsecured credit may be granted if the ISO becomes aware of information related to a Material Change in Financial Condition or other significant information that presents a significant risk to the creditworthiness of the entity.

12.1.1A.2 Unsecured Credit Limit Calculation Steps.

An eight-step process is used to determine Unsecured Credit Limits for Market Participants and FTR Bidders that are Rated Public/Private Corporations, Unrated Public/Private Corporations and Rated Governmental Entities. Criteria for Unsecured Credit Limits for Unrated Governmental Entities is discussed in Section 12.1.1A.3.

Step 1 – If the Market Participant or FTR Bidder has a credit rating(s) from one or more of the "Nationally Recognized Statistical Rating Organizations" (NRSRO), verify the rating(s) with the appropriate NRSRO.

Step 2 - Calculate the Market Participant's or FTR Bidder's Average Rating Default Probability (ARDP).

a. ARDP is the sum of Credit Rating Default Probabilities divided by the total number of Credit Rating Default Probabilities used.

b. The following table shows the median default probability calculated by Moody's KMV (i.e., MKMV) for Standard & Poor's and Moody's long-term credit rating classes. Default probabilities are available from each NRSRO.

c. The example presented below uses the following table to derive the ARDP.

CREDIT RATING DEFAULT PROBABILITIES (DP)
Based on 5 year historical median of Moody's KMV EDF's*

Maximum Allowable Percentage)	7.50%
Base Default Probability	0.06%

Moody's	5 Year Median Default Probability	Tangible Net Worth or Net Asset Percentage	S&P	5 Year Median Default Probability	Tangible Net Worth or Net Asset Percentage
Aaa	0.020%	7.50%	AAA	0.020%	7.50%
Aa1	0.032%	7.50%	AA+	0.033%	7.50%
Aa2	0.040%	7.50%	AA	0.042%	7.50%
Aa3	0.056%	7.50%	AA-	0.059%	7.50%
A1	0.080%	5.60%	A+	0.084%	5.38%
A2	0.114%	3.94%	A	0.119%	3.80%
A3	0.144%	3.12%	A-	0.154%	2.92%
Baa1	0.182%	2.47%	BBB+	0.200%	2.25%
Baa2	0.230%	1.95%	BBB	0.259%	1.73%
Baa3	0.307%	1.47%	BBB-	0.367%	1.23%
Ba1	0.408%	1.10%	BB+	0.518%	0.00%
Ba2	0.544%	0.00%	BB	0.733%	0.00%
Ba3	0.848%	0.00%	BB-	1.215%	0.00%
B1	1.323%	0.00%	B+	2.014%	0.00%
B2	2.064%	0.00%	B	3.338%	0.00%
B3	4.168%	0.00%	B-	5.384%	0.00%
Caa1	8.418%	0.00%	CCC+	8.682%	0.00%
Caa2	17.000%	0.00%	CCC	14.000%	0.00%
Caa3	17.946%	0.00%	CCC-	14.936%	0.00%
Ca	20.000%	0.00%	CC	17.000%	0.00%
C	20.000%	0.00%	C	18.250%	0.00%
			D	20.000%	0.00%

* Table is subject to update on a monthly basis

d. Issuer ratings without the benefit of credit enhancement would be used in this assessment. Such ratings are also known as "counterparty" or "underlying" ratings.

Step 3 – Using MKMV's CreditEdge or RiskCalc software, obtain the Market Participant's or FTR Bidder's MKMV Default Probability (MKDP).

a. Since MKMV calculates default probabilities directly, the MKMV Default Probability will be used without any mapping.

Step 4 – Calculate a Combined Default Probability (CDP) based on one of the following methodologies:

a. CDP for Rated Public/Private Corporations = (ARDP * 50%) + (MKDP * 50%)

b. CDP for Unrated Public/Private Corporations = MKDP * 100%

c. CDP for Rated Governmentally Owned Utilities = ARDP * 100%

Step 5 – Calculate the Market Participant's or FTR Bidder's Tangible Net Worth Percentage (TNWP) or Net Assets Percentage (NAP).

a. TNWP = MAP * BDP / CDP for Rated/Unrated Public/Private Corporations

b. NAP = MAP * BDP / CDP for Rated Governmental Entities

Where:

MAP = Maximum Allowable Percentage;

BDP = Base Default Probability;

CDP = see Step 4 above; and

If the SC's CDP > 0.5%, the TNWP or NAP equals 0%

Step 6 – Calculate the Market Participant's or FTR Bidder's Tangible Net Worth or Net Assets.

a. TNW for Rated/Unrated Public/Private Corporations = Assets minus Intangibles (e.g., Good Will) minus Liabilities

b. NA for Rated Governmental Entities = Total Assets minus Total Liabilities

Step 7 – Calculate the Market Participant's or FTR Bidder's Unsecured Credit Limit.

a. UCL = TNW * TNWP for Rated/Unrated Public/Private Corporations

b. UCL = NA * NAP for Rated Governmental Entities

Step 8 – Adjust Unsecured Credit Limit Downward, if warranted based on the ISO's review of factors in Appendix Z, Section A-1.3.

a. Final UCL = UCL from Step 7 * (0 - 100%)

12.1.1A.3 Unsecured Credit Limit Calculations for Unrated Governmental Entities.

The UCL for an Unrated Governmental Entity is based on the financial ratios defined in the following table:

Ratio	Calculation	Minimum Accepted Value
Times Interest Earned (TIER)	(Long-Term Debt Interest Expense + Change in Net Assets) / Long-Term Debt Interest Expense	1.05
Debt Service Coverage (DSC)	(Depreciation & Amortization Expense + Long Term Debt Interest Expense + Change in Net Assets) / Debt Service Billed (Debt Service Interest and Principal).	1.00
Equity to Assets	Total Equity / Total Assets	0.15

For those Municipals that meet all of the above criteria, initial unsecured credit will be calculated as five percent (5%) of Net Assets (i.e., Total Assets minus Total Liabilities). That percentage may be adjusted downward by up to 100% if the ISO becomes aware of significant negative information regarding the Market Participant's or FTR Bidder's operations as determined through trade publications and/or the financial press.

12.1.1.1 Other Procedures Regarding Unsecured Credit Limits.

As a result of the ISO's credit evaluation, a Market Participant or FTR Bidder may be given an Unsecured Credit Limit by the ISO or denied an Unsecured Credit Limit with the ISO. Following the initial application and the establishment of an Unsecured Credit limit, the ISO will review each Market Participant's or FTR Bidder's Unsecured Credit Limit on a quarterly basis, unless that entity does not prepare quarterly statements, in which case the review will occur on an annual basis, and no entity shall be required to submit a new application. In addition, the ISO may review the Unsecured Credit Limit for any Market Participant or FTR Bidder whenever the ISO becomes aware of information that could indicate a Material Change in Financial Condition. In the event the ISO determines that the Unsecured Credit Limit of a Market Participant or FTR Bidder must be reduced as a result of a subsequent review, the ISO shall notify the Market Participant or FTR Bidder of the reduction, and shall, upon request, also provide the Market Participant or FTR Bidder with a written explanation of why the reduction was made.

12.1.1.2 Determination of Unsecured Credit Limits for Affiliates.

If any Market Participant or FTR Bidder requesting or maintaining an Unsecured Credit Limit is affiliated with one or more other entities subject to the credit requirements of this Section 12, the ISO may consider the overall creditworthiness and financial condition of such Affiliates when determining the applicable Unsecured Credit Limit. The ISO may determine that the maximum Unsecured Credit Limit specified in Section 12.1.1 applies to the combined activity of such Affiliates. In the event the ISO determines that the maximum Unsecured Credit Limit applies to the combined activity of the Affiliates and the Market Participant, the ISO shall inform the Market Participant in writing.

12.1.1.3 Notification of Material Change in Financial Condition.

Each Market Participant or FTR Bidder shall notify the ISO in writing of a Material Change in Financial Condition, within five (5) Business Days of when the Material Change in Financial Condition is known or reasonably should be known by the Market Participant or FTR Bidder. The provision to the ISO of a copy of a Form 10-K, 10-Q, or Form 8-K filed with the U.S. Securities and Exchange Commission shall satisfy the requirement of notifying the ISO of such Material Change in Financial Condition. Alternatively, the Market Participant may direct the ISO to the location of the information on their company website or the website of the U.S. Securities & Exchange Commission.

12.1.1.4 Transition from Credit Provisions that Were in Effect Prior to the Effective Date of this Section 12.1.1, *et seq.*

Each Market Participant or FTR Bidder that, prior to the effective date of this Section 12.1.1, *et seq.*, maintained an "Approved Credit Rating" with respect to market and/or Grid Management Charge obligations, shall be assigned a maximum Unsecured Credit Limit of $250 million for a period not to exceed thirty (30) days. Such thirty-day period shall start on the date the ISO issues a market notice stating that FERC has issued an order making Section 12.1.1, *et seq.* effective. Prior to or during such thirty-day period, each Market Participant or FTR Bidder maintaining an "Approved Credit Rating" as described herein shall submit to the ISO the information that is required for the ISO to make a credit evaluation regarding the Market Participant or FTR Bidder as described in Section 12.1.1. If the Market Participant or FTR Bidder does not submit the required information within the thirty-day period described herein, the ISO shall assign an Unsecured Credit Limit of $0 to the Market Participant or FTR Bidder until the required information has been submitted.

Each Market Participant or FTR Bidder that, prior to the effective date of this Section 12.1.1, *et seq.*, did not maintain an "Approved Credit Rating" with respect to market and/or Grid Management Charge obligations, shall be assigned an Unsecured Credit Limit of $0 until the Market Participant or FTR Bidder submits to the ISO the information that is required for the ISO to make a credit evaluation regarding the Market Participant or FTR Bidder as described in Section 12.1.1.

12.1.2 Financial Security and Financial Security Amount.

A Market Participant or FTR Bidder that does not have an Unsecured Credit Limit, or that has an Unsecured Credit Limit that is less than its Estimated Aggregate Liability, shall post Financial Security that is acceptable to the ISO and that is sufficient to ensure that its Aggregate Credit Limit (*i.e.*, the sum of its Unsecured Credit Limit and Financial Security Amount) is equal to or greater than its Estimated Aggregate Liability. The Financial Security posted by a Market Participant or FTR Bidder may be any combination of the following types of Financial Security provided in favor of the ISO and notified to the ISO under Section 12.3:

(a) an irrevocable and unconditional letter of credit issued by a bank or financial institution that is reasonably acceptable to the ISO;

(b) an irrevocable and unconditional surety bond issued by an insurance company that is reasonably acceptable to the ISO;

(c) an unconditional and irrevocable guaranty issued by a company that is reasonably acceptable to the ISO;

(d) a cash deposit standing to the credit of the ISO in an interest-bearing escrow account maintained at a bank or financial institution that is reasonably acceptable to the ISO;

(e) a certificate of deposit in the name of the ISO issued by a bank or financial institution that is reasonably acceptable to the ISO;

(f) a payment bond certificate in the name of the ISO issued by a bank or financial institution that is reasonably acceptable to the ISO; or

(g) a prepayment to the ISO.

Financial Security instruments as listed above shall be in such form as the ISO may reasonably require from time to time by notice to Market Participants or FTR Bidders, or in such other form as has been evaluated and approved as reasonably acceptable by the ISO. The ISO shall publish and maintain standardized forms related to the types of Financial Security listed above on the ISO Home Page. The ISO shall require the use of standardized forms of Financial Security to the greatest extent possible.

12.1.2.1 Process for Evaluating Requests to Use Non-Standardized Forms of Financial Security.

A Market Participant or FTR Bidder that seeks permission to use a form for Financial Security other than one or more of the standardized forms posted on the ISO Home Page shall seek such permission in a written request to the ISO that explains the basis for the use of such non-standardized form. The ISO shall have ten (10) Business Days from receipt of such request to evaluate it and determine whether it will be approved as reasonably acceptable. If the ISO does not respond to such request within the ten (10) Business Day period, the request shall be deemed to have been denied. Until and unless the ISO approves the use of a non-standardized form for Financial Security, the Market Participant or FTR Bidder that submitted such request shall be required to use one of the standardized forms for Financial Security described in this Section 12.1.2.

12.1.2.2 Expiration of Financial Security.

Each Market Participant or FTR Bidder shall ensure that the financial instruments it uses for the purpose of providing Financial Security will not expire and thereby cause the Market Participant's or FTR Bidder's Aggregate Credit Limit to fall below the Market Participant's or FTR Bidder's Estimated Aggregate Liability. The ISO will treat a financial instrument that does not have an automatic renewal provision and that is not renewed or replaced within seven (7) days of its date of expiration as being out of compliance with the standards for Financial Security contained in this Section 12 and will deem the value of such financial instrument to be zero, and will draw upon such Financial Security prior to its stated expiration if deemed necessary by the ISO.

12.1.2.3 Risk of Loss of Financial Security Amounts Held and Invested by the ISO.

In accordance with the ISO's investment policy, the ISO will invest each Financial Security Amount of a Market Participant or FTR Bidder only in bank accounts, high-quality money market accounts, and/or U.S. Treasury/Agency securities unless a specific written request is received from the Market Participant or FTR Bidder for a different type of investment and the ISO provides its written consent to such alternative investment. A Market Participant or FTR Bidder that provides a Financial Security Amount that is held and invested by the ISO on behalf of the Market Participant or FTR Bidder will bear all risks that such Financial Security Amount will incur a loss of principal and/or interest as a result of the ISO's investment of such Financial Security Amount.

12.1.3 Self-Supply of UDC Demand.

Notwithstanding anything to the contrary in the ISO Tariff, a Scheduling Coordinator or UDC that is an Original Participating Transmission Owner or is a Scheduling Coordinator for an Original Participating Transmission Owner shall not be precluded by Section 12.3 from scheduling transactions that serve a UDC's Demand from –

(1) a resource that the UDC owns; and

(2) a resource that the UDC has under contract to serve its Demand.

12.1.4 Allocation of Aggregate Credit Limit for FTR Auction Participation.

An FTR Bidder may elect to allocate a portion of its Aggregate Credit Limit toward satisfying the credit requirements for participating in auctions of FTRs, as set forth in Section 36.2.6.

12.1.5 Estimated Aggregate Liability.

The ISO will periodically calculate the Estimated Aggregate Liability of each Market Participant and FTR Bidder, based on all charges and settlement amounts for which such Market Participant or FTR Bidder is

Market Usage Charge The component of the Grid Management Charge that provides for the recovery of the ISO's costs, including, but not limited to the costs for processing Supplemental Energy and Ancillary Service bids, maintaining the Open Access Same-Time Information System, monitoring market performance, ensuring generator compliance with market protocols, and determining Market Clearing Prices. The formula for determining the Market Usage Charge is set forth in Appendix F, Schedule 1, Part A of this Tariff.

Master File A file containing information regarding Generating Units, Loads and other resources.

Material Change in Financial Condition A change in or potential threat to the financial condition of a Market Participant or FTR Bidder that increases the risk that the Market Participant or FTR Bidder will be unlikely to meet some or all of its financial obligations. The types of Material Change in Financial Condition include but are not limited to the following:

(a) a credit agency downgrade;

(b) being placed on a credit watch list by a major rating agency;

(c) a bankruptcy filing;

(d) insolvency;

(e) the filing of a material lawsuit that could significantly and adversely affect past, current, or future financial results; or

(f) any change in the financial condition of the Market Participant or FTR Bidder which exceeds a five percent reduction in the Market Participant's or FTR Bidder's tangible net worth for the Market Participant or FTR Bidder's preceding fiscal year, calculated in accordance with generally accepted accounting practices.

Material Modification Those modifications that have a material impact on the cost or timing of any Interconnection Request or any other valid interconnection request with a later queue priority date.

MDAS The ISO's revenue meter data acquisition and processing system.

Meter Data	Energy usage data collected by a metering device or as may be otherwise derived by the use of Approved Load Profiles.
Meter Points	Locations on the ISO Controlled Grid at which the ISO requires the collection of Meter Data by a metering device.
Metered Control Area Load	For purposes of calculating and billing the Grid Management Charge, Metered Control Area Load is: (a) all metered Demand for Energy of Scheduling Coordinators for the supply of Loads in the ISO's Control Area, plus (b) all Energy for exports by Scheduling Coordinators from the ISO Control Area; less (c) Energy associated with the Load of a retail customer of a Scheduling Coordinator, UDC, or MSS that is served by a Generating Unit that: (i) is located on the same site as the customer's Load or provides service to the customer's Load through arrangements as authorized by Section 218 of the California Public Utilities Code; (ii) is a qualifying small power production facility or qualifying cogeneration facility, as those terms are defined in FERC's regulations implementing Section 201 of the Public Utility Regulatory Policies Act of 1978; and (iii) the customer secures Standby Service from a Participating TO

ISO TARIFF APPENDIX Z

Credit Policy and Procedures Guide

REVISION HISTORY

Revision No.	Date	Description
1.0	4/4/2003	Original Draft
2.0	8/13/2004	Second major revision – updated to include only the current credit policies and procedures.
3.0	5/6/2005	Third major revision – updated to include proposed credit policy changes.
4.0	3/6/2006	Fourth major revision – major restructuring and updating to support the new credit policy. Changes the method for determining a Market Participant's or FTR Bidder's unsecured credit limit from simply having an approved credit rating with one that bases unsecured credit as a percentage of Tangible Net Worth or Net Assets based on the type of entity and other quantitative and qualitative factors.
4.1	6/26/2006	Revision made to reflect necessary updates to the CPPG, in accordance with FERC's Notice of Extension of Time issued June 2, 2006, in Docket No. ER06-700-000. Revision to satisfy FERC Order Conditionally Accepting Tariff Revisions Governing Credit Policy issued May 12, 2006 115 FERC ¶ 61,170. Modifications included: • Deletion of Section A-1 describing the transition from the old "Approved Credit Rating Approach" and renumbering of the sections in Part A due to the passing of the transition period; • The addition of Unsecured Credit Limit calculation examples for Unrated Public/Private Corporations, Rated Governmental Entities and Unrated Governmental Entities; • Deletion of the reference to the ISO Board of Governor's ability to reduce the $250M cap on Unsecured Credit Limits; • Description of an alternative Estimated Aggregate Liability calculation method in Section C-2, Section C-3, Section C-3.1 and Appendix 1A.

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INTRODUCTION

All Market Participants and FTR Bidders requesting transmission services with the ISO will be subject to a financial review in accordance with the ISO standards for determining creditworthiness. Such review procedures are designed to protect Market Participants and FTR Bidders from undue exposure to default risk by other Market Participants and FTR Bidders.

This Credit Policy & Procedures Guide (CPPG) provides Market Participants and FTR Bidders further detailed information regarding credit-related provisions described in Section 12 of the ISO Tariff. By providing this information, the ISO hopes to provide Market Participants and FTR Bidders increased visibility into the standard, commercial credit review procedures that the ISO uses in evaluating a Market Participant's and FTR Bidder's ability to meet its financial obligations. Specifically, Market Participants and FTR Bidders will find in the CPPG:

- Information on the processes used to administer the credit policy;
- The methodology used to calculate Unsecured Credit Limits and Estimated Aggregate Liabilities;
- Acceptable forms of Financial Security and the associated processes for requesting, posting and administering Financial Security;
- Security requirements for FTR Bidders;
- Consequences for Market Participants' failure to meet their credit related obligations; and
- Other credit-related information.

Principles

The ISO's intent is to maintain the confidence of Market Participants and FTR Bidders in the ISO markets and to sustain the ISO's mission of ensuring an adequate supply of power at a reasonable cost, by equitably, consistently and strictly enforcing these credit procedures.

The ISO recognizes the importance to Market Participants and FTR Bidders that credit-related practices be transparent and comprehensive. The ISO will endeavor to maintain an accurate procedures guide that describes the methods used to conduct its credit analysis as well as other credit-related practices and administrative procedures on the ISO's Home Page.

Definitions

Any term defined in the Master Definitions Supplement to the ISO Tariff shall have the same meaning where used in this Guide. In any instances where a definition in this document conflicts with a definition in the ISO Tariff, the ISO Tariff definition will prevail. Section number references refer to sections of the CPPG unless specifically stated otherwise.

The following table defines terms used throughout this document and their associated meanings:

TERM	DEFINITION
Affiliated Entities	Legally distinct business units that are Affiliates, as defined in the ISO Tariff.
Aggregate Credit Limit (ACL)	The sum of a Market Participant's or FTR Bidder's Unsecured Credit Limit and its Financial Security Amount, as provided for in Section 12 of the ISO Tariff.
Average Rating Default Probability (ARDP)	The sum of Credit Rating Default Probabilities divided by the total number of Credit Rating Default Probabilities used.
Business Association Identification Number (BAID)	An identification code used by the ISO to represent a Market Participant or a FTR Bidder. A Market Participant may have more than one BAID.
Credit Rating Default Probability	The 5 Year Median Default Probability based on a rating agency's credit rating as listed in the Credit Rating Default Probability table in Section A-2.2 of this CPPG.
FTR Bidder	An entity that submits a bis in an FTR auction conducted by the ISO in accordance with Section 36.4 of the ISO Tariff.
Collateral	See Financial Security.
Combined Default Probability (CDP)	A Market Participant's or FTR Bidder's blended probability of default based on credit agencies' Average Rating Default Probability and MKMV Default Probability according to rules established for different entity types.
Estimated Aggregate Liability (EAL)	The sum of a Market Participant's or FTR Bidder's known and reasonably estimated potential liabilities for a specified time period arising from charges described in the ISO Tariff, as provided for in Section 12 of the ISO Tariff.
Financial Security	Any of the types of financial instruments listed in Section 12 of the ISO Tariff that are posted by a Market Participant or FTR Bidder.
Financial Security Amount	The level of Financial Security posted in accordance with Section 12 of the ISO Tariff by a Market Participant or FTR Bidder.
Material Change in Financial Condition	A change in or potential threat to the financial condition of a Market Participant that increases the risk that the Market Participant will be unlikely to meet some or all of its financial obligations. The types of Material Change in Financial Condition include but are not limited to the following: (a) A credit agency downgrade; (b) Being placed on a credit watch list by a major rating agency; (c) A bankruptcy filing; (d) Insolvency; (e) The filing of a material lawsuit that could significantly adversely affect past, current or future financial results; or any change in the financial condition of the Market Participant which exceeds a five percent (5%) reduction in

	the Market Participant's tangible net worth for the Market Participant's preceding fiscal year, calculated in accordance with generally accepted accounting practices.
MKMV Default Probability	The Moody's KMV default probability determined in accordance with step 3 of Section A-2.2 of this CPPG.
Nationally Recognized Statistical Rating Organizations (NRSRO)	National credit rating agencies as designated by the U.S. Securities & Exchange Commission.
Net Assets (NA)	For governmental or not-for-profit entities, defined as total assets less total liabilities.
Rated Governmental Entity	A municipal utility or state or federal agency that holds an issuer, counterparty or underlying credit rating by a Nationally Recognized Statistical Rating Organization.
Rated Public/Private Corporation	An investor owned or privately held entity that holds an issuer, counterparty or underlying credit rating by a Nationally Recognized Statistical Rating Organization.
Scheduling Coordinator	An entity certified by the ISO for the purposes of undertaking the functions specified in Section 4.5.3 of the ISO Tariff.
Scheduling Coordinator Identification Number (SCID)	A unique number assigned to each Scheduling Coordinator by the ISO.
Tangible Net Worth (TNW)	Total Assets minus Intangibles (e.g., Good Will) minus Total Liabilities.
Unrated Governmental Entity	A municipal utility or state or federal agency that does not hold an issuer, counterparty or underlying credit rating by a Nationally Recognized Statistical Rating Organization.
Unrated Public/Private Corporation	An investor owned or privately held entity that does not hold an issuer, counterparty or underlying credit rating by a Nationally Recognized Statistical Rating Organization.
Unsecured Credit Limit (UCL)	The level of credit established for a Market Participant or a FTR Bidder that is not secured by any form of Financial Security, as provided for in Section 12 of the ISO Tariff.

Rules of Interpretation

Unless the context otherwise requires, if the provisions of this Guide and the ISO Tariff conflict, the ISO Tariff will prevail to the extent of the inconsistency. The provisions of the ISO Tariff have been summarized or repeated in this Guide only to aid understanding.

A reference in this Guide to a given agreement, the ISO Guide or instrument shall be a reference to that agreement or instrument as modified, amended, supplemented or restated through the date as of which such reference is made.

The captions and headings in this Guide are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Protocol.

A reference to a day or Trading Day is to a calendar day unless otherwise specified.

PART A: UNSECURED CREDIT

A-1. Credit Assessment Requirements

As provided in Section 12.1.1 of the ISO Tariff, an approved Application for Unsecured Credit must be on file with the ISO for those Market Participants and FTR Bidders seeking an Unsecured Credit Limit. A copy of the Application for Unsecured Credit can be found at the ISO Home Page. An Application for Unsecured Credit must only be filed once by a Market Participant or FTR Bidder. A Market Participant or FTR Bidder should subsequently inform the ISO of changes to contact or other relevant information contained in the Application.

As provided in Section 12.1 of the ISO Tariff, each Market Participant or FTR Bidder must secure its financial transactions with the ISO by maintaining an Unsecured Credit Limit (UCL) and/or by posting Financial Security. The combination of the UCL and the Financial Security Amount represents the Market Participant's or FTR Bidder's Aggregate Credit Limit (ACL). The ISO will periodically estimate a Market Participant's liabilities and will notify it in case its ACL needs to be increased through posting of additional Financial Security. It is the Market Participant's responsibility to maintain a sufficient ACL to meet all of their estimated financial obligations.

As provided in Sections 12.1.1, 12.1.5 and 12.4 of the ISO Tariff, each Market Participant and FTR Bidder requesting or having unsecured credit is required to submit to the ISO or its agent financial statements and other information related to the overall financial health of the Market Participant or FTR Bidder that will be used in determining the Market Participant's or and FTR Bidder's creditworthiness and ability to meet its financial obligations. Market Participants and FTR Bidders are responsible for the timely submission of their latest financial statements either directly or by indicating where the material can be located on their company website and/or on the U.S. Security Exchange Commission's website as well as other information that may be reasonably necessary for the ISO to conduct its evaluation. The ISO may also rely on financial reporting agencies and the financial press as part of the credit evaluation process.

As provided in Sections 12.1.1 and 12.1.2 of the ISO Tariff, as a result of the credit evaluation, a Market Participant or FTR Bidder may be denied an Unsecured Credit Limit with the ISO. Market Participants or FTR Bidders who have been denied an Unsecured Credit Limit may submit other forms of Financial Security acceptable to the ISO (see Part B) sufficient to cover their Estimated Aggregate Liabilities.

A-1.1. Financial Statements

As provided in Section 12.1.1 of the ISO Tariff, Market Participants and FTR Bidders requesting unsecured credit are required to provide financial statements so that a credit review can be completed.

Based on availability, the Market Participant or FTR Bidder must submit a financial statement for the most recent financial quarter, as well as audited financial statements for the most recent three fiscal years, or the period of existence of the Market Participant or FTR Bidder, if shorter, to the ISO or the ISO's designee. If audited financial statements are not available, financial statements, as described below, should be submitted, signed and attested to by an officer of the Market Participant or FTR Bidder as a fair representation of the financial condition of the Market Participant or FTR Bidder in accordance with generally accepted accounting principles.

The information should include, but is not limited to, the following:

a. If publicly traded:

   i. Annual and quarterly reports on Form 10-K and Form 10-Q, respectively

   ii. Form 8-K reports, if any

b. If privately held or governmentally owned:

   i. Management's Discussion & Analysis (if available)

   ii. Report of Independent Accountants (if available)

   iii. Financial Statements, including:

      - Balance Sheet
      - Income Statement
      - Statement of Cash Flows
      - Statement of Stockholder's Equity

   iv. Notes to Financial Statements

If the above information is available electronically on the Internet, the Market Participant or FTR Bidder may indicate in written or electronic communication where such statements are located for retrieval by the ISO or the ISO's designee.

A-1.2. Rating Agency Reports

Rating agency reports and credit ratings are utilized from those entities designated by the U.S. Securities & Exchange Commission - http://www.sec.gov/answers/nrsro.htm. The ratings utilized are to be long-term credit ratings for the entity as a whole, on a stand-alone basis without the benefit of third party credit support (also known as "issuer" or "underlying" ratings). Project financing ratings or insured bond ratings do not qualify, since such credit ratings are based on the availability of revenue streams or third-party funding available to bond holders but not necessarily available to trade creditors such as the suppliers to the ISO markets. Moreover, the ISO has been advised by the credit rating agencies that these projects or insured bond ratings cannot be considered as valid measures of an entity's ability to meet its non-bond obligations.

If a Market Participant or FTR Bidder has only a "senior long-term unsecured rating" instead of an issuer rating, the rating will be deemed acceptable; however, for the Unsecured Credit Limit calculation, the rating will be lowered by one rating level to account for the risk of obligations to the ISO having a lower claim priority.

If a Market Participant or FTR Bidder has only a "short-term rating" instead of an issuer rating, the ISO will utilize an equivalent long-term rating based on the highlighted rating in the following long- and short-term rating correlation table:

S&P		Moody's	
Short Term Rating	Equivalent Long Term Ratings	Short Term Rating	Equivalent Long Term Ratings
A-1+	AAA/AA+/**AA**/AA-/A+	P1	Aaa/Aa1/Aa2/**AA3**/A1/A2/A3
A-1	A+/**A**/A-	P2	A3/Baa1/**Baa2**/Baa3
A-2	A-/**BBB+**/BBB	P3	Baa3/Ba1/**Ba2**/Ba3
A-3	BBB/**BBB-**	NP	B1/B2/B3/Caa1/**Caa2**/ Caa3/Ca/C
B	BB+/**BB**/BB-		
C	B+ / B / B- / CCC+ / **CCC** / CCC- / CC / C		
D	**D**		

The highlighted rating represents a mid-range rating in the rating agencies' long- and short-term rating correlation table. Equivalent ratings from other rating agencies may also be considered. If the short-term rating is noted as being under a credit watch with negative implications, the ISO will use the lowest long-term equivalent rating in the range for its assessment.

Rating agency reports, particularly credit ratings, are reviewed and updated minimally on a quarterly basis for those Market Participants with an Unsecured Credit Limit. They are also reviewed as needed if questions arise as to changes to a Market Participant's financial health and/or credit standing. Additionally, credit rating agency reports of downgrade/upgrades are reviewed upon notice from a rating agency to determine if the Unsecured Credit Limit should be correspondingly decreased/increased.

A-1.3. Other Qualitative and Quantitative Credit Strength Indicators

As provided in Section 12.1.1 of the ISO Tariff, the ISO may rely on information gathered from financial reporting agencies, the general/financial/energy press, and provided by the Market Participant or FTR Bidder to assess an entity's overall financial health and its ability to meet its financial obligations. Information considered by the ISO in this process may include the qualitative factors noted in FERC's Policy Statement on Electric Creditworthiness[1]:

a) Applicant's history;
b) Nature of organization and operating environment;
c) Management;
d) Contractual obligations;

[1] *"Policy Statement on Credit Related Issues for Electric OATT Transmission Providers, Independent System Operators and Regional Transmission Organizations" (Order E-40, Docket PL05-3-000, November 19, 2004), at footnote 13.*

e) Governance policies;
f) Financial and accounting policies;
g) Risk management and credit policies;
h) Market risk including price exposures, credit exposures and operational exposures;
i) Event risk; and
j) The state or local regulatory environment.

Material negative information in these areas may result in a reduction of up to 100% in the Unsecured Credit Limit that would otherwise be granted based on the methodology described in Section A-2.2. A Market Participant or FTR Bidder, upon request, will be provided a written analysis as to how the provisions of Section A-2.2 were applied in setting its Unsecured Credit Limit.

Notwithstanding the considerations described above, Market Participants and FTR Bidders are obligated to provide the ISO timely information regarding any Material Change in Financial Condition, i.e., an adverse change that could affect its or one of its affiliated entities ability to pay its debt or meet its Financial Security obligations as they become due. Examples of Material Changes in Financial Condition may include but are not limited to:

a) Credit agency downgrades;
b) Being placed on a credit watch list by a major rating agency;
c) A bankruptcy filing;
d) Insolvency;
e) The filing of a material lawsuit that could significantly and adversely affect past, current or future financial results; or
f) Any change in the financial condition of the Market Participant or FTR Bidder that exceeds a five percent (5%) reduction in the Market Participant's or FTR Bidder's Tangible Net Worth or Net Assets for the Market Participant's or FTR Bidder's preceding fiscal year, calculated in accordance with generally accepted accounting practices.

A-2. Unsecured Credit Limit Calculation

See Section 12.1.1A, 12.1.1A.1, 12.1.1A.2 and 12.1.1A.3 of the ISO Tariff.

A-3. Unsecured Credit Limit Issues for Affiliated Entities

As provided in Section 12.1.1.1 of the ISO Tariff, if any Market Participant or FTR Bidder requesting or maintaining an Unsecured Credit Limit is affiliated with one or more other entities subject to the credit requirements of Section 12 of the ISO Tariff, the ISO may consider the overall creditworthiness and financial condition of such Affiliates when determining the applicable Unsecured Credit Limit. The ISO may determine that the maximum Unsecured Credit Limit calculated in accordance with Section A-2 of this document applies to the combined activity of such Affiliates.

PART B: APPROVED FORMS OF FINANCIAL SECURITY

In accordance with Section 12.1.2 of the ISO Tariff, a Market Participant or FTR Bidder, at its own expense, may submit one or more of the following forms of Financial Security to meet its posting requirement (pro-forma templates are located at http://www.caiso.com/docs/2005/06/14/200506141656326466.html):

- An irrevocable and unconditional letter of credit issued by a bank or financial institution that is reasonably acceptable to the ISO;

- An irrevocable and unconditional surety bond issued by an insurance company that is reasonably acceptable to the ISO;
- An unconditional guaranty issued by a company that is reasonably acceptable to the ISO;
- A cash deposit in an escrow account maintained at a bank or financial institution that is reasonably acceptable to the ISO;
- A certificate of deposit in the name of the ISO issued by a bank or financial institution that is reasonably acceptable to the ISO;
- A payment bond certificate issued by a bank or financial institution that is reasonably acceptable to the ISO; or
- A prepayment to the ISO.

The ISO will maintain standard agreement forms related to the above types of Financial Security. In accordance with Section 12.1.2.1 of the ISO Tariff, the ISO will evaluate non-standard agreement forms for these types of Financial Security on a case-by-case basis. For those Market Participants or FTR Bidders that propose the use of a non-standard agreement form, the form would be subject to review and approval by the ISO Finance and Legal Departments. A Market Participant or FTR Bidder will be required to justify any proposed departures from the standard agreement form. The ISO shall have ten (10) Business Days from receipt of such form of Financial Security to evaluate it and determine whether it will be approved as reasonably acceptable. Significant departures from the standard agreement forms may not be accepted. The request is deemed denied if the ISO does not respond within ten (10) Business Days. It should be noted that if the need to post additional Financial Security was prompted by an additional Financial Security request based upon the latest Estimated Aggregate Liability calculation, the review process does not defer the Market Participant's obligation to post.

The standard that the ISO will use in establishing reasonable acceptability for issuing banks, financial institutions or insurance companies is that the institution have and maintain a minimum corporate debt rating of an "A-" by S&P, "A3" by Moody's, "A-" by Duff & Phelps, "A-" by Fitch or an equivalent short-term debt rating by any of these agencies.

In those cases where a Market Participant or FTR Bidder is a subsidiary or affiliate of another entity and would like to utilize the consolidated financial statements and other relevant information of that entity for obtaining credit, a signed corporate guaranty is required. A guarantor would be considered reasonably acceptable and a corresponding Financial Security Amount would be set based on the guarantor's credit evaluation according to the same procedures that a Market Participant or FTR Bidder would undergo as described in Section A-1.

Cash deposits held in escrow will be maintained in an interest bearing account. Interest will accrue to the Market Participant's or FTR Bidder's benefit and will be added to the Market Participant's or FTR Bidder's prepayment account on a monthly basis. Should a Market Participant or FTR Bidder become delinquent in payments, the Market Participant's or FTR Bidder's outstanding account balance will be satisfied using deposited funds. The Market Participant or FTR Bidder must take care to replenish used funds to ensure that it maintains a suitable level of cash to meet future financial obligations.

The ISO Tariff also permits Market Participants to make a prepayment of an upcoming bill due to the ISO. A prepayment may be used as a form of Financial Security. Prepayments to the ISO will be held in an interest-bearing account or another investment acceptable to the Market Participant and the ISO, and interest on the investment will accrue at the rate as provided for in the investment. Interest will accrue to the Market Participant's benefit and will be added to the Market Participant's prepayment account on a monthly basis. Due to the additional administrative effort involved in tracking and posting interest on such prepayments, the use of this option is not encouraged.

As provided in Section 12.1.2.3 of the ISO Tariff, the ISO shall not be held liable for any losses of funds held and invested by the ISO on the Market Participant's or FTR Bidder's behalf. Market Participants and FTR Bidders agree to bear any risk of loss of principal and/or interest of such funds. Funds will only be invested in bank accounts, high-quality money market funds or U.S. Government securities according to the ISO investment policy, unless otherwise agreed to by the Market Participant or FTR Bidder and the ISO.

In accordance with Section 12.1.2.2 of the ISO Tariff, each Market Participant or FTR Bidder shall ensure that the financial instruments it uses for the purpose of providing Financial Security will not expire and thereby cause the Market Participant's or FTR Bidder's Aggregate Credit Limit to fall below the Market Participant's or FTR Bidder's Estimated Aggregate Liability. The ISO will treat a financial instrument that does not have an automatic renewal provision and that is not renewed or replaced within seven (7) days of its date of expiration as being out of compliance with the standards for Financial Security and will deem the value of such financial instrument to be zero, and will draw upon such Financial Security prior to its stated expiration if deemed necessary by the ISO.

PART C: ESTIMATED AGGREGATE LIABILITY CALCULATION

This section describes the approach used by the ISO to determine the Financial Security posting requirements for Market Participants. Different approaches are used for new Market Participants (those without experience data with the ISO or who have been previously inactive) and for Market Participants with such data.

C-1. New Market Participants

A new Market Participant (or a Market Participant that has previously been inactive) is required to post an initial Financial Security Amount to cover a minimum of 14 days of estimated obligations as well as additional Financial Security as obligations are incurred.

This posting requirement is based on anticipated scheduling/trading practices and overall volumes. The ISO has prepared a simple template (Appendix 2) that may be used to determine an initial posting requirement. The template is an Excel worksheet located at the New Market Participant Security Calculation link http://www.caiso.com/docs/2005/06/14/200506141656326466.html.

The ISO will monitor a Market Participant's ongoing security requirement by comparing actual obligations against the estimated obligations to determine if an additional Financial Security Amount is required using the method described in Section C.2. This approach permits a Market Participant to increase its Financial Security Amount as often as weekly until the time elapsed from initial participation equals the length of the ISO payment cycle. At that time, the Financial Security Amount should be sufficient to cover 102 days transactions on an ongoing basis (The "Level Posting Period", as described in the subsequent section).

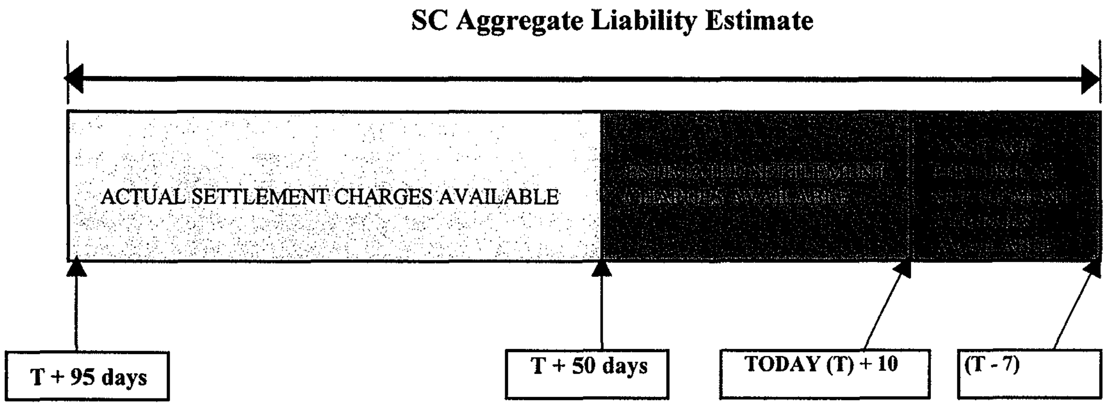
C-2. Other Market Participants - Scheduling Coordinator Aggregate Liability Estimate (SCALE) and Estimated Aggregate Liability (EAL) Overview

The Scheduling Coordinator Aggregate Liability Estimate (SCALE) application or an alternative method is used to calculate a Market Participant's Estimated Aggregate Liability, which is the estimate of unpaid obligations for a specified time period arising from charges described in the ISO Tariff.

The sum of a Market Participant's Unsecured Credit Limit and its Financial Security Amount is intended to provide coverage of not less than 100% of its Estimated Aggregate Liability. For a Market Participant that must post Financial Security because its Unsecured Credit Limit is not equal to or greater than its Estimated Aggregate Liability, the figures generated in determining the Estimated Aggregate Liability are normally the basis for determining each Market Participant's Financial Security posting requirement.

At any given time, the number of trade days of unpaid obligations to the ISO, based on the preliminary payment calendar, will be from 60-95 days, depending on the date of the last cash settlement. To avoid frequent changes to Financial Security posting requirements during the month and to allow a sufficient cushion of coverage given the allowed five day response time for Market Participants to post additional Financial Security, a "Level Posting Period" equal to 102 days is used as the basis for all Financial Security posting requirements.

The charges contributing to the Estimated Aggregate Liability are all charges outlined in the ISO Tariff. The Estimated Aggregate Liability calculation incorporates outstanding obligations, actual settlement charges, estimated settlement charges (calculated ten days after the trade date), and average historical settlement charges. The illustration below provides a representative example of what periods the different settlement charges cover in the Estimated Aggregate Liability calculation.



NOTE: The *Average Historical Settlement Charges Available* could vary between seven (7) to fourteen (14) days.

Level Posting Period EALs are calculated as follows:

1. Aggregate all outstanding, actual settlement, predictive settlement and average historical predictive obligations through a specified calendar date. For example, if the EAL analysis was conducted on 8/1/2005, the Level Posting Period would begin on June 1, 2005 and end on August 13, 2005. The following obligations would be included in the analysis:

   - Outstanding AR/AP Obligations – Any open AR/AP balances, excluding balances covered by bankruptcies.

   - Final Invoice Obligation – Those obligations not paid on the preliminary invoice.

   - Actual Settlement Obligations – June 1, 2005 to June 9, 2005.

   - Predictive Settlement Obligations – June 10, 2005 through July 25, 2005.

   - Predictive Monthly Settlement Obligations - June 1, 2005 through July 25, 2005. For month-end Charge Types, daily amounts will be calculated to reflect those amounts as they are accrued.

   - Forecasted Settlement Obligations – July 26, 2005 through August 13, 2005 based on the average predictive settlement obligations from July 11, 2005 through July 25, 2005.

2. Calculate the daily average obligation by dividing the aggregate obligations calculated in step 1 above by the total number of days between June 1, 2005 and August 13, 2005.
3. Multiply the daily average obligation calculated in step 2 above by the level posting period days (i.e., 102 days).

Level Posting Period Days – The maximum number of days outstanding for the calendar year, based on the preliminary payment calendar, plus seven days for administrative purposes; currently set at 102 days.

Predictive Settlement Obligations – The obligations calculated by the settlement system using estimated generation, load and intertie MWhs (see Appendix 1 for a description of the MWh estimation process).

For a Market Participant that maintains multiple BAID numbers, the Estimated Aggregate Liability of the Market Participant as a legal entity will be calculated by summing the Estimated Aggregate Liabilities for all such BAID numbers and comparing the sum of the Estimated Aggregate Liabilities to the Aggregate Credit Limit of the Market Participant.

C-3. Adjustments to SCALE and Use of other ISO Data to Generate Estimated Aggregate Liability

The SCALE application provides liability estimates for Market Participants that, from an aggregate perspective as well as for most individual Market Participants, are the best liability estimates available to the ISO. Prior to the use of this approach, the ISO used a mechanical projection of available settlements data over the "blind spot" for each participant for which settlements data was not yet available. That approach did not consider changes in activity levels, or most changes in market prices.

Despite the significant improvement in accuracy from the use of the SCALE approach, there are times at which the ISO or a Market Participant observes that the SCALE application may be producing a liability estimate that appears to be inaccurate. The ISO has noted this situation when certain market parameters change such as the introduction of new market charges during Phase 1B of MRTU in 2004and during the C1 Control Area Footprint change in December 2005. In such instances, the ISO will attempt to revise the SCALE algorithms to appropriately reflect such changes, and may make manual adjustments to the SCALE results to reflect known issues. Alternatively, as a result of these or other causes, the SCALE application may also be considered to be temporarily inoperative by the ISO, and another approach to calculating liabilities must be used. This approach may also be used when:

- It becomes necessary to monitor the liabilities of a Market Participant on a more frequent basis than the SCALE application provides for;
- The ISO has determined that SCALE is not producing accurate Estimated Aggregate Liabilities for one or more Market Participants; or
- In situations that arise that the automated SCALE application cannot readily accommodate, e.g., a Market Participant bankruptcy where new BAIDs are established. In such a case, the previous activity levels in the "old" BAIDs may be representative of ongoing activities levels, but this data is not readily accessible to the SCALE application to estimate liabilities for the new post-bankruptcy BAIDs.

Market Participants may also recommend changes to the liability estimates produced by the SCALE application or an alternative ISO calculation through the dispute procedures noted in Part E.

C-3.1 Calculation of Estimated Aggregate Liability Using Available Settlements Data

If the ISO determines that the SCALE application is inoperative or producing liability estimates that are of questionable accuracy, the ISO will use an alternate approach to calculate Estimated Aggregate Liabilities for Market Participants. This backup approach will rely on available settlements data.

As noted in Section C-2, the Estimated Aggregate Liability amount consists of those trade days for which actual settlement charges are available and trade days for which actual settlements charges are not yet available. This alternative approach relies on a different method for estimating charges for the trade days for which actual settlements data is not available. Specifically, estimated charges for these trade dates are estimated based on average daily charges for trade dates for which settlements data is available.

The alternative EAL method differs from the SCALE method only in the manner it estimates data to represent liability for the "blind spot" in the payment calendar. It captures the same "actual" data as in the SCALE approach, specifically:

- Outstanding AR/AP Obligations – Any open AR/AP balances, excluding balances covered by bankruptcies.
- Final Invoice Obligation – Those obligations not paid on the preliminary invoice.
- Actual Settlement Obligations – Preliminary Settlements obligations up to the date of the latest Preliminary Statement.

The 102-day Level Posting Period is utilized in both SCALE and the alternative EAL approach. Depending on when the latest Preliminary and Final invoices were paid, there will be between about 8 and 40 days of unpaid actual Preliminary Statements. There can be an additional 20 to 30 days of unpaid Final statements as well, though those days are not counted toward the 102-day total because they are only incremental and are not representative of a complete day of activity.

The remainder of days in the 102-day Level Posting Period for which unpaid Preliminary Statements are not available must be estimated. The estimate is derived by taking a daily average of published, actual charges and multiplying by the number of remaining days in the Level Posting Period. The daily average is based on all outstanding unpaid Preliminary and Final activity and an additional amount of days (as described subsequently) of historical Final Statement activity. Due to the difficulty and pitfalls of gauging "blind spot" activity on historical statements, three methods will be utilized, varying only by the number of historical months used in the derivation of daily-average amounts.

The three methods will use the same outstanding charges (i.e., available Preliminary and Final activity) but will also consider a total of either one, two, or twelve months of historical data. The process of estimation is a relatively simple one, though each Market Participant's activity must be separated into Daily Market, Monthly Market, and GMC activity and estimated separately due to the difference in charge frequency. Appendix 1A contains additional details and an example calculation.

Once a daily average amount is derived for each market type and for each EAL method, they will be grouped by method and multiplied by the number of days remaining to fill the 102-day Level Posting Period. Thus, three Level Posting Period Estimated Aggregate Liability calculations will result. FERC Fees and other outstanding AR/AP balances will be added to each figure and the sum for each method will be divided by 0.9 in order to account for the ISO's stated policy for Financial Security of not more than a 90% utilization rate. Any shortfall between the 90%

utilization amount of the EAL and the posted Financial Security will be considered as a potential request for additional Financial Security.

Any Market Participant that would tentatively be required to post additional Financial Security based on the Estimated Aggregate Liability calculation using any of these three methods is flagged for additional review. ISO staff will review the preliminary liability estimates resulting from the use of 12 months, 2 months and 1 months of historical settlements data. Such information is reviewed in a numeric and graphical format. ISO staff aims to select the method that best represents Market Participant activity for which settlements data is not yet available. If ISO staff determines that the Estimated Aggregate Liability for the Market Participant exceeds 90% of the Market Participant's Aggregate Credit Limit, the ISO will request additional Financial Security and will provide the supporting calculation used for the Estimate Aggregate Liability amount.

C-4. Special Circumstances

The ISO's goal is to ensure that active as well as inactive Market Participants (to the extent they are not covered by their Unsecured Credit Limits) post adequate Financial Security to cover all known and reasonably estimated potential liabilities. Various charges and collateral issues sometimes arise which require special consideration.

The ISO intends to include the following charges in the Estimated Aggregate Liability calculation, if and when such data is available, and will require Market Participants to post Financial Security accordingly. The ISO's planned Settlement and Market Clearing system upgrade is scheduled for implementation in November 2007, at which time improved data for certain of these transactions is anticipated to be available.

- **Daily Adjustments and Disputes** – Charges associated with daily adjustments and disputes that are regularly calculated by the settlement system will be included in the liability estimation calculations as the charges are calculated. There should generally be no need to attempt to forecast these amounts since they are typically relatively small and usually affect many Market Participants.

- **Refund Orders** – The ISO will assess its ability to reasonably calculate the charges associated with a refund before the ISO's settlement system is rerun. If the ISO can reasonably apportion the refund to specific Market Participants, it will include the amounts in the liability estimation process and request security accordingly. If the ISO deems that complexities of a refund order preclude it from reasonably assessing the liabilities, it will not make a security request until the refund is processed through the settlement system. However, the ISO will make available an aggregate forecast of the refund liabilities, if at all possible, to Market Participants for informational purposes only.

- **Good Faith Negotiations** – In general, Good Faith Negotiations (GFN) tend to affect the transactions of an individual Market Participant, which in turn may affect a few or many other Market Participants. Transactions associated with GFNs will be handled in the same manner as transactions associated with Refund Orders.

Other special circumstances include:

- **Debtor/Creditor Market Participants leaving the market or incurring substantial activity level changes** – Those Market Participants that are exiting the ISO markets, or that have changed their business practices resulting in substantially reduced participation in the ISO markets, will be required to maintain a Financial Security Amount at least equal to five percent (5%) of the absolute value of the peak monthly net charges from their beginning participation date to their last participation date or the date the substantial change occurred. The ISO will use this Financial Security posting requirement as a base amount and reserves the right to increase or decrease the base amount depending on the number of settlement reruns in the queue and the estimated value of those settlement reruns. The five percent (5%) residual Financial Security posting will be retained for a period of one year, unless specific circumstances warrant a change in this retention period (e.g., pending FERC ordered adjustments).

- **Past due amounts owed to SCs are not considered part of an SC's security posting**. This treatment is necessary if the ISO is to maintain the integrity of the overall settlement system, which requires that each month be settled separately. Each trade month consists of creditors and debtors whose receivables and obligations vary over time. To the extent that amounts owed to an SC related to defaults in previous months are included in the liability estimation calculation and permitted to reduce that SC's current posting requirements, the ISO will have no means to enforce the payment obligation of that SC to pay current invoices rather than refuse payment in an attempt to recoup previous past-due amounts owed to them.

C-5. Estimated Aggregate Liability Review

As provided in Section 12.4 of the ISO Tariff, Estimated Aggregate Liabilityis used to determine Financial Security posting requirements and is to be used as the basis for additional Financial Security requests, particularly when a Market Participant's calculated liability estimate exceeds 90% of its Estimated Aggregate Liability.

A Market Participant has five (5) business days to review the request for additional Financial Security and submit proposed changes that must be agreed to by the ISO. Within the five (5) business days, the Market Participant must either demonstrate to the ISO's satisfaction that the ISO's Financial Security request is all or partially unnecessary, or post the required Financial Security Amount calculated by the ISO. If the ISO and Market Participant are unable to agree on the appropriate level of Financial Security during the five (5) business day review period, the Market Participant must post the additional Financial Security and continue the dispute procedure as described in Part E. Any excess Financial Security amounts will be returned to the Market Participant if the dispute process finds in favor of the Market Participant.

C-6. Financial Security Posting Requirements

This section describes the process for determining when additional Financial Security is required and how the request for additional Financial Security is communicated to the Market Participant.

C-6.1. Financial Security Requests

As described above, to the extent a Market Participant's Unsecured Credit Limit is less than its Estimated Aggregate Liability, the Market Participant must post a Financial Security Amount. The determination of a required/recommended Financial Security Amount is based on a Market Participant's most recent ISO Estimated Aggregate Liability calculation. The ISO recommends that each Market Participant maintain an Aggregate Credit Limit such that its Estimated Aggregate Liability does not exceed 90% of its Aggregate Credit Limit. The calculation is as follows:

Recommended Aggregate Credit Limit = (Estimated Aggregate Liability) / (0.90)

The 90% level is specified in the ISO Tariff and is used as the basis for the Financial Security Amount recommended by the ISO. A Market Participant must provide an additional Financial Security Amount when its obligations reach 100 percent of its Aggregate Credit Limit. However, the ISO recommends providing additional Financial Security at the 90% level, because when a

Market Participant's Estimated Aggregate Liability exceeds 100% of its Aggregate Credit Limit, the ISO may be required to impose enforcement actions.

The Estimated Aggregate Liability calculated by the ISO for a Market Participant may fluctuate, and at times this may result in swings in Financial Security posting requirements. To the extent that the Estimated Aggregate Liability exceeds the Aggregate Credit Limit at any time, a Market Participant may be subject to enforcement actions including not being entitled to submit a schedule to the ISO. Thus, the ISO recommends that Market Participants maintain a margin of Aggregate Credit Limit above their maximum anticipated Estimated Aggregate Liability.

The Estimated Aggregate Liability is updated weekly for each Market Participant and is used to determine if additional Financial Security needs to be posted. Based on a Market Participant's Aggregate Credit Limit utilization level (which is the EAL divided by Aggregate Credit Limit), the following actions will be taken at each level listed:

Aggregate Credit Limit Utilization %	**Action**
< 50%.	No notice or action taken.
≥50% and < 70%	Market Participant notified for information only.
≥70% and < 90%	Market Participant notified of a *recommended* security increase. The ISO recommends, but does not require, that an additional posting is made to maintain the SCALE at or below 70%.
≥90%	The ISO *requests* that a Market Participant increase the posting amount within five business days so that the security utilization does not exceed 90 percent. If the Market Participant takes no action in response to the recommendation to post additional security, upon reaching 100 percent security utilization, they will be subject to the enforcement provisions of the ISO Tariff as described in Section D, Enforcement, including potential rejection of schedules.

C-6.2. Financial Security Requests Communication

Each week the ISO Finance calculates each Market Participant's Estimated Aggregate Liability and notifies the ISO's customer service representatives of the Estimated Aggregate Liability amount and any recommended increases in the Market Participant's Financial Security Amount. These communications contain specific information regarding the amount each Market Participant needs to post Financial Security in order to maintain the recommended 90% ratio described above as well as the minimum amount needed so that the Market Participant's Estimated Aggregate Liability does not exceed its Aggregate Credit Limit.

The ISO customer service representative is to contact any Market Participant for which an increase in Financial Security is recommended or required within one (1) business day.

The customer service representative should copy ISO Finance on all security related client correspondence. The ISO customer service representatives will communicate with the ISO Finance and Market Participants to address questions related to the request.

A required increase in the Financial Security Amount is to be resolved within five (5) business days. Each Market Participant not in compliance with the requirement that its Estimated Aggregate Liability be less than its Aggregate Credit Limit is subject to enforcement procedures as described in Part D.

C-6.3. FTR Auction Financial Security Requirements

The credit requirements related to participation in the ISO's annual Firm Transmission Rights (FTR) are the same as those for other market obligations. Auction requirements are set forth in the FTR Bidders Manual published annually by the ISO. A FTR Bidder's ACL must be sufficient to not only cover ongoing estimated liabilities but also the liabilities resulting from potential winning bids. Each FTR Bidder may choose to designate a portion of their UCL and/or posted Financial Security specifically for the FTR auction by notifying the ISO of the FTR Bidder's intent. Alternatively, the FTR Bidder may choose to post additional Financial Security solely to cover their participation in the FTR auction by notifying the ISO of the purpose for the additional Financial Security.

PART D. ENFORCEMENT

Following the date on which a Market Participant commences trading, if a Market Participant's Estimated Aggregate Liability, as calculated by the ISO, at any time exceeds its Aggregate Credit Limit, the ISO may take any or all of the following actions in accordance with Section 12.5 of the ISO Tariff:

(a) The ISO may withhold a pending payment distribution.

(b) The ISO may limit trading, which may include rejection of Schedules and/or limiting other ISO market activity. In such case, the ISO shall notify the Market Participant of its action and the Market Participant shall not be entitled to submit further Schedules to the ISO until the Market Participant posts an additional Financial Security Amount that is sufficient to ensure that the Market Participant's Aggregate Credit Limit is at least equal to its Estimated Aggregate Liability.

(c) The ISO may require the Market Participant to post an additional Financial Security Amount in lieu of an Unsecured Credit Limit for a period of time.

(d) The ISO may restrict, suspend, or terminate a Market Participant's Service Agreement.

In addition, the ISO may restrict or suspend a Market Participant's right to schedule or require the Market Participant to increase its Financial Security Amount if at any time such Market Participant's potential additional liability for Imbalance Energy and other ISO charges is determined by the ISO to be excessive by comparison with the likely cost of the amount of Energy scheduled by the Market Participant.

PART E. DISPUTE PROCEDURES

The ISO provides Market Participants the ability to dispute the Estimated Aggregate Liability calculated by the ISO and, as a result, the ISO may reduce or cancel a requested Financial Security adjustment. The following steps are required for a Market Participant to dispute a Financial Security request resulting from the ISO's calculation of Estimated Aggregate Liability:

1. Request by the Market Participant to review the ISO calculation.

2. Reasonable and compelling situation presented, as determined by the Market Participant's ISO client representative.

3. Documentation of facts and circumstances that evidence that the ISO's calculation of Estimated Aggregate Liability results in an excessive and unwarranted Financial Security posting requirement.

    a. Examples include:
        i. Issues related to non-recurring retroactive charges.

ii. Demonstrable changes in expected obligations as a result of physical changes (new capacity, loss of customers).
iii. Other issues.

b. Presentation of a reasonable alternative Estimated Aggregate Liability.

4. Approval by the ISO Manager and/or Director of Customer Services and Industry Affairs and approval by the ISO Treasurer.

5. The ISO may decline to adjust the initial Estimated Aggregate Liability, as calculated using the SCALE application, if the Market Participant has had Financial Security shortfalls in the past 12 months (i.e., it has been shown that the Market Participant's Aggregate Credit Limit at times during the preceding 12 months has been insufficient to cover the Market Participant's Estimated Aggregate Liability).

   In no such case shall an ISO request for increased Financial Security remain outstanding for more than five (5) business days. Either the above process is to be completed within five (5) business days from the date of the ISO request for additional Financial Security, or the Market Participant is to post additional Financial Security within the five (5) business days and continue this process, which may result in a return of posted Financial Security back to the Market Participant if the results of the dispute process are found to favor the Market Participant.

   Factors for consideration in the event these procedures are utilized include:

   Weighing the risk of using the lower figure to the potential detriment of market creditors if the Market Participant is under-secured and defaults, against the desire not to impose additional potentially unwarranted costs on a Market Participant.

   Equity and consistency of treatment of Market Participants in the dispute procedure.

   The evidentiary value of the information provided by the Market Participant's in the dispute procedure.

APPENDIX 1: SCHEDULING COORDINATOR AGGREGATE LIABILITY ESTIMATE MEASUREMENT FILE DEVELOPMENT PROCESS

INTRODUCTION

The following information provides background and an overview of the operation of the SCALE liability estimation process. This section focuses on the measurement file development process to develop proxies for missing meter data. This allows the ISO to use available operational to estimate current liabilities.

DEVELOPMENT PROCESS

Defined Terms

EMS Utility Distribution Control Area (UDC) Load – The ISO control area load MWhs aggregated at the PG&E, SCE and SDG&E level.

Generation Deviation Allocation Flag – The generation deviation allocation flag denotes which Market Participant load profiles are allocated generation deviation/Unaccounted for Energy (UFE) MWhs.

Load Profiles

Annual Load Profile – Load profile developed from actual meter MWhs for the period of Trade Date (T) + 50 to T+415.

Current Load Profile – Load profile developed from actual meter MWhs for period of T+50 to T+80.

Schedule Load Profile – Load profile developed from scheduled meter MWhs for the period of T+1 to T+49.

Seasonal Load Profile – Load profile developed from actual meter MWhs for the prior season.

Short-Term Schedule Load Profile - Load profile developed from scheduled meter MWhs for the period of T+1 to T+14.

Load Profile Adjustment Percentage – The load profile adjustment percentage is calculated as the percentage variance between actual metered load and allocated EMS UDC Load. This percentage is utilized to develop actual metered load, utilized by the settlement system, from allocated EMS UDC Load.

Meter Load to Scheduled Load Adjustment Percentage – The meter load to scheduled load adjustment percentage is calculated as the variance between actual meter load and scheduled load. The percentage is utilized to create representative meter load from scheduled load.

Off-Peak – This term represents the day of the week to which a load profile corresponds. The Off-Peak days of the week include: Saturday, Sunday and Holidays.

On-Peak –This term represents the day of the week to which a load profile corresponds. The On-Peak days of the week include: Monday, Tuesday, Wednesday, Thursday and Friday.

Other Adjustment Percentage – For a Market Participant whose load profiles and adjustment percentages do not reflect its load, the other adjustment percentage approach is utilized. This approach is only rarely used.

Use Meter Load to Scheduled Load Adjustment Percentage Flag – This flag identifies those calculated Market Participant load profiles that are subsequently adjusted by the meter load to scheduled load adjustment percentage.

Use Scheduled Load Flag – This flag identifies those Market Participants where utilization of scheduled load a proxy for metered load is appropriate.

Market Participant Liability Estimations

In 2003, the focus of the Scheduling Coordinator Aggregate Liability Estimation (SCALE) project was on the development of settlement statements seven days after the trade date using a system that is essentially a copy of the settlement system with missing load, generation and intertie data derived from a combination of meter, telemetry and estimated data from other systems. In order for the SCALE application to effectively and accurately calculate participant liabilities, three essential data inputs are needed: load, generation and intertie MWhs. It was determined that 75 to 80 percent of generation and intertie MWhs are derived from the ISO polled meter data stored in the ISO's Data Warehouse. However, the load MWhs were not available until 45 days after the trade date. Thus, the main focus of the SCALE project team's efforts to was on the estimation of load data. The analysis conducted produced the following findings:

1. Utilization of current actual meter load profiles, which are based on meter data that is 50 to 80 days old, to allocate EMS UDC Load, did not alone accurately reflect a Market Participant's current position in the market. For example, a Market Participant's load profile based on past data would not accurately reflect a situation where it has transferred its load/customers to another Market Participant.
2. Utilization of annual load profiles to allocate EMS UDC Load in many instances did not reflect load increases or decreases that appear over time. For example, since September 2001, certain Market Participants have acquired a substantial amount of load from other Market Participants, but the annual load profiles generated did not reflect this load shift.
3. Utilization of schedules to estimate system load and to derive participant liabilities did not reflect the actual daily system load or participant imbalances. This was mainly due to a Market Participant's ability to schedule whatever amount of load that it chooses. Analysis of Market Participant scheduling patterns has shown that many Market Participants' schedules are closely related to their actual metered quantities. However, Market Participant scheduling practices may not be consistent.
4. After conducting an analysis of the load estimation methodologies above, it was determined that all three methods should be combined to provide for a more accurate load estimate. The methodology, outlined below, includes the information gathered through the liability estimation process.

Additional areas that the SCALE team worked on were the estimation of the remaining 15 to 25 percent of missing generation and intertie MWhs. The team developed a methodology to estimate the remaining generation and intertie MWhs, and an explanation of the methodology is outlined below.

Load Estimation Methodology

As mentioned in the previous section, three approaches were considered to estimate load MWhs and each had significant shortcomings that precluded them from being utilized exclusively. By utilizing each of the methodologies in conjunction with each other, a proxy for metered load was developed that more closely represented each participant's position in the market. The following are the steps created to develop a Market Participant's load estimate.

1. **Develop Load Profiles** - Development of each Market Participant's "On-Peak" (Monday through Friday) and "Off-Peak" (Saturday, Sunday and Holidays) hourly load profiles by UDC area. The load profiles developed consist of:
   - Annual Load Profiles,
   - Seasonal Load Profiles,
   - Current Load Profiles,
   - Scheduled Load Profiles, and
   - Short-Term Scheduled Load Profiles.
2. **Select Load Profile** – Once the load profiles are developed for a given time period, the next step in the load estimation process is to determine which load profile (Annual, Seasonal, Current etc) most closely reflects a Market Participant's actual position in the market. For example, the EMS UDC Load from 12/16/2002 to 1/15/2003 is allocated to each of the load profiles listed above. Next, the allocated MWhs for each set of profiles is compared against the actual metered MWhs for the same time period 12/16/2002 to 1/15/2003. The load profile that best represents a Market Participant's actual meter MWhs is utilized for subsequent load allocations.
3. **Calculate / Select Load Profile Adjustment Percentages and Load Profile Application Flags** – The following adjustment percentages and load profile application flags, which are defined above, are calculated or selected to be utilized in subsequent calculations:
   - Load Profile Adjustment Percentage,
   - Meter Load to Scheduled Load Adjustment Percentage,
   - Other Adjustment Percentage,
   - Use Meter Load to Scheduled Load Adjustment Percentage Flag, and
   - Use Scheduled Load Flag.

   (note: the results of steps 1 thru 3 are utilized for a designated period, such as 30 days)

4. **Validate EMS UDC Load** – EMS UDC Load validation for each trade date is conducted to ensure that the data derived from EMS does not include significant outlier MWhs. The calculation includes comparing an historical EMS load profile (T+1 to T+50) to the current trade date load profile. Where the current load profile MWh does not meet the 15 percent tolerance level, the current EMS MWh value is adjusted to within tolerance.

5. **Allocate EMS UDC Load** – Next, the ISO will utilizes the selected load profile for determining the MP's hourly load to allocate EMS UDC Load. The following steps are required for the allocation of EMS UDC Load:
   i. The EMS UDC Load is allocated to MP's based on the following formula (all calculations are conducted on an hourly basis):
      - Where Use Schedule Load Flag = "True"; Scheduled Load * (1+Meter Load to Scheduled Load Adjustment Percentage)

- Where Use Schedule Load Flag = "False" and Use Meter Load to Scheduled Load Adjustment Percentage Flag = "True", EMS UDC Load * Selected Load Profile / 1000 * (1+ Load Profile Adjustment Percentage) * (1+ Other Adjustment Percentage) * (1+ Meter Load to Scheduled Load Adjustment Percentage),
- Else, EMS UDC Load * Selected Load Profile / 1000 * (1+ Load Profile Adjustment Percentage) * (1+ Other Adjustment Percentage)

ii. The value of Hourly EMS UDC Load * Selected Load Profile is divided by 1000 because the hourly load profile percentages derived are multiplied by 1000 for data representation purposes.

6. **Calculate Generation Deviation / Unaccounted for Energy (UFE) Quantity by UDC** - For each UDC, a Generation Deviation / UFE calculation is completed, which provides a residual amount of Load MWhs that are allocated to designated Market Participants on a *pro rata* basis. The purpose of the calculation and load MWh allocation is to minimize Charge Type 406 UFE charges. The UFE calculation is outlined in the settlement and billing protocols under CT 406. The allocation process is as follows (all calculations are conducted on an hourly basis):

   i. Where Generation Deviation Allocation Flag = "False", MP Load + (UDC UFE *MP Load / Total UDC Load where Generation Deviation Allocation Flag = "False").

7. **Load Distribution and Upload** – Upon deriving the load MWhs to be utilized in the settlement statement calculation, the MWhs are distributed to each Market Participant's valid resources IDs in the following manner and then uploaded into the SCALE application.

   i. Development of a list of valid metered and scheduled resources utilized by each MP over a given time period (T+1 to T+80).

   ii. Allocate the estimated load to the valid resources on a weighted basis by hour. For all resources that have both metered quantities and scheduled quantities, metered quantities will be utilized for weighting purposes. Resources that have scheduled quantities and no metered quantities are assumed to be recently utilized resources and scheduled quantities will be used for weighting purposes.

   iii. Allocate the resource quantities calculated above evenly across the six sub-hour interval levels for upload into the measurements table in the SCALE application.

Generation Estimation Methodology

As mentioned above, at T+7 approximately 15 to 25 percent of generation meter data is not available. The following is an explanation of the methodology utilized to develop a proxy for the missing generation meter data.

The ISO determined that the missing generation data consists of the following:

1. The ISO polled unit MWhs that were either not available at T+7 or were being worked on by the metering department at the time of the T+7 data push, and
2. Qualifying Facility (QF) unit and other non-polled unit MWhs.

The process for determining the remaining generation data is based on EMS and schedule data.

1. **Download T+7 Meter Data Acquisition System (MDAS) Generation Data** – For the trade date being worked on, all generation data available in the T+7 measurement table is downloaded for analysis purposes.
2. **Download Scheduled Generation Data** – From Market Operation's Scheduling Infrastructure (SI) database, download hourly scheduled generation by resource ID.
3. **Download Real Time (RT) Dispatch Data** – From Market Operation's SI database, download hourly real time dispatched data by resource ID.
4. **Download EMS Data from Plant Information (PI)** – A table has been developed from information provided by Market Operations that contains approximately 800 generation resource IDs mapped to the appropriate PI tags. Using the PI tags, generation unit hourly EMS MWhs are downloaded from PI.
5. **Download Actual Meter & Schedule Data** – From the Data Warehouse, download actual metered and scheduled quantities for a period of T+50 to T+80 for analysis purposes.
6. **Utilization of T+7 MDAS Generation Data** – Where T+7 MDAS generation data exists for a particular resource, even if the measurement quantity is zero, use this value. (Between 75 and 85 percent of all generation MWhs.)
7. **Utilization of EMS Generation Data** – Where MDAS data is not available and Dispatched Generation MWh >0 and EMS MWh >0, use EMS MWhs. (Approximately 18.75 percent of all generation MWhs.)
   a. Dispatched Generation MWh = Scheduled Generation MWh + RT Dispatched Generation MWh
   b. Where the EMS MWh * 1.15 is greater than the maximum generation capacity of the unit utilize the maximum generation capacity of the unit.
8. **Utilization of Dispatched/Scheduled Generation MWhs** – Where MDAS data is not available and Dispatched Generation MWh >0 and EMS MWh = 0, use Adjusted Dispatched / Scheduled Generation MWh. (Approximately 6.25 percent of all generation MWhs.)

   a. Adjusted Dispatched Generation MWh =
      i. For all Dispatched / Scheduled Generation MWhs >=1 MWh, Dispatched / Scheduled Generation MWhs* 1+(Hourly Metered vs. Scheduled Generation Variance Percentage)
   b. Resource Historical Metered vs. Scheduled Variance Percentage (T+50 to T+80) = (average hourly metered MWh – average hourly scheduled MWh) / average hourly scheduled MWh
9. **Upload the Developed MWhs to the SCALE Application** - Allocate the resource quantities calculated above evenly across the six sub-hour interval levels for upload into the measurements table in the SCALE application.

Intertie/Intratie (TIE) Estimation Methodology

Currently, 75 to 80 percent of the TIE data is available from the ISO polled meters. The process for determining the remaining intertie MWhs is based on the utilization of EMS data and allocated load MWhs derived in the Load Estimation Methodology for various intraties.

1. **Download T+7 MDAS Intertie Data** – For the trade date being estimated, all TIE data available in the T+7 measurement table is downloaded for analysis purposes.
2. **Download EMS Data from PI** – A table has been developed from information provided by Market Operations that contains TIE resource IDs mapped to the appropriate PI tags. Using the PI tags, TIE hourly EMS MWhs are downloaded from PI.
3. **Utilization of T+7 MDAS Intertie Data** – Where T+7 MDAS TIE data exists, use MDAS data. (Approximately 84 percent of all TIE MWhs.)
4. **Utilization of EMS Intertie Data** – Where MDAS data is not available use the EMS data. (Approximately 13 percent of all TIE MWhs.)
5. **Utilization of Load Data** – For intratie IDs, utilize the amount calculated as load as the intratie MWhs where appropriate. (Approximately 3 percent of all TIE MWhs.)
6. **Upload the Developed MWhs to the SCALE Application** - Allocate the resource quantities calculated above evenly across the six sub-hour interval levels for upload into the measurements table in the SCALE application.

SCALE Data Development Conclusion

The above steps describe how missing meter MWh data is developed for an estimated T+7 settlement run. Further enhancements to this process may be forthcoming as the process is transitioned to a permanent software tool, planned for November 1, 2007 when the ISO's new Settlement and Market Clearing System (SaMC) is implemented.

APPENDIX 1A: ALTERNATIVE ESTIMATED AGGREGATE LIABILITY CALCULATION

To assist Market Participants in understanding and verifying the ISO's alternative EAL calculation, the following section provides additional details and an example calculation. As described in Section 3.1, the ISO initially evaluates a Market Participant's liability by deriving three estimates which vary only by the number of months used in derivation of the daily average liability amounts. ISO Staff review the preliminary estimates to determine which appears to be most representative of the likely actual liability, and may request additional collateral based on that estimate. A summary report detailing the alternative EAL calculation will be provided to any Maket Participant requested to post additional security, or at any time when requested by the Market Participant. The report will highlight only the method that is deemed by the ISO to be most representative of the Market Participant's liability, however all three methods are available upon request as well.

This Estimated Aggregate Liability (EAL) Report presents most of the details of the calculation, which should be verifiable by the Market Participant using published Settlements Statements. Adding all outstanding, unpaid, published Settlements activity to an estimate of the remaining liability in the 102-day period results in the Level Posting Period EAL.

For example, assume that the EAL is calculated on Friday, June 16, 2006. On this day there are 23 days of published Preliminary Statements along with 4 days of Final Statements for the month of April. All of this activity will be summed for April and will account for 23 days out of the required 102 days. The Preliminary Statement has been paid for March; therefore no days in March will be counted in the Level Posting Period. However, there are still incremental charges in March on Final Statements that have been invoiced but not paid, and therefore will be included in the liability amount.

Now an estimate must be derived for the remaining seven days of April, along with an additional 72 days that make up the Level Posting Period (23+7+72=102). The estimate is based on a calculated daily average amount for all Charge Types. For simplicity, the Charge Types are aggregated into three categories: Daily Market (Imbalance Energy, Ancillary Services, etc.), Monthly Market (Wheeling, Transmission, etc), and GMC. The following table entitled "**<u>Charge Type Category List"</u>** lists all Charge Types and their category designation.

The averages for all three categories will be calculated using the same time period, based on either one, two or twelve months of historical Settlements data. In the one-month method, the time-period for derivation of daily averages will include 23 days of April published data, 30 days of March published data (because the month is still open), and one additional month of previously paid Settlement activity, specifically the month of February. For purposes of our example, <u>assume that all outstanding, published obligations net to a total of $7,000.</u>

To derive a daily average amount for the category of 'Daily Market' charge types, sum all charge type amounts in this category (see attached table) from February 1 to April 23 and divide by 82 (28+31+23). <u>Assume the result is $100 per day.</u>

To derive the daily average of 'Monthly Market' charges, sum all charge type amounts in this category from February 1 to March 31. Due to the fact that these charge types accrue only on the last day of the month, there is no reason to consider the range of April 1 to April 23 at this time. Divide the amount by 60 days for the two-month period. <u>Assume the result is $50 per day.</u>

Lastly, derive the 'GMC' category charges in the same manner as the 'Monthly Market' charges and divide by 60. <u>Assume the result is $25.</u>

<u>Now combine the results and calculate 102-day Liability.</u>

Outstanding obligations: calculated above for the 23 days of April Prelims and 30 days of March Finals, includes 'Daily Market', 'Monthly Market' (incremental Final), and 'GMC' (incremental Final)

$ 7,000 *(23 days)*

'Daily Market' Estimate: 7 days in April, 31 days in May, 30 days in June, 11 days in July

$ 100 * (7+31+30+11) = $ **7,900** *(79 days)*

'Monthly Market' Estimate: 30 days in April, 31 days in May, 30 days in June, 11 days in July

$ 50 * (30+31+30+11) = **$ 5,100** (102 days)

'GMC' Estimate: 30 days in April, 31 days in May, 30 days in June, 11 days in July

$ 25 * (30+31+30+11) = **$ 2,550** (102 days)

Total 102-day Level Posting Period EAL:

$ 7,000 + $ 7,900 + $ 5,100 + $ 2,550

= $ 22,550

The other two methods are calculated in the same manner while adding additional months of historical Settlements data.

Charge Type Category List:

Frequency	Charge Type	Charge Type Description	Service Type
Daily	1	Day-Ahead Spinning Reserve due SC	Ancillary Services
Daily	2	Day-Ahead Non-Spinning Reserve due SC	Ancillary Services
Daily	3	Day-Ahead AGC/Regulation due SC	Ancillary Services
Daily	4	Day-Ahead Replacement Reserve due SC	Ancillary Services
Daily	5	Day-Ahead Regulation Up due SC	Ancillary Services
Daily	6	Day Ahead Regulation Down due SC	Ancillary Services
Daily	24	Dispatched Replacemnt Res (Bid-in) Capacity Withhold	Ancillary Services
Daily	51	Hour-Ahead Spinning Reserve due SC	Ancillary Services
Daily	52	Hour-Ahead Non-Spinning Reserve due SC	Ancillary Services
Daily	53	Hour-Ahead AGC/Regulation due SC	Ancillary Services
Daily	54	Hour-Ahead Replacement Reserve due SC	Ancillary Services
Daily	55	Hour Ahead AGC/Regulation Up due SC	Ancillary Services
Daily	56	Hour AHead AGC/Regulation Down due SC	Ancillary Services
Daily	61	Hour-Ahead RMR Preempted Spinning Reserve	RMR
Daily	62	Hour-Ahead RMR Preempted Non-Spinning Reserve	RMR
Daily	64	Hour-Ahead RMR Preempted Replacement Reserve	RMR
Daily	65	Hour-Ahead RMR Preempted Regulation Up	RMR
Daily	66	Hour-Ahead RMR Preempted Regulation Down	RMR
Daily	71	Real Time RMR Preempted Spin Reserve (DA Price)	RMR
Daily	72	Real Time RMR Preempted Non-Spin Reserve (DA Price)	RMR
Daily	74	Real Time RMR Preempted Replacement Reserve (DA Price)	RMR
Daily	75	Real Time RMR Preempted Regulation Up (DA Price)	RMR
Daily	76	Real Time RMR Preempted Regulation Down (DA Price)	RMR
Daily	81	Real Time RMR Preempted Spin Reserve (HA Price)	RMR
Daily	82	Real Time RMR Preempted Non-Spin Reserve (HA Price)	RMR
Daily	84	Real Time RMR Preempted Replacement Reserve (HA Price)	RMR
Daily	85	Real Time RMR Preempted Regulation Up (HA Price)	RMR
Daily	86	Real Time RMR Preempted Regulation Down (HA Price)	RMR
Daily	101	Day-Ahead Spinning Reserve due ISO	Ancillary Services
Daily	102	Day-Ahead Non-Spinning Reserve due ISO	Ancillary Services
Daily	103	Day-Ahead AGC/Regulation due ISO	Ancillary Services
Daily	111	Spinning Reserve due ISO	Ancillary Services
Daily	112	Non-spinning Reserve due ISo	Ancillary Services
Daily	114	Replacement Reserve due ISO	Ancillary Services
Daily	115	Regulation Up due ISO	Ancillary Services

Frequency	Charge Type	Charge Type Description	Service Type
Daily	116	Regulation Down due ISO	Ancillary Services
Daily	124	Dispatched Replace Res (Self-Prov.) Capacity Withhold	Ancillary Services
Daily	130	Insufficient Energy in Response to ISO Instructions	Misc
Daily	131	Reduct. in Avail. Cap. due to Uninst. Dev. due ISO	Misc
Daily	141	No Pay Charge - Spinning Reserve	No Pay
Daily	142	No Pay Charge - Non-Spinning Reserve	No Pay
Daily	144	No Pay Charge - Replacement Reserve	No Pay
Daily	145	No Pay Charge - Regulation Up	No Pay
Daily	146	No Pay Charge - Regulation Down	No Pay
Daily	151	Hour-Ahead Spinning Reserve due ISO	Ancillary Services
Daily	152	Hour-Ahead Non-Spinning Reserve due ISO	Ancillary Services
Daily	153	Hour-Ahead AGC/Regulation due ISO	Ancillary Services
Daily	201	Day-Ahead Intra-Zonal Congestion Incs/Decs Settlement	Congestion
Daily	202	Day-Ahead Intra-Zonal Congestion Charge Refund	Congestion
Daily	203	Day-Ahead Inter-Zonal Congestion Settlement due SC	Congestion
Daily	204	Day-Ahead Inter-Zonal Congestion Settlement due TO	Congestion
Daily	251	Hour-Ahead Intra-Zonal Congestion Settlement	Congestion
Daily	252	Hour-Ahead Intra-Zonal Congestion Charge Refund	Congestion
Daily	253	Hour-Ahead Inter-Zonal Congestion Settlement due SC	Congestion
Daily	254	Hour-Ahead Inter-Zonal Congestion Settlement due TO	Congestion
Daily	255	Hour-Ahead Inter-Zonal Congestion Debit to TOs	Congestion
Daily	256	Hour-Ahead Inter-Zonal Congestion Debit due SC	Congestion
Daily	271	Real-time Intra-zonal Congestion INC/DEC Settlement	Imbalance Energy
Daily	272	Real-time Above MCP Costs for Non-Market Dispatches	Excess Costs
Daily	301	Supplemental and A/S Energy	Reliability
Daily	303	Ex-Post Replacement Reserve due ISO (Dispatched)	Ancillary Services
Daily	304	Ex-Post Replacement Reserve due ISO (Undispatched)	Ancillary Services
Daily	353	Contracted Black Start due SC	Reliability
Daily	401	Instructed Energy	Imbalance Energy
Daily	402	Generation Deviation Settlement	Imbalance Energy
Daily	403	Load Deviation Settlement	Imbalance Energy
Daily	404	Export Deviation Settlement	Imbalance Energy
Daily	405	Import Deviation Settlement	Imbalance Energy
Daily	406	UFE Settlement	Imbalance Energy
Daily	407	Uninstructed Energy	Imbalance Energy
Daily	410	Unscheduled RMR Energy	Imbalance Energy
Daily	451	Real-Time Intra-Zonal Congestion Incs/Decs Settlement	Congestion
Daily	452	Real-Time Intra-Zonal Congestion Charge/Refund	Congestion

Frequency	Charge Type	Charge Type Description	Service Type
Daily	481	Excess Cost for Instructed Energy	Imbalance Energy
Daily	485	Insufficient Response to AWE Instruction	Penalties
Daily	487	Allocation of Excess Cost for Instructed Energy	Imbalance Energy
Daily	499	Interest due SC	Misc
Daily	502	Generation Deviation Effective Price	Imbalance Energy
Daily	503	Load Deviation Effective Price	Imbalance Energy
Daily	505	Import Deviation Effective Price	Imbalance Energy
Daily	547	Uninstructed Deviation Penalty Charges Due ISO	Penalties
Daily	1003	Regulation Energy Payment Adjustment	Adjustments
Daily	1004	Over-Generation Payment Due SC	Reliability
Daily	1010	Neutrality Adjustment Charge/Refund	Imbalance Energy
Daily	1011	Ancillary Service Rational Buyer Adjustment	Ancillary Services
Daily	1012	RMR Preemption Revenue Allocation	RMR
Daily	1013	REPA Cash Neutrality Charge	Reliability
Daily	1030	No Pay Provision Market Refund	No Pay
Daily	1061	Distribution of Preempted Spinning Reserve	RMR
Daily	1062	Distribution of Preempted Non-Spinning Reserve	RMR
Daily	1064	Distribution of Preempted Replacement Reserve	RMR
Daily	1065	Distribution of Preempted Regulation Up	Ancillary Services
Daily	1066	Distribution of Preempted Regulation Down	Ancillary Services
Daily	1104	Over-Generation Payment Due ISO	Reliability
Daily	1210	Existing Contracts Cash Neutrality Charge/Refund	Misc
Daily	1277	Real-time Intra-zonal Congestion Charge/Refund	Imbalance Energy
Daily	1278	Alloc of AboveMCP Cost for Real-Time Non-Mkt Dsptch	Excess Costs
Daily	1303	Supplemental Reactive Energy due ISO	Reliability
Daily	1401	Imbalance Energy Offset	Imbalance Energy
Daily	1407	Deviation Penalty for Positive Uninstructed Deviation	Penalties
Daily	1470	Neutrality Charge for UDP Penalties	Penalties
Daily	1471	Excess Cost Neutrality Settlement	Excess Costs
Daily	1481	Excess Cost Allocation - Neutrality Adjustment	Excess Costs
Daily	1487	Energy Exchange Program Neutrality Adjustment	Adjustments
Daily	1680	Allocation of Bid Cost Recovery	Reliability
Daily	1999	Rounding Charge/Refund	Misc
Daily	2009	ISO/SC Distribution/Allocation	Misc
Daily	2010	Finance Charges	Misc
Daily	2020	Must Run due ISO	Misc
Daily	2407	Deviation Penalty for Negative Uninstructed Deviation	Penalties
Daily	2900	CONTINGENCY-Net Manual Market Invoice	Misc
Daily	4141	No Pay Settlement for Spin Capacity	No Pay
Daily	4142	No Pay Settlement for Non Spin Capacity	No Pay
Daily	4144	No Pay Settlement for Replacement Reserve Capacity	No Pay
Daily	4271	Reliability Excess Cost Settlement - Due SC	Imbalance Energy
Daily	4272	OOM Congestion Excess Cost Settlement - Due SC	Imbalance Energy
Daily	4401	Instructed Energy Settlement	Imbalance Energy

Frequency	Charge Type	Charge Type Description	Service Type
Daily	4406	Settlement of Unaccounted for Energy	Imbalance Energy
Daily	4407	Uninstructed Energy Settlement	Imbalance Energy
Daily	4410	Unscheduled RMR Energy	Imbalance Energy
Daily	4450	Transmission Loss Settlement	Imbalance Energy
Daily	4470	Negative Uninstructed Deviation Penalty	Penalties
Daily	4480	Positive Uninstructed Deviation Penalty	Penalties
Daily	4481	Settlement of Excess Cost - Due SC	Imbalance Energy
Daily	4487	Allocation of Excess Cost - Due ISO	Imbalance Energy
Daily	4660	Hrly Pre Dispatch Bid Cost Recovery Settlement	Excess Costs
Daily	4680	Settlement of Bid Cost Recovery	Excess Costs
Daily	4999	Neutrality Adjustment	Adjustments
Daily	5900	Shortfall Receipt	Misc
Daily	5910	Shortfall Allocation	Misc
Daily	5999	FERC Interest	Misc
Daily	6601	Communication Fees	Misc
Daily	6602	Training Fees	Misc
Daily	6603	Miscellaneous Fees	Misc
Daily	6604	OSAT Training Revenues	Misc
Daily	6605	Metering Training Revenues	Misc
Daily	6606	WSCC Revenues	Misc
Daily	6607	Detailed Wheeling Spreadsheet Fees	Misc
Daily	6608	Archived Settlement Statements Retrieval Fee	Misc
Daily	6609	Station Power Fee	Misc
Daily	6610	Station Power Fee Allocation	Misc
Daily	6611	Security Refund	Misc
Daily	6612	ISO Services for GCP	Misc
Daily	6616	FTR Auction	Misc
Daily	6701	Market Invoice	Misc
Daily	6702	GMC Invoice	Misc
Daily	6703	FERC Invoice	Misc
Monthly	7	Demand Relief Monthly Payment	Misc
Monthly	117	Demand Relief Monthly Charge	Misc
Monthly	302	Ex-Post Supplemental Reactive Power due TO	Reliability
Monthly	354	Wheeling Refund due TO	Wheeling
Monthly	372	High Voltage Access Charge due ISO	TAC
Monthly	374	High Voltage Access Revenue due PTO	TAC
Monthly	382	High Voltage Wheeling Charge due ISO	Wheeling
Monthly	383	Low Voltage Wheeling Charge due ISO	Wheeling
Monthly	384	High Voltage Wheeling Revenue due TO	Wheeling
Monthly	385	Low Voltage Wheeling Revenue due TO	Wheeling
Monthly	550	FERC Fees	FERC Fees
Monthly	591	Emissions Cost Recovery	Uplift Fees
Monthly	592	Start-Up Cost Recovery	Uplift Fees
Monthly	593	Emissions Cost Due Trustee	Uplift Fees
Monthly	594	Start-Up Costs Due Trustee	Uplift Fees
Monthly	595	Minimum Load Cost Allocation Due ISO	Reliability
Monthly	691	Emission Cost Payment	Uplift Fees

Frequency	Charge Type	Charge Type Description	Service Type
Monthly	692	Startup Cost Payment	Uplift Fees
Monthly	695	Minimum Load Cost Compensation Due SC	Reliability
Monthly	701	Forecasting Service Fee	Misc
Monthly	702	Forecasting Service Fee Allocation	Misc
Monthly	711	Intermittent Resources Net Deviations	Imbalance Energy
Monthly	721	Intermittent Resources Net Deviation Alloc Charge	Imbalance Energy
Monthly	731	Intermittent Resources Uninstructed Deviation	Imbalance Energy
Monthly	790	Market Transaction Bill Period Adjustment	Adjustments
Monthly	791	Grid Management Charge Bill Period Adjustment	Adjustments
Monthly	792	FERC Fee Bill Period Adjustment	Adjustments
Monthly	793	Transmission Access Charge Refund Bill Period Adj	Adjustments
Monthly	1001	Black start due BA	Reliability
Monthly	1101	Black Start Capacity due ISO	Reliability
Monthly	1120	Est. Summer Reliab. Contract Capacity Pymt/Charge	Reliability
Monthly	1121	Act. Summer Reliab. Contract Capacity Pymt/Charge	Reliability
Monthly	1302	Long Term Voltage Support Contract due ISO	Reliability
Monthly	1353	Black Start Energy due ISO	Reliability
Monthly	1591	EP Penalty Charge, due CAISO trustee	Penalties
Monthly	1592	EP Penalty Allocation Payment	Penalties
Monthly	1593	EP Penalty/Alloc for under/over	Penalties
Monthly	1691	MLCC Neutrality Allocation	Reliability
Monthly	1697	MLCC Tier 1 Allocation	Reliability
Monthly	1698	MLCC Reliability Service Cost Allocation	Reliability
Monthly	1699	MLCC Inter-Zonal Congestion Allocation	Reliability
Monthly	2999	Interest due SC	Misc
Monthly	3010	Termination Fee	Adjustments
Monthly	3020	Termination Fee	Adjustments
Monthly	3101	Black Start Capacity due BA	Reliability
Monthly	3302	Supplemental Reactive Energy due SC	Reliability
Monthly	3303	Long Term Voltage Support due BA	Reliability
Monthly	3351	Grid Management Charge Adjustment Charge/Refund	Adjustments
Monthly	3372	High Voltage Access Charge Adj - Due ISO	Adjustments
Monthly	3374	High Voltage Access Charge Adj - Due PTO	Adjustments
Monthly	3382	High Voltage Wheeling Access Charge Adj - Due ISO	Adjustments
Monthly	3383	Low Voltage Wheeling Access Charge Adj - Due ISO	Adjustments
Monthly	3384	High Voltage Wheeling Access Charge Adj - Due PTO	Adjustments
Monthly	3385	Low Voltage Wheeling Access Charge Adj - Due PTO	Adjustments
Monthly	3472	Demand Relief Energy Payment	Misc
Monthly	3473	Discretionary Load Curtailment Payment	Misc
Monthly	3482	Demand Relief Energy Charge	Misc
Monthly	3483	Discretionary Load Curtailment Charge	Misc

Frequency	Charge Type	Charge Type Description	Service Type
Monthly	3999	Interest and Penalty	Misc
Monthly	4695	Settlement of Minimum Load Cost Comp - Due SC	Reliability
GMC	4501	Core Reliability Services Non-Coincident Peak	GMC
GMC	4502	Core Reliability Services Non-Coincident Off-Peak	GMC
GMC	4503	Core Reliability Services Exports	GMC
GMC	4504	Core Reliability Svcs/Energy Trans Svcs Mojave	GMC
GMC	4505	Energy Transmission Services Net Energy	GMC
GMC	4506	Energy Transmission Services Deviations	GMC
GMC	4511	Forward Scheduling	GMC
GMC	4512	Forward Scheduling Inter-SC Trades	GMC
GMC	4513	Forward Scheduling Path 15 Inter SC Trades	GMC
GMC	4522	Congestion Management	GMC
GMC	4534	Market Usage Ancillary Services	GMC
GMC	4535	Market Usage Instructed energy	GMC
GMC	4536	Market Usage Uninstructed Energy	GMC
GMC	4575	Settlements, Metering, Client Relations	GMC

APPENDIX 2: TEMPLATE FOR DETERMINATION OF AN INITIAL FINANCIAL SECURITY POSTING AMOUNT

California ISO
Simplified Calculation of Initial Security Amount

Average Hourly Load	4.0	MWh	<-----INPUT
Average Hourly Generation	5.4	MWh	<-----INPUT
Total Daily Load / Generation	96.0		

	Billable MWh	Price	Total
Ancillary Services	5	$ 9.764	$ 47
FERC Fee	96	$ 0.038	$ 4
Grid Management Charge	165	$ 0.743	$ 123
Imbalance Energy	(25)	$ 44.233	$ (1,087)
Interzonal Congestion	40	$ 0.672	$ 27
Reliability / Minimum Load Cost Compensation	96	$ 0.765	$ 73
Reliability Must Run Generation	96	$ 0.004	$ 0
Uplift Charges	96	$ 0.042	$ 4
Wheeling Charges	96	$ 0.101	$ 10
Total Daily Charges / Daily Security Deposit			$ (800)
Level Period 102 day Security Deposit Posting Requirement			$ (81,579)

Assumptions:

MWh Percentages

A/S % of Load	5.02%
Net Imbalance Energy Percentage	4.00%
Congestion % of Load	41.25%

Per MWh Costs

Ancillary Services	$ 9.764
FERC Fee	$ 0.038
Grid Management Charge	$ 0.743
Imbalance Energy	$ 44.233
Interzonal Congestion	$ 0.672
Reliability / Minimum Load Cost Compensation	$ 0.765
Reliability Must Run Generation	$ 0.004
Uplift Charges	$ 0.042
Wheeling Charges	$ 0.101

Note:
Settlement calendar longest number of outstanding days is 95.
The ISO adds 7 days to the estimation to allow for administrative needs and communications to / from SC.

ATTACHMENT A-2

12 CREDITWORTHINESS.

* * *

12.1.1 Unsecured Credit Limit.

Each Market Participant or FTR Bidder requesting an Unsecured Credit Limit shall submit an application to the ISO in the form specified on the ISO Home Page. The ISO shall determine the Unsecured Credit Limit for each Market Participant or FTR Bidder in accordance with the procedures set forth in the ISO Credit Policy & Procedures Guide posted on the ISO Home Page. The maximum Unsecured Credit Limit for any Market Participant or FTR Bidder shall be $250 million~~, or a lesser maximum Unsecured Credit Limit determined by the ISO Governing Board, in its discretion, and posted on the ISO Home Page~~. In accordance with the procedures described in the ISO Credit Policy & Procedures Guide, each Market Participant or FTR Bidder requesting or maintaining an Unsecured Credit Limit is required to submit to the ISO or its agent financial statements and other information related to its overall financial health as directed by the ISO. Each Market Participant or FTR Bidder is responsible for the timely submission of its latest financial statements as well as other information that may be reasonably necessary for the ISO to conduct its evaluation. ~~As part of the credit evaluation process, the ISO may also rely on Nationally Recognized Statistical Rating Organizations as defined by the U.S. Securities and Exchange Commission, other third-party credit assessment tools and services, and the general and/or financial press.~~ The ISO shall determine the Unsecured Credit Limit for each Market Participant or FTR Bidder as described in subsections 12.1.1A, 12.1.1A.1, 12.1.1A.2 and 12.1.1A.3.

12.1.1A Unsecured Credit Limit Calculation.

An Unsecured Credit Limit (UCL) for each Public/Private Corporation or Governmental Entity that requests an unsecured limit is calculated as follows:

1. Rated Public/Private Corporations – the UCL is the lesser of $250 million or an amount equal to the Market Participant's or FTR Bidder's Tangible Net Worth (TNW) multiplied by a calculated percentage of TNW. The TNW percentage is comprised of 50 percent (50%) of the

Market Participant's or FTR Bidder's Credit Rating Default Probability and 50 percent (50%) of the MKMV Default Probability.

2. Unrated Public/Private Corporations – the UCL is the lesser of $250 million or an amount equal to the Market Participant's or FTR Bidder's Tangible Net Worth (TNW) multiplied by a calculated percentage of TNW. The TNW percentage is comprised of 100 percent of the MKMV Default Probability.

3. Rated Governmental Entities – the UCL is the lesser of $250 million or an amount equal to the Market Participant's or FTR Bidder's Net Assets (NA) multiplied by a calculated percentage of NA. The NA percentage is comprised of 100 percent of the Market Participant's or FTR Bidder's Credit Rating Default Probability.

4. Unrated Governmental Entities – the UCL is the lesser of $250 million or an amount equal to a given percentage of the Market Participant's or FTR Bidder's Net Assets if the Market Participant or FTR Bidder has a minimum of $25 million in Net Assets and its Times Interest Earned, Debt Service Coverage and Equity to Assets ratios meet or exceed specified minimums.

The $250 million hard cap on UCLs specified in the ISO Tariff has been set with respect to the length of the current ISO payment calendar, i.e., a maximum of 95 days of charges outstanding. Upon implementation of Payment Acceleration (scheduled for 2008), we expect to recommend a reduction in the $250 million hard cap. Any changes to the $250 million cap will require FERC approval of an amendment to the applicable provisions of the ISO Tariff.

12.1.1A.1 Maximum Percentage of TNW and NA.

For Rated and Unrated Public/Private Corporations or Rated Governmental Entities, the maximum percentage of TNW or NA is 7.5 percent (7.5%) if the Market Participant's or FTR Bidder's Combined Default Probability is less than or equal to 0.06 percent (0.06%).

The Maximum Allowable Percentage of 7.5% is for the highest quality firms; that is, those Market Participants and FTR Bidders with a CDP of 0.06 percent or less. The TNWP or NAP that a Market Participant or FTR Bidder qualifies for will be reduced as its credit risk increases.

For Unrated Governmental Entities, the ISO may provide an Unsecured Credit Limit of up to 5 percent (5%) of NA.

With respect to either of these potential maximum percentages, a lesser amount of unsecured credit may be granted if the ISO becomes aware of information related to a Material Change in Financial Condition or other significant information that presents a significant risk to the creditworthiness of the entity.

12.1.1A.2 Unsecured Credit Limit Calculation Steps.

An eight-step process is used to determine Unsecured Credit Limits for Market Participants and FTR Bidders that are Rated Public/Private Corporations, Unrated Public/Private Corporations and Rated Governmental Entities. Criteria for Unsecured Credit Limits for Unrated Governmental Entities is discussed in Section 12.1.1A.3.

Step 1 – If the Market Participant or FTR Bidder has a credit rating(s) from one or more of the "Nationally Recognized Statistical Rating Organizations" (NRSRO), verify the rating(s) with the appropriate NRSRO.

Step 2 - Calculate the Market Participant's or FTR Bidder's Average Rating Default Probability (ARDP).

a. ARDP is the sum of Credit Rating Default Probabilities divided by the total number of Credit Rating Default Probabilities used.

b. The following table shows the median default probability calculated by Moody's KMV (i.e., MKMV) for Standard & Poor's and Moody's long-term credit rating classes. Default probabilities are available from each NRSRO.

c. The example presented below uses the following table to derive the ARDP.

CREDIT RATING DEFAULT PROBABILITIES (DP) Based on 5 year historical median of Moody's KMV EDF's*					
Maximum Allowable Percentage)				7.50%	
Base Default Probability				0.06%	
Moody's	5 Year Median Default Probability	Tangible Net Worth or Net Asset Percentage	S&P	5 Year Median Default Probability	Tangible Net Worth or Net Asset Percentage
Aaa	0.020%	7.50%	AAA	0.020%	7.50%
Aa1	0.032%	7.50%	AA+	0.033%	7.50%
Aa2	0.040%	7.50%	AA	0.042%	7.50%
Aa3	0.056%	7.50%	AA-	0.059%	7.50%
A1	0.080%	5.60%	A+	0.084%	5.38%
A2	0.114%	3.94%	A	0.119%	3.80%
A3	0.144%	3.12%	A-	0.154%	2.92%
Baa1	0.182%	2.47%	BBB+	0.200%	2.25%
Baa2	0.230%	1.95%	BBB	0.259%	1.73%
Baa3	0.307%	1.47%	BBB-	0.367%	1.23%
Ba1	0.408%	1.10%	BB+	0.518%	0.00%
Ba2	0.544%	0.00%	BB	0.733%	0.00%
Ba3	0.848%	0.00%	BB-	1.215%	0.00%
B1	1.323%	0.00%	B+	2.014%	0.00%
B2	2.064%	0.00%	B	3.338%	0.00%
B3	4.168%	0.00%	B-	5.384%	0.00%
Caa1	8.418%	0.00%	CCC+	8.682%	0.00%
Caa2	17.000%	0.00%	CCC	14.000%	0.00%
Caa3	17.946%	0.00%	CCC-	14.936%	0.00%
Ca	20.000%	0.00%	CC	17.000%	0.00%
C	20.000%	0.00%	C	18.250%	0.00%
-	-	-	D	20.000%	0.00%
* Table is subject to update on a monthly basis					

d. Issuer ratings without the benefit of credit enhancement would be used in this assessment. Such ratings are also known as "counterparty" or "underlying" ratings.

Step 3 – Using MKMV's CreditEdge or RiskCalc software, obtain the Market Participant's or FTR Bidder's MKMV Default Probability (MKDP).

a. Since MKMV calculates default probabilities directly, the MKMV Default Probability will be used without any mapping.

Step 4 – Calculate a Combined Default Probability (CDP) based on one of the following methodologies:

a. CDP for Rated Public/Private Corporations = (ARDP * 50%) + (MKDP * 50%)

b. CDP for Unrated Public/Private Corporations = MKDP * 100%

c. CDP for Rated Governmentally Owned Utilities = ARDP * 100%

Step 5 – Calculate the Market Participant's or FTR Bidder's Tangible Net Worth Percentage (TNWP) or Net Assets Percentage (NAP).

a. TNWP = MAP * BDP / CDP for Rated/Unrated Public/Private Corporations

b. NAP = MAP * BDP / CDP for Rated Governmental Entities

Where:

MAP = Maximum Allowable Percentage;

BDP = Base Default Probability;

CDP = see Step 4 above; and

If the SC's CDP > 0.5%, the TNWP or NAP equals 0%

Step 6 – Calculate the Market Participant's or FTR Bidder's Tangible Net Worth or Net Assets.

a. TNW for Rated/Unrated Public/Private Corporations = Assets minus Intangibles (e.g., Good Will) minus Liabilities

b. NA for Rated Governmental Entities = Total Assets minus Total Liabilities

Step 7 – Calculate the Market Participant's or FTR Bidder's Unsecured Credit Limit.

a. UCL = TNW * TNWP for Rated/Unrated Public/Private Corporations

b. UCL = NA * NAP for Rated Governmental Entities

Step 8 – Adjust Unsecured Credit Limit Downward, if warranted based on the ISO's review of factors in Appendix Z, Section A-1.3.

a. Final UCL = UCL from Step 7 * (0 - 100%)

12.1.1A.3 Unsecured Credit Limit Calculations for Unrated Governmental Entities.

The UCL for an Unrated Governmental Entity is based on the financial ratios defined in the following table:

Ratio	Calculation	Minimum Accepted Value
Times Interest Earned (TIER)	(Long-Term Debt Interest Expense + Change in Net Assets) / Long-Term Debt Interest Expense	1.05
Debt Service Coverage (DSC)	(Depreciation & Amortization Expense + Long Term Debt Interest Expense + Change in Net Assets) / Debt Service Billed (Debt Service Interest and Principal).	1.00
Equity to Assets	Total Equity / Total Assets	0.15

For those Municipals that meet all of the above criteria, initial unsecured credit will be calculated as five percent (5%) of Net Assets (i.e., Total Assets minus Total Liabilities). That percentage may be adjusted downward by up to 100% if the ISO becomes aware of significant negative information regarding the Market Participant's or FTR Bidder's operations as determined through trade publications and/or the financial press.

12.1.1.1 Other Procedures Regarding Unsecured Credit Limits.

As a result of the ISO's credit evaluation, a Market Participant or FTR Bidder may be given an Unsecured Credit Limit by the ISO or denied an Unsecured Credit Limit with the ISO. Following the initial application and the establishment of an Unsecured Credit limit, the ISO will review each Market Participant's or FTR Bidder's Unsecured Credit Limit on a quarterly basis, unless that entity does not prepare quarterly statements, in which case the review will occur on an annual basis, and no entity shall be required to submit a new application. In addition, the ISO may review the Unsecured Credit Limit for any Market Participant or FTR Bidder whenever the ISO becomes aware of information that could indicate a Material Change in Financial Condition. In the event the ISO determines that the Unsecured Credit Limit of a Market Participant or FTR Bidder must be reduced as a result of a subsequent review, the ISO shall notify the Market Participant or FTR Bidder of the reduction, and shall, upon request, also provide the Market Participant or FTR Bidder with a written explanation of why the reduction was made.

12.1.1.~~1~~2 Determination of Unsecured Credit Limits for Affiliates.

If any Market Participant or FTR Bidder requesting or maintaining an Unsecured Credit Limit is affiliated with one or more other entities subject to the credit requirements of this Section 12, the ISO may consider the overall creditworthiness and financial condition of such Affiliates when determining the applicable

Unsecured Credit Limit. The ISO may determine that the maximum Unsecured Credit Limit specified in Section 12.1.1 applies to the combined activity of such Affiliates. In the event the ISO determines that the maximum Unsecured Credit Limit applies to the combined activity of the Affiliates and the Market Participant, the ISO shall inform the Market Participant in writing.

12.1.1.~~2~~3 Notification of Material Change in Financial Condition.

Each Market Participant or FTR Bidder shall notify the ISO in writing of a Material Change in Financial Condition, within five (5) Business Days of when the Material C~~c~~hange in Financial Condition is known or reasonably should be known by the Market Participant or FTR Bidder. The provision to the ISO of a copy of a Form 10-K, 10-Q, or Form 8-K filed with the U.S. Securities and Exchange Commission shall satisfy the requirement of notif~~i~~ying the ISO of such Material Change in Financial Condition. Alternatively, the Market Participant may direct the ISO to the location of the information on their company website or the website of the U.S. Securities & Exchange Commission.

12.1.1.~~3~~4 Transition from Credit Provisions that Were in Effect Prior to the Effective Date of this Section 12.1.1, *et seq.*

Each Market Participant or FTR Bidder that, prior to the effective date of this Section 12.1.1, *et seq.*, maintained an "Approved Credit Rating" with respect to market and/or Grid Management Charge obligations, shall be assigned a maximum Unsecured Credit Limit of $250 million for a period not to exceed thirty (30) days. Such thirty-day period shall start on the date the ISO issues a market notice stating that FERC has issued an order making Section 12.1.1, *et seq.* effective. Prior to or during such thirty-day period, each Market Participant or FTR Bidder maintaining an "Approved Credit Rating" as described herein shall submit to the ISO the information that is required for the ISO to make a credit evaluation regarding the Market Participant or FTR Bidder as described in Section 12.1.1. If the Market Participant or FTR Bidder does not submit the required information within the thirty-day period described herein, the ISO shall assign an Unsecured Credit Limit of $0 to the Market Participant or FTR Bidder until the required information has been submitted.

Each Market Participant or FTR Bidder that, prior to the effective date of this Section 12.1.1, *et seq.*, did not maintain an "Approved Credit Rating" with respect to market and/or Grid Management Charge obligations, shall be assigned an Unsecured Credit Limit of $0 until the Market Participant or FTR Bidder submits to the ISO the information that is required for the ISO to make a credit evaluation regarding the Market Participant or FTR Bidder as described in Section 12.1.1.

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12.1.2.2 Expiration of Financial Security.

Each Market Participant or FTR Bidder shall ensure that the financial instruments it uses for the purpose of providing Financial Security will not expire and thereby cause the Market Participant's or FTR Bidder's Aggregate Credit Limit to fall below the Market Participant's or FTR Bidder's Estimated Aggregate Liability. The ISO ~~may~~ will treat a financial instrument that does not have an automatic renewal provision and that is not renewed or replaced within ~~thirty~~ seven (~~30~~7) days of its date of expiration as being out of compliance with the standards for Financial Security contained in this Section 12 and ~~may~~ will deem the value of such financial instrument to be zero, and ~~may~~ will draw upon such Financial Security prior to its stated expiration if deemed necessary by the ISO.

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Appendix A

* * *

Material Change in Financial Condition

A change in or potential threat to the financial condition of a Market Participant or FTR Bidder that increases the risk that the Market Participant or FTR Bidder will be unlikely to meet some or all of its financial obligations. The types of Material Change in Financial Condition include but are not limited to the following:

(a) a credit agency downgrade;

(b) being placed on a credit watch list by a major rating agency;

(c) a bankruptcy filing;

(d) ins~~v~~olvency;

(e) the filing of a material lawsuit that could significantly and adversely affect past, current, or future financial results; or

(f) any change in the financial condition of the Market Participant or FTR Bidder which exceeds a five percent reduction in the Market Participant's or FTR Bidder's tangible net worth for the Market Participant or FTR Bidder's preceding fiscal year, calculated in accordance with generally accepted accounting practices.

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ISO TARIFF APPENDIX Z

Credit Policy and Procedures Guide

REVISION HISTORY

Revision No.	Date	Description
1.0	4/4/2003	Original Draft
2.0	8/13/2004	Second major revision – updated to include only the current credit policies and procedures.
3.0	5/6/2005	Third major revision – updated to include proposed credit policy changes.
4.0	3/6/2006	Fourth major revision – major restructuring and updating to support the new credit policy. Changes the method for determining a Market Participant's or FTR Bidder's unsecured credit limit from simply having an approved credit rating with one that bases unsecured credit as a percentage of Tangible Net Worth or Net Assets based on the type of entity and other quantitative and qualitative factors.
4.1	6/26/2006	Revision made to reflect necessary updates to the CPPG, in accordance with FERC's Notice of Extension of Time issued June 2, 2006, in Docket No. ER06-700-000. Revision to satisfy FERC Order Conditionally Accepting Tariff Revisions Governing Credit Policy issued May 12, 2006 115 FERC ¶ 61,170. Modifications included: • Deletion of Section A-1 describing the transition from the old "Approved Credit Rating Approach" and renumbering of the sections in Part A due to the passing of the transition period; • The addition of Unsecured Credit Limit calculation examples for Unrated Public/Private Corporations, Rated Governmental Entities and Unrated Governmental Entities; • Deletion of the reference to the ISO Board of Governor's ability to reduce the $250M cap on Unsecured Credit Limits; • Description of an alternative Estimated Aggregate Liability calculation method in Section C-2, Section C-3, Section C-3.1 and Appendix 1A.

TABLE OF CONTENTS

INTRODUCTION

All Market Participants and FTR Bidders requesting transmission services with the ISO will be subject to a financial review in accordance with the ISO standards for determining creditworthiness. Such review procedures are designed to protect Market Participants and FTR Bidders from undue exposure to default risk by other Market Participants and FTR Bidders.

This Credit Policy & Procedures Guide (CPPG) provides Market Participants and FTR Bidders further detailed information regarding credit-related provisions described in Section 12 of the ISO Tariff. By providing this information, the ISO hopes to provide Market Participants and FTR Bidders increased visibility into the standard, commercial credit review procedures that the ISO uses in evaluating a Market Participant's and FTR Bidder's ability to meet its financial obligations. Specifically, Market Participants and FTR Bidders will find in the CPPG:

- Information on the processes used to administer the credit policy;
- The methodology used to calculate Unsecured Credit Limits and Estimated Aggregate Liabilities;
- Acceptable forms of Financial Security and the associated processes for requesting, posting and administering Financial Security;
- Security requirements for FTR Bidders;
- Consequences for Market Participants' failure to meet their credit related obligations; and
- Other credit-related information.

Principles

The ISO's intent is to maintain the confidence of Market Participants and FTR Bidders in the ISO markets and to sustain the ISO's mission of ensuring an adequate supply of power at a reasonable cost, by equitably, consistently and strictly enforcing these credit procedures.

The ISO recognizes the importance to Market Participants and FTR Bidders that credit-related practices be transparent and comprehensive. The ISO will endeavor to maintain an accurate procedures guide that describes the methods used to conduct its credit analysis as well as other credit-related practices and administrative procedures on the ISO's Home Page.

Definitions

Any term defined in the Master Definitions Supplement to the ISO Tariff shall have the same meaning where used in this Guide. In any instances where a definition in this document conflicts with a definition in the ISO Tariff, the ISO Tariff definition will prevail. Section number references refer to sections of the CPPG unless specifically stated otherwise.

The following table defines terms used throughout this document and their associated meanings:

TERM	DEFINITION
Affiliated Entities	Legally distinct business units that are Affiliates, as defined in the ISO Tariff.
Aggregate Credit Limit (ACL)	The sum of a Market Participant's or FTR Bidder's Unsecured Credit Limit and its Financial Security Amount, as provided for in Section 12 of the ISO Tariff.
Average Rating Default Probability (ARDP)	The sum of Credit Rating Default Probabilities divided by the total number of Credit Rating Default Probabilities used.
Business Association Identification Number (BAID)	An identification code used by the ISO to represent a Market Participant or a FTR Bidder. A Market Participant may have more than one BAID.
Credit Rating Default Probability	The 5 Year Median Default Probability based on a rating agency's credit rating as listed in the Credit Rating Default Probability table in Section A-2.2 of this CPPG.
FTR Bidder	An entity that submits a bis in an FTR auction conducted by the ISO in accordance with Section 36.4 of the ISO Tariff.
Collateral	See Financial Security.
Combined Default Probability (CDP)	A Market Participant's or FTR Bidder's blended probability of default based on credit agencies' Average Rating Default Probability and MKMV Default Probability according to rules established for different entity types.
Estimated Aggregate Liability (EAL)	The sum of a Market Participant's or FTR Bidder's known and reasonably estimated potential liabilities for a specified time period arising from charges described in the ISO Tariff, as provided for in Section 12 of the ISO Tariff.
Financial Security	Any of the types of financial instruments listed in Section 12 of the ISO Tariff that are posted by a Market Participant or FTR Bidder.
Financial Security Amount	The level of Financial Security posted in accordance with Section 12 of the ISO Tariff by a Market Participant or FTR Bidder.
Material Change in Financial Condition	A change in or potential threat to the financial condition of a Market Participant that increases the risk that the Market Participant will be unlikely to meet some or all of its financial obligations. The types of Material Change in Financial Condition include but are not limited to the following: (a) A credit agency downgrade; (b) Being placed on a credit watch list by a major rating agency; (c) A bankruptcy filing; (d) Insolvency; (e) The filing of a material lawsuit that could significantly adversely affect past, current or future financial results; or

	any change in the financial condition of the Market Participant which exceeds a five percent (5%) reduction in the Market Participant's tangible net worth for the Market Participant's preceding fiscal year, calculated in accordance with generally accepted accounting practices.
MKMV Default Probability	The Moody's KMV default probability determined in accordance with step 3 of Section A-2.2 of this CPPG.
Nationally Recognized Statistical Rating Organizations (NRSRO)	National credit rating agencies as designated by the U.S. Securities & Exchange Commission.
Net Assets (NA)	For governmental or not-for-profit entities, defined as total assets less total liabilities.
Rated Governmental Entity	A municipal utility or state or federal agency that holds an issuer, counterparty or underlying credit rating by a Nationally Recognized Statistical Rating Organization.
Rated Public/Private Corporation	An investor owned or privately held entity that holds an issuer, counterparty or underlying credit rating by a Nationally Recognized Statistical Rating Organization.
Scheduling Coordinator	An entity certified by the ISO for the purposes of undertaking the functions specified in Section 4.5.3 of the ISO Tariff.
Scheduling Coordinator Identification Number (SCID)	A unique number assigned to each Scheduling Coordinator by the ISO.
Tangible Net Worth (TNW)	Total Assets minus Intangibles (e.g., Good Will) minus Total Liabilities.
Unrated Governmental Entity	A municipal utility or state or federal agency that does not hold an issuer, counterparty or underlying credit rating by a Nationally Recognized Statistical Rating Organization.
Unrated Public/Private Corporation	An investor owned or privately held entity that does not hold an issuer, counterparty or underlying credit rating by a Nationally Recognized Statistical Rating Organization.
Unsecured Credit Limit (UCL)	The level of credit established for a Market Participant or a FTR Bidder that is not secured by any form of Financial Security, as provided for in Section 12 of the ISO Tariff.

Rules of Interpretation

Unless the context otherwise requires, if the provisions of this Guide and the ISO Tariff conflict, the ISO Tariff will prevail to the extent of the inconsistency. The provisions of the ISO Tariff have been summarized or repeated in this Guide only to aid understanding.

A reference in this Guide to a given agreement, the ISO Guide or instrument shall be a reference to that agreement or instrument as modified, amended, supplemented or restated through the date as of which such reference is made.

The captions and headings in this Guide are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Protocol.

A reference to a day or Trading Day is to a calendar day unless otherwise specified.

PART A: UNSECURED CREDIT

A-1. Credit Assessment Requirements

As provided in Section 12.1.1 of the ISO Tariff, an approved Application for Unsecured Credit must be on file with the ISO for those Market Participants and FTR Bidders seeking an Unsecured Credit Limit. A copy of the Application for Unsecured Credit can be found at the ISO Home Page. An Application for Unsecured Credit must only be filed once by a Market Participant or FTR Bidder. A Market Participant or FTR Bidder should subsequently inform the ISO of changes to contact or other relevant information contained in the Application.

As provided in Section 12.1 of the ISO Tariff, each Market Participant or FTR Bidder must secure its financial transactions with the ISO by maintaining an Unsecured Credit Limit (UCL) and/or by posting Financial Security. The combination of the UCL and the Financial Security Amount represents the Market Participant's or FTR Bidder's Aggregate Credit Limit (ACL). The ISO will periodically estimate a Market Participant's liabilities and will notify it in case its ACL needs to be increased through posting of additional Financial Security. It is the Market Participant's responsibility to maintain a sufficient ACL to meet all of their estimated financial obligations.

As provided in Sections 12.1.1, 12.1.5 and 12.4 of the ISO Tariff, each Market Participant and FTR Bidder requesting or having unsecured credit is required to submit to the ISO or its agent financial statements and other information related to the overall financial health of the Market Participant or FTR Bidder that will be used in determining the Market Participant's or and FTR Bidder's creditworthiness and ability to meet its financial obligations. Market Participants and FTR Bidders are responsible for the timely submission of their latest financial statements either directly or by indicating where the material can be located on their company website and/or on the U.S. Security Exchange Commission's website as well as other information that may be reasonably necessary for the ISO to conduct its evaluation. The ISO may also rely on financial reporting agencies and the financial press as part of the credit evaluation process.

As provided in Sections 12.1.1 and 12.1.2 of the ISO Tariff, as a result of the credit evaluation, a Market Participant or FTR Bidder may be denied an Unsecured Credit Limit with the ISO. Market Participants or FTR Bidders who have been denied an Unsecured Credit Limit may submit other forms of Financial Security acceptable to the ISO (see Part B) sufficient to cover their Estimated Aggregate Liabilities.

A-1.1. Financial Statements

As provided in Section 12.1.1 of the ISO Tariff, Market Participants and FTR Bidders requesting unsecured credit are required to provide financial statements so that a credit review can be completed.

Based on availability, the Market Participant or FTR Bidder must submit a financial statement for the most recent financial quarter, as well as audited financial statements for the most recent three fiscal years, or the period of existence of the Market Participant or FTR Bidder, if shorter, to the ISO or the ISO's designee. If audited financial statements are not available, financial statements, as described below, should be submitted, signed and attested to by an officer of the Market Participant or FTR Bidder as a fair representation of the financial condition of the Market Participant or FTR Bidder in accordance with generally accepted accounting principles.

The information should include, but is not limited to, the following:

a. If publicly traded:

i. Annual and quarterly reports on Form 10-K and Form 10-Q, respectively

ii. Form 8-K reports, if any

b. If privately held or governmentally owned:

i. Management's Discussion & Analysis (if available)

ii. Report of Independent Accountants (if available)

iii. Financial Statements, including:

- Balance Sheet
- Income Statement
- Statement of Cash Flows
- Statement of Stockholder's Equity

iv. Notes to Financial Statements

If the above information is available electronically on the Internet, the Market Participant or FTR Bidder may indicate in written or electronic communication where such statements are located for retrieval by the ISO or the ISO's designee.

A-1.2. Rating Agency Reports

Rating agency reports and credit ratings are utilized from those entities designated by the U.S. Securities & Exchange Commission - http://www.sec.gov/answers/nrsro.htm. The ratings utilized are to be long-term credit ratings for the entity as a whole, on a stand-alone basis without the benefit of third party credit support (also known as "issuer" or "underlying" ratings). Project financing ratings or insured bond ratings do not qualify, since such credit ratings are based on the availability of revenue streams or third-party funding available to bond holders but not necessarily available to trade creditors such as the suppliers to the ISO markets. Moreover, the ISO has been advised by the credit rating agencies that these projects or insured bond ratings cannot be considered as valid measures of an entity's ability to meet its non-bond obligations.

If a Market Participant or FTR Bidder has only a "senior long-term unsecured rating" instead of an issuer rating, the rating will be deemed acceptable; however, for the Unsecured Credit Limit calculation, the rating will be lowered by one rating level to account for the risk of obligations to the ISO having a lower claim priority.

If a Market Participant or FTR Bidder has only a "short-term rating" instead of an issuer rating, the ISO will utilize an equivalent long-term rating based on the highlighted rating in the following long- and short-term rating correlation table:

S&P		Moody's	
Short Term Rating	Equivalent Long Term Ratings	Short Term Rating	Equivalent Long Term Ratings
A-1+	AAA/AA+/**AA**/AA-/A+	P1	Aaa/Aa1/Aa2/**AA3**/A1/A2/A3
A-1	A+/**A**/A-	P2	A3/Baa1/**Baa2**/Baa3
A-2	A-/**BBB+**/BBB	P3	Baa3/Ba1/**Ba2**/Ba3
A-3	BBB/**BBB-**	NP	B1/B2/B3/Caa1/**Caa2**/ Caa3/Ca/C
B	BB+/**BB**/BB-		
C	B+ / B / B- / CCC+ / **CCC** / CCC- / CC / C		
D	**D**		

The highlighted rating represents a mid-range rating in the rating agencies' long- and short-term rating correlation table. Equivalent ratings from other rating agencies may also be considered. If the short-term rating is noted as being under a credit watch with negative implications, the ISO will use the lowest long-term equivalent rating in the range for its assessment.

Rating agency reports, particularly credit ratings, are reviewed and updated minimally on a quarterly basis for those Market Participants with an Unsecured Credit Limit. They are also reviewed as needed if questions arise as to changes to a Market Participant's financial health and/or credit standing. Additionally, credit rating agency reports of downgrade/upgrades are reviewed upon notice from a rating agency to determine if the Unsecured Credit Limit should be correspondingly decreased/increased.

A-1.3. Other Qualitative and Quantitative Credit Strength Indicators

As provided in Section 12.1.1 of the ISO Tariff, the ISO may rely on information gathered from financial reporting agencies, the general/financial/energy press, and provided by the Market Participant or FTR Bidder to assess an entity's overall financial health and its ability to meet its financial obligations. Information considered by the ISO in this process may include the qualitative factors noted in FERC's Policy Statement on Electric Creditworthiness[1]:

a) Applicant's history;
b) Nature of organization and operating environment;
c) Management;
d) Contractual obligations;

[1] *"Policy Statement on Credit Related Issues for Electric OATT Transmission Providers, Independent System Operators and Regional Transmission Organizations" (Order E-40, Docket PL05-3-000, November 19, 2004), at footnote 13.*

e) Governance policies;
f) Financial and accounting policies;
g) Risk management and credit policies;
h) Market risk including price exposures, credit exposures and operational exposures;
i) Event risk; and
j) The state or local regulatory environment.

Material negative information in these areas may result in a reduction of up to 100% in the Unsecured Credit Limit that would otherwise be granted based on the methodology described in Section A-2.2. A Market Participant or FTR Bidder, upon request, will be provided a written analysis as to how the provisions of Section A-2.2 were applied in setting its Unsecured Credit Limit.

Notwithstanding the considerations described above, Market Participants and FTR Bidders are obligated to provide the ISO timely information regarding any Material Change in Financial Condition, i.e., an adverse change that could affect its or one of its affiliated entities ability to pay its debt or meet its Financial Security obligations as they become due. Examples of Material Changes in Financial Condition may include but are not limited to:

a) Credit agency downgrades;
b) Being placed on a credit watch list by a major rating agency;
c) A bankruptcy filing;
d) Insolvency;
e) The filing of a material lawsuit that could significantly and adversely affect past, current or future financial results; or
f) Any change in the financial condition of the Market Participant or FTR Bidder that exceeds a five percent (5%) reduction in the Market Participant's or FTR Bidder's Tangible Net Worth or Net Assets for the Market Participant's or FTR Bidder's preceding fiscal year, calculated in accordance with generally accepted accounting practices.

A-2. Unsecured Credit Limit Calculation

See Section 12.1.1A, 12.1.1A.1, 12.1.1A.2 and 12.1.1A.3 of the ISO Tariff.

A-3. Unsecured Credit Limit Issues for Affiliated Entities

As provided in Section 12.1.1.1 of the ISO Tariff, if any Market Participant or FTR Bidder requesting or maintaining an Unsecured Credit Limit is affiliated with one or more other entities subject to the credit requirements of Section 12 of the ISO Tariff, the ISO may consider the overall creditworthiness and financial condition of such Affiliates when determining the applicable Unsecured Credit Limit. The ISO may determine that the maximum Unsecured Credit Limit calculated in accordance with Section A-2 of this document applies to the combined activity of such Affiliates.

PART B: APPROVED FORMS OF FINANCIAL SECURITY

In accordance with Section 12.1.2 of the ISO Tariff, a Market Participant or FTR Bidder, at its own expense, may submit one or more of the following forms of Financial Security to meet its posting requirement (pro-forma templates are located at http://www.caiso.com/docs/2005/06/14/200506141656326466.html):

- An irrevocable and unconditional letter of credit issued by a bank or financial institution that is reasonably acceptable to the ISO;

- An irrevocable and unconditional surety bond issued by an insurance company that is reasonably acceptable to the ISO;
- An unconditional guaranty issued by a company that is reasonably acceptable to the ISO;
- A cash deposit in an escrow account maintained at a bank or financial institution that is reasonably acceptable to the ISO;
- A certificate of deposit in the name of the ISO issued by a bank or financial institution that is reasonably acceptable to the ISO;
- A payment bond certificate issued by a bank or financial institution that is reasonably acceptable to the ISO; or
- A prepayment to the ISO.

The ISO will maintain standard agreement forms related to the above types of Financial Security. In accordance with Section 12.1.2.1 of the ISO Tariff, the ISO will evaluate non-standard agreement forms for these types of Financial Security on a case-by-case basis. For those Market Participants or FTR Bidders that propose the use of a non-standard agreement form, the form would be subject to review and approval by the ISO Finance and Legal Departments. A Market Participant or FTR Bidder will be required to justify any proposed departures from the standard agreement form. The ISO shall have ten (10) Business Days from receipt of such form of Financial Security to evaluate it and determine whether it will be approved as reasonably acceptable. Significant departures from the standard agreement forms may not be accepted. The request is deemed denied if the ISO does not respond within ten (10) Business Days. It should be noted that if the need to post additional Financial Security was prompted by an additional Financial Security request based upon the latest Estimated Aggregate Liability calculation, the review process does not defer the Market Participant's obligation to post.

The standard that the ISO will use in establishing reasonable acceptability for issuing banks, financial institutions or insurance companies is that the institution have and maintain a minimum corporate debt rating of an "A-" by S&P, "A3" by Moody's, "A-" by Duff & Phelps, "A-" by Fitch or an equivalent short-term debt rating by any of these agencies.

In those cases where a Market Participant or FTR Bidder is a subsidiary or affiliate of another entity and would like to utilize the consolidated financial statements and other relevant information of that entity for obtaining credit, a signed corporate guaranty is required. A guarantor would be considered reasonably acceptable and a corresponding Financial Security Amount would be set based on the guarantor's credit evaluation according to the same procedures that a Market Participant or FTR Bidder would undergo as described in Section A-1.

Cash deposits held in escrow will be maintained in an interest bearing account. Interest will accrue to the Market Participant's or FTR Bidder's benefit and will be added to the Market Participant's or FTR Bidder's prepayment account on a monthly basis. Should a Market Participant or FTR Bidder become delinquent in payments, the Market Participant's or FTR Bidder's outstanding account balance will be satisfied using deposited funds. The Market Participant or FTR Bidder must take care to replenish used funds to ensure that it maintains a suitable level of cash to meet future financial obligations.

The ISO Tariff also permits Market Participants to make a prepayment of an upcoming bill due to the ISO. A prepayment may be used as a form of Financial Security. Prepayments to the ISO will be held in an interest-bearing account or another investment acceptable to the Market Participant and the ISO, and interest on the investment will accrue at the rate as provided for in the investment. Interest will accrue to the Market Participant's benefit and will be added to the Market Participant's prepayment account on a monthly basis. Due to the additional administrative effort involved in tracking and posting interest on such prepayments, the use of this option is not encouraged.

As provided in Section 12.1.2.3 of the ISO Tariff, the ISO shall not be held liable for any losses of funds held and invested by the ISO on the Market Participant's or FTR Bidder's behalf. Market Participants and FTR Bidders agree to bear any risk of loss of principal and/or interest of such funds. Funds will only be invested in bank accounts, high-quality money market funds or U.S. Government securities according to the ISO investment policy, unless otherwise agreed to by the Market Participant or FTR Bidder and the ISO.

In accordance with Section 12.1.2.2 of the ISO Tariff, each Market Participant or FTR Bidder shall ensure that the financial instruments it uses for the purpose of providing Financial Security will not expire and thereby cause the Market Participant's or FTR Bidder's Aggregate Credit Limit to fall below the Market Participant's or FTR Bidder's Estimated Aggregate Liability. The ISO will treat a financial instrument that does not have an automatic renewal provision and that is not renewed or replaced within seven (7) days of its date of expiration as being out of compliance with the standards for Financial Security and will deem the value of such financial instrument to be zero, and will draw upon such Financial Security prior to its stated expiration if deemed necessary by the ISO.

PART C: ESTIMATED AGGREGATE LIABILITY CALCULATION

This section describes the approach used by the ISO to determine the Financial Security posting requirements for Market Participants. Different approaches are used for new Market Participants (those without experience data with the ISO or who have been previously inactive) and for Market Participants with such data.

C-1. New Market Participants

A new Market Participant (or a Market Participant that has previously been inactive) is required to post an initial Financial Security Amount to cover a minimum of 14 days of estimated obligations as well as additional Financial Security as obligations are incurred.

This posting requirement is based on anticipated scheduling/trading practices and overall volumes. The ISO has prepared a simple template (Appendix 2) that may be used to determine an initial posting requirement. The template is an Excel worksheet located at the New Market Participant Security Calculation link http://www.caiso.com/docs/2005/06/14/200506141656326466.html.

The ISO will monitor a Market Participant's ongoing security requirement by comparing actual obligations against the estimated obligations to determine if an additional Financial Security Amount is required using the method described in Section C.2. This approach permits a Market Participant to increase its Financial Security Amount as often as weekly until the time elapsed from initial participation equals the length of the ISO payment cycle. At that time, the Financial Security Amount should be sufficient to cover 102 days transactions on an ongoing basis (The "Level Posting Period", as described in the subsequent section).

C-2. Other Market Participants - Scheduling Coordinator Aggregate Liability Estimate (SCALE) and Estimated Aggregate Liability (EAL) Overview

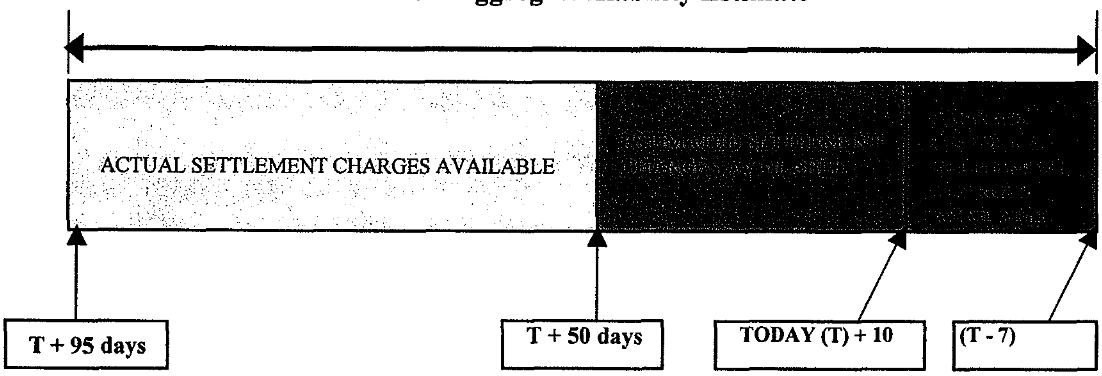
The Scheduling Coordinator Aggregate Liability Estimate (SCALE) application or an alternative method is used to calculate a Market Participant's Estimated Aggregate Liability, which is the estimate of unpaid obligations for a specified time period arising from charges described in the ISO Tariff.

The sum of a Market Participant's Unsecured Credit Limit and its Financial Security Amount is intended to provide coverage of not less than 100% of its Estimated Aggregate Liability. For a Market Participant that must post Financial Security because its Unsecured Credit Limit is not equal to or greater than its Estimated Aggregate Liability, the figures generated in determining the Estimated Aggregate Liability are normally the basis for determining each Market Participant's Financial Security posting requirement.

At any given time, the number of trade days of unpaid obligations to the ISO, based on the preliminary payment calendar, will be from 60-95 days, depending on the date of the last cash settlement. To avoid frequent changes to Financial Security posting requirements during the month and to allow a sufficient cushion of coverage given the allowed five day response time for Market Participants to post additional Financial Security, a "Level Posting Period" equal to 102 days is used as the basis for all Financial Security posting requirements.

The charges contributing to the Estimated Aggregate Liability are all charges outlined in the ISO Tariff. The Estimated Aggregate Liability calculation incorporates outstanding obligations, actual settlement charges, estimated settlement charges (calculated ten days after the trade date), and average historical settlement charges. The illustration below provides a representative example of what periods the different settlement charges cover in the Estimated Aggregate Liability calculation.

SC Aggregate Liability Estimate



NOTE: The *Average Historical Settlement Charges Available* could vary between seven (7) to fourteen (14) days.

Level Posting Period EALs are calculated as follows:

1. Aggregate all outstanding, actual settlement, predictive settlement and average historical predictive obligations through a specified calendar date. For example, if the EAL analysis was conducted on 8/1/2005, the Level Posting Period would begin on June 1, 2005 and end on August 13, 2005. The following obligations would be included in the analysis:

   - Outstanding AR/AP Obligations – Any open AR/AP balances, excluding balances covered by bankruptcies.
   - Final Invoice Obligation – Those obligations not paid on the preliminary invoice.
   - Actual Settlement Obligations – June 1, 2005 to June 9, 2005.
   - Predictive Settlement Obligations – June 10, 2005 through July 25, 2005.
   - Predictive Monthly Settlement Obligations - June 1, 2005 through July 25, 2005. For month-end Charge Types, daily amounts will be calculated to reflect those amounts as they are accrued.
   - Forecasted Settlement Obligations – July 26, 2005 through August 13, 2005 based on the average predictive settlement obligations from July 11, 2005 through July 25, 2005.

2. Calculate the daily average obligation by dividing the aggregate obligations calculated in step 1 above by the total number of days between June 1, 2005 and August 13, 2005.

3. Multiply the daily average obligation calculated in step 2 above by the level posting period days (i.e., 102 days).

Level Posting Period Days – The maximum number of days outstanding for the calendar year, based on the preliminary payment calendar, plus seven days for administrative purposes; currently set at 102 days.

Predictive Settlement Obligations – The obligations calculated by the settlement system using estimated generation, load and intertie MWhs (see Appendix 1 for a description of the MWh estimation process).

For a Market Participant that maintains multiple BAID numbers, the Estimated Aggregate Liability of the Market Participant as a legal entity will be calculated by summing the Estimated Aggregate Liabilities for all such BAID numbers and comparing the sum of the Estimated Aggregate Liabilities to the Aggregate Credit Limit of the Market Participant.

C-3. Adjustments to SCALE and Use of other ISO Data to Generate Estimated Aggregate Liability

The SCALE application provides liability estimates for Market Participants that, from an aggregate perspective as well as for most individual Market Participants, are the best liability estimates available to the ISO. Prior to the use of this approach, the ISO used a mechanical projection of available settlements data over the "blind spot" for each participant for which settlements data was not yet available. That approach did not consider changes in activity levels, or most changes in market prices.

Despite the significant improvement in accuracy from the use of the SCALE approach, there are times at which the ISO or a Market Participant observes that the SCALE application may be producing a liability estimate that appears to be inaccurate. The ISO has noted this situation when certain market parameters change such as the introduction of new market charges during Phase 1B of MRTU in 2004and during the C1 Control Area Footprint change in December 2005. In such instances, the ISO will attempt to revise the SCALE algorithms to appropriately reflect such changes, and may make manual adjustments to the SCALE results to reflect known issues. Alternatively, as a result of these or other causes, the SCALE application may also be considered to be temporarily inoperative by the ISO, and another approach to calculating liabilities must be used. This approach may also be used when:

- It becomes necessary to monitor the liabilities of a Market Participant on a more frequent basis than the SCALE application provides for;
- The ISO has determined that SCALE is not producing accurate Estimated Aggregate Liabilities for one or more Market Participants; or
- In situations that arise that the automated SCALE application cannot readily accommodate, e.g., a Market Participant bankruptcy where new BAIDs are established. In such a case, the previous activity levels in the "old" BAIDs may be representative of ongoing activities levels, but this data is not readily accessible to the SCALE application to estimate liabilities for the new post-bankruptcy BAIDs.

Market Participants may also recommend changes to the liability estimates produced by the SCALE application or an alternative ISO calculation through the dispute procedures noted in Part E.

C-3.1 Calculation of Estimated Aggregate Liability Using Available Settlements Data

If the ISO determines that the SCALE application is inoperative or producing liability estimates that are of questionable accuracy, the ISO will use an alternate approach to calculate Estimated Aggregate Liabilities for Market Participants. This backup approach will rely on available settlements data.

As noted in Section C-2, the Estimated Aggregate Liability amount consists of those trade days for which actual settlement charges are available and trade days for which actual settlements charges are not yet available. This alternative approach relies on a different method for estimating charges for the trade days for which actual settlements data is not available. Specifically, estimated charges for these trade dates are estimated based on average daily charges for trade dates for which settlements data is available.

The alternative EAL method differs from the SCALE method only in the manner it estimates data to represent liability for the "blind spot" in the payment calendar. It captures the same "actual" data as in the SCALE approach, specifically:

- Outstanding AR/AP Obligations – Any open AR/AP balances, excluding balances covered by bankruptcies.
- Final Invoice Obligation – Those obligations not paid on the preliminary invoice.
- Actual Settlement Obligations – Preliminary Settlements obligations up to the date of the latest Preliminary Statement.

The 102-day Level Posting Period is utilized in both SCALE and the alternative EAL approach. Depending on when the latest Preliminary and Final invoices were paid, there will be between about 8 and 40 days of unpaid actual Preliminary Statements. There can be an additional 20 to 30 days of unpaid Final statements as well, though those days are not counted toward the 102-day total because they are only incremental and are not representative of a complete day of activity.

The remainder of days in the 102-day Level Posting Period for which unpaid Preliminary Statements are not available must be estimated. The estimate is derived by taking a daily average of published, actual charges and multiplying by the number of remaining days in the Level Posting Period. The daily average is based on all outstanding unpaid Preliminary and Final activity and an additional amount of days (as described subsequently) of historical Final Statement activity. Due to the difficulty and pitfalls of gauging "blind spot" activity on historical statements, three methods will be utilized, varying only by the number of historical months used in the derivation of daily-average amounts.

The three methods will use the same outstanding charges (i.e., available Preliminary and Final activity) but will also consider a total of either one, two, or twelve months of historical data. The process of estimation is a relatively simple one, though each Market Participant's activity must be separated into Daily Market, Monthly Market, and GMC activity and estimated separately due to the difference in charge frequency. Appendix 1A contains additional details and an example calculation.

Once a daily average amount is derived for each market type and for each EAL method, they will be grouped by method and multiplied by the number of days remaining to fill the 102-day Level Posting Period. Thus, three Level Posting Period Estimated Aggregate Liability calculations will result. FERC Fees and other outstanding AR/AP balances will be added to each figure and the sum for each method will be divided by 0.9 in order to account for the ISO's stated policy for Financial Security of not more than a 90% utilization rate. Any shortfall between the 90%

utilization amount of the EAL and the posted Financial Security will be considered as a potential request for additional Financial Security.

Any Market Participant that would tentatively be required to post additional Financial Security based on the Estimated Aggregate Liability calculation using any of these three methods is flagged for additional review. ISO staff will review the preliminary liability estimates resulting from the use of 12 months, 2 months and 1 months of historical settlements data. Such information is reviewed in a numeric and graphical format. ISO staff aims to select the method that best represents Market Participant activity for which settlements data is not yet available. If ISO staff determines that the Estimated Aggregate Liability for the Market Participant exceeds 90% of the Market Participant's Aggregate Credit Limit, the ISO will request additional Financial Security and will provide the supporting calculation used for the Estimate Aggregate Liability amount.

C-4. Special Circumstances

The ISO's goal is to ensure that active as well as inactive Market Participants (to the extent they are not covered by their Unsecured Credit Limits) post adequate Financial Security to cover all known and reasonably estimated potential liabilities. Various charges and collateral issues sometimes arise which require special consideration.

The ISO intends to include the following charges in the Estimated Aggregate Liability calculation, if and when such data is available, and will require Market Participants to post Financial Security accordingly. The ISO's planned Settlement and Market Clearing system upgrade is scheduled for implementation in November 2007, at which time improved data for certain of these transactions is anticipated to be available.

- **Daily Adjustments and Disputes** – Charges associated with daily adjustments and disputes that are regularly calculated by the settlement system will be included in the liability estimation calculations as the charges are calculated. There should generally be no need to attempt to forecast these amounts since they are typically relatively small and usually affect many Market Participants.

- **Refund Orders** – The ISO will assess its ability to reasonably calculate the charges associated with a refund before the ISO's settlement system is rerun. If the ISO can reasonably apportion the refund to specific Market Participants, it will include the amounts in the liability estimation process and request security accordingly. If the ISO deems that complexities of a refund order preclude it from reasonably assessing the liabilities, it will not make a security request until the refund is processed through the settlement system. However, the ISO will make available an aggregate forecast of the refund liabilities, if at all possible, to Market Participants for informational purposes only.

- **Good Faith Negotiations** – In general, Good Faith Negotiations (GFN) tend to affect the transactions of an individual Market Participant, which in turn may affect a few or many other Market Participants. Transactions associated with GFNs will be handled in the same manner as transactions associated with Refund Orders.

Other special circumstances include:

- **Debtor/Creditor Market Participants leaving the market or incurring substantial activity level changes** – Those Market Participants that are exiting the ISO markets, or that have changed their business practices resulting in substantially reduced participation in the ISO markets, will be required to maintain a Financial Security Amount at least equal to five percent (5%) of the absolute value of the peak monthly net charges from their beginning participation date to their last participation date or the date the substantial change occurred. The ISO will use this Financial Security posting requirement as a base amount and reserves the right to increase or decrease the base amount depending on the number of settlement reruns in the queue and the estimated value of those settlement reruns. The five percent (5%) residual Financial Security posting will be retained for a period of one year, unless specific circumstances warrant a change in this retention period (e.g., pending FERC ordered adjustments).

- **Past due amounts owed to SCs are not considered part of an SC's security posting.** This treatment is necessary if the ISO is to maintain the integrity of the overall settlement system, which requires that each month be settled separately. Each trade month consists of creditors and debtors whose receivables and obligations vary over time. To the extent that amounts owed to an SC related to defaults in previous months are included in the liability estimation calculation and permitted to reduce that SC's current posting requirements, the ISO will have no means to enforce the payment obligation of that SC to pay current invoices rather than refuse payment in an attempt to recoup previous past-due amounts owed to them.

C-5. Estimated Aggregate Liability Review

As provided in Section 12.4 of the ISO Tariff, Estimated Aggregate Liabilityis used to determine Financial Security posting requirements and is to be used as the basis for additional Financial Security requests, particularly when a Market Participant's calculated liability estimate exceeds 90% of its Estimated Aggregate Liability.

A Market Participant has five (5) business days to review the request for additional Financial Security and submit proposed changes that must be agreed to by the ISO. Within the five (5) business days, the Market Participant must either demonstrate to the ISO's satisfaction that the ISO's Financial Security request is all or partially unnecessary, or post the required Financial Security Amount calculated by the ISO. If the ISO and Market Participant are unable to agree on the appropriate level of Financial Security during the five (5) business day review period, the Market Participant must post the additional Financial Security and continue the dispute procedure as described in Part E. Any excess Financial Security amounts will be returned to the Market Participant if the dispute process finds in favor of the Market Participant.

C-6. Financial Security Posting Requirements

This section describes the process for determining when additional Financial Security is required and how the request for additional Financial Security is communicated to the Market Participant.

C-6.1. Financial Security Requests

As described above, to the extent a Market Participant's Unsecured Credit Limit is less than its Estimated Aggregate Liability, the Market Participant must post a Financial Security Amount. The determination of a required/recommended Financial Security Amount is based on a Market Participant's most recent ISO Estimated Aggregate Liability calculation. The ISO recommends that each Market Participant maintain an Aggregate Credit Limit such that its Estimated Aggregate Liability does not exceed 90% of its Aggregate Credit Limit. The calculation is as follows:

Recommended Aggregate Credit Limit = (Estimated Aggregate Liability) / (0.90)

The 90% level is specified in the ISO Tariff and is used as the basis for the Financial Security Amount recommended by the ISO. A Market Participant must provide an additional Financial Security Amount when its obligations reach 100 percent of its Aggregate Credit Limit. However, the ISO recommends providing additional Financial Security at the 90% level, because when a

Market Participant's Estimated Aggregate Liability exceeds 100% of its Aggregate Credit Limit, the ISO may be required to impose enforcement actions.

The Estimated Aggregate Liability calculated by the ISO for a Market Participant may fluctuate, and at times this may result in swings in Financial Security posting requirements. To the extent that the Estimated Aggregate Liability exceeds the Aggregate Credit Limit at any time, a Market Participant may be subject to enforcement actions including not being entitled to submit a schedule to the ISO. Thus, the ISO recommends that Market Participants maintain a margin of Aggregate Credit Limit above their maximum anticipated Estimated Aggregate Liability.

The Estimated Aggregate Liability is updated weekly for each Market Participant and is used to determine if additional Financial Security needs to be posted. Based on a Market Participant's Aggregate Credit Limit utilization level (which is the EAL divided by Aggregate Credit Limit), the following actions will be taken at each level listed:

Aggregate Credit Limit Utilization %	**Action**
< 50%.	No notice or action taken.
≥50% and < 70%	Market Participant notified for information only.
≥70% and < 90%	Market Participant notified of a *recommended* security increase. The ISO recommends, but does not require, that an additional posting is made to maintain the SCALE at or below 70%.
≥90%	The ISO *requests* that a Market Participant increase the posting amount within five business days so that the security utilization does not exceed 90 percent. If the Market Participant takes no action in response to the recommendation to post additional security, upon reaching 100 percent security utilization, they will be subject to the enforcement provisions of the ISO Tariff as described in Section D, Enforcement, including potential rejection of schedules.

C-6.2. Financial Security Requests Communication

Each week the ISO Finance calculates each Market Participant's Estimated Aggregate Liability and notifies the ISO's customer service representatives of the Estimated Aggregate Liability amount and any recommended increases in the Market Participant's Financial Security Amount. These communications contain specific information regarding the amount each Market Participant needs to post Financial Security in order to maintain the recommended 90% ratio described above as well as the minimum amount needed so that the Market Participant's Estimated Aggregate Liability does not exceed its Aggregate Credit Limit.

The ISO customer service representative is to contact any Market Participant for which an increase in Financial Security is recommended or required within one (1) business day.

The customer service representative should copy ISO Finance on all security related client correspondence. The ISO customer service representatives will communicate with the ISO Finance and Market Participants to address questions related to the request.

A required increase in the Financial Security Amount is to be resolved within five (5) business days. Each Market Participant not in compliance with the requirement that its Estimated

Aggregate Liability be less than its Aggregate Credit Limit is subject to enforcement procedures as described in Part D.

C-6.3. FTR Auction Financial Security Requirements

The credit requirements related to participation in the ISO's annual Firm Transmission Rights (FTR) are the same as those for other market obligations. Auction requirements are set forth in the FTR Bidders Manual published annually by the ISO. A FTR Bidder's ACL must be sufficient to not only cover ongoing estimated liabilities but also the liabilities resulting from potential winning bids. Each FTR Bidder may choose to designate a portion of their UCL and/or posted Financial Security specifically for the FTR auction by notifying the ISO of the FTR Bidder's intent. Alternatively, the FTR Bidder may choose to post additional Financial Security solely to cover their participation in the FTR auction by notifying the ISO of the purpose for the additional Financial Security.

PART D. ENFORCEMENT

Following the date on which a Market Participant commences trading, if a Market Participant's Estimated Aggregate Liability, as calculated by the ISO, at any time exceeds its Aggregate Credit Limit, the ISO may take any or all of the following actions in accordance with Section 12.5 of the ISO Tariff:

(a) The ISO may withhold a pending payment distribution.

(b) The ISO may limit trading, which may include rejection of Schedules and/or limiting other ISO market activity. In such case, the ISO shall notify the Market Participant of its action and the Market Participant shall not be entitled to submit further Schedules to the ISO until the Market Participant posts an additional Financial Security Amount that is sufficient to ensure that the Market Participant's Aggregate Credit Limit is at least equal to its Estimated Aggregate Liability.

(c) The ISO may require the Market Participant to post an additional Financial Security Amount in lieu of an Unsecured Credit Limit for a period of time.

(d) The ISO may restrict, suspend, or terminate a Market Participant's Service Agreement.

In addition, the ISO may restrict or suspend a Market Participant's right to schedule or require the Market Participant to increase its Financial Security Amount if at any time such Market Participant's potential additional liability for Imbalance Energy and other ISO charges is determined by the ISO to be excessive by comparison with the likely cost of the amount of Energy scheduled by the Market Participant.

PART E. DISPUTE PROCEDURES

The ISO provides Market Participants the ability to dispute the Estimated Aggregate Liability calculated by the ISO and, as a result, the ISO may reduce or cancel a requested Financial Security adjustment. The following steps are required for a Market Participant to dispute a Financial Security request resulting from the ISO's calculation of Estimated Aggregate Liability:

1. Request by the Market Participant to review the ISO calculation.

2. Reasonable and compelling situation presented, as determined by the Market Participant's ISO client representative.

3. Documentation of facts and circumstances that evidence that the ISO's calculation of Estimated Aggregate Liability results in an excessive and unwarranted Financial Security posting requirement.

    a. Examples include:

i. Issues related to non-recurring retroactive charges.
ii. Demonstrable changes in expected obligations as a result of physical changes (new capacity, loss of customers).
iii. Other issues.

b. Presentation of a reasonable alternative Estimated Aggregate Liability.

4. Approval by the ISO Manager and/or Director of Customer Services and Industry Affairs and approval by the ISO Treasurer.

5. The ISO may decline to adjust the initial Estimated Aggregate Liability, as calculated using the SCALE application, if the Market Participant has had Financial Security shortfalls in the past 12 months (i.e., it has been shown that the Market Participant's Aggregate Credit Limit at times during the preceding 12 months has been insufficient to cover the Market Participant's Estimated Aggregate Liability).

In no such case shall an ISO request for increased Financial Security remain outstanding for more than five (5) business days. Either the above process is to be completed within five (5) business days from the date of the ISO request for additional Financial Security, or the Market Participant is to post additional Financial Security within the five (5) business days and continue this process, which may result in a return of posted Financial Security back to the Market Participant if the results of the dispute process are found to favor the Market Participant.

Factors for consideration in the event these procedures are utilized include:

Weighing the risk of using the lower figure to the potential detriment of market creditors if the Market Participant is under-secured and defaults, against the desire not to impose additional potentially unwarranted costs on a Market Participant.

Equity and consistency of treatment of Market Participants in the dispute procedure.

The evidentiary value of the information provided by the Market Participant's in the dispute procedure.

APPENDIX 1: SCHEDULING COORDINATOR AGGREGATE LIABILITY ESTIMATE MEASUREMENT FILE DEVELOPMENT PROCESS

INTRODUCTION

The following information provides background and an overview of the operation of the SCALE liability estimation process. This section focuses on the measurement file development process to develop proxies for missing meter data. This allows the ISO to use available operational to estimate current liabilities.

DEVELOPMENT PROCESS

Defined Terms

EMS Utility Distribution Control Area (UDC) Load – The ISO control area load MWhs aggregated at the PG&E, SCE and SDG&E level.

Generation Deviation Allocation Flag – The generation deviation allocation flag denotes which Market Participant load profiles are allocated generation deviation/Unaccounted for Energy (UFE) MWhs.

Load Profiles

Annual Load Profile – Load profile developed from actual meter MWhs for the period of Trade Date (T) + 50 to T+415.
Current Load Profile – Load profile developed from actual meter MWhs for period of T+50 to T+80.
Schedule Load Profile – Load profile developed from scheduled meter MWhs for the period of T+1 to T+49.
Seasonal Load Profile – Load profile developed from actual meter MWhs for the prior season.
Short-Term Schedule Load Profile - Load profile developed from scheduled meter MWhs for the period of T+1 to T+14.

Load Profile Adjustment Percentage – The load profile adjustment percentage is calculated as the percentage variance between actual metered load and allocated EMS UDC Load. This percentage is utilized to develop actual metered load, utilized by the settlement system, from allocated EMS UDC Load.

Meter Load to Scheduled Load Adjustment Percentage – The meter load to scheduled load adjustment percentage is calculated as the variance between actual meter load and scheduled load. The percentage is utilized to create representative meter load from scheduled load.

Off-Peak – This term represents the day of the week to which a load profile corresponds. The Off-Peak days of the week include: Saturday, Sunday and Holidays.

On-Peak –This term represents the day of the week to which a load profile corresponds. The On-Peak days of the week include: Monday, Tuesday, Wednesday, Thursday and Friday.

Other Adjustment Percentage – For a Market Participant whose load profiles and adjustment percentages do not reflect its load, the other adjustment percentage approach is utilized. This approach is only rarely used.

Use Meter Load to Scheduled Load Adjustment Percentage Flag – This flag identifies those calculated Market Participant load profiles that are subsequently adjusted by the meter load to scheduled load adjustment percentage.

Use Scheduled Load Flag – This flag identifies those Market Participants where utilization of scheduled load a proxy for metered load is appropriate.

Market Participant Liability Estimations

In 2003, the focus of the Scheduling Coordinator Aggregate Liability Estimation (SCALE) project was on the development of settlement statements seven days after the trade date using a system that is essentially a copy of the settlement system with missing load, generation and intertie data derived from a combination of meter, telemetry and estimated data from other systems. In order for the SCALE application to effectively and accurately calculate participant liabilities, three essential data inputs are needed: load, generation and intertie MWhs. It was determined that 75 to 80 percent of generation and intertie MWhs are derived from the ISO polled meter data stored in the ISO's Data Warehouse. However, the load MWhs were not available until 45 days after the trade date. Thus, the main focus of the SCALE project team's efforts to was on the estimation of load data. The analysis conducted produced the following findings:

1. Utilization of current actual meter load profiles, which are based on meter data that is 50 to 80 days old, to allocate EMS UDC Load, did not alone accurately reflect a Market Participant's current position in the market. For example, a Market Participant's load profile based on past data would not accurately reflect a situation where it has transferred its load/customers to another Market Participant.

2. Utilization of annual load profiles to allocate EMS UDC Load in many instances did not reflect load increases or decreases that appear over time. For example, since September 2001, certain Market Participants have acquired a substantial amount of load from other Market Participants, but the annual load profiles generated did not reflect this load shift.

3. Utilization of schedules to estimate system load and to derive participant liabilities did not reflect the actual daily system load or participant imbalances. This was mainly due to a Market Participant's ability to schedule whatever amount of load that it chooses. Analysis of Market Participant scheduling patterns has shown that many Market Participants' schedules are closely related to their actual metered quantities. However, Market Participant scheduling practices may not be consistent.

4. After conducting an analysis of the load estimation methodologies above, it was determined that all three methods should be combined to provide for a more accurate load estimate. The methodology, outlined below, includes the information gathered through the liability estimation process.

Additional areas that the SCALE team worked on were the estimation of the remaining 15 to 25 percent of missing generation and intertie MWhs. The team developed a methodology to estimate the remaining generation and intertie MWhs, and an explanation of the methodology is outlined below.

Load Estimation Methodology

As mentioned in the previous section, three approaches were considered to estimate load MWhs and each had significant shortcomings that precluded them from being utilized exclusively. By utilizing each of the methodologies in conjunction with each other, a proxy for metered load was developed that more closely represented each participant's position in the market. The following are the steps created to develop a Market Participant's load estimate.

1. **Develop Load Profiles** - Development of each Market Participant's "On-Peak" (Monday through Friday) and "Off-Peak" (Saturday, Sunday and Holidays) hourly load profiles by UDC area. The load profiles developed consist of:

   - Annual Load Profiles,
   - Seasonal Load Profiles,
   - Current Load Profiles,
   - Scheduled Load Profiles, and
   - Short-Term Scheduled Load Profiles.

2. **Select Load Profile** – Once the load profiles are developed for a given time period, the next step in the load estimation process is to determine which load profile (Annual, Seasonal, Current etc) most closely reflects a Market Participant's actual position in the market. For example, the EMS UDC Load from 12/16/2002 to 1/15/2003 is allocated to each of the load profiles listed above. Next, the allocated MWhs for each set of profiles is compared against the actual metered MWhs for the same time period 12/16/2002 to 1/15/2003. The load profile that best represents a Market Participant's actual meter MWhs is utilized for subsequent load allocations.

3. **Calculate / Select Load Profile Adjustment Percentages and Load Profile Application Flags** – The following adjustment percentages and load profile application flags, which are defined above, are calculated or selected to be utilized in subsequent calculations:

   - Load Profile Adjustment Percentage,
   - Meter Load to Scheduled Load Adjustment Percentage,
   - Other Adjustment Percentage,
   - Use Meter Load to Scheduled Load Adjustment Percentage Flag, and
   - Use Scheduled Load Flag.

   (note: the results of steps 1 thru 3 are utilized for a designated period, such as 30 days)

4. **Validate EMS UDC Load** – EMS UDC Load validation for each trade date is conducted to ensure that the data derived from EMS does not include significant outlier MWhs. The calculation includes comparing an historical EMS load profile (T+1 to T+50) to the current trade date load profile. Where the current load profile MWh does not meet the 15 percent tolerance level, the current EMS MWh value is adjusted to within tolerance.

5. **Allocate EMS UDC Load** – Next, the ISO will utilizes the selected load profile for determining the MP's hourly load to allocate EMS UDC Load. The following steps are required for the allocation of EMS UDC Load:

   i. The EMS UDC Load is allocated to MP's based on the following formula (all calculations are conducted on an hourly basis):

      - Where Use Schedule Load Flag = "True"; Scheduled Load * (1+Meter Load to Scheduled Load Adjustment Percentage)

      - Where Use Schedule Load Flag = "False" and Use Meter Load to Scheduled Load Adjustment Percentage Flag = "True", EMS UDC Load * Selected Load Profile / 1000 * (1+ Load Profile Adjustment Percentage) * (1+ Other Adjustment Percentage) * (1+ Meter Load to Scheduled Load Adjustment Percentage),

      - Else, EMS UDC Load * Selected Load Profile / 1000 * (1+ Load Profile Adjustment Percentage) * (1+ Other Adjustment Percentage)

   ii. The value of Hourly EMS UDC Load * Selected Load Profile is divided by 1000 because the hourly load profile percentages derived are multiplied by 1000 for data representation purposes.

6. **Calculate Generation Deviation / Unaccounted for Energy (UFE) Quantity by UDC** - For each UDC, a Generation Deviation / UFE calculation is completed, which provides a residual amount of Load MWhs that are allocated to designated Market Participants on a *pro rata* basis. The purpose of the calculation and load MWh allocation is to minimize Charge Type 406 UFE charges. The UFE calculation is outlined in the settlement and billing protocols under CT 406. The allocation process is as follows (all calculations are conducted on an hourly basis):

   i. Where Generation Deviation Allocation Flag = "False", MP Load + (UDC UFE *MP Load / Total UDC Load where Generation Deviation Allocation Flag = "False").

7. **Load Distribution and Upload** – Upon deriving the load MWhs to be utilized in the settlement statement calculation, the MWhs are distributed to each Market Participant's valid resources IDs in the following manner and then uploaded into the SCALE application.

   i. Development of a list of valid metered and scheduled resources utilized by each MP over a given time period (T+1 to T+80).

   ii. Allocate the estimated load to the valid resources on a weighted basis by hour. For all resources that have both metered quantities and scheduled quantities, metered quantities will be utilized for weighting purposes. Resources that have scheduled quantities and no metered quantities are assumed to be recently utilized resources and scheduled quantities will be used for weighting purposes.

   iii. Allocate the resource quantities calculated above evenly across the six sub-hour interval levels for upload into the measurements table in the SCALE application.

Generation Estimation Methodology

As mentioned above, at T+7 approximately 15 to 25 percent of generation meter data is not available. The following is an explanation of the methodology utilized to develop a proxy for the missing generation meter data.

The ISO determined that the missing generation data consists of the following:

1. The ISO polled unit MWhs that were either not available at T+7 or were being worked on by the metering department at the time of the T+7 data push, and

2. Qualifying Facility (QF) unit and other non-polled unit MWhs.

The process for determining the remaining generation data is based on EMS and schedule data.

1. **Download T+7 Meter Data Acquisition System (MDAS) Generation Data** – For the trade date being worked on, all generation data available in the T+7 measurement table is downloaded for analysis purposes.

2. **Download Scheduled Generation Data** – From Market Operation's Scheduling Infrastructure (SI) database, download hourly scheduled generation by resource ID.

3. **Download Real Time (RT) Dispatch Data** – From Market Operation's SI database, download hourly real time dispatched data by resource ID.

4. **Download EMS Data from Plant Information (PI)** – A table has been developed from information provided by Market Operations that contains approximately 800 generation resource IDs mapped to the appropriate PI tags. Using the PI tags, generation unit hourly EMS MWhs are downloaded from PI.

5. **Download Actual Meter & Schedule Data** – From the Data Warehouse, download actual metered and scheduled quantities for a period of T+50 to T+80 for analysis purposes.

6. **Utilization of T+7 MDAS Generation Data** – Where T+7 MDAS generation data exists for a particular resource, even if the measurement quantity is zero, use this value. (Between 75 and 85 percent of all generation MWhs.)

7. **Utilization of EMS Generation Data** – Where MDAS data is not available and Dispatched Generation MWh >0 and EMS MWh >0, use EMS MWhs. (Approximately 18.75 percent of all generation MWhs.)

   a. Dispatched Generation MWh = Scheduled Generation MWh + RT Dispatched Generation MWh

   b. Where the EMS MWh * 1.15 is greater than the maximum generation capacity of the unit utilize the maximum generation capacity of the unit.

8. **Utilization of Dispatched/Scheduled Generation MWhs** – Where MDAS data is not available and Dispatched Generation MWh >0 and EMS MWh = 0, use Adjusted Dispatched / Scheduled Generation MWh. (Approximately 6.25 percent of all generation MWhs.)

   a. Adjusted Dispatched Generation MWh =

      i. For all Dispatched / Scheduled Generation MWhs >=1 MWh, Dispatched / Scheduled Generation MWhs* 1+(Hourly Metered vs. Scheduled Generation Variance Percentage)

   b. Resource Historical Metered vs. Scheduled Variance Percentage (T+50 to T+80) = (average hourly metered MWh – average hourly scheduled MWh) / average hourly scheduled MWh

9. **Upload the Developed MWhs to the SCALE Application** - Allocate the resource quantities calculated above evenly across the six sub-hour interval levels for upload into the measurements table in the SCALE application.

Intertie/Intratie (TIE) Estimation Methodology

Currently, 75 to 80 percent of the TIE data is available from the ISO polled meters. The process for determining the remaining intertie MWhs is based on the utilization of EMS data and allocated load MWhs derived in the Load Estimation Methodology for various intraties.

1. **Download T+7 MDAS Intertie Data** – For the trade date being estimated, all TIE data available in the T+7 measurement table is downloaded for analysis purposes.

2. **Download EMS Data from PI** – A table has been developed from information provided by Market Operations that contains TIE resource IDs mapped to the appropriate PI tags. Using the PI tags, TIE hourly EMS MWhs are downloaded from PI.

3. **Utilization of T+7 MDAS Intertie Data** – Where T+7 MDAS TIE data exists, use MDAS data. (Approximately 84 percent of all TIE MWhs.)

4. **Utilization of EMS Intertie Data** – Where MDAS data is not available use the EMS data. (Approximately 13 percent of all TIE MWhs.)

5. **Utilization of Load Data** – For intratie IDs, utilize the amount calculated as load as the intratie MWhs where appropriate. (Approximately 3 percent of all TIE MWhs.)

6. **Upload the Developed MWhs to the SCALE Application** - Allocate the resource quantities calculated above evenly across the six sub-hour interval levels for upload into the measurements table in the SCALE application.

SCALE Data Development Conclusion

The above steps describe how missing meter MWh data is developed for an estimated T+7 settlement run. Further enhancements to this process may be forthcoming as the process is transitioned to a permanent software tool, planned for November 1, 2007 when the ISO's new Settlement and Market Clearing System (SaMC) is implemented.

APPENDIX 1A: ALTERNATIVE ESTIMATED AGGREGATE LIABILITY CALCULATION

To assist Market Participants in understanding and verifying the ISO's alternative EAL calculation, the following section provides additional details and an example calculation. As described in Section 3.1, the ISO initially evaluates a Market Participant's liability by deriving three estimates which vary only by the number of months used in derivation of the daily average liability amounts. ISO Staff review the preliminary estimates to determine which appears to be most representative of the likely actual liability, and may request additional collateral based on that estimate. A summary report detailing the alternative EAL calculation will be provided to any Maket Participant requested to post additional security, or at any time when requested by the Market Participant. The report will highlight only the method that is deemed by the ISO to be most representative of the Market Participant's liability, however all three methods are available upon request as well.

This Estimated Aggregate Liability (EAL) Report presents most of the details of the calculation, which should be verifiable by the Market Participant using published Settlements Statements. Adding all outstanding, unpaid, published Settlements activity to an estimate of the remaining liability in the 102-day period results in the Level Posting Period EAL.

For example, assume that the EAL is calculated on Friday, June 16, 2006. On this day there are 23 days of published Preliminary Statements along with 4 days of Final Statements for the month of April. All of this activity will be summed for April and will account for 23 days out of the required 102 days. The Preliminary Statement has been paid for March; therefore no days in March will be counted in the Level Posting Period. However, there are still incremental charges in March on Final Statements that have been invoiced but not paid, and therefore will be included in the liability amount.

Now an estimate must be derived for the remaining seven days of April, along with an additional 72 days that make up the Level Posting Period (23+7+72=102). The estimate is based on a calculated daily average amount for all Charge Types. For simplicity, the Charge Types are aggregated into three categories: Daily Market (Imbalance Energy, Ancillary Services, etc.), Monthly Market (Wheeling, Transmission, etc), and GMC. The following table entitled "**Charge Type Category List**" lists all Charge Types and their category designation.

The averages for all three categories will be calculated using the same time period, based on either one, two or twelve months of historical Settlements data. In the one-month method, the time-period for derivation of daily averages will include 23 days of April published data, 30 days of March published data (because the month is still open), and one additional month of previously paid Settlement activity, specifically the month of February. For purposes of our example, assume that all outstanding, published obligations net to a total of $7,000.

To derive a daily average amount for the category of 'Daily Market' charge types, sum all charge type amounts in this category (see attached table) from February 1 to April 23 and divide by 82 (28+31+23). Assume the result is $100 per day.

To derive the daily average of 'Monthly Market' charges, sum all charge type amounts in this category from February 1 to March 31. Due to the fact that these charge types accrue only on the last day of the month, there is no reason to consider the range of April 1 to April 23 at this time. Divide the amount by 60 days for the two-month period. Assume the result is $50 per day.

Lastly, derive the 'GMC' category charges in the same manner as the 'Monthly Market' charges and divide by 60. Assume the result is $25.

Now combine the results and calculate 102-day Liability.

Outstanding obligations: calculated above for the 23 days of April Prelims and 30 days of March Finals, includes 'Daily Market', 'Monthly Market' (incremental Final), and 'GMC' (incremental Final)

$ 7,000 *(23 days)*

'Daily Market' Estimate: 7 days in April, 31 days in May, 30 days in June, 11 days in July

$ 100 * (7+31+30+11) = $ **7,900** *(79 days)*

'Monthly Market' Estimate: 30 days in April, 31 days in May, 30 days in June, 11 days in July

$ 50 * (30+31+30+11) = **$ 5,100** (102 days)

'GMC' Estimate: 30 days in April, 31 days in May, 30 days in June, 11 days in July

$ 25 * (30+31+30+11) = **$ 2,550** (102 days)

Total 102-day Level Posting Period EAL:

$ 7,000 + $ 7,900 + $ 5,100 + $ 2,550

= $ 22,550

The other two methods are calculated in the same manner while adding additional months of historical Settlements data.

Charge Type Category List:

Frequency	Charge Type	Charge Type Description	Service Type
Daily	1	Day-Ahead Spinning Reserve due SC	Ancillary Services
Daily	2	Day-Ahead Non-Spinning Reserve due SC	Ancillary Services
Daily	3	Day-Ahead AGC/Regulation due SC	Ancillary Services
Daily	4	Day-Ahead Replacement Reserve due SC	Ancillary Services
Daily	5	Day-Ahead Regulation Up due SC	Ancillary Services
Daily	6	Day Ahead Regulation Down due SC	Ancillary Services
Daily	24	Dispatched Replacemnt Res (Bid-in) Capacity Withhold	Ancillary Services
Daily	51	Hour-Ahead Spinning Reserve due SC	Ancillary Services
Daily	52	Hour-Ahead Non-Spinning Reserve due SC	Ancillary Services
Daily	53	Hour-Ahead AGC/Regulation due SC	Ancillary Services
Daily	54	Hour-Ahead Replacement Reserve due SC	Ancillary Services
Daily	55	Hour Ahead AGC/Regulation Up due SC	Ancillary Services
Daily	56	Hour AHead AGC/Regulation Down due SC	Ancillary Services
Daily	61	Hour-Ahead RMR Preempted Spinning Reserve	RMR
Daily	62	Hour-Ahead RMR Preempted Non-Spinning Reserve	RMR
Daily	64	Hour-Ahead RMR Preempted Replacement Reserve	RMR
Daily	65	Hour-Ahead RMR Preempted Regulation Up	RMR
Daily	66	Hour-Ahead RMR Preempted Regulation Down	RMR
Daily	71	Real Time RMR Preempted Spin Reserve (DA Price)	RMR
Daily	72	Real Time RMR Preempted Non-Spin Reserve (DA Price)	RMR
Daily	74	Real Time RMR Preempted Replacement Reserve (DA Price)	RMR
Daily	75	Real Time RMR Preempted Regulation Up (DA Price)	RMR
Daily	76	Real Time RMR Preempted Regulation Down (DA Price)	RMR
Daily	81	Real Time RMR Preempted Spin Reserve (HA Price)	RMR
Daily	82	Real Time RMR Preempted Non-Spin Reserve (HA Price)	RMR
Daily	84	Real Time RMR Preempted Replacement Reserve (HA Price)	RMR
Daily	85	Real Time RMR Preempted Regulation Up (HA Price)	RMR
Daily	86	Real Time RMR Preempted Regulation Down (HA Price)	RMR
Daily	101	Day-Ahead Spinning Reserve due ISO	Ancillary Services
Daily	102	Day-Ahead Non-Spinning Reserve due ISO	Ancillary Services
Daily	103	Day-Ahead AGC/Regulation due ISO	Ancillary Services
Daily	111	Spinning Reserve due ISO	Ancillary Services
Daily	112	Non-spinning Reserve due ISo	Ancillary Services
Daily	114	Replacement Reserve due ISO	Ancillary Services
Daily	115	Regulation Up due ISO	Ancillary Services

Frequency	Charge Type	Charge Type Description	Service Type
Daily	116	Regulation Down due ISO	Ancillary Services
Daily	124	Dispatched Replace Res (Self-Prov.) Capacity Withhold	Ancillary Services
Daily	130	Insufficient Energy in Response to ISO Instructions	Misc
Daily	131	Reduct. in Avail. Cap. due to Uninst. Dev. due ISO	Misc
Daily	141	No Pay Charge - Spinning Reserve	No Pay
Daily	142	No Pay Charge - Non-Spinning Reserve	No Pay
Daily	144	No Pay Charge - Replacement Reserve	No Pay
Daily	145	No Pay Charge - Regulation Up	No Pay
Daily	146	No Pay Charge - Regulation Down	No Pay
Daily	151	Hour-Ahead Spinning Reserve due ISO	Ancillary Services
Daily	152	Hour-Ahead Non-Spinning Reserve due ISO	Ancillary Services
Daily	153	Hour-Ahead AGC/Regulation due ISO	Ancillary Services
Daily	201	Day-Ahead Intra-Zonal Congestion Incs/Decs Settlement	Congestion
Daily	202	Day-Ahead Intra-Zonal Congestion Charge Refund	Congestion
Daily	203	Day-Ahead Inter-Zonal Congestion Settlement due SC	Congestion
Daily	204	Day-Ahead Inter-Zonal Congestion Settlement due TO	Congestion
Daily	251	Hour-Ahead Intra-Zonal Congestion Settlement	Congestion
Daily	252	Hour-Ahead Intra-Zonal Congestion Charge Refund	Congestion
Daily	253	Hour-Ahead Inter-Zonal Congestion Settlement due SC	Congestion
Daily	254	Hour-Ahead Inter-Zonal Congestion Settlement due TO	Congestion
Daily	255	Hour-Ahead Inter-Zonal Congestion Debit to TOs	Congestion
Daily	256	Hour-Ahead Inter-Zonal Congestion Debit due SC	Congestion
Daily	271	Real-time Intra-zonal Congestion INC/DEC Settlement	Imbalance Energy
Daily	272	Real-time Above MCP Costs for Non-Market Dispatches	Excess Costs
Daily	301	Supplemental and A/S Energy	Reliability
Daily	303	Ex-Post Replacement Reserve due ISO (Dispatched)	Ancillary Services
Daily	304	Ex-Post Replacement Reserve due ISO (Undispatched)	Ancillary Services
Daily	353	Contracted Black Start due SC	Reliability
Daily	401	Instructed Energy	Imbalance Energy
Daily	402	Generation Deviation Settlement	Imbalance Energy
Daily	403	Load Deviation Settlement	Imbalance Energy
Daily	404	Export Deviation Settlement	Imbalance Energy
Daily	405	Import Deviation Settlement	Imbalance Energy
Daily	406	UFE Settlement	Imbalance Energy
Daily	407	Uninstructed Energy	Imbalance Energy
Daily	410	Unscheduled RMR Energy	Imbalance Energy
Daily	451	Real-Time Intra-Zonal Congestion Incs/Decs Settlement	Congestion
Daily	452	Real-Time Intra-Zonal Congestion Charge/Refund	Congestion

Frequency	Charge Type	Charge Type Description	Service Type
Daily	481	Excess Cost for Instructed Energy	Imbalance Energy
Daily	485	Insufficient Response to AWE Instruction	Penalties
Daily	487	Allocation of Excess Cost for Instructed Energy	Imbalance Energy
Daily	499	Interest due SC	Misc
Daily	502	Generation Deviation Effective Price	Imbalance Energy
Daily	503	Load Deviation Effective Price	Imbalance Energy
Daily	505	Import Deviation Effective Price	Imbalance Energy
Daily	547	Uninstructed Deviation Penalty Charges Due ISO	Penalties
Daily	1003	Regulation Energy Payment Adjustment	Adjustments
Daily	1004	Over-Generation Payment Due SC	Reliability
Daily	1010	Neutrality Adjustment Charge/Refund	Imbalance Energy
Daily	1011	Ancillary Service Rational Buyer Adjustment	Ancillary Services
Daily	1012	RMR Preemption Revenue Allocation	RMR
Daily	1013	REPA Cash Neutrality Charge	Reliability
Daily	1030	No Pay Provision Market Refund	No Pay
Daily	1061	Distribution of Preempted Spinning Reserve	RMR
Daily	1062	Distribution of Preempted Non-Spinning Reserve	RMR
Daily	1064	Distribution of Preempted Replacement Reserve	RMR
Daily	1065	Distribution of Preempted Regulation Up	Ancillary Services
Daily	1066	Distribution of Preempted Regulation Down	Ancillary Services
Daily	1104	Over-Generation Payment Due ISO	Reliability
Daily	1210	Existing Contracts Cash Neutrality Charge/Refund	Misc
Daily	1277	Real-time Intra-zonal Congestion Charge/Refund	Imbalance Energy
Daily	1278	Alloc of AboveMCP Cost for Real-Time Non-Mkt Dsptch	Excess Costs
Daily	1303	Supplemental Reactive Energy due ISO	Reliability
Daily	1401	Imbalance Energy Offset	Imbalance Energy
Daily	1407	Deviation Penalty for Positive Uninstructed Deviation	Penalties
Daily	1470	Neutrality Charge for UDP Penalties	Penalties
Daily	1471	Excess Cost Neutrality Settlement	Excess Costs
Daily	1481	Excess Cost Allocation - Neutrality Adjustment	Excess Costs
Daily	1487	Energy Exchange Program Neutrality Adjustment	Adjustments
Daily	1680	Allocation of Bid Cost Recovery	Reliability
Daily	1999	Rounding Charge/Refund	Misc
Daily	2009	ISO/SC Distribution/Allocation	Misc
Daily	2010	Finance Charges	Misc
Daily	2020	Must Run due ISO	Misc
Daily	2407	Deviation Penalty for Negative Uninstructed Deviation	Penalties
Daily	2900	CONTINGENCY-Net Manual Market Invoice	Misc
Daily	4141	No Pay Settlement for Spin Capacity	No Pay
Daily	4142	No Pay Settlement for Non Spin Capacity	No Pay
Daily	4144	No Pay Settlement for Replacement Reserve Capacity	No Pay
Daily	4271	Reliability Excess Cost Settlement - Due SC	Imbalance Energy
Daily	4272	OOM Congestion Excess Cost Settlement - Due SC	Imbalance Energy
Daily	4401	Instructed Energy Settlement	Imbalance Energy

Frequency	Charge Type	Charge Type Description	Service Type
Daily	4406	Settlement of Unaccounted for Energy	Imbalance Energy
Daily	4407	Uninstructed Energy Settlement	Imbalance Energy
Daily	4410	Unscheduled RMR Energy	Imbalance Energy
Daily	4450	Transmission Loss Settlement	Imbalance Energy
Daily	4470	Negative Uninstructed Deviation Penalty	Penalties
Daily	4480	Positive Uninstructed Deviation Penalty	Penalties
Daily	4481	Settlement of Excess Cost - Due SC	Imbalance Energy
Daily	4487	Allocation of Excess Cost - Due ISO	Imbalance Energy
Daily	4660	Hrly Pre Dispatch Bid Cost Recovery Settlement	Excess Costs
Daily	4680	Settlement of Bid Cost Recovery	Excess Costs
Daily	4999	Neutrality Adjustment	Adjustments
Daily	5900	Shortfall Receipt	Misc
Daily	5910	Shortfall Allocation	Misc
Daily	5999	FERC Interest	Misc
Daily	6601	Communication Fees	Misc
Daily	6602	Training Fees	Misc
Daily	6603	Miscellaneous Fees	Misc
Daily	6604	OSAT Training Revenues	Misc
Daily	6605	Metering Training Revenues	Misc
Daily	6606	WSCC Revenues	Misc
Daily	6607	Detailed Wheeling Spreadsheet Fees	Misc
Daily	6608	Archived Settlement Statements Retrieval Fee	Misc
Daily	6609	Station Power Fee	Misc
Daily	6610	Station Power Fee Allocation	Misc
Daily	6611	Security Refund	Misc
Daily	6612	ISO Services for GCP	Misc
Daily	6616	FTR Auction	Misc
Daily	6701	Market Invoice	Misc
Daily	6702	GMC Invoice	Misc
Daily	6703	FERC Invoice	Misc
Monthly	7	Demand Relief Monthly Payment	Misc
Monthly	117	Demand Relief Monthly Charge	Misc
Monthly	302	Ex-Post Supplemental Reactive Power due TO	Reliability
Monthly	354	Wheeling Refund due TO	Wheeling
Monthly	372	High Voltage Access Charge due ISO	TAC
Monthly	374	High Voltage Access Revenue due PTO	TAC
Monthly	382	High Voltage Wheeling Charge due ISO	Wheeling
Monthly	383	Low Voltage Wheeling Charge due ISO	Wheeling
Monthly	384	High Voltage Wheeling Revenue due TO	Wheeling
Monthly	385	Low Voltage Wheeling Revenue due TO	Wheeling
Monthly	550	FERC Fees	FERC Fees
Monthly	591	Emissions Cost Recovery	Uplift Fees
Monthly	592	Start-Up Cost Recovery	Uplift Fees
Monthly	593	Emissions Cost Due Trustee	Uplift Fees
Monthly	594	Start-Up Costs Due Trustee	Uplift Fees
Monthly	595	Minimum Load Cost Allocation Due ISO	Reliability
Monthly	691	Emission Cost Payment	Uplift Fees

Frequency	Charge Type	Charge Type Description	Service Type
Monthly	692	Startup Cost Payment	Uplift Fees
Monthly	695	Minimum Load Cost Compensation Due SC	Reliability
Monthly	701	Forecasting Service Fee	Misc
Monthly	702	Forecasting Service Fee Allocation	Misc
Monthly	711	Intermittent Resources Net Deviations	Imbalance Energy
Monthly	721	Intermittent Resources Net Deviation Alloc Charge	Imbalance Energy
Monthly	731	Intermittent Resources Uninstructed Deviation	Imbalance Energy
Monthly	790	Market Transaction Bill Period Adjustment	Adjustments
Monthly	791	Grid Management Charge Bill Period Adjustment	Adjustments
Monthly	792	FERC Fee Bill Period Adjustment	Adjustments
Monthly	793	Transmission Access Charge Refund Bill Period Adj	Adjustments
Monthly	1001	Black start due BA	Reliability
Monthly	1101	Black Start Capacity due ISO	Reliability
Monthly	1120	Est. Summer Reliab. Contract Capacity Pymt/Charge	Reliability
Monthly	1121	Act. Summer Reliab. Contract Capacity Pymt/Charge	Reliability
Monthly	1302	Long Term Voltage Support Contract due ISO	Reliability
Monthly	1353	Black Start Energy due ISO	Reliability
Monthly	1591	EP Penalty Charge, due CAISO trustee	Penalties
Monthly	1592	EP Penalty Allocation Payment	Penalties
Monthly	1593	EP Penalty/Alloc for under/over	Penalties
Monthly	1691	MLCC Neutrality Allocation	Reliability
Monthly	1697	MLCC Tier 1 Allocation	Reliability
Monthly	1698	MLCC Reliability Service Cost Allocation	Reliability
Monthly	1699	MLCC Inter-Zonal Congestion Allocation	Reliability
Monthly	2999	Interest due SC	Misc
Monthly	3010	Termination Fee	Adjustments
Monthly	3020	Termination Fee	Adjustments
Monthly	3101	Black Start Capacity due BA	Reliability
Monthly	3302	Supplemental Reactive Energy due SC	Reliability
Monthly	3303	Long Term Voltage Support due BA	Reliability
Monthly	3351	Grid Management Charge Adjustment Charge/Refund	Adjustments
Monthly	3372	High Voltage Access Charge Adj - Due ISO	Adjustments
Monthly	3374	High Voltage Access Charge Adj - Due PTO	Adjustments
Monthly	3382	High Voltage Wheeling Access Charge Adj - Due ISO	Adjustments
Monthly	3383	Low Voltage Wheeling Access Charge Adj - Due ISO	Adjustments
Monthly	3384	High Voltage Wheeling Access Charge Adj - Due PTO	Adjustments
Monthly	3385	Low Voltage Wheeling Access Charge Adj - Due PTO	Adjustments
Monthly	3472	Demand Relief Energy Payment	Misc
Monthly	3473	Discretionary Load Curtailment Payment	Misc
Monthly	3482	Demand Relief Energy Charge	Misc
Monthly	3483	Discretionary Load Curtailment Charge	Misc

Frequency	Charge Type	Charge Type Description	Service Type
Monthly	3999	Interest and Penalty	Misc
Monthly	4695	Settlement of Minimum Load Cost Comp - Due SC	Reliability
GMC	4501	Core Reliability Services Non-Coincident Peak	GMC
GMC	4502	Core Reliability Services Non-Coincident Off-Peak	GMC
GMC	4503	Core Reliability Services Exports	GMC
GMC	4504	Core Reliability Svcs/Energy Trans Svcs Mojave	GMC
GMC	4505	Energy Transmission Services Net Energy	GMC
GMC	4506	Energy Transmission Services Deviations	GMC
GMC	4511	Forward Scheduling	GMC
GMC	4512	Forward Scheduling Inter-SC Trades	GMC
GMC	4513	Forward Scheduling Path 15 Inter SC Trades	GMC
GMC	4522	Congestion Management	GMC
GMC	4534	Market Usage Ancillary Services	GMC
GMC	4535	Market Usage Instructed energy	GMC
GMC	4536	Market Usage Uninstructed Energy	GMC
GMC	4575	Settlements, Metering, Client Relations	GMC

APPENDIX 2: TEMPLATE FOR DETERMINATION OF AN INITIAL FINANCIAL SECURITY POSTING AMOUNT

California ISO
Simplified Calculation of Initial Security Amount

Average Hourly Load	4.0	MWh	<----INPUT
Average Hourly Generation	5.4	MWh	<----INPUT
Total Daily Load / Generation	96.0		

	Billable MWh	Price	Total
Ancillary Services	5	$ 9.764	$ 47
FERC Fee	96	$ 0.038	$ 4
Grid Management Charge	165	$ 0.743	$ 123
Imbalance Energy	(25)	$ 44.233	$ (1,087)
Interzonal Congestion	40	$ 0.672	$ 27
Reliability / Minimum Load Cost Compensation	96	$ 0.765	$ 73
Reliability Must Run Generation	96	$ 0.004	$ 0
Uplift Charges	96	$ 0.042	$ 4
Wheeling Charges	96	$ 0.101	$ 10
Total Daily Charges / Daily Security Deposit			$ (800)
Level Period 102 day Security Deposit Posting Requirement			$ (81,579)

Assumptions

MWh Percentages

A/S % of Load	5.02%
Net Imbalance Energy Percentage	4.00%
Congestion % of Load	41.25%

Per MWh Costs

Ancillary Services	$ 9.764
FERC Fee	$ 0.038
Grid Management Charge	$ 0.743
Imbalance Energy	$ 44.233
Interzonal Congestion	$ 0.672
Reliability / Minimum Load Cost Compensation	$ 0.765
Reliability Must Run Generation	$ 0.004
Uplift Charges	$ 0.042
Wheeling Charges	$ 0.101

Note:
Settlement calendar longest number of outstanding days is 95.
The ISO adds 7 days to the estimation to allow for administrative needs and communications to / from SC.

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ATTACHMENT B

ATTACHMENT B-1

12 CREDITWORTHINESS.

12.1 Credit Requirements.

The creditworthiness requirements in this section apply to the ISO's acceptance of Schedules, to all transactions in an ISO Market, to the payment of charges pursuant to the ISO Tariff (including the Grid Management Charge), and to establish credit limits for participation in any ISO auction of FTRs. Each Market Participant (including each Scheduling Coordinator, UDC, or MSS) or FTR Bidder shall secure its financial transactions with the ISO (including its participation in any auction of FTRs) by maintaining an Unsecured Credit Limit and/or by posting Financial Security, the level of which constitutes the Market Participant's or FTR Bidder's Financial Security Amount. For each Market Participant or FTR Bidder, the sum of its Unsecured Credit Limit and its Financial Security Amount shall represent its Aggregate Credit Limit. Each Market Participant or FTR Bidder shall have the responsibility to maintain an Aggregate Credit Limit that is at least equal to its Estimated Aggregate Liability.

12.1.1 Unsecured Credit Limit.

Each Market Participant or FTR Bidder requesting an Unsecured Credit Limit shall submit an application to the ISO in the form specified on the ISO Home Page. The ISO shall determine the Unsecured Credit Limit for each Market Participant or FTR Bidder in accordance with the procedures set forth in the ISO Credit Policy & Procedures Guide posted on the ISO Home Page. The maximum Unsecured Credit Limit for any Market Participant or FTR Bidder shall be $250 million. In accordance with the procedures described in the ISO Credit Policy & Procedures Guide, each Market Participant or FTR Bidder requesting or maintaining an Unsecured Credit Limit is required to submit to the ISO or its agent financial statements and other information related to its overall financial health as directed by the ISO. Each Market Participant or FTR Bidder is responsible for the timely submission of its latest financial statements as well as other information that may be reasonably necessary for the ISO to conduct its evaluation. The ISO shall determine the Unsecured Credit Limit for each Market Participant or FTR Bidder as described in subsections (a), (b), (c), and (d) below:

(a) For a Market Participant or FTR Bidder that is a Rated Public/Private Corporation, the Unsecured Credit Limit shall be the lesser of $250 million or an amount equal to the Market Participant's or FTR Bidder's Tangible Net Worth (TNW) multiplied by a calculated percentage of TNW. The allowable TNW percentage is determined with reference to 50 percent (50%) of the Market Participant's or FTR Bidder's Credit Rating Default Probability and 50 percent (50%) of the MKMV Default Probability.

(b) For a Market Participant or FTR Bidder that is an Unrated Public/Private Corporation, the Unsecured Credit Limit shall be the lesser of $250 million or an amount equal to the Market Participant's or FTR Bidder's Tangible Net Worth (TNW) multiplied by a calculated percentage of TNW. The allowable TNW percentage is determined with reference to 100 percent of the MKMV Default Probability.

(c) For a Market Participant or FTR Bidder that is a Rated Governmental Entity, the Unsecured Credit Limit shall be the lesser of $250 million or an amount equal to the Market Participant's or FTR Bidder's Net Assets (NA) multiplied by a calculated percentage of NA. The allowable NA percentage is determined with reference to 100 percent of the Market Participant's or FTR Bidder's Credit Rating Default Probability.

As to each of the types of entities listed in subsections (a), (b), and (c) above, the ISO will use the following eight-step process to calculate the entity's Unsecured Credit Limit: (1) the ISO will obtain the Market Participant's or FTR Bidder's credit rating(s) from NRSROs; (2) the ISO will calculate the Market Participant's or FTR Bidder's Average Rating Default Probability from NRSRO ratings; (3) the ISO will obtain the Market Participant's or FTR Bidder's MKMV Default Probability, if available; (4) the ISO will create a composite default probability for the Market Participant or FTR Bidder based on the results of steps (2) and (3) above; (5) the ISO will calculate a maximum allowable percentage of Tangible Net Worth or Net Assets for the Market Participant or FTR Bidder based on the results of step (4) above; (6) the ISO will obtain the Market Participant's or FTR Bidder's Tangible Net Worth or Net Assets from its financial statements; (7) the ISO will determine a preliminary Unsecured Credit Limit by multiplying the results of step (5) and step (6) above; and (8) if warranted, the ISO will adjust the preliminary Unsecured

Credit Limit downward by up to 100%, based on the ISO's review of qualitative and quantitative factors that relate to an entity's overall financial health and its ability to meet its financial obligations (as described in Section 12.1.1.1).

(d) For a Market Participant or FTR Bidder that is an Unrated Governmental Entity, the Unsecured Credit Limit shall be the lesser of $250 million or an amount equal to a specified percentage of the Market Participant's or FTR Bidder's Net Assets if the Market Participant or FTR Bidder has a minimum of $25 million in Net Assets and its Times Interest Earned, Debt Service Coverage and Equity to Assets ratios (as those ratios are defined in Section A-2.3 of the ISO Credit Policy & Procedures Guide) meet or exceed minimums specified in the ISO Credit Policy & Procedures Guide.

As a result of the ISO's credit evaluation, a Market Participant or FTR Bidder may be given an Unsecured Credit Limit by the ISO or denied an Unsecured Credit Limit with the ISO. Following the initial application and the establishment of an Unsecured Credit limit, the ISO will review each Market Participant's or FTR Bidder's Unsecured Credit Limit on a quarterly basis, unless that entity does not prepare quarterly statements, in which case the review will occur on an annual basis, and no entity shall be required to submit a new application. In addition, the ISO may review the Unsecured Credit Limit for any Market Participant or FTR Bidder whenever the ISO becomes aware of information that could indicate a Material Change in Financial Condition. In the event the ISO determines that the Unsecured Credit Limit of a Market Participant or FTR Bidder must be reduced as a result of a subsequent review, the ISO shall notify the Market Participant or FTR Bidder of the reduction, and shall, upon request, also provide the Market Participant or FTR Bidder with a written explanation of why the reduction was made.

12.1.1.1 Qualitative and Quantitative Credit Strength Indicators.

In determining a Market Participant's or FTR Bidder's Unsecured Credit Limit, the ISO may rely on information gathered from financial reporting agencies, the general/financial/energy press, and provided by the Market Participant or FTR Bidder to assess its overall financial health and its ability to meet its financial obligations. Information considered by the ISO in this process may include the following qualitative factors:

a) Applicant's history;

b) Nature of organization and operating environment;

c) Management;

d) Contractual obligations;

e) Governance policies;

f) Financial and accounting policies;

g) Risk management and credit policies;

h) Market risk including price exposures, credit exposures and operational exposures;

i) Event risk; and

j) The state or local regulatory environment.

Material negative information in these areas may result in a reduction of up to 100% in the Unsecured Credit Limit that would otherwise be granted based on the eight-step process described in Section 12.1.1. A Market Participant or FTR Bidder, upon request, will be provided a written analysis as to how the provisions in Section 12.1.1 and this section were applied in setting its Unsecured Credit Limit.

12.1.1.2 Financial Statements.

Market Participants and FTR Bidders requesting unsecured credit are required to provide financial statements so that a credit review can be completed. Based on availability, the Market Participant or FTR Bidder must submit a financial statement for the most recent financial quarter, as well as audited financial statements for the most recent three fiscal years, or the period of existence of the Market Participant or FTR Bidder, if shorter, to the ISO or the ISO's designee. If audited financial statements are not available, financial statements, as described below, should be submitted, signed and attested to by an officer of the Market Participant or FTR Bidder as a fair representation of the financial condition of the Market Participant or FTR Bidder in accordance with generally accepted accounting principles. The information should include, but is not limited to, the following:

a. If publicly traded:

   i. Annual and quarterly reports on Form 10-K and Form 10-Q, respectively

   ii. Form 8-K reports, if any

b. If privately held or governmentally owned:

i. Management's Discussion & Analysis (if available)

ii. Report of Independent Accountants (if available)

iii. Financial Statements, including:

- Balance Sheet
- Income Statement
- Statement of Cash Flows
- Statement of Stockholder's Equity

iv. Notes to Financial Statements

If the above information is available electronically on the Internet, the Market Participant or FTR Bidder may indicate in written or electronic communication where such statements are located for retrieval by the ISO or the ISO's designee.

12.1.1.3 Determination of Unsecured Credit Limits for Affiliates.

If any Market Participant or FTR Bidder requesting or maintaining an Unsecured Credit Limit is affiliated with one or more other entities subject to the credit requirements of this Section 12, the ISO may consider the overall creditworthiness and financial condition of such Affiliates when determining the applicable Unsecured Credit Limit. The ISO may determine that the maximum Unsecured Credit Limit specified in Section 12.1.1 applies to the combined activity of such Affiliates. In the event the ISO determines that the maximum Unsecured Credit Limit applies to the combined activity of the Affiliates and the Market Participant, the ISO shall inform the Market Participant in writing.

12.1.1.4 Notification of Material Change in Financial Condition.

Each Market Participant or FTR Bidder shall notify the ISO in writing of a Material Change in Financial Condition, within five (5) Business Days of when the Material Change in Financial Condition is known or reasonably should be known by the Market Participant or FTR Bidder. The provision to the ISO of a copy of a Form 10-K, 10-Q, or Form 8-K filed with the U.S. Securities and Exchange Commission shall satisfy the requirement of notifying the ISO of such Material Change in Financial Condition. Alternatively, the Market Participant may direct the ISO to the location of the information on their company website or the website of the U.S. Securities & Exchange Commission.

12.1.2 Financial Security and Financial Security Amount.

A Market Participant or FTR Bidder that does not have an Unsecured Credit Limit, or that has an Unsecured Credit Limit that is less than its Estimated Aggregate Liability, shall post Financial Security that is acceptable to the ISO and that is sufficient to ensure that its Aggregate Credit Limit (*i.e.*, the sum of its Unsecured Credit Limit and Financial Security Amount) is equal to or greater than its Estimated Aggregate Liability. The Financial Security posted by a Market Participant or FTR Bidder may be any combination of the following types of Financial Security provided in favor of the ISO and notified to the ISO under Section 12.3:

(a) an irrevocable and unconditional letter of credit issued by a bank or financial institution that is reasonably acceptable to the ISO;

(b) an irrevocable and unconditional surety bond issued by an insurance company that is reasonably acceptable to the ISO;

(c) an unconditional and irrevocable guaranty issued by a company that is reasonably acceptable to the ISO;

(d) a cash deposit standing to the credit of the ISO in an interest-bearing escrow account maintained at a bank or financial institution that is reasonably acceptable to the ISO;

(e) a certificate of deposit in the name of the ISO issued by a bank or financial institution that is reasonably acceptable to the ISO;

(f) a payment bond certificate in the name of the ISO issued by a bank or financial institution that is reasonably acceptable to the ISO; or

(g) a prepayment to the ISO.

Financial Security instruments as listed above shall be in such form as the ISO may reasonably require from time to time by notice to Market Participants or FTR Bidders, or in such other form as has been evaluated and approved as reasonably acceptable by the ISO. The ISO shall publish and maintain standardized forms related to the types of Financial Security listed above on the ISO Home Page. The ISO shall require the use of standardized forms of Financial Security to the greatest extent possible.

12.1.2.1 Additional Procedures Regarding Certain Types of Financial Security.

(a) Unconditional and irrevocable guaranties: In those cases where a Market Participant or FTR Bidder is a subsidiary or affiliate of another entity and would like to utilize the consolidated financial statements and other relevant information of that entity for obtaining credit, a signed corporate guaranty is required. A guarantor would be considered reasonably acceptable and a corresponding Financial Security Amount would be set based on the guarantor's credit evaluation according to the same procedures that apply to the credit evaluation of a Market Participant or FTR Bidder.

(b) Cash deposits standing to the credit of the ISO in interest-bearing escrow accounts: Interest on a cash deposit standing to the credit of the ISO in an interest-bearing escrow account will accrue to the Market Participant's or FTR Bidder's benefit and will be added to the Market Participant's or FTR Bidder's prepayment account on a monthly basis. Should a Market Participant or FTR Bidder become delinquent in payments, the Market Participant's or FTR Bidder's outstanding account balance will be satisfied using deposited funds. The Market Participant or FTR Bidder must take care to replenish used funds to ensure that its Aggregate Credit Limit continues to exceed its Estimated Aggregate Liability.

(c) Prepayments to the ISO: Prepayments to the ISO will be held in an interest-bearing account or another investment acceptable to the Market Participant and the ISO, and interest on the investment will accrue at the rate as provided for in the investment. Interest will accrue to the Market Participant's benefit and will be added to the Market Participant's prepayment account on a monthly basis. Due to the additional administrative effort involved in tracking and posting interest on such prepayments, the use of this option is not encouraged.

12.1.2.2 Process for Evaluating Requests to Use Non-Standardized Forms of Financial Security.

A Market Participant or FTR Bidder that seeks permission to use a form for Financial Security other than one or more of the standardized forms posted on the ISO Home Page shall seek such permission in a written request to the ISO that explains the basis for the use of such non-standardized form. The ISO shall have ten (10) Business Days from receipt of such request to evaluate it and determine whether it will be approved as reasonably acceptable. If the ISO does not respond to such request within the ten (10) Business Day period, the request shall be deemed to have been denied. Until and unless the ISO approves the use of a non-standardized form for Financial Security, the Market Participant or FTR Bidder that submitted such request shall be required to use one of the standardized forms for Financial Security described in this Section 12.1.2.

12.1.2.3 Expiration of Financial Security.

Each Market Participant or FTR Bidder shall ensure that the financial instruments it uses for the purpose of providing Financial Security will not expire and thereby cause the Market Participant's or FTR Bidder's Aggregate Credit Limit to fall below the Market Participant's or FTR Bidder's Estimated Aggregate Liability. The ISO will treat a financial instrument that does not have an automatic renewal provision and that is not renewed or replaced within seven (7) days of its date of expiration as being out of compliance with the standards for Financial Security contained in this Section 12 and will deem the value of such financial instrument to be zero, and will draw upon such Financial Security prior to its stated expiration if deemed necessary by the ISO.

12.1.2.4 Risk of Loss of Financial Security Amounts Held and Invested by the ISO.

In accordance with the ISO's investment policy, the ISO will invest each Financial Security Amount of a Market Participant or FTR Bidder only in bank accounts, high-quality money market accounts, and/or U.S. Treasury/Agency securities unless a specific written request is received from the Market Participant or FTR Bidder for a different type of investment and the ISO provides its written consent to such alternative investment. A Market Participant or FTR Bidder that provides a Financial Security Amount that is held and invested by the ISO on behalf of the Market Participant or FTR Bidder will bear all risks that such Financial Security Amount will incur a loss of principal and/or interest as a result of the ISO's investment of such Financial Security Amount.

12.1.3 Self-Supply of UDC Demand.

Notwithstanding anything to the contrary in the ISO Tariff, a Scheduling Coordinator or UDC that is an Original Participating Transmission Owner or is a Scheduling Coordinator for an Original Participating Transmission Owner shall not be precluded by Section 12.3 from scheduling transactions that serve a UDC's Demand from –

(1) a resource that the UDC owns; and

(2) a resource that the UDC has under contract to serve its Demand.

12.1.4 Allocation of Aggregate Credit Limit for FTR Auction Participation.

An FTR Bidder may elect to allocate a portion of its Aggregate Credit Limit toward satisfying the credit requirements for participating in auctions of FTRs, as set forth in Section 36.2.6.

12.1.5 Estimated Aggregate Liability.

The ISO will periodically calculate the Estimated Aggregate Liability of each Market Participant and FTR Bidder, based on all charges and settlement amounts for which such Market Participant or FTR Bidder is liable or reasonably anticipated by the ISO to be liable for pursuant to the ISO Tariff. The Estimated Aggregate Liability for each Market Participant or FTR Bidder shall be determined and applied by the ISO consistent with the procedures set forth in the ISO Credit Policy & Procedures Guide posted on the ISO Home Page. The ISO shall upon request provide each Market Participant or FTR Bidder with information concerning the basis for the ISO's determination of its Estimated Aggregate Liability, and the ISO's determination may be disputed in accordance with the procedures set forth in the ISO Credit Policy & Procedures Guide. The ISO shall compare each Market Participant's or FTR Bidder's Estimated Aggregate Liability against its Aggregate Credit Limit on a periodic basis.

12.2 Review of Creditworthiness.

The ISO may review the creditworthiness of any Market Participant or FTR Bidder which delays or defaults in making payments due under the ISO Tariff and, as a consequence of that review, may require such Market Participant or FTR Bidder, whether or not it an Unsecured Credit Limit, to provide credit support in the form of any of the following types of Financial Security:

(a) an irrevocable and unconditional letter of credit by a bank or financial institution reasonably acceptable to the ISO;

(b) a cash deposit standing to the credit of an interest-bearing escrow account maintained at a bank or financial institution designated by the ISO;

(c) an irrevocable and unconditional surety bond posted by an insurance company reasonably acceptable to the ISO;

(d) a payment bond certificate in the name of the ISO from a financial institution designated by the ISO; or

(e) a prepayment to the ISO.

The ISO may require the Market Participant or FTR Bidder to maintain such Financial Security for at least one (1) year from the date of such delay or default.

12.4 Calculation of Ongoing Financial Security Requirements.

Following the date on which a Market Participant commences trading, if the Market Participant's Estimated Aggregate Liability, as calculated by the ISO, at any time exceeds its Aggregate Credit Limit, the ISO shall direct the Market Participant to post an additional Financial Security Amount within five (5) Business Days that is sufficient to ensure that the Market Participant's Aggregate Credit Limit is at least equal to its Estimated Aggregate Liability. The ISO shall also notify a Market Participant if at any time its Estimated Aggregate Liability exceeds 90% of its Aggregate Credit Limit. For the purposes of calculating the Market Participant's Estimated Aggregate Liability, the ISO shall include (1) outstanding charges for Trading Days for which Settlement data is available, and (2) an estimate of charges for Trading Days for which Settlement data is not yet available. To estimate charges for Trading Days for which Settlement data is not yet available, the ISO will consider available historical Settlement data, and other available operational and market data as described in the ISO Credit Policy & Procedures Guide posted on the ISO Home Page.

12.4.1 Review of an ISO Request for an Additional Financial Security Amount.

A Market Participant has five (5) Business Days to review an ISO request for additional Financial Security and submit proposed changes that must be agreed to by the ISO. Within the five (5) Business Days, the Market Participant must either demonstrate to the ISO's satisfaction that the ISO's Financial Security request is entirely or partially unnecessary, or post the required Financial Security Amount calculated by the ISO. If the ISO and the Market Participant are unable to agree on the appropriate level of Financial Security during the five (5) Business Day review period, the Market Participant must post the additional Financial Security and may continue with the dispute process described in Section 12.4.2. Any excess Financial Security amounts will be returned to the Market Participant if the dispute process finds in favor of the Market Participant.

12.4.2 Dispute Process Regarding an ISO Request for an Additional Security Amount.

Market Participants may dispute the Estimated Aggregate Liability calculated by the ISO and, as a result, the ISO may reduce or cancel a requested Financial Security adjustment. The following steps are required for a Market Participant to dispute a Financial Security request resulting from the ISO's calculation of Estimated Aggregate Liability:

(1) Request by the Market Participant to review the ISO calculation.

(2) A reasonable and compelling situation presented, as determined by the Market Participant's ISO client representative.

(3) Documentation of facts and circumstances that evidence that the ISO's calculation of Estimated Aggregate Liability results in an excessive and unwarranted Financial Security posting requirement.

(4) Approval by the ISO Manager and/or Director of Customer Services and Industry Affairs and approval by the ISO Treasurer.

(5) The ISO may decline to adjust the initial Estimated Aggregate Liability, as calculated by the ISO, if the Market Participant has had Financial Security shortfalls in the past 12 months (*i.e.*, it has been shown that the Market Participant's Aggregate Credit Limit at times during the preceding 12 months has been insufficient to cover the Market Participant's Estimated Aggregate Liability).

In no such case shall an ISO request for increased Financial Security remain outstanding for more than five (5) Business Days. Either the above process is to be completed within five (5) Business Days from the date of the ISO request for additional Financial Security, or the Market Participant is to post additional Financial Security within the five (5) Business Days and continue this process, which may result in a return of posted Financial Security back to the Market Participant if the results of the dispute process are found to favor the Market Participant.

Factors for consideration in the event this dispute process is utilized include: weighing the risk of using the lower figure to the potential detriment of market creditors if the Market Participant is under-secured and defaults, against the desire not to impose additional potentially unwarranted costs on a Market Participant; equity and consistency of treatment of Market Participants in the dispute process; and the evidentiary value of the information provided by the Market Participant in the dispute process.

12.5 ISO Enforcement Actions Regarding Under-Secured Market Participants.

Following the date on which a Market Participant commences trading, if a Market Participant's Estimated Aggregate Liability, as calculated by the ISO, at any time exceeds its Aggregate Credit Limit, the ISO may take any or all of the following actions:

(a) The ISO may withhold a pending payment distribution.

(b) The ISO may limit trading, which may include rejection of Schedules and/or limiting other ISO market activity. In such case, the ISO shall notify the Market Participant of its action and the Market Participant shall not be entitled to submit further Schedules to the ISO until the Market Participant posts an additional Financial Security Amount that is sufficient to ensure that the Market Participant's Aggregate Credit Limit is at least equal to its Estimated Aggregate Liability.

(c) The ISO may require the Market Participant to post an additional Financial Security Amount in lieu of an Unsecured Credit Limit for a period of time.

(d) The ISO may restrict, suspend, or terminate a Market Participant's Service Agreement.

In addition, the ISO may restrict or suspend a Market Participant's right to schedule or require the Market Participant to increase its Financial Security Amount if at any time such Market Participant's potential additional liability for Imbalance Energy and other ISO charges is determined by the ISO to be excessive by comparison with the likely cost of the amount of Energy scheduled by the Market Participant.

Approved Load Profile	Local Regulatory Authority approved Load profiles applied to cumulative End-Use Meter Data in order to allocate consumption of Energy to Settlement Periods.
Approved Maintenance Outage	A Maintenance Outage which has been approved by the ISO through the ISO Outage Coordination Office.
"Area Control Error (ACE)"	The sum of the instantaneous difference between the actual net interchange and the scheduled net interchange between the ISO Control Area and all adjacent Control Areas and the ISO Control Area's frequency correction and time error correction obligations.
Authorized Users	A person or an entity identified as an authorized user in a meter service agreement between the ISO and an ISO Metered Entity or a meter service agreement between the ISO and a SC.
Automatic Mitigation Procedure (AMP)	The market power mitigation procedure described in Attachment A to Appendix P.
Available Transfer Capacity	For a given transmission path, the capacity rating in MW of the path established consistent with ISO and WECC transmission capacity
Average Rating Default Probability (ARDP)	The sum of Credit Rating Default Probabilities divided by the total number of Credit Rating Default Probabilities used.

Control Area Operator	The person responsible for managing the real-time operations of a Control Area.
Converted Rights	Those transmission service rights as defined in Section 16.21A.1 of the ISO Tariff.
Core Reliability Services - Demand Charge	A component of the Grid Management Charge that provides for the recovery of the ISO's costs of providing a basic, non-scalable level of reliable operation for the ISO Control Area and meeting regional and national reliability requirements. The formula for determining the Core Reliability Services – Demand Charge is set forth in Appendix F, Schedule 1, Part A of this Tariff.
Core Reliability Services – Energy Export Charge	A component of the Grid Management Charge that provides for the recovery of the ISO's costs of providing a basic, non-scalable level of reliable operation for the ISO Control Area and meeting regional and national reliability requirements. The formula for determining the Core Reliability Services – Energy Exports Charge is set forth in Appendix F, Schedule 1, Part A of this Tariff.
CPUC	The California Public Utilities Commission, or its successor.
Credit Rating Default Probability	The 5 Year Median Default Probability based on a rating agency's credit rating as listed in the Credit Rating Default Probabilities table in Section A-2.2 of the ISO Credit Policy & Procedures Guide.
Critical Protective System	Facilities and sites with protective relay systems and Remedial Action Schemes that the ISO determines may have a direct impact on the ability of the ISO to maintain system security and over which the ISO exercises Operational Control.
CTC (Competition Transition Charge)	A non-bypassable charge that is the mechanism that the California Legislature and the CPUC mandated to permit recovery of costs stranded as a result of the shift to the new market structure.
Curtailable Demand	Demand from a Participating Load that can be curtailed at the direction of the ISO in the real-time Dispatch of the ISO Controlled Grid. Scheduling Coordinators with Curtailable Demand may offer it to the ISO to meet Non-Spinning Reserve or Replacement Reserve requirements.
Day 0	The Trading Day to which the Settlement Statement or Settlement

Market Usage Charge — The component of the Grid Management Charge that provides for the recovery of the ISO's costs, including, but not limited to the costs for processing Supplemental Energy and Ancillary Service bids, maintaining the Open Access Same-Time Information System, monitoring market performance, ensuring generator compliance with market protocols, and determining Market Clearing Prices. The formula for determining the Market Usage Charge is set forth in Appendix F, Schedule 1, Part A of this Tariff.

Master File — A file containing information regarding Generating Units, Loads and other resources.

Material Change in Financial Condition — A change in or potential threat to the financial condition of a Market Participant or FTR Bidder that increases the risk that the Market Participant or FTR Bidder will be unlikely to meet some or all of its financial obligations. The types of Material Change in Financial Condition include but are not limited to the following:

(a) a credit agency downgrade;

(b) being placed on a credit watch list by a major rating agency;

(c) a bankruptcy filing;

(d) insolvency;

(e) the filing of a material lawsuit that could significantly and adversely affect past, current, or future financial results; or

(f) any change in the financial condition of the Market Participant or FTR Bidder which exceeds a five percent (5%) reduction in the Market Participant's or FTR Bidder's tangible net worth or net assets for the Market Participant or FTR Bidder's preceding fiscal year, calculated in accordance with generally accepted accounting practices.

Material Modification — Those modifications that have a material impact on the cost or timing of any Interconnection Request or any other valid interconnection request with a later queue priority date.

MDAS — The ISO's revenue meter data acquisition and processing system.

under terms approved by a Local Regulatory Authority or FERC, as applicable, or the customer's Load can be curtailed concurrently with an outage of the Generating Unit.

Meter Data Exchange Format	The format for submitting Meter Data to the ISO which will be published by the ISO on the ISO Home Page or available on request to the Meter and Data Acquisition Manager, ISO Client Service Department.
Meter Data Request Format	The format for requesting Settlement Quality Meter Data from the ISO which will be published by the ISO on the ISO Home Page or available on request to the Meter and Data Acquisition Manager, ISO Client Service Department.
Metered Quantities	For each Direct Access End-User, the actual metered amount of MWh and MW; for each Participating Generator the actual metered amounts of MWh, MW, MVAr and MVArh.
Metering Facilities	Revenue quality meters, instrument transformers, secondary circuitry, secondary devices, meter data servers, related communication facilities and other related local equipment.
Minimum Load Costs	The costs a Generating Unit incurs operating at minimum load.
MKMV Default Probability	A calculated result of Moody's KMV CreditEdge or RiskCalc software products.
Monthly Peak Load	The maximum hourly Demand on a Participating TO's transmission system for a calendar month, multiplied by the Operating Reserve Multiplier.
MSS (Metered Subsystem)	A geographically contiguous system located within a single Zone which has been operating as an electric utility for a number of years prior to the ISO Operations Date as a municipal utility, water district, irrigation district, State agency or Federal power administration subsumed within the ISO Control Area and encompassed by ISO certified revenue quality meters at each interface point with the ISO Controlled Grid and ISO certified revenue quality meters on all Generating Units or, if aggregated, each individual resource and Participating Load internal to the system, which is operated in accordance with a MSS Agreement described in Section 4.9.1.
MSS Operator	An entity that owns an MSS and has executed a MSS Agreement.

Municipal Tax Exempt Debt	An obligation the interest on which is excluded from gross income for federal tax purposes pursuant to Section 103(a) of

the Internal Revenue Code of 1986 or the corresponding provisions of prior law without regard to the identity of the holder thereof. Municipal Tax Exempt Debt does not include Local Furnishing Bonds.

Must-Offer Generator	All entities defined in Section 40.1.1 of the ISO Tariff.
Nationally Recognized Statistical Rating Organizations (NRSRO)	National credit rating agencies as designated by the U.S. Securities & Exchange Commission.
Native Load	Load required to be served by a utility within its Service Area pursuant to applicable law, franchise, or statute.
NERC	The North American Electric Reliability Council or its successor.
Net Assets (NA)	For governmental and not-for-profit entities, defined as total assets minus total liabilities.
Net FTR Revenue	The sum of: 1) the revenue received by the New Participating TO from the sale, auction, or other transfer of the FTRs provided to it pursuant to Section 36.4.3 FTR, or any substantively identical successor provision of the ISO Tariff; and 2) for each hour: a) the Usage Charge revenue received by the New Participating To associated with its Section 36.4.3 FTRs; minus b) Usage Charges that are: i) incurred by the Scheduling Coordinator for the New Participating TO under ISO Tariff Section 27.1.2.1.4 ii) associated with the New Participating TO's Section 36.4.3 FTRs, and iii) incurred by the New Participating TO for its energy transactions but not incurred as a result of the use of the transmission by a third-party and minus c) the charges paid by the New Participating TO pursuant to Section 27.1.2.1.7, to the extent such charges are incurred by the Scheduling Coordinator of the New Participating TO on Congested Inter-Zonal Interfaces that are associated with the Section 36.4.3 FTRs provided to the New Participating TO. The component of New FTR Revenue represented by item 2) immediately above shall not be less than zero for any hour.

Net Negative Uninstructed Deviation	The real-time change in Generation or Demand associated with underscheduled Load (i.e., Load that appears unscheduled in real time) and overscheduled Generation (i.e., Generation that is scheduled in forward markets and does not appear in real time). Deviations are netted for each Settlement Interval, apply to a Scheduling Coordinator's entire portfolio, and include Load, Generation, imports and exports.
Net Output	The gross Energy output from a Generating Unit less the Station Power requirements for such Generating Unit during the Netting Period, or the Energy available to provide Remote Self-Supply from a generating facility in another Control Area during the Netting Period.
Netting Period	A calendar month, representing the interval over which the Net Output of one or more generating resources in a Station Power Portfolio is available to be attributed to the self-supply of Station Power in that Station Power Portfolio.
Network Upgrades	The additions, modifications, and upgrades to the ISO

	Service Territory may be comprised of the Service Areas of more than one Local Public Owned Electric Utility, if they are operating under an agreement with the ISO for aggregation of their MSS and their MSS Operator is designated as the Participating TO.
Queue Position	The order of a valid Interconnection Request, relative to all other pending valid Interconnection Requests, that is established based upon the date and time of receipt of the valid Interconnection Request by the ISO.
Qualifying Facility	A qualifying co-generation or small power production facility recognized by FERC.
Ramping	Changing the loading level of a Generating Unit in a constant manner over a fixed time (e.g., ramping up or ramping down). Such changes may be directed by a computer or manual control.
RAS (Remedial Action Schemes)	Protective systems that typically utilize a combination of conventional protective relays, computer-based processors, and telecommunications to accomplish rapid, automated response to unplanned power system events. Also, details of RAS logic and any special requirements for arming of RAS schemes, or changes in RAS programming, that may be required.
Rated Governmental Entity	A municipal utility or state or federal agency that holds an issuer, counterparty, or underlying credit rating by a Nationally Recognized Statistical Rating Organization.
Rated Public/Private Corporation	An investor-owned or privately held entity that holds an issuer, counterparty, or underlying credit rating by a Nationally Recognized Statistical Rating Organization.
Reactive Power Control	Generation or other equipment needed to maintain acceptable voltage levels on the ISO Controlled Grid and to meet reactive capacity requirements at points of interconnection on the ISO Controlled Grid.
Real Time Market	The competitive generation market controlled and coordinated by the ISO for arranging real-time Imbalance Energy.
Redispatch	The readjustment of scheduled Generation or Demand side management measures, to relieve Congestion or manage Energy imbalances.

Registered Data	Those items of technical data and operating characteristics relating to Generation, transmission or distribution facilities which are identified to the owners of such facilities as being information, supplied in accordance with the ISO Tariff, to assist the ISO to maintain reliability of the ISO Controlled Grid and to carry out its functions.

an hour before the commencement of the Settlement Period.

Supply The rate at which Energy is delivered to the ISO Controlled Grid measured in units of watts or standard multiples thereof, e.g., 1,000W=1 KW; 1,000 KW = 1MW, etc.

System Emergency Conditions beyond the normal control of the ISO that affect the ability of the ISO Control Area to function normally including any abnormal system condition which requires immediate manual or automatic action to prevent loss of Load, equipment damage, or tripping of system elements which might result in cascading Outages or to restore system operation to meet the minimum operating reliability criteria.

System Planning Studies Reports summarizing studies performed to assess the adequacy of the ISO Controlled Grid as regards conformance to Reliability Criteria.

System Reliability A measure of an electric system's ability to deliver uninterrupted service at the proper voltage and frequency.

System Resource A group of resources, single resource, or a portion of a resource located outside of the ISO Control Area, or an allocated portion of a Control Area's portfolio of generating resources that are directly responsive to that Control Area's Automatic Generation Control (AGC) capable of providing Energy and/or Ancillary Services to the ISO Controlled Grid.

System Unit One or more individual Generating Units and/or Loads within a Metered Subsystem controlled so as to simulate a single resource with specified performance characteristics, as mutually determined and agreed to by the MSS Operator and the ISO. The Generating Units and/or Loads making up a System Unit must be in close physical proximity to each other such that the operation of the resources comprising the System Unit does not result in significant differences in flows on the ISO Controlled Grid.

TAC Area A portion of the ISO Controlled Grid with respect to which Participating TOs' High Voltage Transmission Revenue Requirements are recovered through a High Voltage Access Charge. TAC Areas are listed in Schedule 3 of Appendix F.

Take-Out Point The metering points at which a Scheduling Coordinator Metered Entity or ISO Metered Entity takes delivery of Energy.

Tangible Net Worth (TNW) Total assets minus intangibles (*e.g.*, good will) minus total liabilities.

Tax Exempt Debt Municipal Tax Exempt Debt or Local Furnishing Bonds.

Energy	instructed by the ISO or which the ISO Tariff provides will be paid at the price for Uninstructed Imbalance Energy.
Unit Commitment	The process of determining which Generating Units will be committed (started) to meet Demand and provide Ancillary Services in the near future (e.g., the next Trading Day).
Unrated Governmental Entity	A municipal utility or state or federal agency that does not hold an issuer, counterparty, or underlying credit rating by a Nationally Recognized Statistical Rating Organization.
Unrated Public/Private Corporation	An investor-owned or privately held entity that does not hold an issuer, counterparty, or underlying credit rating by a Nationally Recognized Statistical Rating Organization.
Unsecured Credit Limit	The level of credit established for a Market Participant or FTR Bidder that is not secured by any form of Financial Security, as provided for in Section 12 of the ISO Tariff.
Usage Charge	The amount of money, per 1 kW of scheduled flow, that the ISO charges a Scheduling Coordinator for use of a specific Congested Inter-Zonal Interface during a given hour.
Validation, Estimation and Editing (VEE)	Applies to Meter Data directly acquired by the ISO. Validation is the process of checking the data to ensure that it is contiguous, within pre-defined limits and has not been flagged by the meter. Estimation and Editing is the process of replacing or making complete Meter Data by using data from redundant meters, schedules, PMS or, if necessary, statistical estimation.
Value Added Network (VAN)	A data communications service provider that provides, stores and forwards electronic data delivery services within its network and to subscribers on other VANs. The data is mostly EDI type messages.
Voltage Limits	For all substation busses, the normal and post-contingency Voltage Limits (kV). The bandwidth for normal Voltage Limits must fall within the bandwidth of the post-contingency Voltage Limits. Special voltage limitations for abnormal operating conditions such as heavy or light Demand may be specified.
Voltage Support	Services provided by Generating Units or other equipment such as shunt capacitors, static var compensators, or synchronous condensers that are required to maintain established grid voltage criteria. This service is required under normal or System Emergency conditions.
Waiver Denial Period	The period determined in accordance with Section 40.1.6.

ATTACHMENT B-2

BLACKLINES FOR JULY 11, 2006 CREDIT POLICY COMPLIANCE FILING

ATTACHMENT B-2

12 CREDITWORTHINESS.

* * *

12.1.1 Unsecured Credit Limit.

Each Market Participant or FTR Bidder requesting an Unsecured Credit Limit shall submit an application to the ISO in the form specified on the ISO Home Page. The ISO shall determine the Unsecured Credit Limit for each Market Participant or FTR Bidder in accordance with the procedures set forth in the ISO Credit Policy & Procedures Guide posted on the ISO Home Page. The maximum Unsecured Credit Limit for any Market Participant or FTR Bidder shall be $250 million~~, or a lesser maximum Unsecured Credit Limit determined by the ISO Governing Board, in its discretion, and posted on the ISO Home Page~~. In accordance with the procedures described in the ISO Credit Policy & Procedures Guide, each Market Participant or FTR Bidder requesting or maintaining an Unsecured Credit Limit is required to submit to the ISO or its agent financial statements and other information related to its overall financial health as directed by the ISO. Each Market Participant or FTR Bidder is responsible for the timely submission of its latest financial statements as well as other information that may be reasonably necessary for the ISO to conduct its evaluation. ~~As part of the credit evaluation process, the ISO may also rely on Nationally Recognized Statistical Rating Organizations as defined by the U.S. Securities and Exchange Commission, other third-party credit assessment tools and services, and the general and/or financial press.~~ <u>The ISO shall determine the Unsecured Credit Limit for each Market Participant or FTR Bidder as described in subsections (a), (b), (c), and (d) below.</u>

<u>(a) For a Market Participant or FTR Bidder that is a Rated Public/Private Corporation, the Unsecured Credit Limit shall be the lesser of $250 million or an amount equal to the Market Participant's or FTR Bidder's Tangible Net Worth (TNW) multiplied by a calculated percentage of TNW. The allowable TNW percentage is determined with</u>

reference to 50 percent (50%) of the Market Participant's or FTR Bidder's Credit Rating Default Probability and 50 percent (50%) of the MKMV Default Probability.

(b) For a Market Participant or FTR Bidder that is an Unrated Public/Private Corporation, the Unsecured Credit Limit shall be the lesser of $250 million or an amount equal to the Market Participant's or FTR Bidder's Tangible Net Worth (TNW) multiplied by a calculated percentage of TNW. The allowable TNW percentage is determined with reference to 100 percent of the MKMV Default Probability.

(c) For a Market Participant or FTR Bidder that is a Rated Governmental Entity, the Unsecured Credit Limit shall be the lesser of $250 million or an amount equal to the Market Participant's or FTR Bidder's Net Assets (NA) multiplied by a calculated percentage of NA. The allowable NA percentage is determined with reference to 100 percent of the Market Participant's or FTR Bidder's Credit Rating Default Probability.

As to each of the types of entities listed in subsections (a), (b), and (c) above, the ISO will use the following eight-step process to calculate the entity's Unsecured Credit Limit: (1) the ISO will obtain the Market Participant's or FTR Bidder's credit rating(s) from NRSROs; (2) the ISO will calculate the Market Participant's or FTR Bidder's Average Rating Default Probability from NRSRO ratings; (3) the ISO will obtain the Market Participant's or FTR Bidder's MKMV Default Probability, if available; (4) the ISO will create a composite default probability for the Market Participant or FTR Bidder based on the results of steps (2) and (3) above; (5) the ISO will calculate a maximum allowable percentage of Tangible Net Worth or Net Assets for the Market Participant or FTR Bidder based on the results of step (4) above; (6) the ISO will obtain the Market Participant's or FTR Bidder's Tangible Net Worth or Net Assets from its financial statements; (7) the ISO will determine a preliminary Unsecured Credit Limit by multiplying the results of step (5) and step (6) above; and (8) if warranted, the ISO will adjust the preliminary Unsecured Credit Limit downward by up to 100%, based on the ISO's review of qualitative and quantitative factors that relate to an entity's overall financial health and its ability to meet its financial obligations (as described in Section 12.1.1.1).

(d) For a Market Participant or FTR Bidder that is an Unrated Governmental Entity, the Unsecured Credit Limit shall be the lesser of $250 million or an amount equal to a specified percentage of the Market Participant's or FTR Bidder's Net Assets if the Market Participant or FTR Bidder has a minimum of $25 million in Net Assets and its Times Interest Earned, Debt Service Coverage and Equity to Assets ratios (as those ratios are defined in Section A-2.3 of the ISO Credit Policy & Procedures Guide) meet or exceed minimums specified in the ISO Credit Policy & Procedures Guide.

As a result of the ISO's credit evaluation, a Market Participant or FTR Bidder may be given an Unsecured Credit Limit by the ISO or denied an Unsecured Credit Limit with the ISO. Following the initial application and the establishment of an Unsecured Credit limit, the ISO will review each Market Participant's or FTR Bidder's Unsecured Credit Limit on a quarterly basis, unless that entity does not prepare quarterly statements, in which case the review will occur on an annual basis, and no entity shall be required to submit a new application. In addition, the ISO may review the Unsecured Credit Limit for any Market Participant or FTR Bidder whenever the ISO becomes aware of information that could indicate a Material Change in Financial Condition. In the event the ISO determines that the Unsecured Credit Limit of a Market Participant or FTR Bidder must be reduced as a result of a subsequent review, the ISO shall notify the Market Participant or FTR Bidder of the reduction, and shall, upon request, also provide the Market Participant or FTR Bidder with a written explanation of why the reduction was made.

12.1.1.1 Qualitative and Quantitative Credit Strength Indicators.

In determining a Market Participant's or FTR Bidder's Unsecured Credit Limit, the ISO may rely on information gathered from financial reporting agencies, the general/financial/energy press, and provided by the Market Participant or FTR Bidder to assess its overall financial health and its ability to meet its financial obligations. Information considered by the ISO in this process may include the following qualitative factors:

a) Applicant's history;

b) Nature of organization and operating environment;

c) Management;

d) Contractual obligations;

e) Governance policies;

f) Financial and accounting policies;

g) Risk management and credit policies;

h) Market risk including price exposures, credit exposures and operational exposures;

i) Event risk; and

j) The state or local regulatory environment.

Material negative information in these areas may result in a reduction of up to 100% in the Unsecured Credit Limit that would otherwise be granted based on the eight-step process described in Section 12.1.1. A Market Participant or FTR Bidder, upon request, will be provided a written analysis as to how the provisions in Section 12.1.1 and this section were applied in setting its Unsecured Credit Limit.

12.1.1.2 Financial Statements.

Market Participants and FTR Bidders requesting unsecured credit are required to provide financial statements so that a credit review can be completed. Based on availability, the Market Participant or FTR Bidder must submit a financial statement for the most recent financial quarter, as well as audited financial statements for the most recent three fiscal years, or the period of existence of the Market Participant or FTR Bidder, if shorter, to the ISO or the ISO's designee. If audited financial statements are not available, financial statements, as described below, should be submitted, signed and attested to by an officer of the Market Participant or FTR Bidder as a fair representation of the financial condition of the Market Participant or FTR Bidder in accordance with generally accepted accounting principles. The information should include, but is not limited to, the following:

a. If publicly traded:

i. Annual and quarterly reports on Form 10-K and Form 10-Q, respectively

ii. Form 8-K reports, if any

b. If privately held or governmentally owned:

i. Management's Discussion & Analysis (if available)

ii. Report of Independent Accountants (if available)

iii. Financial Statements, including:

- Balance Sheet
- Income Statement
- Statement of Cash Flows
- Statement of Stockholder's Equity

iv. Notes to Financial Statements

If the above information is available electronically on the Internet, the Market Participant or FTR Bidder may indicate in written or electronic communication where such statements are located for retrieval by the ISO or the ISO's designee.

12.1.1.3~~1~~ Determination of Unsecured Credit Limits for Affiliates.

If any Market Participant or FTR Bidder requesting or maintaining an Unsecured Credit Limit is affiliated with one or more other entities subject to the credit requirements of this Section 12, the ISO may consider the overall creditworthiness and financial condition of such Affiliates when determining the applicable Unsecured Credit Limit. The ISO may determine that the maximum Unsecured Credit Limit specified in Section 12.1.1 applies to the combined activity of such Affiliates. In the event the ISO determines that the maximum Unsecured Credit Limit applies to the combined activity of the Affiliates and the Market Participant, the ISO shall inform the Market Participant in writing.

12.1.1.4~~2~~ Notification of Material Change in Financial Condition.

Each Market Participant or FTR Bidder shall notify the ISO in writing of a Material Change in Financial Condition, within five (5) Business Days of when the Material C~~c~~hange in Financial Condition is known or reasonably should be known by the Market Participant or FTR Bidder. The provision to the ISO of a copy of a Form 10-K, 10-Q, or Form 8-K filed with the U.S. Securities and Exchange Commission shall satisfy the requirement of notif~~i~~ying the ISO of such Material Change in Financial Condition. Alternatively, the Market Participant may direct the ISO to the location of the information on their company website or the website of the U.S. Securities & Exchange Commission.

~~12.1.1.3 Transition from Credit Provisions that Were in Effect Prior to the Effective Date of this Section 12.1.1, *et seq.*~~

~~Each Market Participant or FTR Bidder that, prior to the effective date of this Section 12.1.1, *et seq.*, maintained an "Approved Credit Rating" with respect to market and/or Grid Management Charge obligations, shall be assigned a maximum Unsecured Credit Limit of $250 million for a period not to exceed thirty (30) days. Such thirty-day period shall start on the date the ISO issues a market notice stating that FERC has issued an order making Section 12.1.1, *et seq.* effective. Prior to or during such thirty-day period, each Market Participant or FTR Bidder maintaining an "Approved Credit Rating" as described herein shall submit to the ISO the information that is required for the ISO to make a credit evaluation regarding the Market Participant or FTR Bidder as described in Section 12.1.1. If the Market Participant or FTR Bidder does not submit the required information within the thirty-day period described herein, the ISO shall assign an Unsecured Credit Limit of $0 to the Market Participant or FTR Bidder until the required information has been submitted.~~

~~Each Market Participant or FTR Bidder that, prior to the effective date of this Section 12.1.1, *et seq.*, did not maintain an "Approved Credit Rating" with respect to market and/or Grid Management Charge obligations, shall be assigned an Unsecured Credit Limit of $0 until the Market Participant or FTR Bidder submits to the ISO the information that is required for the ISO to make a credit evaluation regarding the Market Participant or FTR Bidder as described in Section 12.1.1.~~

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12.1.2.1 Additional Procedures Regarding Certain Types of Financial Security.

(a) Unconditional and irrevocable guaranties: In those cases where a Market Participant or FTR Bidder is a subsidiary or affiliate of another entity and would like to utilize the consolidated financial statements and other relevant information of that entity for obtaining credit, a signed corporate guaranty is required. A guarantor would be considered reasonably acceptable and a corresponding Financial Security Amount would be set based on the guarantor's credit evaluation according to the same procedures that apply to the credit evaluation of a Market Participant or FTR Bidder.

(b) Cash deposits standing to the credit of the ISO in interest-bearing escrow accounts: Interest on a cash deposit standing to the credit of the ISO in an interest-bearing escrow account will accrue to the Market Participant's or FTR Bidder's benefit and will be added to the Market Participant's or FTR Bidder's prepayment account on a monthly basis. Should a Market Participant or FTR Bidder become delinquent in payments, the Market Participant's or FTR Bidder's outstanding account balance will be satisfied using deposited funds. The Market Participant or FTR Bidder must take care to replenish used funds to ensure that its Aggregate Credit Limit continues to exceed its Estimated Aggregate Liability.

(c) Prepayments to the ISO: Prepayments to the ISO will be held in an interest-bearing account or another investment acceptable to the Market Participant and the ISO, and interest on the investment will accrue at the rate as provided for in the investment. Interest will accrue to the Market Participant's benefit and will be added to the Market Participant's prepayment account on a monthly basis. Due to the additional administrative effort involved in tracking and posting interest on such prepayments, the use of this option is not encouraged.

12.1.2.2~~1~~ Process for Evaluating Requests to Use Non-Standardized Forms of Financial Security.

A Market Participant or FTR Bidder that seeks permission to use a form for Financial Security other than one or more of the standardized forms posted on the ISO Home Page shall seek such permission in a written request to the ISO that explains the basis for the use of such non-standardized form. The ISO shall have ten (10) Business Days from receipt of such request to evaluate it and determine whether it will be approved as reasonably acceptable. If the ISO does not respond to such request within the ten (10) Business Day period, the request shall be deemed to have been denied. Until and unless the ISO approves the use of a non-standardized form for Financial Security, the Market Participant or FTR Bidder that submitted such request shall be required to use one of the standardized forms for Financial Security described in this Section 12.1.2.

12.1.2.3~~2~~ Expiration of Financial Security.

Each Market Participant or FTR Bidder shall ensure that the financial instruments it uses for the purpose of providing Financial Security will not expire and thereby cause the Market Participant's or FTR Bidder's Aggregate Credit Limit to fall below the Market Participant's or FTR Bidder's Estimated Aggregate Liability. The ISO ~~may~~will treat a financial instrument that does not have an automatic renewal provision and that is not renewed or replaced within ~~thirty~~ seven (~~30~~7) days of its date of expiration as being out of compliance with the standards for Financial Security contained in this Section 12 and will~~may~~ deem the value of such financial instrument to be zero, and ~~may~~will draw upon such Financial Security prior to its stated expiration if deemed necessary by the ISO.

12.1.2.4~~3~~ Risk of Loss of Financial Security Amounts Held and Invested by the ISO.

In accordance with the ISO's investment policy, the ISO will invest each Financial Security Amount of a Market Participant or FTR Bidder only in bank accounts, high-quality money market accounts, and/or U.S. Treasury/Agency securities unless a specific written request is received from the Market Participant or FTR Bidder for a different type of investment and the ISO provides its written consent to such alternative investment. A Market Participant or FTR Bidder that provides a Financial Security Amount that is held and invested by the ISO on behalf of the Market Participant or FTR Bidder will bear all risks that such Financial Security Amount will incur a loss of principal and/or interest as a result of the ISO's investment of such Financial Security Amount.

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12.4 Calculation of Ongoing Financial Security Requirements.

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12.4.1 Review of an ISO Request for an Additional Financial Security Amount.

A Market Participant has five (5) Business Days to review an ISO request for additional Financial Security and submit proposed changes that must be agreed to by the ISO. Within the five (5) Business Days, the Market Participant must either demonstrate to the ISO's satisfaction that the ISO's Financial Security request is entirely or partially unnecessary, or post the required Financial Security Amount calculated by the ISO. If the ISO and the Market Participant are unable to agree on the appropriate level of Financial

Security during the five (5) Business Day review period, the Market Participant must post the additional Financial Security and may continue with the dispute process described in Section 12.4.2. Any excess Financial Security amounts will be returned to the Market Participant if the dispute process finds in favor of the Market Participant.

12.4.2 Dispute Process Regarding an ISO Request for an Additional Security Amount.

Market Participants may dispute the Estimated Aggregate Liability calculated by the ISO and, as a result, the ISO may reduce or cancel a requested Financial Security adjustment. The following steps are required for a Market Participant to dispute a Financial Security request resulting from the ISO's calculation of Estimated Aggregate Liability:

(1) Request by the Market Participant to review the ISO calculation.

(2) A reasonable and compelling situation presented, as determined by the Market Participant's ISO client representative.

(3) Documentation of facts and circumstances that evidence that the ISO's calculation of Estimated Aggregate Liability results in an excessive and unwarranted Financial Security posting requirement.

(4) Approval by the ISO Manager and/or Director of Customer Services and Industry Affairs and approval by the ISO Treasurer.

(5) The ISO may decline to adjust the initial Estimated Aggregate Liability, as calculated by the ISO, if the Market Participant has had Financial Security shortfalls in the past 12 months (*i.e.*, it has been shown that the Market Participant's Aggregate Credit Limit at times during the preceding 12 months has been insufficient to cover the Market Participant's Estimated Aggregate Liability).

In no such case shall an ISO request for increased Financial Security remain outstanding for more than five (5) Business Days. Either the above process is to be completed within five (5) Business Days from the date of the ISO request for additional Financial Security, or the Market Participant is to post additional Financial Security within the five (5) Business Days and continue this process, which may result in a return of posted Financial Security back to the Market Participant if the results of the dispute process are found to favor the Market Participant.

Factors for consideration in the event this dispute process is utilized include: weighing the risk of using the lower figure to the potential detriment of market creditors if the Market Participant is under-secured and defaults, against the desire not to impose additional potentially unwarranted costs on a Market Participant; equity and consistency of treatment of Market Participants in the dispute process; and the evidentiary value of the information provided by the Market Participant in the dispute process.

****

APPENDIX A

Average Rating Default Probability (ARDP) — The sum of Credit Rating Default Probabilities divided by the total number of Credit Rating Default Probabilities used.

* * *

Credit Rating Default Probability — The 5 Year Median Default Probability based on a rating agency's credit rating as listed in the Credit Rating Default Probabilities table in Section A-2.2 of the ISO Credit Policy & Procedures Guide.

* * *

Material Change in Financial Condition — A change in or potential threat to the financial condition of a Market Participant or FTR Bidder that increases the risk that the Market Participant or FTR Bidder will be unlikely to meet some or all of its financial obligations. The types of Material Change in Financial Condition include but are not limited to the following:

(a) a credit agency downgrade;

(b) being placed on a credit watch list by a major rating agency;

(c) a bankruptcy filing;

(d) ins~~v~~olvency;

(e) the filing of a material lawsuit that could significantly and adversely affect past, current, or future financial results; or

(f) any change in the financial condition of the Market

Participant or FTR Bidder which exceeds a five percent (5%) reduction in the Market Participant's or FTR Bidder's tangible net worth or net assets for the Market Participant or FTR Bidder's preceding fiscal year, calculated in accordance with generally accepted accounting practices.

* * *

MKMV Default Probability	A calculated result of Moody's KMV CreditEdge or RiskCalc software products.

* * *

Nationally Recognized Statistical Rating Organizations (NRSRO)	National credit rating agencies as designated by the U.S. Securities & Exchange Commission.

* * *

Net Assets (NA)	For governmental and not-for-profit entities, defined as total assets minus total liabilities.

* * *

Rated Governmental Entity	A municipal utility or state or federal agency that holds an issuer, counterparty, or underlying credit rating by a Nationally Recognized Statistical Rating Organization.
Rated Public/Private Corporation	An investor-owned or privately held entity that holds an issuer, counterparty, or underlying credit rating by a Nationally Recognized Statistical Rating Organization.

* * *

Tangible Net Worth (TNW)	Total assets minus intangibles (*e.g.*, good will) minus total liabilities.

* * *

Unrated Governmental Entity	A municipal utility or state or federal agency that does not hold an issuer, counterparty, or underlying credit rating by a Nationally Recognized Statistical Rating Organization.
Unrated Public/Private Corporation	An investor-owned or privately held entity that does not hold an issuer, counterparty, or underlying credit rating by a Nationally Recognized Statistical Rating Organization.

ATTACHMENT B-3

CREDIT POLICY & PROCEDURES GUIDE

CALIFORNIA ISO FINANCE DEPARTMENT
~~March 7~~June 26, 2006

PLEASE DIRECT COMMENTS AND QUESTIONS TO:

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REVISION HISTORY

Revision No.	Date	Description
1.0	4/4/2003	Original Draft
2.0	8/13/2004	Second major revision – updated to include only the current credit policies and procedures.
3.0	5/6/2005	Third major revision – updated to include proposed credit policy changes.
4.0	3/6/2006	Fourth major revision – major restructuring and updating to support the new credit policy. Changes the method for determining a Market Participant's or FTR Bidder's unsecured credit limit from simply having an approved credit rating with one that bases unsecured credit as a percentage of Tangible Net Worth or Net Assets based on the type of entity and other quantitative and qualitative factors.
4.1	6/26/2006	Revision made to reflect necessary updates to the CPPG, in accordance with FERC's Notice of Extension of Time issued June 2, 2006, in Docket No. ER06-700-000. Revision to satisfy FERC Order Conditionally Accepting Tariff Revisions Governing Credit Policy issued May 12, 2006 115 FERC ¶ 61,170. Modifications included: • Deletion of Section A-1 describing the transition from the old "Approved Credit Rating Approach" and renumbering of the sections in Part A due to the passing of the transition period; • The addition of Unsecured Credit Limit calculation examples for Unrated Public/Private Corporations, Rated Governmental Entities and Unrated Governmental Entities; • Deletion of the reference to the ISO Board of Governor's ability to reduce the $250M cap on Unsecured Credit Limits; • Description of an alternative Estimated Aggregate Liability calculation method in Section C-2, Section C-3, Section C-3.1 and Appendix 1A.

TABLE OF CONTENTS

INTRODUCTION

All Market Participants and FTR Bidders requesting transmission services with the ISO will be subject to a financial review in accordance with the ISO standards for determining creditworthiness. Such review procedures are designed to protect Market Participants and FTR Bidders from undue exposure to default risk by other Market Participants and FTR Bidders.

This Credit Policy & Procedures Guide (CPPG) provides Market Participants and FTR Bidders further detailed information regarding credit-related provisions described in Section 12 of the ISO Tariff. By providing this information, the ISO hopes to provide Market Participants and FTR Bidders increased visibility into the standard, commercial credit review procedures that the ISO uses in evaluating a Market Participant's and FTR Bidder's ability to meet its financial obligations. Specifically, Market Participants and FTR Bidders will find in the CPPG:

- Information on the processes used to administer the credit policy;
- The methodology used to calculate Unsecured Credit Limits and Estimated Aggregate Liabilities;
- Acceptable forms of Financial Security and the associated processes for requesting, posting and administering Financial Security;
- Security requirements for FTR Bidders;
- Consequences for Market Participants' failure to meet their credit related obligations; and
- Other credit-related information.

Principles

The ISO's intent is to maintain the confidence of Market Participants and FTR Bidders in the ISO markets and to sustain the ISO's mission of ensuring an adequate supply of power at a reasonable cost, by equitably, consistently and strictly enforcing these credit procedures.

The ISO recognizes the importance to Market Participants and FTR Bidders that credit-related practices be transparent and comprehensive. The ISO will endeavor to maintain an accurate procedures guide that describes the methods used to conduct its credit analysis as well as other credit-related practices and administrative procedures on the ISO's Home Page.

Definitions

Any term defined in the Master Definitions Supplement to the ISO Tariff shall have the same meaning where used in this ~~Protocol~~Guide. In any instances where a definition in this document conflicts with a definition in the ISO Tariff, the ISO Tariff definition will prevail. Section number references refer to sections of the CPPG unless specifically stated otherwise.

The following table defines terms used throughout this document and their associated meanings:

TERM	DEFINITION
Affiliated Entities	Legally distinct business units that are Affiliates, as defined in the ISO Tariff.~~share common ownership and/or control.~~
Aggregate Credit Limit (ACL)	The sum of a Market Participant's or FTR Bidder's Unsecured Credit Limit and its Financial Security Amount, as provided for in Section 12 of the ISO Tariff.
Average Rating Default Probability (ARDP)	The sum of ~~Agency~~ Credit Rating Default Probabilities divided by the total number of ~~Agency~~ Credit Rating Default Probabilities used.
Business Association Identification Number (BAID)	An identification code used by the ISO to represent a Market Participant or a FTR Bidder. A Market Participant may have more than one BAID.
Credit Rating Default Probability	The 5 Year Median Default Probability based on a rating agency's credit rating as listed in the Credit Rating Default Probability table in Section A-2.2 of this CPPG.
FTR Bidder	An entity that submits a bis in an FTR auction conducted by the ISO in accordance with Section 36.4 of the ISO Tariff. ~~An entity that registers with the ISO to become a FTR Holder through allocation, auction, or the secondary market, and therefore must comply with the requirements for FTR Holders under the ISO Tariff.~~
Collateral	See Financial Security.
Combined Default Probability (CDP)	A Market Participant's or FTR Bidder's blended probability of default based on credit agencies' Average Rating Default Probability and ~~Moody's~~ MKMV ~~d~~Default ~~p~~Probability according to rules established for different entity types.
Estimated Aggregate Liability (EAL)	The sum of a Market Participant's or FTR Bidder's known and reasonably estimated potential liabilities for a specified time period arising from charges described in the ISO Tariff, as provided for in Section 12 of the ISO Tariff.
Financial Security	Any of the types of financial instruments listed in Section 12 of the ISO Tariff that are posted by a Market Participant or FTR Bidder.
Financial Security Amount	The level of Financial Security posted in accordance with Section 12 of the ISO Tariff by a Market Participant or FTR Bidder.
Material Change in Financial Condition	A change in or potential threat to the financial condition of a Market Participant that increases the risk that the Market Participant will be unlikely to meet some or all of its financial obligations. The types of Material Change in Financial Condition include but are not limited to the following: (a) A credit agency downgrade;

	(b) Being placed on a credit watch list by a major rating agency; (c) A bankruptcy filing; (d) Insolvency; (e) The filing of a material lawsuit that could significantly adversely affect past, current or future financial results; or any change in the financial condition of the Market Participant which exceeds a five percent (5%) reduction in the Market Participant's tangible net worth for the Market Participant's preceding fiscal year, calculated in accordance with generally accepted accounting practices.
MKMV Default Probability	The Moody's KMV default probability determined in accordance with step 3 of Section A-2.2 of this CPPG.
Nationally Recognized Statistical Rating Organizations (NRSRO)	National credit rating agencies as designated by the U.S. Securities & Exchange Commission.
Net Assets (NA)	For governmental or not-for-profit entities, defined as total assets less total liabilities.
Rated Governmental Entity	A municipal utility or state or federal agency that holds an issuer, counterparty or underlying ~~unsecured~~ credit rating by a Nationally Recognized Statistical Rating Organization.
Rated Public/Private Corporation	An investor owned or privately held entity that holds an issuer, counterparty or underlying ~~unsecured~~ credit rating by a Nationally Recognized Statistical Rating Organization.
Scheduling Coordinator	An entity certified by the ISO for the purposes of undertaking the functions specified in Section 4.5.3 ~~2.2.6~~ of the ISO Tariff.
Scheduling Coordinator Identification Number (SCID)	A unique number assigned to each Scheduling Coordinator by the ISO.
Tangible Net Worth (TNW)	Total Assets minus Intangibles (e.g., Good Will) minus Total Liabilities.
Unrated Governmental Entity	A municipal utility or state or federal agency that does not hold an issuer, counterparty or underlying ~~unsecured~~ credit rating by a Nationally Recognized Statistical Rating Organization.
Unrated Public/Private Corporation	An investor owned or privately held entity that does not hold an issuer, counterparty or underlying ~~unsecured~~ credit rating by a Nationally Recognized Statistical Rating Organization.
Unsecured Credit Limit (UCL)	The level of credit established for a Market Participant or a FTR Bidder that is not secured by any form of Financial Security, as provided for in Section 12 of the ISO Tariff.

Rules of Interpretation

Unless the context otherwise requires, if the provisions of this ~~Protocol~~ Guide and the ISO Tariff conflict, the ISO Tariff will prevail to the extent of the inconsistency. The provisions of the ISO Tariff have been summarized or repeated in this ~~Protocol~~ Guide only to aid understanding.

A reference in this ~~Protocol~~ Guide to a given agreement, the ISO ~~Protocol~~ Guide or instrument shall be a reference to that agreement or instrument as modified, amended, supplemented or restated through the date as of which such reference is made.

The captions and headings in this ~~Protocol~~ Guide are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Protocol.

A reference to a day or Trading Day is to a calendar day unless otherwise specified.

PART A: UNSECURED CREDIT

~~A-1. Transition from the Existing "Approved Credit Rating Approach"~~

~~The ISO will begin using this new methodology for establishing Unsecured Credit Limits after FERC approval of the March 2006 Credit Policy changes. The ISO will transition to this approach as follows:~~

- ~~Entities that currently maintain an "Approved Credit Rating" with respect to Market and/or GMC obligations will be assigned the maximum Unsecured Credit Limit of $250,000,000 for a period not to exceed 30 days. The 30 day period will start from the date that the ISO notifies Market Participants of FERC's approval of the March 2006 Credit Policy Amendments. Prior to or during this 30-day transition period, the entity is to submit to the ISO information necessary for the ISO to establish an entity-specific credit limit as set forth in this Credit Policy and Procedure Guide. If the entity does not submit the required information within the 30-day period, ISO will assign the Market Participant a $0 Unsecured Credit Limit until such time that the required information is submitted and processed.~~
- ~~Entities that do not currently maintain an "Approved Credit Rating" with respect to Market and/or GMC obligations will be assigned a $0 Unsecured Credit Limit until they submit required information necessary for the ISO to establish an entity-specific credit limit as set forth in this Credit Policy and Procedure Guide. All Market Participants will be notified of FERC's approval of the March 2006 Credit Policy Amendments, and will be informed of their opportunity to apply for an Unsecured Credit Limit.~~

A-~~2~~1. Credit Assessment Requirements

As provided in Section 12.1.1 of the ISO Tariff, ~~A~~an approved Application for Unsecured Credit must be on file with the ISO for those Market Participants and FTR Bidders seeking an Unsecured Credit Limit. A copy of the Application for Unsecured Credit can be found at the ISO Home Page. An Application for Unsecured Credit must only be filed once by a Market Participant or FTR Bidder. A Market Participant or FTR Bidder should subsequently inform the ISO of changes to contact or other relevant information contained in the Application.

As provided in Section 12.1 of the ISO Tariff, ~~E~~each Market Participant or FTR Bidder must secure its financial transactions with the ISO by maintaining an Unsecured Credit Limit (UCL) and/or by posting Financial Security. The combination of the UCL and the Financial Security Amount represents the Market Participant's or FTR Bidder's Aggregate Credit Limit (ACL). The ISO will periodically estimate a Market Participant's liabilities and will notify it in case its ACL needs to be increased through posting of additional Financial Security. It is the Market Participant's responsibility to maintain a sufficient ACL to meet all of their estimated financial obligations.

As provided in Sections 12.1.1, 12.1.5 and 12.4 of the ISO Tariff, ~~E~~each Market Participant and FTR Bidder requesting or having unsecured credit is required to submit to the ISO or its agent financial statements and other information related to the overall financial health of the Market Participant or FTR Bidder that will be used in determining the Market Participant's or and FTR Bidder's creditworthiness and ability to meet its financial obligations. Market Participants and FTR Bidders are responsible for the timely submission of their latest financial statements either directly or by indicating where the material can be located on their company website and/or on the U.S. Security Exchange Commission's website as well as other information that may be reasonably necessary for the ISO to conduct its evaluation. The ISO may also rely on financial reporting agencies and the financial press as part of the credit evaluation process.

As provided in Sections 12.1.1 and 12.1.2 of the ISO Tariff, ~~A~~as a result of the credit evaluation, a Market Participant or FTR Bidder may be denied an Unsecured Credit Limit with the ISO. Market Participants or FTR Bidders who have been denied an Unsecured Credit Limit may submit other forms of Financial Security acceptable to the ISO (see Part B) sufficient to cover their Estimated Aggregate Liabilities.

A-~~2~~1.1. Financial Statements

As provided in Section 12.1.1 of the ISO Tariff, Market Participants and FTR Bidders requesting unsecured credit are required to provide financial statements so that a credit review can be completed.

Based on availability, the Market Participant or FTR Bidder must submit a financial statement for the most recent financial quarter, as well as audited financial statements for the most recent three fiscal years, or the period of existence of the Market Participant or FTR Bidder, if shorter, to the ISO or the ISO's designee. If audited financial statements are not available, financial statements, as described below, should be submitted, signed and attested to by an officer of the Market Participant or FTR Bidder as a fair representation of the financial condition of the Market Participant or FTR Bidder in accordance with generally accepted accounting principles.

The information should include, but is not limited to, the following:

a. If publicly traded:

    i. Annual and quarterly reports on Form 10-K and Form 10-Q, respectively

    ii. Form 8-K reports, if any

b. If privately held or governmentally owned:

    i. Management's Discussion & Analysis (if available)

    ii. Report of Independent Accountants (if available)

    iii. Financial Statements, including:

        - Balance Sheet
        - Income Statement
        - Statement of Cash Flows

- Statement of Stockholder's Equity

iv. Notes to Financial Statements

If the above information is available electronically on the Internet, the Market Participant or FTR Bidder may indicate in written or electronic communication where such statements are located for retrieval by the ISO or the ISO's designee.

A-~~2~~1.2. Rating Agency Reports

Rating agency reports and credit ratings are utilized from those entities designated by the U.S. Securities & Exchange Commission - http://www.sec.gov/answers/nrsro.htm. The ratings utilized are to be long-term credit ratings for the entity as a whole, on a stand-alone basis without the benefit of third party credit support (also known as "issuer" or "underlying" ratings). Project financing ratings or insured bond ratings do not qualify, since such credit ratings are based on the availability of revenue streams or third-party funding available to bond holders but not necessarily available to trade creditors such as the suppliers to the ISO markets. Moreover, the ISO has been advised by the credit rating agencies that these projects or insured bond ratings cannot be considered as valid measures of an entity's ability to meet its non-bond obligations.

If a Market Participant or FTR Bidder has only a "senior long-term unsecured rating" instead of an issuer rating, the rating will be deemed acceptable; however, for the Unsecured Credit Limit calculation, the rating will be lowered by one rating level to account for the risk of obligations to the ISO having a lower claim priority.

If a Market Participant or FTR Bidder has only a "short-term rating" instead of an issuer rating, the ISO will utilize an equivalent long-term rating based on the highlighted rating in the following long- and short-term rating correlation table:

S&P		**Moody's**	
Short Term Rating	Equivalent Long Term Ratings	Short Term Rating	Equivalent Long Term Ratings
A-1+	AAA/AA+/**AA**/AA-/A+	P1	Aaa/Aa1/Aa2/**AA3**/A1/A2/A3
A-1	A+/**A**/A-	P2	A3/Baa1/**Baa2**/Baa3
A-2	A-/**BBB+**/BBB	P3	Baa3/Ba1/**Ba2**/Ba3
A-3	BBB/**BBB-**	NP	B1/B2/B3/Caa1/**Caa2**/ Caa3/Ca/C
B	BB+/**BB**/BB-		
C	B+ / B / B- / CCC+ / **CCC** / CCC- / CC / C		
D	**D**		

The highlighted rating represents a mid-range rating in the rating agencies' long- and short-term rating correlation table. Equivalent ratings from other rating agencies may also be considered. If the short-term rating is noted as being under a credit watch with negative implications, the ISO will use the lowest long-term equivalent rating in the range for its assessment.

Rating agency reports, particularly credit ratings, are reviewed and updated minimally on a quarterly basis for those Market Participants with an Unsecured Credit Limit. They are also reviewed as needed if questions arise as to changes to a Market Participant's financial health and/or credit standing. Additionally, credit rating agency reports of downgrade/upgrades are reviewed upon notice from a rating agency to determine if the Unsecured Credit Limit should be correspondingly decreased/increased.

A-~~2~~1.3. Other Qualitative and Quantitative Credit Strength Indicators

As provided in Section 12.1.1 of the ISO Tariff, ~~T~~the ISO may rely on information gathered from financial reporting agencies, the general/financial/energy press, and provided by the Market Participant or FTR Bidder to assess an entity's overall financial health and its ability to meet its financial obligations. Information considered by the ISO in this process may include the qualitative factors noted in FERC's Policy Statement on Electric Creditworthiness[1]:

a) Applicant's history;
b) Nature of organization and operating environment;
c) Management;
d) Contractual obligations;
e) Governance policies;
f) Financial and accounting policies;
g) Risk management and credit policies;
h) Market risk including price exposures, credit exposures and operational exposures;
i) Event risk; and
j) The state or local regulatory environment.

Material negative information in these areas may result in a reduction of up to 100% in the Unsecured Credit Limit that would otherwise be granted based on the methodology described in Section A-~~3~~2.2. A Market Participant or FTR Bidder, upon request, will be provided a written analysis as to how the provisions of ~~s~~Section A-~~3~~2.2 were applied in setting its Unsecured Credit Limit.

Notwithstanding the considerations described above, Market Participants and FTR Bidders are obligated to provide the ISO timely information regarding any Material Change in Financial Condition, i.e., an adverse change that could affect its or one of its affiliated entities ability to pay its debt or meet its Financial Security obligations as they become due. Examples of Material Changes in Financial Condition may include but are not limited to:

a) Credit agency downgrades;
b) Being placed on a credit watch list by a major rating agency;
c) A bankruptcy filing;
d) Insolvency;
e) The filing of a material lawsuit that could significantly and adversely affect past, current or future financial results; or

[1] "*Policy Statement on Credit Related Issues for Electric OATT Transmission Providers, Independent System Operators and Regional Transmission Organizations*" (*Order E-40, Docket PL05-3-000, November 19, 2004*)*, at footnote 13.*

f) Any change in the financial condition of the Market Participant or FTR Bidder that exceeds a five percent (5%) reduction in the Market Participant's or FTR Bidder's Tangible Net Worth or Net Assets for the Market Participant's or FTR Bidder's preceding fiscal year, calculated in accordance with generally accepted accounting practices.

A-~~3~~2. Unsecured Credit Limit Calculation

An Unsecured Credit Limit (UCL) for each Public/Private Corporation or Governmental Entity that requests an unsecured limit is calculated as follows:

1. ***Rated Public/Private Corporations*** – the UCL is the lesser of $250 million or an amount equal to the Market Participant's or FTR Bidder's Tangible Net Worth (TNW) multiplied by a calculated percentage of TNW. The TNW percentage is comprised of 50 percent (50%) of the Market Participant's or FTR Bidder's ~~Agency~~ Credit Rating ~~d~~Default ~~p~~Probability and 50 percent (50%) of the ~~Moody's~~ MKMV ~~d~~Default ~~p~~Probability.

2. ***Unrated Public/Private Corporations*** – the UCL is the lesser of $250 million or an amount equal to the Market Participant's or FTR Bidder's Tangible Net Worth (TNW) multiplied by a calculated percentage of TNW. The TNW percentage is comprised of 100 percent of the ~~Moody's~~ MKMV ~~d~~Default ~~p~~Probability.

3. ***Rated Governmental Entities*** – the UCL is the lesser of $250 million or an amount equal to the Market Participant's or FTR Bidder's Net Assets (NA) multiplied by a calculated percentage of NA. The NA percentage is comprised of 100 percent of the Market Participant's or FTR Bidder's ~~Agency~~ Credit Rating ~~d~~Default ~~p~~Probability.

4. ***Unrated Governmental Entities*** – the UCL is the lesser of $250 million or an amount equal to a given percentage of the Market Participant's or FTR Bidder's Net Assets if the Market Participant or FTR Bidder has a minimum of $25 million in Net Assets and its Times Interest Earned, Debt Service Coverage and Equity to Assets ratios meet or exceed specified minimums.

The $250 million hard cap on UCLs specified in the ISO Tariff has been set with respect to the length of the current ISO payment calendar, i.e., a maximum of 95 days of charges outstanding. Upon implementation of Payment Acceleration (scheduled for 2008), we expect to recommend a reduction in the $250 million hard cap. Any changes to the $250 million cap will require FERC approval of an amendment to the applicable provisions of the ISO Tariff.~~The hard cap may be further reduced by a vote of the ISO Governing Board at any time.~~

A-~~3~~2.1. Maximum Percentage of TNW and NA

For Rated and Unrated Public/Private Corporations or Rated Governmental Entities, the maximum percentage of TNW or NA is 7.5 percent (7.5%) if the Market Participant's or FTR Bidder's Combined ~~Third Party~~ Default Probability is less than or equal to 0.06 percent (0.06%).

The Maximum Allowable Percentage of 7.5% is for the highest quality firms; that is, those Market Participants and FTR Bidders with a CDP of 0.06 percent or less. The TNWP or NAP that a Market Participant or FTR Bidder qualifies for will be reduced as its credit risk increases.

For Unrated Governmental Entities, the ISO may provide an Unsecured Credit Limit of up to 5 percent (5%) of NA.

With respect to either of these potential maximum percentages, a lesser amount of unsecured credit may be granted if the ISO becomes aware of information related to a Material Change in

Financial Condition or other significant information that presents a significant risk to the creditworthiness of the entity.

A-~~3~~2.2. Unsecured Credit Limit Calculation Steps

An eight-step process is used to determine Unsecured Credit Limits ~~a~~ for Market Participant~~'~~s ~~or~~ and FTR Bidder~~'~~s ~~Unsecured Credit Limit~~ that are Rated Public/Private Corporations, Unrated Public/Private Corporations and Rated Governmental Entities. Criteria for Unsecured Credit Limits for Unrated Governmental Entities is discussed in Section A-2.3.~~:~~

Step 1 – If the Market Participant or FTR Bidder has a credit rating(s) from one or more of the "Nationally Recognized Statistical Rating Organizations" (NRSRO), verify the rating(s) with the appropriate NRSRO.

Step 2 - Calculate the Market Participant's or FTR Bidder's Average Rating Default Probability (ARDP).

a. ARDP is the sum of ~~Agency Rating~~ Credit Rating Default Probabilities divided by the total number of ~~Agency Rating~~ Credit Rating Default Probabilities used.

b. The following table shows the median default probability calculated by Moody's KMV (i.e., MKMV) for Standard & Poor's and Moody's long-term credit rating classes. Default probabilities are available from each NRSRO.

c. The example presented below uses the following table to derive the ARDP.

~~AGENCY RATING~~ CREDIT RATING DEFAULT PROBABILITIES (DP) Based on 5 year historical median of Moody's KMV EDF's* Maximum Allowable Percentage ~~of Tangible Net Worth (TNW)~~ 7.50% Base Default Probability ~~for Maximum TNW Calculation~~ 0.06%					
Moody's	5 Year Median Default Probability	Tangible Net Worth or Net Asset Percentage	S&P	5 Year Median Default Probability	Tangible Net Worth or Net Asset Percentage
Aaa	0.020%	7.50%	AAA	0.020%	7.50%
Aa1	0.032%	7.50%	AA+	0.033%	7.50%
Aa2	0.040%	7.50%	AA	0.042%	7.50%
Aa3	0.056%	7.50%	AA-	0.059%	7.50%
A1	0.080%	5.60%	A+	0.084%	5.38%
A2	0.114%	3.94%	A	0.119%	3.80%
A3	0.144%	3.12%	A-	0.154%	2.92%
Baa1	0.182%	2.47%	BBB+	0.200%	2.25%
Baa2	0.230%	1.95%	BBB	0.259%	1.73%
Baa3	0.307%	1.47%	BBB-	0.367%	1.23%
Ba1	0.408%	1.10%	BB+	0.518%	0.00%
Ba2	0.544%	0.00%	BB	0.733%	0.00%
Ba3	0.848%	0.00%	BB-	1.215%	0.00%
B1	1.323%	0.00%	B+	2.014%	0.00%
B2	2.064%	0.00%	B	3.338%	0.00%
B3	4.168%	0.00%	B-	5.384%	0.00%
Caa1	8.418%	0.00%	CCC+	8.682%	0.00%
Caa2	17.000%	0.00%	CCC	14.000%	0.00%
Caa3	17.946%	0.00%	CCC-	14.936%	0.00%
Ca	20.000%	0.00%	CC	17.000%	0.00%
C	20.000%	0.00%	C	18.250%	0.00%
			D	20.000%	0.00%
* Table ~~to be updated each January 31st~~ is subject to update on a monthly basis.					

d. Issuer ratings without the benefit of credit enhancement would be used in this assessment. Such ratings are also known as "counterparty" or "underlying" ratings.

Step 3 – Using MKMV's CreditEdge or RiskCalc software, obtain the Market Participant's or FTR Bidder's MKMV Default Probability (MKDP).

a. Since MKMV calculates default probabilities directly, the MKMV ~~d~~Default ~~p~~Probability will be used without any mapping.

Step 4 – Calculate a Combined Default Probability (CDP) based on one of the following methodologies:

a. CDP for Rated Public/Private Corporations = (ARDP * 50%) + (MKDP * 50%)

b. CDP for Unrated Public/Private Corporations = MKDP * 100%

c. CDP for Rated Governmentally Owned Utilities = ARDP * 100%

Step 5 – Calculate the Market Participant's or FTR Bidder's Tangible Net Worth Percentage[2] (TNWP) or Net Assets Percentage (NAP).

a. TNWP = ~~MTNWP~~ MAP * BDP / CDP for Rated/Unrated Public/Private Corporations

b. NAP = MAP * BDP / CDP for Rated Governmental Entities

Where:

~~MTNWP~~ MAP = Maximum ~~Tangible Net Worth~~ Allowable Percentage ~~allowed, which currently equals 7.5 percent~~;

BDP = Base Default Probability~~, which currently equals 0.06 percent~~;

CDP = see Step 4 above; and

If the SC's CDP > 0.5%, the TNWP ~~=~~ or NAP equals 0% ~~percent if the SC's CDP > 0.5 percent~~

Step 6 – Calculate the Market Participant's or FTR Bidder's Tangible Net Worth or Net Assets.

a. TNW for Rated/Unrated Public/Private Corporations = Assets minus Intangibles~~,~~ ~~such as~~ (e.g., Good Will)~~,~~ minus Liabilities

b. NA for Rated Governmentally ~~Owned Utilities~~ Entities = Total Assets minus Total Liabilities

Step 7 – Calculate the Market Participant's or FTR Bidder's Unsecured Credit Limit.

~~a.~~c. UCL = TNW * TNWP for Rated/Unrated Public/Private Corporations

~~b.~~d. UCL = NA * ~~TNWP~~ NAP for Rated Governmentally ~~Owned Utilities~~ Entities

Step 8 – Adjust Unsecured Credit Limit Downward, if warranted based on the ISO's review of factors in Section A-~~2~~1.3.

[2] ~~The maximum TNW percentage is 7.5% for the highest quality firms; that is, those Market Participants and FTR Bidders with a CDP of 0.06 percent or less. The TNW percentage that a Market Participant or FTR Bidder qualifies for will be reduced as its credit risk increases.~~

a. Final UCL = UCL from Step 7 * (0 - 100%)

A-2.3. Unsecured Credit Limit Calculation for Unrated Governmental Entities

The UCL for an Unrated Governmental Entity is based on the financial ratios defined in the following table:

Ratio	Calculation	Minimum Accepted Value
Times Interest Earned (TIER)	(Long-Term Debt Interest Expense + Change in Net Assets) / Long-Term Debt Interest Expense	1.05
Debt Service Coverage (DSC)	(Depreciation & Amortization Expense + Long Term Debt Interest Expense + Change in Net Assets) / Debt Service Billed (Debt Service Interest and Principal).	1.00
Equity to Assets	Total Equity / Total Assets	0.15

For those Municipals that meet all of the above criteria, initial unsecured credit will be calculated as five percent (5%) of Net Assets (i.e., Total Assets minus Total Liabilities). That percentage may be adjusted downward by up to 100% if the ISO becomes aware of significant negative information regarding the Market Participant's or FTR Bidder's operations as determined through trade publications and/or the financial press.

A-~~3~~2.~~3~~4. Unsecured Credit Limit Calculation Examples

Rated Public/Private Corporations

Step 1 – Step ~~3~~2: Calculate the Market Participant's or FTR Bidder's Average Rating Default Probability

If a Market Participant or FTR Bidder has a Moody's long-term rating of Baa2 and a Standard & Poor's long-term rating of BBB+, its Average Rating Default Probability is calculated as (0.230% + 0.200%) / 2 = 0.215%.
~~(0.230% + 0.200%) / 2, or 0.215%.~~

Step 3 – Step 4: Calculate a Combined Default Probability

If the Market Participant or FTR Bidder has ~~an~~ 0.240% MKMV ~~d~~Default ~~p~~Probability, its Combined Default Probability would be (50% * 0.215%) + (50% * 0.240%) = 0.228%

Step 5: Calculate the Market Participant's or FTR Bidder's Allowable Tangible Net Worth Percentage

TNWP = 7.5% x 0.06% / 0.228% = 1.97%

Step 6 – Step 8: Calculate the Market Participant's or FTR Bidder's Tangible Net Worth and Unsecured Credit Limit

Step 5. ~~Allowable % of~~ Tangible Net Worth Percentage (TNWP)	Step 6. Tangible Net Worth (TNW)	Step 7. Unsecured Credit Limit (UCL)	Step 8. Adjust UCL Based on Qualitative Factors
1.97%	Tangible Assets (i.e., Total Assets less Goodwill) $192,100,000 minus Total Liabilities $38,000,000 equals TNW $154,100,000	TNW $154,100,000 times ~~Allowable % of~~ TNWP 1.97% equals UCL $3,036,000	UCL $3,036,000 times Adjustment factor based on qualitative factors as specified in section A-~~2~~1.3. 80% equals Final UCL $2,429,000

Unrated Public/Private Corporations

Step 1 – Step 2: Calculate the Market Participant's or FTR Bidder's Average Rating Default Probability

These steps would not be applicable for unrated public/private corporations.

Step 3 – Step 4: Calculate a Combined Default Probability

If the Market Participant or FTR Bidder has a 0.240% MKMV Default Probability, its Combined Default Probability would be 100% * 0.240% = 0.240%

Step 5: Calculate the Market Participant's or FTR Bidder's Allowable Tangible Net Worth Percentage

TNWP = 7.5% x 0.06% / 0.240% = 1.88%

Step 6 – Step 8: Calculate the Market Participant's or FTR Bidder's Tangible Net Worth and Unsecured Credit Limit

Step 5. Tangible Net Worth Percentage (TNWP)	Step 6. Tangible Net Worth (TNW)	Step 7. Unsecured Credit Limit (UCL)	Step 8. Adjust UCL Based on Qualitative Factors
1.88%	Tangible Assets (i.e., Total Assets less Goodwill) $192,100,000 minus Total Liabilities $38,000,000 equals TNW $154,100,000	TNW $154,100,000 times TNWP 1.88% equals UCL $2,897,000	UCL $2,897,000 times Adjustment factor based on qualitative factors as specified in section A-1.3. 50% equals Final UCL $1,449,000

Rated Governmental Entities

Step 1 – Step 2: Calculate the Market Participant's or FTR Bidder's Average Rating Default Probability

If a Market Participant or FTR Bidder has a Moody's long-term rating of A1 and a Standard & Poor's long-term rating of AA-, its Average Rating Default Probability is calculated as (0.080% + 0.059%) / 2 = 0.070%.

Step 3 – Step 4: Calculate a Combined Default Probability

MKMV Default Probabilities are not available for Rated Governmental Entities. Therefore, the Combined Default Probability would be 100% * 0.070% = 0.070%

Step 5: Calculate the Market Participant's or FTR Bidder's Allowable Net Asset Percentage

NAP = 7.5% x 0.06% / 0.070% = 6.43%

Step 6 – Step 8: Calculate the Market Participant's or FTR Bidder's Net Assets and Unsecured Credit Limit

Step 5. Net Assets Percentage (NAP)	Step 6. Net Assets	Step 7. Unsecured Credit Limit (UCL)	Step 8. Adjust UCL Based on Qualitative Factors
6.43%	Total Assets $192,100,000 minus Total Liabilities $38,000,000 equals Net Assets $154,100,000	Net Assets $154,100,000 times NAP 6.43% equals UCL $9,909,000	UCL $9,909,000 times Adjustment factor based on qualitative factors as specified in section A-1.3. 100% equals Final UCL $9,909,000

Unrated Governmental Entities

Long-Term Debt Interest Expense = $7,900,000
Change in Net Assets = $4,100,000
Depreciation & Amortization Expense = $5,900,000
Debt Service Billed = $9,900,000
Total Assets = $283,600,000

Total Liabilities = $232,500,000
Total Equity = Total Assets – Total Liabilities = $51,100,000

Times Interest Earned = (Long-Term Debt Interest Expense + Change in Net Assets) / Long-Term Debt Interest Expense = ($7,900,000 + $4,100,000) / $7,900,000 = 1.52 ***(Acceptable)***

Debt Service Coverage = (Depreciation & Amortization Expense + Long- Term Debt Interest Expense + Change in Net Assets) / Debt Service Billed =
($5,900,000 + $7,900,000 + $4,100,000) / $9,900,000 = 1.81 ***(Acceptable)***

Equity to Assets = Total Equity / Total Assets = $51,100,000 / $283,600,000 = 0.18 ***(Acceptable)***

Based on each of the ratios exceeding the minimum accepted value, the Unsecured Credit Limit = Net Assets * 5% = $51,100,000 * 0.05 = $2,555,000

~~A-4. Unsecured Credit Limit Calculation for Unrated Governmentally Owned Utilities~~

~~The UCL for an unrated Governmentally Owned Utility is based on the financial ratios defined in the following table:~~

~~Ratio~~	~~Calculation~~	~~Minimum Accepted Value~~
~~Times Interest Earned (TIER)~~	~~(Long-Term Debt Interest Expense + Change in Net Assets) / Long-Term Debt Interest Expense~~	~~1.05~~
~~Debt Service Coverage (DSC)~~	~~(Depreciation & Amortization Expense + Long Term Debt Interest Expense + Change in Net Assets) / Debt Service Billed (Debt Service Interest and Principal).~~	~~1.00~~
~~Equity to Assets~~	~~Total Equity / Total Assets~~	~~0.15~~

~~For those Municipals that meet all of the above criteria, initial unsecured credit will be calculated as five percent (5%) of Net Assets (i.e., Total Assets minus Total Liabilities). That percentage may be adjusted downward by up to 100% if the ISO becomes aware of significant negative information regarding the Market Participant's or FTR Bidder's operations as determined through trade publications and/or the financial press.~~

A-~~5~~3. Unsecured Credit Limit Issues for Affiliated Entities

As provided in Section 12.1.1.1 of the ISO Tariff, ~~I~~if any Market Participant or FTR Bidder requesting or maintaining an Unsecured Credit Limit is affiliated with one or more other entities subject to the credit requirements of Section 12 of the ISO Tariff, the ISO may consider the overall creditworthiness and financial condition of such Affiliates when determining the applicable Unsecured Credit Limit. The ISO may determine that the maximum Unsecured Credit Limit calculated in accordance with Section A-~~3~~2 of this document applies to the combined activity of such Affiliates.

PART B: APPROVED FORMS OF FINANCIAL SECURITY

In accordance with Section 12.1.2 of the ISO Tariff, ~~A~~ a Market Participant or FTR Bidder, at its own expense, may submit one or more of the following forms of Financial Security to meet its posting requirement (pro-forma templates are located at http://www.caiso.com/docs/2005/06/14/200506141656326466.html):

- An irrevocable and unconditional letter of credit issued by a bank or financial institution that is reasonably acceptable to the ISO;
- An irrevocable and unconditional surety bond issued by an insurance company that is reasonably acceptable to the ISO;
- An unconditional guaranty issued by a company that is reasonably acceptable to the ISO;
- A cash deposit in an escrow account maintained at a bank or financial institution that is reasonably acceptable to the ISO;
- A certificate of deposit in the name of the ISO issued by a bank or financial institution that is reasonably acceptable to the ISO;
- A payment bond certificate issued by a bank or financial institution that is reasonably acceptable to the ISO; or
- A prepayment to the ISO.

The ISO will maintain standard agreement forms related to the above types of Financial Security. In accordance with Section 12.1.2.1 of the ISO Tariff, ~~T~~the ISO will evaluate non-standard agreement forms for these types of Financial Security on a case-by-case basis. For those Market Participants or FTR Bidders that propose the use of a non-standard agreement form, the form would be subject to review and approval by the ISO Finance and Legal Departments. A Market Participant or FTR Bidder will be required to justify any proposed departures from the standard agreement form. The ISO shall have ten (10) Business Days from receipt of such form of Financial Security to evaluate it and determine whether it will be approved as reasonably acceptable. Significant departures from the standard agreement forms may not be accepted. The request is deemed denied if the ISO does not respond within ten (10) Business Days. It should be noted that if the need to post additional Financial Security was prompted by an additional Financial Security request based upon the latest Estimated Aggregate Liability calculation, the review process does not defer the Market Participant's obligation to post.

The standard that the ISO will use in establishing reasonable acceptability for issuing banks, financial institutions or insurance companies is that the institution have and maintain a minimum corporate debt rating of an "A-" by S&P, "A3" by Moody's, "A-" by Duff & Phelps, "A-" by Fitch or an equivalent short-term debt rating by any of these agencies.

In those cases where a Market Participant or FTR Bidder is a subsidiary or affiliate of another entity and would like to utilize the consolidated financial statements and other relevant information of that entity for obtaining credit, a signed corporate guaranty is required. A guarantor would be considered reasonably acceptable and a corresponding Financial Security Amount would be set based on the guarantor's credit evaluation according to the same procedures that a Market Participant or FTR Bidder would undergo as described in Section A-~~2~~1.

Cash deposits held in escrow will be maintained in an interest bearing account. Interest will accrue to the Market Participant's or FTR Bidder's benefit and will be added to the Market Participant's or FTR Bidder's prepayment account on a monthly basis. Should a Market Participant or FTR Bidder become delinquent in payments, the Market Participant's or FTR Bidder's outstanding account balance will be satisfied using deposited funds. The Market Participant or FTR Bidder must take care to replenish used funds to ensure that it maintains a suitable level of cash to meet future financial obligations.

The ISO Tariff also permits Market Participants to make a prepayment of an upcoming bill due to the ISO. A prepayment may be used as a form of Financial Security. Prepayments to the ISO will be held in an interest-bearing account or another investment acceptable to the Market Participant and the ISO, and interest on the investment will accrue at the rate as provided for in the investment. Interest will accrue to the Market Participant's benefit and will be added to the Market Participant's prepayment account on a monthly basis. Due to the additional administrative effort involved in tracking and posting interest on such prepayments, the use of this option is not encouraged.

As provided in Section 12.1.2.3 of the ISO Tariff, ~~T~~the ISO shall not be held liable for any losses of funds held and invested by the ISO on the Market Participant's or FTR Bidder's behalf. Market Participants and FTR Bidders agree to bear any risk of loss of principal and/or interest of such funds. Funds will only be invested in bank accounts, high-quality money market funds or U.S. Government securities according to the ISO investment policy, unless otherwise agreed to by the Market Participant or FTR Bidder and the ISO.

In accordance with Section 12.1.2.2 of the ISO Tariff, ~~E~~each Market Participant or FTR Bidder shall ensure that the financial instruments it uses for the purpose of providing Financial Security will not expire and thereby cause the Market Participant's or FTR Bidder's Aggregate Credit Limit to fall below the Market Participant's or FTR Bidder's Estimated Aggregate Liability. The ISO ~~may~~ will treat a financial instrument that does not have an automatic renewal provision and that is not renewed or replaced within ~~thirty~~ seven (~~30~~7) days of its date of expiration as being out of compliance with the standards for Financial Security and ~~may~~ will deem the value of such financial instrument to be zero, and ~~may~~ will draw upon such Financial Security prior to its stated expiration if deemed necessary by the ISO.

PART C: ESTIMATED AGGREGATE LIABILITY CALCULATION

This section describes the approach used by the ISO to determine the Financial Security posting requirements for Market Participants. Different approaches are used for new Market Participants (those without experience data with the ISO or who have been previously inactive) and for Market Participants with such data.

C-1. New Market Participants

A new Market Participant (or a Market Participant that has previously been inactive) is required to post an initial Financial Security Amount to cover a minimum of 14 days of estimated obligations as well as additional Financial Security as obligations are incurred.

This posting requirement is based on anticipated scheduling/trading practices and overall volumes. The ISO has prepared a simple template (Appendix 2) that may be used to determine an initial posting requirement. The template is an Excel worksheet located at the New Market Participant Security Calculation link http://www.caiso.com/docs/2005/06/14/200506141656326466.html.

The ISO will monitor a Market Participant's ongoing security requirement by comparing actual obligations against the estimated obligations to determine if an additional Financial Security Amount is required using the method described in Section C.2. This approach permits a Market Participant to increase its Financial Security Amount as often as weekly until the time elapsed from initial participation equals the length of the ISO payment cycle. At that time, the Financial Security Amount should be sufficient to cover 102 days transactions on an ongoing basis (The "Level Posting Period", as described in the subsequent section).

C-2. Other Market Participants - Scheduling Coordinator Aggregate Liability Estimate (SCALE) and Estimated Aggregate Liability (EAL) Overview

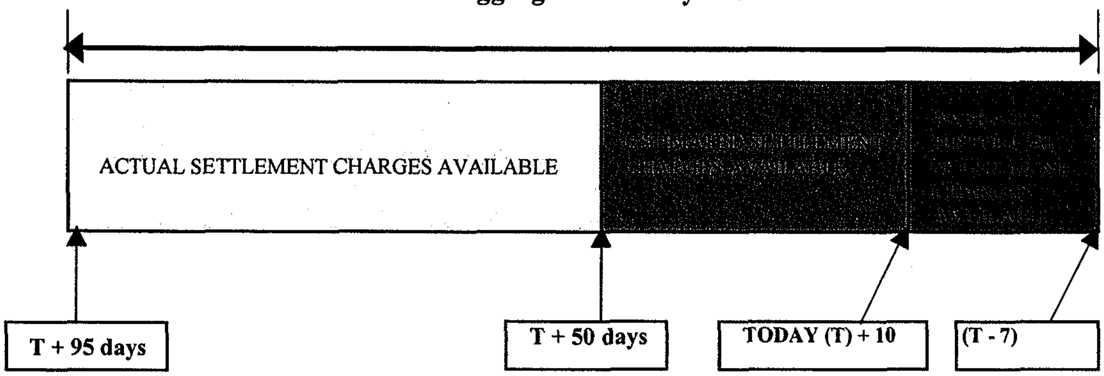
The Scheduling Coordinator Aggregate Liability Estimate (SCALE) application or an alternative method is used to calculate a Market Participant's Estimated Aggregate Liability, which is the estimate of unpaid obligations for a specified time period arising from charges described in the ISO Tariff.

The sum of a Market Participant's Unsecured Credit Limit and its Financial Security Amount is intended to provide coverage of not less than 100% of its Estimated Aggregate Liability. For a Market Participant that must post Financial Security because its Unsecured Credit Limit is not equal to or greater than its Estimated Aggregate Liability, the figures generated ~~by the SCALE application~~in determining the Estimated Aggregate Liability are normally the basis for determining each Market Participant's Financial Security posting requirement.

At any given time, the number of trade days of unpaid obligations to the ISO, based on the preliminary payment calendar, will be from 60~~5~~-95 days, depending on the date of the last cash settlement. To avoid frequent changes to Financial Security posting~~s~~ requirements during the month and to allow a sufficient cushion of coverage given the allowed five day response time for Market Participants to post additional Financial Security, a "Level Posting Period" equal to 102 days is used as the basis for all Financial Security posting requirements.

The charges contributing to the Estimated Aggregate Liability are all charges outlined in the ISO Tariff. The Estimated Aggregate Liability calculation incorporates outstanding obligations, actual settlement charges, estimated settlement charges (calculated ten days after the trade date), and average historical settlement charges. The illustration below provides a representative example of what periods the different settlement charges cover in the Estimated Aggregate Liability calculation.

SC Aggregate Liability Estimate



NOTE: The *Average Historical Settlement Charges Available* could vary between seven (7) to fourteen (14) days.

Level Posting Period ~~SCALEs~~ EALs are calculated as follows:

1. Aggregate all outstanding, actual settlement, predictive settlement and average historical predictive obligations through a specified calendar date. For example, if the ~~SCALE~~ EAL analysis was conducted on 8/1/2005, the Level Posting Period would begin on June 1, 2005 and end on August 13, 2005. The following obligations would be included in the analysis:

   - Outstanding AR/AP Obligations – Any open AR/AP balances, excluding balances covered by bankruptcies.
   - Final Invoice Obligation – Those obligations not paid on the preliminary invoice.
   - Actual Settlement Obligations – June 1, 2005 to June 9, 2005.
   - Predictive Settlement Obligations – June 10, 2005 through July 25, 2005.
   - Predictive Monthly Settlement Obligations - June 1, 2005 through July 25, 2005. For month-end Charge Types, ~~SCALE~~ ~~will calculate~~ daily amounts will be calculated to reflect those amounts as they are accrued.
   - Forecasted Settlement Obligations – July 26, 2005 through August 13, 2005 based on the average predictive settlement obligations from July 11, 2005 through July 25, 2005.

2. Calculate the daily average obligation by dividing the aggregate obligations calculated in step 1 above by the total number of days between June 1, 2005 and August 13, 2005.

3. Multiply the daily average obligation calculated in step 2 above by the level posting period days (i.e., 102 days).

Level Posting Period Days – The maximum number of days outstanding for the calendar year, based on the preliminary payment calendar, plus seven days for administrative purposes; currently set at 102 days.

Predictive Settlement Obligations – The obligations calculated by the settlement system using estimated generation, load and intertie MWhs (see Appendix 1 for a description of the MWh estimation process).

For a Market Participant that maintains multiple BAID numbers, the Estimated Aggregate Liability of the Market Participant as a legal entity will be calculated by summing the Estimated Aggregate Liabilities for all such BAID numbers and comparing the sum of the Estimated Aggregate Liabilities to the Aggregate Credit Limit of the Market Participant.

C-3. Adjustments to SCALE and Use of other ISO Data to Generate Estimated Aggregate Liability

The SCALE application provides liability estimates for Market Participants that, from an aggregate perspective as well as for most individual Market Participants, are the best liability estimates ~~of liability~~ available to the ISO. Prior to the use of this approach, the ISO used a mechanical projection of available settlements data over the "blind spot" for each participant for which settlements data was not yet available. That approach did not consider changes in activity levels, or most changes in market prices.

Despite the significant improvement in accuracy from the use of the SCALE approach, there are times at which the ISO or a Market Participant observes that the SCALE application may be producing a liability estimate that appears to be inaccurate. The ISO has noted this situation ~~after the introduction of new~~ when certain market parameters ~~charges~~ change such as the introduction of new market charges during ~~(for example, in 2004,~~ Phase 1B of MRTU in 2004~~),~~ and during the C1 Control Area Footprint change in December 2005. In such instances, the ISO will attempt to revise the SCALE algorithms to appropriately reflect such changes, and may make manual adjustments to the SCALE results to reflect known issues. Alternatively, as a result of these or other causes, the SCALE application may also be considered to be temporarily inoperative by the ISO, and another approach to calculating liabilities must be used. This approach may also be used when:

- It becomes necessary to monitor the liabilities of a Market Participant on a more frequent basis than the SCALE application provides for;
- The ISO has determined that SCALE is not producing accurate Estimated Aggregate Liabilities for one or more Market Participants; or
- In situations that arise that the automated SCALE application cannot readily accommodate, e.g., a Market Participant bankruptcy where new BAIDs are established. In such a case, the previous activity levels in the "old" BAIDs may be representative of ongoing activities levels, but this data is not readily accessible to the SCALE application to estimate liabilities for the new post-bankruptcy BAIDs.

Market Participants may also recommend changes to the liability estimates produced by the SCALE application or an alternative ISO calculation through the dispute procedures noted in Part E.

~~At times, the ISO also may determine Estimated Aggregate Liabilities using other available data sources including available settlements data, PI (Plant Information software) data, Market Participant schedule data, or other information derived from the ISO systems. This approach may be used when:~~
~~□It becomes necessary to monitor the liabilities of a Market Participant on a more frequent basis than the SCALE application provides for;~~
~~□The ISO has determined that SCALE is not producing accurate Estimated Aggregate Liabilities for a Market Participant; or~~
~~□Other situations arise that the automated SCALE application cannot readily accommodate, e.g., a Market Participant bankruptcy where new BAIDs are established. In such a case, the previous~~

~~activity levels in the "old" BAIDs may be representative of ongoing activities levels, but this data is not readily accessible to the SCALE application to estimate liabilities for the new post-bankruptcy BAIDs.~~

C-3.1 Calculation of Estimated Aggregate Liability Using Available Settlements Data

If the ISO determines that the SCALE application is inoperative or producing liability estimates that are of questionable accuracy, the ISO will use an alternate approach to calculate Estimated Aggregate Liabilities for Market Participants. This backup approach will rely on available settlements data.

As noted in Section C-2, the Estimated Aggregate Liability amount consists of those trade days for which actual settlement charges are available and trade days for which actual settlements charges are not yet available. This alternative approach relies on a different method for estimating charges for the trade days for which actual settlements data is not available. Specifically, estimated charges for these trade dates are estimated based on average daily charges for trade dates for which settlements data is available.

The alternative EAL method differs from the SCALE method only in the manner it estimates data to represent liability for the "blind spot" in the payment calendar. It captures the same "actual" data as in the SCALE approach, specifically:

- Outstanding AR/AP Obligations – Any open AR/AP balances, excluding balances covered by bankruptcies.
- Final Invoice Obligation – Those obligations not paid on the preliminary invoice.
- Actual Settlement Obligations – Preliminary Settlements obligations up to the date of the latest Preliminary Statement.

The 102-day Level Posting Period is utilized in both SCALE and the alternative EAL approach. Depending on when the latest Preliminary and Final invoices were paid, there will be between about 8 and 40 days of unpaid actual Preliminary Statements. There can be an additional 20 to 30 days of unpaid Final statements as well, though those days are not counted toward the 102-day total because they are only incremental and are not representative of a complete day of activity.

The remainder of days in the 102-day Level Posting Period for which unpaid Preliminary Statements are not available must be estimated. The estimate is derived by taking a daily average of published, actual charges and multiplying by the number of remaining days in the Level Posting Period. The daily average is based on all outstanding unpaid Preliminary and Final activity and an additional amount of days (as described subsequently) of historical Final Statement activity. Due to the difficulty and pitfalls of gauging "blind spot" activity on historical statements, three methods will be utilized, varying only by the number of historical months used in the derivation of daily-average amounts.

The three methods will use the same outstanding charges (i.e., available Preliminary and Final activity) but will also consider a total of either one, two, or twelve months of historical data. The process of estimation is a relatively simple one, though each Market Participant's activity must be separated into Daily Market, Monthly Market, and GMC activity and estimated separately due to the difference in charge frequency. Appendix 1A contains additional details and an example calculation.

Once a daily average amount is derived for each market type and for each EAL method, they will be grouped by method and multiplied by the number of days remaining to fill the 102-day Level Posting Period. Thus, three Level Posting Period Estimated Aggregate Liability calculations will result. FERC Fees and other outstanding AR/AP balances will be added to each figure and the sum for each method will be divided by 0.9 in order to account for the ISO's stated policy for Financial Security of not more than a 90% utilization rate. Any shortfall between the 90% utilization amount of the EAL and the posted Financial Security will be considered as a potential request for additional Financial Security.

Any Market Participant that would tentatively be required to post additional Financial Security based on the Estimated Aggregate Liability calculation using any of these three methods is flagged for additional review. ISO staff will review the preliminary liability estimates resulting from the use of 12 months, 2 months and 1 months of historical settlements data. Such information is reviewed in a numeric and graphical format. ISO staff aims to select the method that best represents Market Participant activity for which settlements data is not yet available. If ISO staff determines that the Estimated Aggregate Liability for the Market Participant exceeds 90% of the Market Participant's Aggregate Credit Limit, the ISO will request additional Financial Security and will provide the supporting calculation used for the Estimate Aggregate Liability amount.

C-4. Special Circumstances

The ISO's goal is to ensure that active as well as inactive Market Participants (to the extent they are not covered by their Unsecured Credit Limits) post adequate Financial Security to cover all known and reasonably estimated potential liabilities. Various charges and collateral issues sometimes arise which require special consideration.

The ISO intends to include the following charges in the Estimated Aggregate Liability calculation, if and when such data is available, and will require Market Participants to post Financial Security accordingly. The ISO's planned Settlement and Market Clearing system upgrade is scheduled for implementation in November 2007, at which time improved data for certain of these transactions is anticipated to be available.

- **Daily Adjustments and Disputes** – Charges associated with daily adjustments and disputes that are regularly calculated by the settlement system will be included in the ~~SCALE~~ liability estimation calculations as the charges are calculated. There should generally be no need to attempt to forecast these amounts since they are typically relatively small and usually affect many Market Participants.

- **Refund Orders** – The ISO will assess its ability to reasonably calculate the charges associated with a refund before the ISO's settlement system is rerun. If the ISO can reasonably apportion the refund to specific Market Participants, it will include the amounts in the ~~SCALE~~ liability estimation process and request security accordingly. If the ISO deems that complexities of a refund order preclude it from reasonably assessing the liabilities, it will not make a security request until the refund is processed through the settlement system. However, the ISO will make available an aggregate forecast of the refund liabilities, if at all possible, to Market Participants for informational purposes only.

- **Good Faith Negotiations** – In general, Good Faith Negotiations (GFN) tend to affect the transactions of an individual Market Participant, which in turn may affect a few or many other Market Participants. Transactions associated with GFNs will be handled in the same manner as transactions associated with Refund Orders.

Other special circumstances include:

- **Debtor/Creditor Market Participants leaving the market or incurring substantial activity level changes** – Those Market Participants that are exiting the ISO markets, or that have changed their business practices resulting in substantially reduced participation in the ISO markets, will be required to maintain a Financial Security Amount at least equal to five percent (5%) of the absolute value of the peak monthly net charges from their beginning participation date to their last participation date or the date the substantial change occurred. The ISO will use this Financial Security posting requirement as a base amount and reserves the right to increase or decrease the base amount depending on the number of settlement reruns in the queue and the estimated value of those settlement reruns. The five percent (5%) residual Financial Security posting will be retained for a period of one year, unless specific circumstances warrant a change in this retention period (e.g., pending FERC ordered adjustments).

- **Past due amounts owed to SCs are not considered part of an SC's security posting.** This treatment is necessary if the ISO is to maintain the integrity of the overall settlement system, which requires that each month be settled separately. Each trade month consists of creditors and debtors whose receivables and obligations vary over time. To the extent that amounts owed to an SC related to defaults in previous months are included in the ~~SCALE~~ liability estimation calculation and permitted to reduce that SC's current posting requirements, the ISO will have no means to enforce the payment obligation of that SC to pay current invoices rather than refuse payment in an attempt to recoup previous past-due amounts owed to them.

C-5. Estimated Aggregate Liability Review

As provided in Section 12.4 of the ISO Tariff, Estimated Aggregate Liability~~, as typically calculated by the ISO's SCALE application (see Appendix 1),~~ is used to determine Financial Security posting requirements and is to be used as the basis for additional Financial Security requests, particularly when a Market Participant's ~~SCALE~~ calculated liability estimate exceeds 90% of its Estimated Aggregate Liability.

A Market Participant has five (5) business days to review the request for additional Financial Security and submit proposed changes that must be agreed to by the ISO. Within the five (5) business days, the Market Participant must either demonstrate to the ISO's satisfaction that the ISO's Financial Security request is all or partially unnecessary, or post the required Financial Security Amount calculated by the ISO. If the ISO and Market Participant are unable to agree on the appropriate level of Financial Security during the five (5) business day review period, the Market Participant must post the additional Financial Security and continue the dispute procedure as described in Part E. Any excess Financial Security amounts will be returned to the Market Participant if the dispute process finds in favor of the Market Participant.

C-6. Financial Security Posting Requirements

This section describes the process for determining when additional Financial Security is required and how the request for additional Financial Security is communicated to the Market Participant.

C-6.1. Financial Security Requests

As described above, to the extent a Market Participant's Unsecured Credit Limit is less than its Estimated Aggregate Liability, the Market Participant must post a Financial Security Amount. The determination of a required/recommended Financial Security Amount is based on a Market Participant's most recent ISO Estimated Aggregate Liability calculation. The ISO recommends that each Market Participant maintain an Aggregate Credit Limit such that its Estimated Aggregate Liability does not exceed 90% of its Aggregate Credit Limit. The calculation is as follows:

Recommended Aggregate Credit Limit = (Estimated Aggregate Liability) / (0.90)

The 90% level is specified in the ISO Tariff and is used as the basis for the Financial Security Amount recommended by the ISO. A Market Participant must provide an additional Financial Security Amount when its obligations reach 100 percent of its Aggregate Credit Limit. However, the ISO recommends providing additional Financial Security at the 90% level, because when a Market Participant's Estimated Aggregate Liability exceeds 100% of its Aggregate Credit Limit, the ISO may be required to impose enforcement actions.

The Estimated Aggregate Liability calculated by the ISO for a Market Participant may fluctuate, and at times this may result in swings in Financial Security posting requirements. To the extent that the Estimated Aggregate Liability exceeds the Aggregate Credit Limit at any time, a Market Participant may be subject to enforcement actions including not being entitled to submit a schedule to the ISO. Thus, the ISO recommends that Market Participants maintain a margin of Aggregate Credit Limit above their maximum anticipated Estimated Aggregate Liability.

The Estimated Aggregate Liability ~~(SCALE)~~ is updated weekly for each Market Participant and is used to determine if additional Financial Security needs to be posted. Based on a Market Participant's Aggregate Credit Limit utilization level (which is the EAL divided by Aggregate Credit Limit), the following actions will be taken at each level listed:

Aggregate Credit Limit Utilization %	Action
< 50%.	No notice or action taken.
≥~~>~~50% and < 70%	Market Participant notified for information only.
≥70% and < 90%	Market Participant notified of a *recommended* security increase. The ISO recommends, but does not require, that an additional posting is made to maintain the SCALE at or below 70%.
≥~~>~~90%	The ISO *requests* that a Market Participant increase the posting amount within five business days so that the security utilization does not exceed 90 percent. If the Market Participant takes no action in response to the recommendation to post additional security, upon reaching 100 percent security utilization, they will be subject to the enforcement provisions of the ISO Tariff as described in Section D, Enforcement, including potential rejection of schedules.

C-6.2. Financial Security Requests Communication

Each week the ISO Finance calculates each Market Participant's Estimated Aggregate Liability and notifies the ISO's customer service representatives ~~Account Managers~~ of the Estimated Aggregate Liability amount and any recommended increases in the Market Participant's Financial Security Amount. These communications contain specific information regarding the amount each Market Participant needs to post Financial Security in order to maintain the recommended 90% ratio described above as well as the minimum amount needed so that the Market Participant's Estimated Aggregate Liability does not exceed its Aggregate Credit Limit.

The ISO customer service representative ~~Account Manager~~ is to contact any Market Participant for which an increase in Financial Security is recommended or required within one (1) business day.

The customer service representative ~~Account Manager~~ should copy ISO Finance on all security related client correspondence. The ISO customer service representatives ~~Account Managers~~ will communicate with the ISO Finance and Market Participants to address questions related to the request.

A required increase in the Financial Security Amount is to be resolved within five (5) business days. Each Market Participant not in compliance with the requirement that its Estimated Aggregate Liability be less than its Aggregate Credit Limit is subject to enforcement procedures as described in Part D.

C-6.3. FTR Auction Financial Security Requirements

The credit requirements related to participation in the ISO's annual Firm Transmission Rights (FTR) are the same as those for other market obligations. Auction requirements are set forth in the FTR Bidders Manual published annually by the ISO. A FTR Bidder's ACL must be sufficient to not only cover ongoing estimated liabilities but also the liabilities resulting from potential winning bids. Each FTR Bidder may choose to designate a portion of their UCL and/or posted Financial Security specifically for the FTR auction by notifying the ISO of the FTR Bidder's intent. Alternatively, the FTR Bidder may choose to post additional Financial Security solely to cover their participation in the FTR auction by notifying the ISO of the purpose for the additional Financial Security.

PART D. ENFORCEMENT

Following the date on which a Market Participant commences trading, if a Market Participant's Estimated Aggregate Liability, as calculated by the ISO, at any time exceeds its Aggregate Credit Limit, the ISO may take any or all of the following actions in accordance with Section 12.5 of the ISO Tariff:

(a) The ISO may withhold a pending payment distribution.

(b) The ISO may limit trading, which may include rejection of Schedules and/or limiting other ISO market activity. In such case, the ISO shall notify the Market Participant of its action and the Market Participant shall not be entitled to submit further Schedules to the ISO until the Market Participant posts an additional Financial Security Amount that is sufficient to ensure that the Market Participant's Aggregate Credit Limit is at least equal to its Estimated Aggregate Liability.

(c) The ISO may require the Market Participant to post an additional Financial Security Amount in lieu of an Unsecured Credit Limit for a period of time.

(d) The ISO may restrict, suspend, or terminate a Market Participant's Service Agreement.

In addition, the ISO may restrict or suspend a Market Participant's right to schedule or require the Market Participant to increase its Financial Security Amount if at any time such Market Participant's potential additional liability for Imbalance Energy and other ISO charges is determined by the ISO to be excessive by comparison with the likely cost of the amount of Energy scheduled by the Market Participant.

PART E. DISPUTE PROCEDURES

The ISO provides Market Participants the ability to dispute the Estimated Aggregate Liability calculated by the ISO and, as a result, the ISO may reduce or cancel a requested Financial Security adjustment. The following steps are required for a Market Participant to dispute a Financial Security request resulting from the ISO's calculation of Estimated Aggregate Liability:

1. Request by the Market Participant to review the ISO calculation.

2. Reasonable and compelling situation presented, as determined by the Market Participant's ISO client representative.

3. Documentation of facts and circumstances that evidence that the ISO's calculation of Estimated Aggregate Liability results in an excessive and unwarranted Financial Security posting requirement.

    a. Examples include:
        i. Issues related to non-recurring retroactive charges.
        ii. Demonstrable changes in expected obligations as a result of physical changes (new capacity, loss of customers).
        iii. Other issues.
    b. Presentation of a reasonable alternative Estimated Aggregate Liability.

4. Approval by the ISO Manager and/or Director of Customer Services and Industry Affairs and approval by the ISO Treasurer.

5. The ISO may decline to adjust the initial Estimated Aggregate Liability, as calculated using the SCALE application, if the Market Participant has had Financial Security shortfalls in the past 12 months (i.e., it has been shown that the Market Participant's Aggregate Credit Limit at times during the preceding 12 months has been insufficient to cover the Market Participant's Estimated Aggregate Liability).

   In no such case shall an ISO request for increased Financial Security remain outstanding for more than five (5) business days. Either the above process is to be completed within five (5) business days from the date of the ISO request for additional Financial Security, or the Market Participant is to post additional Financial Security within the five (5) business days and continue this process, which may result in a return of posted Financial Security back to the Market Participant if the results of the dispute process are found to favor the Market Participant.

   Factors for consideration in the event these procedures are utilized include:

   - Weighing the risk of using the lower figure to the potential detriment of market creditors if the Market Participant is under-secured and defaults, against the desire not to impose additional potentially unwarranted costs on a Market Participant.
   - Equity and consistency of treatment of Market Participants in the dispute procedure.
   - The evidentiary value of the information provided by the Market Participant's in the dispute procedure.

APPENDIX 1: SCHEDULING COORDINATOR AGGREGATE LIABILITY ESTIMATE MEASUREMENT FILE DEVELOPMENT PROCESS

INTRODUCTION

The following information provides background and an overview of the operation of the SCALE liability estimation process. This section focuses on the measurement file development process to develop proxies for missing meter data. This allows the ISO to use available operational to estimate current liabilities.

DEVELOPMENT PROCESS

Defined Terms

EMS Utility Distribution Control Area (UDC) Load – The ISO control area load MWhs aggregated at the PG&E, SCE and SDG&E level.

Generation Deviation Allocation Flag – The generation deviation allocation flag denotes which Market Participant load profiles are allocated generation deviation/Unaccounted for Energy (UFE) MWhs.

Load Profiles

Annual Load Profile – Load profile developed from actual meter MWhs for the period of Trade Date (T) + 50 to T+415.
Current Load Profile – Load profile developed from actual meter MWhs for period of T+50 to T+80.
Schedule Load Profile – Load profile developed from scheduled meter MWhs for the period of T+1 to T+49.
Seasonal Load Profile – Load profile developed from actual meter MWhs for the prior season.
Short-Term Schedule Load Profile - Load profile developed from scheduled meter MWhs for the period of T+1 to T+14.

Load Profile Adjustment Percentage – The load profile adjustment percentage is calculated as the percentage variance between actual metered load and allocated EMS UDC Load. This percentage is utilized to develop actual metered load, utilized by the settlement system, from allocated EMS UDC Load.

Meter Load to Scheduled Load Adjustment Percentage – The meter load to scheduled load adjustment percentage is calculated as the variance between actual meter load and scheduled load. The percentage is utilized to create representative meter load from scheduled load.

Off-Peak – This term represents the day of the week to which a load profile corresponds. The Off-Peak days of the week include: Saturday, Sunday and Holidays.

On-Peak –This term represents the day of the week to which a load profile corresponds. The On-Peak days of the week include: Monday, Tuesday, Wednesday, Thursday and Friday.

Other Adjustment Percentage – For a Market Participant whose load profiles and adjustment percentages do not reflect its load, the other adjustment percentage approach is utilized. This approach is only rarely used.

Use Meter Load to Scheduled Load Adjustment Percentage Flag – This flag identifies those calculated Market Participant load profiles that are subsequently adjusted by the meter load to scheduled load adjustment percentage.

Use Scheduled Load Flag – This flag identifies those Market Participants where utilization of scheduled load a proxy for metered load is appropriate.

Market Participant Liability Estimations

In 2003, the focus of the Scheduling Coordinator Aggregate Liability Estimation (SCALE) project was on the development of settlement statements seven days after the trade date using a system that is essentially a copy of the settlement system with missing load, generation and intertie data derived from a combination of meter, telemetry and estimated data from other systems. In order for the SCALE application to effectively and accurately calculate participant liabilities, three essential data inputs are needed: load, generation and intertie MWhs. It was determined that 75 to 80 percent of generation and intertie MWhs are derived from the ISO polled meter data stored in the ISO's Data Warehouse. However, the load MWhs were not available until 45 days after the trade date. Thus, the main focus of the SCALE project team's efforts to was on the estimation of load data. The analysis conducted produced the following findings:

1. Utilization of current actual meter load profiles, which are based on meter data that is 50 to 80 days old, to allocate EMS UDC Load, did not alone accurately reflect a Market Participant's current position in the market. For example, a Market Participant's load profile based on past data would not accurately reflect a situation where it has transferred its load/customers to another Market Participant.

2. Utilization of annual load profiles to allocate EMS UDC Load in many instances did not reflect load increases or decreases that appear over time. For example, since September 2001, certain Market Participants have acquired a substantial amount of load from other Market Participants, but the annual load profiles generated did not reflect this load shift.

3. Utilization of schedules to estimate system load and to derive participant liabilities did not reflect the actual daily system load or participant imbalances. This was mainly due to a Market Participant's ability to schedule whatever amount of load that it chooses. Analysis of Market Participant scheduling patterns has shown that many Market Participants' schedules are closely related to their actual metered quantities. However, Market Participant scheduling practices may not be consistent.

4. After conducting an analysis of the load estimation methodologies above, it was determined that all three methods should be combined to provide for a more accurate load estimate. The methodology, outlined below, includes the information gathered through the liability estimation process.

Additional areas that the SCALE team worked on were the estimation of the remaining 15 to 25 percent of missing generation and intertie MWhs. The team developed a methodology to estimate the remaining generation and intertie MWhs, and an explanation of the methodology is outlined below.

Load Estimation Methodology

As mentioned in the previous section, three approaches were considered to estimate load MWhs and each had significant shortcomings that precluded them from being utilized exclusively. By utilizing each of the methodologies in conjunction with each other, a proxy for metered load was developed that more closely represented each participant's position in the market. The following are the steps created to develop a Market Participant's load estimate.

1. **Develop Load Profiles** - Development of each Market Participant's "On-Peak" (Monday through Friday) and "Off-Peak" (Saturday, Sunday and Holidays) hourly load profiles by UDC area. The load profiles developed consist of:

    - Annual Load Profiles,
    - Seasonal Load Profiles,
    - Current Load Profiles,
    - Scheduled Load Profiles, and
    - Short-Term Scheduled Load Profiles.

2. **Select Load Profile** – Once the load profiles are developed for a given time period, the next step in the load estimation process is to determine which load profile (Annual, Seasonal, Current etc) most closely reflects a Market Participant's actual position in the market. For example, the EMS UDC Load from 12/16/2002 to 1/15/2003 is allocated to each of the load profiles listed above. Next, the allocated MWhs for each set of profiles is compared against the actual metered MWhs for the same time period 12/16/2002 to 1/15/2003. The load profile that best represents a Market Participant's actual meter MWhs is utilized for subsequent load allocations.

3. **Calculate / Select Load Profile Adjustment Percentages and Load Profile Application Flags** – The following adjustment percentages and load profile application flags, which are defined above, are calculated or selected to be utilized in subsequent calculations:

    - Load Profile Adjustment Percentage,
    - Meter Load to Scheduled Load Adjustment Percentage,
    - Other Adjustment Percentage,
    - Use Meter Load to Scheduled Load Adjustment Percentage Flag, and
    - Use Scheduled Load Flag.

    (note: the results of steps 1 thru 3 are utilized for a designated period, such as 30 days)

4. **Validate EMS UDC Load** – EMS UDC Load validation for each trade date is conducted to ensure that the data derived from EMS does not include significant outlier MWhs. The calculation includes comparing an historical EMS load profile (T+1 to T+50) to the current trade date load profile. Where the current load profile MWh does not meet the 15 percent tolerance level, the current EMS MWh value is adjusted to within tolerance.

5. **Allocate EMS UDC Load** – Next, the ISO will utilizes the selected load profile for determining the MP's hourly load to allocate EMS UDC Load. The following steps are required for the allocation of EMS UDC Load:

    i. The EMS UDC Load is allocated to MP's based on the following formula (all calculations are conducted on an hourly basis):

- Where Use Schedule Load Flag = "True"; Scheduled Load * (1+Meter Load to Scheduled Load Adjustment Percentage)

- Where Use Schedule Load Flag = "False" and Use Meter Load to Scheduled Load Adjustment Percentage Flag = "True", EMS UDC Load * Selected Load Profile / 1000 * (1+ Load Profile Adjustment Percentage) * (1+ Other Adjustment Percentage) * (1+ Meter Load to Scheduled Load Adjustment Percentage),

- Else, EMS UDC Load * Selected Load Profile / 1000 * (1+ Load Profile Adjustment Percentage) * (1+ Other Adjustment Percentage)

ii. The value of Hourly EMS UDC Load * Selected Load Profile is divided by 1000 because the hourly load profile percentages derived are multiplied by 1000 for data representation purposes.

6. **Calculate Generation Deviation / Unaccounted for Energy (UFE) Quantity by UDC** - For each UDC, a Generation Deviation / UFE calculation is completed, which provides a residual amount of Load MWhs that are allocated to designated Market Participants on a *pro rata* basis. The purpose of the calculation and load MWh allocation is to minimize Charge Type 406 UFE charges. The UFE calculation is outlined in the settlement and billing protocols under CT 406. The allocation process is as follows (all calculations are conducted on an hourly basis):

   i. Where Generation Deviation Allocation Flag = "False", MP Load + (UDC UFE *MP Load / Total UDC Load where Generation Deviation Allocation Flag = "False").

7. **Load Distribution and Upload** – Upon deriving the load MWhs to be utilized in the settlement statement calculation, the MWhs are distributed to each Market Participant's valid resources IDs in the following manner and then uploaded into the SCALE application.

   i. Development of a list of valid metered and scheduled resources utilized by each MP over a given time period (T+1 to T+80).

   ii. Allocate the estimated load to the valid resources on a weighted basis by hour. For all resources that have both metered quantities and scheduled quantities, metered quantities will be utilized for weighting purposes. Resources that have scheduled quantities and no metered quantities are assumed to be recently utilized resources and scheduled quantities will be used for weighting purposes.

   iii. Allocate the resource quantities calculated above evenly across the six sub-hour interval levels for upload into the measurements table in the SCALE application.

Generation Estimation Methodology

As mentioned above, at T+7 approximately 15 to 25 percent of generation meter data is not available. The following is an explanation of the methodology utilized to develop a proxy for the missing generation meter data.

The ISO determined that the missing generation data consists of the following:

1. The ISO polled unit MWhs that were either not available at T+7 or were being worked on by the metering department at the time of the T+7 data push, and

2. Qualifying Facility (QF) unit and other non-polled unit MWhs.

The process for determining the remaining generation data is based on EMS and schedule data.

1. **Download T+7 Meter Data Acquisition System (MDAS) Generation Data** – For the trade date being worked on, all generation data available in the T+7 measurement table is downloaded for analysis purposes.

2. **Download Scheduled Generation Data** – From Market Operation's Scheduling Infrastructure (SI) database, download hourly scheduled generation by resource ID.

3. **Download Real Time (RT) Dispatch Data** – From Market Operation's SI database, download hourly real time dispatched data by resource ID.

4. **Download EMS Data from Plant Information (PI)** – A table has been developed from information provided by Market Operations that contains approximately 800 generation resource IDs mapped to the appropriate PI tags. Using the PI tags, generation unit hourly EMS MWhs are downloaded from PI.

5. **Download Actual Meter & Schedule Data** – From the Data Warehouse, download actual metered and scheduled quantities for a period of T+50 to T+80 for analysis purposes.

6. **Utilization of T+7 MDAS Generation Data** – Where T+7 MDAS generation data exists for a particular resource, even if the measurement quantity is zero, use this value. (Between 75 and 85 percent of all generation MWhs.)

7. **Utilization of EMS Generation Data** – Where MDAS data is not available and Dispatched Generation MWh >0 and EMS MWh >0, use EMS MWhs. (Approximately 18.75 percent of all generation MWhs.)

    a. Dispatched Generation MWh = Scheduled Generation MWh + RT Dispatched Generation MWh

    b. Where the EMS MWh * 1.15 is greater than the maximum generation capacity of the unit utilize the maximum generation capacity of the unit.

8. **Utilization of Dispatched/Scheduled Generation MWhs** – Where MDAS data is not available and Dispatched Generation MWh >0 and EMS MWh = 0, use Adjusted Dispatched / Scheduled Generation MWh. (Approximately 6.25 percent of all generation MWhs.)

    a. Adjusted Dispatched Generation MWh =

        i. For all Dispatched / Scheduled Generation MWhs >=1 MWh, Dispatched / Scheduled Generation MWhs* 1+(Hourly Metered vs. Scheduled Generation Variance Percentage)

    b. Resource Historical Metered vs. Scheduled Variance Percentage (T+50 to T+80) = (average hourly metered MWh – average hourly scheduled MWh) / average hourly scheduled MWh

9. **Upload the Developed MWhs to the SCALE Application** - Allocate the resource quantities calculated above evenly across the six sub-hour interval levels for upload into the measurements table in the SCALE application.

Intertie/Intratie (TIE) Estimation Methodology

Currently, 75 to 80 percent of the TIE data is available from the ISO polled meters. The process for determining the remaining intertie MWhs is based on the utilization of EMS data and allocated load MWhs derived in the Load Estimation Methodology for various intraties.

1. **Download T+7 MDAS Intertie Data** – For the trade date being estimated, all TIE data available in the T+7 measurement table is downloaded for analysis purposes.

2. **Download EMS Data from PI** – A table has been developed from information provided by Market Operations that contains TIE resource IDs mapped to the appropriate PI tags. Using the PI tags, TIE hourly EMS MWhs are downloaded from PI.

3. **Utilization of T+7 MDAS Intertie Data** – Where T+7 MDAS TIE data exists, use MDAS data. (Approximately 84 percent of all TIE MWhs.)

4. **Utilization of EMS Intertie Data** – Where MDAS data is not available use the EMS data. (Approximately 13 percent of all TIE MWhs.)

5. **Utilization of Load Data** – For intratie IDs, utilize the amount calculated as load as the intratie MWhs where appropriate. (Approximately 3 percent of all TIE MWhs.)

6. **Upload the Developed MWhs to the SCALE Application** - Allocate the resource quantities calculated above evenly across the six sub-hour interval levels for upload into the measurements table in the SCALE application.

SCALE Data Development Conclusion

The above steps describe how missing meter MWh data is developed for an estimated T+7 settlement run. Further enhancements to this process may be forthcoming as the process is transitioned to a permanent software tool, planned for November 1, 2007 when the ISO's new Settlement and Market Clearing System (SaMC) is implemented.

APPENDIX 1A: ALTERNATIVE ESTIMATED AGGREGATE LIABILITY CALCULATION

To assist Market Participants in understanding and verifying the ISO's alternative EAL calculation, the following section provides additional details and an example calculation. As described in Section 3.1, the ISO initially evaluates a Market Participant's liability by deriving three estimates which vary only by the number of months used in derivation of the daily average liability amounts. ISO Staff review the preliminary estimates to determine which appears to be most representative of the likely actual liability, and may request additional collateral based on that estimate. A summary report detailing the alternative EAL calculation will be provided to any Maket Participant requested to post additional security, or at any time when requested by the Market Participant. The report will highlight only the method that is deemed by the ISO to be most representative of the Market Participant's liability, however all three methods are available upon request as well.

This Estimated Aggregate Liability (EAL) Report presents most of the details of the calculation, which should be verifiable by the Market Participant using published Settlements Statements. Adding all outstanding, unpaid, published Settlements activity to an estimate of the remaining liability in the 102-day period results in the Level Posting Period EAL.

For example, assume that the EAL is calculated on Friday, June 16, 2006. On this day there are 23 days of published Preliminary Statements along with 4 days of Final Statements for the month of April. All of this activity will be summed for April and will account for 23 days out of the required 102 days. The Preliminary Statement has been paid for March; therefore no days in March will be counted in the Level Posting Period. However, there are still incremental charges in March on Final Statements that have been invoiced but not paid, and therefore will be included in the liability amount.

Now an estimate must be derived for the remaining seven days of April, along with an additional 72 days that make up the Level Posting Period (23+7+72=102). The estimate is based on a calculated daily average amount for all Charge Types. For simplicity, the Charge Types are aggregated into three categories: Daily Market (Imbalance Energy, Ancillary Services, etc.), Monthly Market (Wheeling, Transmission, etc), and GMC. The following table entitled "**Charge Type Category List"** lists all Charge Types and their category designation.

The averages for all three categories will be calculated using the same time period, based on either one, two or twelve months of historical Settlements data. In the one-month method, the time-period for derivation of daily averages will include 23 days of April published data, 30 days of March published data (because the month is still open), and one additional month of previously paid Settlement activity, specifically the month of February. For purposes of our example, assume that all outstanding, published obligations net to a total of $7,000.

To derive a daily average amount for the category of 'Daily Market' charge types, sum all charge type amounts in this category (see attached table) from February 1 to April 23 and divide by 82 (28+31+23). Assume the result is $100 per day.

To derive the daily average of 'Monthly Market' charges, sum all charge type amounts in this category from February 1 to March 31. Due to the fact that these charge types accrue only on the last day of the month, there is no reason to consider the range of April 1 to April 23 at this time. Divide the amount by 60 days for the two-month period. Assume the result is $50 per day.

Lastly, derive the 'GMC' category charges in the same manner as the 'Monthly Market' charges and divide by 60. Assume the result is $25.

Now combine the results and calculate 102-day Liability.

Outstanding obligations: calculated above for the 23 days of April Prelims and 30 days of March Finals, includes 'Daily Market', 'Monthly Market' (incremental Final), and 'GMC' (incremental Final)

$ 7,000 *(23 days)*

'Daily Market' Estimate: 7 days in April, 31 days in May, 30 days in June, 11 days in July

$ 100 * (7+31+30+11) = $ **7,900** *(79 days)*

'Monthly Market' Estimate: 30 days in April, 31 days in May, 30 days in June, 11 days in July

$ 50 * (30+31+30+11) = **$ 5,100** (102 days)

'GMC' Estimate: 30 days in April, 31 days in May, 30 days in June, 11 days in July

$ 25 * (30+31+30+11) = **$ 2,550** (102 days)

Total 102-day Level Posting Period EAL:

$ 7,000 + $ 7,900 + $ 5,100 + $ 2,550

= $ 22,550

The other two methods are calculated in the same manner while adding additional months of historical Settlements data.

Charge Type Category List:

Frequency	Charge Type	Charge Type Description	Service Type
Daily	1	Day-Ahead Spinning Reserve due SC	Ancillary Services
Daily	2	Day-Ahead Non-Spinning Reserve due SC	Ancillary Services
Daily	3	Day-Ahead AGC/Regulation due SC	Ancillary Services
Daily	4	Day-Ahead Replacement Reserve due SC	Ancillary Services
Daily	5	Day-Ahead Regulation Up due SC	Ancillary Services
Daily	6	Day Ahead Regulation Down due SC	Ancillary Services
Daily	24	Dispatched Replacemnt Res (Bid-in) Capacity Withhold	Ancillary Services
Daily	51	Hour-Ahead Spinning Reserve due SC	Ancillary Services
Daily	52	Hour-Ahead Non-Spinning Reserve due SC	Ancillary Services
Daily	53	Hour-Ahead AGC/Regulation due SC	Ancillary Services
Daily	54	Hour-Ahead Replacement Reserve due SC	Ancillary Services
Daily	55	Hour Ahead AGC/Regulation Up due SC	Ancillary Services
Daily	56	Hour AHead AGC/Regulation Down due SC	Ancillary Services
Daily	61	Hour-Ahead RMR Preempted Spinning Reserve	RMR
Daily	62	Hour-Ahead RMR Preempted Non-Spinning Reserve	RMR
Daily	64	Hour-Ahead RMR Preempted Replacement Reserve	RMR
Daily	65	Hour-Ahead RMR Preempted Regulation Up	RMR
Daily	66	Hour-Ahead RMR Preempted Regulation Down	RMR
Daily	71	Real Time RMR Preempted Spin Reserve (DA Price)	RMR
Daily	72	Real Time RMR Preempted Non-Spin Reserve (DA Price)	RMR
Daily	74	Real Time RMR Preempted Replacement Reserve (DA Price)	RMR
Daily	75	Real Time RMR Preempted Regulation Up (DA Price)	RMR
Daily	76	Real Time RMR Preempted Regulation Down (DA Price)	RMR
Daily	81	Real Time RMR Preempted Spin Reserve (HA Price)	RMR
Daily	82	Real Time RMR Preempted Non-Spin Reserve (HA Price)	RMR
Daily	84	Real Time RMR Preempted Replacement Reserve (HA Price)	RMR
Daily	85	Real Time RMR Preempted Regulation Up (HA Price)	RMR
Daily	86	Real Time RMR Preempted Regulation Down (HA Price)	RMR
Daily	101	Day-Ahead Spinning Reserve due ISO	Ancillary Services
Daily	102	Day-Ahead Non-Spinning Reserve due ISO	Ancillary Services
Daily	103	Day-Ahead AGC/Regulation due ISO	Ancillary Services
Daily	111	Spinning Reserve due ISO	Ancillary Services
Daily	112	Non-spinning Reserve due ISo	Ancillary Services
Daily	114	Replacement Reserve due ISO	Ancillary Services
Daily	115	Regulation Up due ISO	Ancillary Services

Frequency	Charge Type	Charge Type Description	Service Type
Daily	116	Regulation Down due ISO	Ancillary Services
Daily	124	Dispatched Replace Res (Self-Prov.) Capacity Withhold	Ancillary Services
Daily	130	Insufficient Energy in Response to ISO Instructions	Misc
Daily	131	Reduct. in Avail. Cap. due to Uninst. Dev. due ISO	Misc
Daily	141	No Pay Charge - Spinning Reserve	No Pay
Daily	142	No Pay Charge - Non-Spinning Reserve	No Pay
Daily	144	No Pay Charge - Replacement Reserve	No Pay
Daily	145	No Pay Charge - Regulation Up	No Pay
Daily	146	No Pay Charge - Regulation Down	No Pay
Daily	151	Hour-Ahead Spinning Reserve due ISO	Ancillary Services
Daily	152	Hour-Ahead Non-Spinning Reserve due ISO	Ancillary Services
Daily	153	Hour-Ahead AGC/Regulation due ISO	Ancillary Services
Daily	201	Day-Ahead Intra-Zonal Congestion Incs/Decs Settlement	Congestion
Daily	202	Day-Ahead Intra-Zonal Congestion Charge Refund	Congestion
Daily	203	Day-Ahead Inter-Zonal Congestion Settlement due SC	Congestion
Daily	204	Day-Ahead Inter-Zonal Congestion Settlement due TO	Congestion
Daily	251	Hour-Ahead Intra-Zonal Congestion Settlement	Congestion
Daily	252	Hour-Ahead Intra-Zonal Congestion Charge Refund	Congestion
Daily	253	Hour-Ahead Inter-Zonal Congestion Settlement due SC	Congestion
Daily	254	Hour-Ahead Inter-Zonal Congestion Settlement due TO	Congestion
Daily	255	Hour-Ahead Inter-Zonal Congestion Debit to TOs	Congestion
Daily	256	Hour-Ahead Inter-Zonal Congestion Debit due SC	Congestion
Daily	271	Real-time Intra-zonal Congestion INC/DEC Settlement	Imbalance Energy
Daily	272	Real-time Above MCP Costs for Non-Market Dispatches	Excess Costs
Daily	301	Supplemental and A/S Energy	Reliability
Daily	303	Ex-Post Replacement Reserve due ISO (Dispatched)	Ancillary Services
Daily	304	Ex-Post Replacement Reserve due ISO (Undispatched)	Ancillary Services
Daily	353	Contracted Black Start due SC	Reliability
Daily	401	Instructed Energy	Imbalance Energy
Daily	402	Generation Deviation Settlement	Imbalance Energy
Daily	403	Load Deviation Settlement	Imbalance Energy
Daily	404	Export Deviation Settlement	Imbalance Energy
Daily	405	Import Deviation Settlement	Imbalance Energy
Daily	406	UFE Settlement	Imbalance Energy
Daily	407	Uninstructed Energy	Imbalance Energy
Daily	410	Unscheduled RMR Energy	Imbalance Energy
Daily	451	Real-Time Intra-Zonal Congestion Incs/Decs Settlement	Congestion
Daily	452	Real-Time Intra-Zonal Congestion Charge/Refund	Congestion

Frequency	Charge Type	Charge Type Description	Service Type
Daily	481	Excess Cost for Instructed Energy	Imbalance Energy
Daily	485	Insufficient Response to AWE Instruction	Penalties
Daily	487	Allocation of Excess Cost for Instructed Energy	Imbalance Energy
Daily	499	Interest due SC	Misc
Daily	502	Generation Deviation Effective Price	Imbalance Energy
Daily	503	Load Deviation Effective Price	Imbalance Energy
Daily	505	Import Deviation Effective Price	Imbalance Energy
Daily	547	Uninstructed Deviation Penalty Charges Due ISO	Penalties
Daily	1003	Regulation Energy Payment Adjustment	Adjustments
Daily	1004	Over-Generation Payment Due SC	Reliability
Daily	1010	Neutrality Adjustment Charge/Refund	Imbalance Energy
Daily	1011	Ancillary Service Rational Buyer Adjustment	Ancillary Services
Daily	1012	RMR Preemption Revenue Allocation	RMR
Daily	1013	REPA Cash Neutrality Charge	Reliability
Daily	1030	No Pay Provision Market Refund	No Pay
Daily	1061	Distribution of Preempted Spinning Reserve	RMR
Daily	1062	Distribution of Preempted Non-Spinning Reserve	RMR
Daily	1064	Distribution of Preempted Replacement Reserve	RMR
Daily	1065	Distribution of Preempted Regulation Up	Ancillary Services
Daily	1066	Distribution of Preempted Regulation Down	Ancillary Services
Daily	1104	Over-Generation Payment Due ISO	Reliability
Daily	1210	Existing Contracts Cash Neutrality Charge/Refund	Misc
Daily	1277	Real-time Intra-zonal Congestion Charge/Refund	Imbalance Energy
Daily	1278	Alloc of AboveMCP Cost for Real-Time Non-Mkt Dsptch	Excess Costs
Daily	1303	Supplemental Reactive Energy due ISO	Reliability
Daily	1401	Imbalance Energy Offset	Imbalance Energy
Daily	1407	Deviation Penalty for Positive Uninstructed Deviation	Penalties
Daily	1470	Neutrality Charge for UDP Penalties	Penalties
Daily	1471	Excess Cost Neutrality Settlement	Excess Costs
Daily	1481	Excess Cost Allocation - Neutrality Adjustment	Excess Costs
Daily	1487	Energy Exchange Program Neutrality Adjustment	Adjustments
Daily	1680	Allocation of Bid Cost Recovery	Reliability
Daily	1999	Rounding Charge/Refund	Misc
Daily	2009	ISO/SC Distribution/Allocation	Misc
Daily	2010	Finance Charges	Misc
Daily	2020	Must Run due ISO	Misc
Daily	2407	Deviation Penalty for Negative Uninstructed Deviation	Penalties
Daily	2900	CONTINGENCY-Net Manual Market Invoice	Misc
Daily	4141	No Pay Settlement for Spin Capacity	No Pay
Daily	4142	No Pay Settlement for Non Spin Capacity	No Pay
Daily	4144	No Pay Settlement for Replacement Reserve Capacity	No Pay
Daily	4271	Reliability Excess Cost Settlement - Due SC	Imbalance Energy
Daily	4272	OOM Congestion Excess Cost Settlement - Due SC	Imbalance Energy
Daily	4401	Instructed Energy Settlement	Imbalance Energy

Frequency	Charge Type	Charge Type Description	Service Type
Daily	4406	Settlement of Unaccounted for Energy	Imbalance Energy
Daily	4407	Uninstructed Energy Settlement	Imbalance Energy
Daily	4410	Unscheduled RMR Energy	Imbalance Energy
Daily	4450	Transmission Loss Settlement	Imbalance Energy
Daily	4470	Negative Uninstructed Deviation Penalty	Penalties
Daily	4480	Positive Uninstructed Deviation Penalty	Penalties
Daily	4481	Settlement of Excess Cost - Due SC	Imbalance Energy
Daily	4487	Allocation of Excess Cost - Due ISO	Imbalance Energy
Daily	4660	Hrly Pre Dispatch Bid Cost Recovery Settlement	Excess Costs
Daily	4680	Settlement of Bid Cost Recovery	Excess Costs
Daily	4999	Neutrality Adjustment	Adjustments
Daily	5900	Shortfall Receipt	Misc
Daily	5910	Shortfall Allocation	Misc
Daily	5999	FERC Interest	Misc
Daily	6601	Communication Fees	Misc
Daily	6602	Training Fees	Misc
Daily	6603	Miscellaneous Fees	Misc
Daily	6604	OSAT Training Revenues	Misc
Daily	6605	Metering Training Revenues	Misc
Daily	6606	WSCC Revenues	Misc
Daily	6607	Detailed Wheeling Spreadsheet Fees	Misc
Daily	6608	Archived Settlement Statements Retrieval Fee	Misc
Daily	6609	Station Power Fee	Misc
Daily	6610	Station Power Fee Allocation	Misc
Daily	6611	Security Refund	Misc
Daily	6612	ISO Services for GCP	Misc
Daily	6616	FTR Auction	Misc
Daily	6701	Market Invoice	Misc
Daily	6702	GMC Invoice	Misc
Daily	6703	FERC Invoice	Misc
Monthly	7	Demand Relief Monthly Payment	Misc
Monthly	117	Demand Relief Monthly Charge	Misc
Monthly	302	Ex-Post Supplemental Reactive Power due TO	Reliability
Monthly	354	Wheeling Refund due TO	Wheeling
Monthly	372	High Voltage Access Charge due ISO	TAC
Monthly	374	High Voltage Access Revenue due PTO	TAC
Monthly	382	High Voltage Wheeling Charge due ISO	Wheeling
Monthly	383	Low Voltage Wheeling Charge due ISO	Wheeling
Monthly	384	High Voltage Wheeling Revenue due TO	Wheeling
Monthly	385	Low Voltage Wheeling Revenue due TO	Wheeling
Monthly	550	FERC Fees	FERC Fees
Monthly	591	Emissions Cost Recovery	Uplift Fees
Monthly	592	Start-Up Cost Recovery	Uplift Fees
Monthly	593	Emissions Cost Due Trustee	Uplift Fees
Monthly	594	Start-Up Costs Due Trustee	Uplift Fees
Monthly	595	Minimum Load Cost Allocation Due ISO	Reliability
Monthly	691	Emission Cost Payment	Uplift Fees

Frequency	Charge Type	Charge Type Description	Service Type
Monthly	692	Startup Cost Payment	Uplift Fees
Monthly	695	Minimum Load Cost Compensation Due SC	Reliability
Monthly	701	Forecasting Service Fee	Misc
Monthly	702	Forecasting Service Fee Allocation	Misc
Monthly	711	Intermittent Resources Net Deviations	Imbalance Energy
Monthly	721	Intermittent Resources Net Deviation Alloc Charge	Imbalance Energy
Monthly	731	Intermittent Resources Uninstructed Deviation	Imbalance Energy
Monthly	790	Market Transaction Bill Period Adjustment	Adjustments
Monthly	791	Grid Management Charge Bill Period Adjustment	Adjustments
Monthly	792	FERC Fee Bill Period Adjustment	Adjustments
Monthly	793	Transmission Access Charge Refund Bill Period Adj	Adjustments
Monthly	1001	Black start due BA	Reliability
Monthly	1101	Black Start Capacity due ISO	Reliability
Monthly	1120	Est. Summer Reliab. Contract Capacity Pymt/Charge	Reliability
Monthly	1121	Act. Summer Reliab. Contract Capacity Pymt/Charge	Reliability
Monthly	1302	Long Term Voltage Support Contract due ISO	Reliability
Monthly	1353	Black Start Energy due ISO	Reliability
Monthly	1591	EP Penalty Charge, due CAISO trustee	Penalties
Monthly	1592	EP Penalty Allocation Payment	Penalties
Monthly	1593	EP Penalty/Alloc for under/over	Penalties
Monthly	1691	MLCC Neutrality Allocation	Reliability
Monthly	1697	MLCC Tier 1 Allocation	Reliability
Monthly	1698	MLCC Reliability Service Cost Allocation	Reliability
Monthly	1699	MLCC Inter-Zonal Congestion Allocation	Reliability
Monthly	2999	Interest due SC	Misc
Monthly	3010	Termination Fee	Adjustments
Monthly	3020	Termination Fee	Adjustments
Monthly	3101	Black Start Capacity due BA	Reliability
Monthly	3302	Supplemental Reactive Energy due SC	Reliability
Monthly	3303	Long Term Voltage Support due BA	Reliability
Monthly	3351	Grid Management Charge Adjustment Charge/Refund	Adjustments
Monthly	3372	High Voltage Access Charge Adj - Due ISO	Adjustments
Monthly	3374	High Voltage Access Charge Adj - Due PTO	Adjustments
Monthly	3382	High Voltage Wheeling Access Charge Adj - Due ISO	Adjustments
Monthly	3383	Low Voltage Wheeling Access Charge Adj - Due ISO	Adjustments
Monthly	3384	High Voltage Wheeling Access Charge Adj - Due PTO	Adjustments
Monthly	3385	Low Voltage Wheeling Access Charge Adj - Due PTO	Adjustments
Monthly	3472	Demand Relief Energy Payment	Misc
Monthly	3473	Discretionary Load Curtailment Payment	Misc
Monthly	3482	Demand Relief Energy Charge	Misc
Monthly	3483	Discretionary Load Curtailment Charge	Misc

Frequency	Charge Type	Charge Type Description	Service Type
Monthly	3999	Interest and Penalty	Misc
Monthly	4695	Settlement of Minimum Load Cost Comp - Due SC	Reliability
GMC	4501	Core Reliability Services Non-Coincident Peak	GMC
GMC	4502	Core Reliability Services Non-Coincident Off-Peak	GMC
GMC	4503	Core Reliability Services Exports	GMC
GMC	4504	Core Reliability Svcs/Energy Trans Svcs Mojave	GMC
GMC	4505	Energy Transmission Services Net Energy	GMC
GMC	4506	Energy Transmission Services Deviations	GMC
GMC	4511	Forward Scheduling	GMC
GMC	4512	Forward Scheduling Inter-SC Trades	GMC
GMC	4513	Forward Scheduling Path 15 Inter SC Trades	GMC
GMC	4522	Congestion Management	GMC
GMC	4534	Market Usage Ancillary Services	GMC
GMC	4535	Market Usage Instructed energy	GMC
GMC	4536	Market Usage Uninstructed Energy	GMC
GMC	4575	Settlements, Metering, Client Relations	GMC

APPENDIX 2: TEMPLATE FOR DETERMINATION OF AN INITIAL FINANCIAL SECURITY POSTING AMOUNT

California ISO
Simplified Calculation of Initial Security Amount

Average Hourly Load	4.0	MWh	<-----INPUT
Average Hourly Generation	5.4	MWh	<-----INPUT
Total Daily Load / Generation	96.0		

	Billable MWh	Price	Total
Ancillary Services	5	$ 9.764	$ 47
FERC Fee	96	$ 0.038	$ 4
Grid Management Charge	165	$ 0.743	$ 123
Imbalance Energy	(25)	$ 44.233	$ (1,087)
Interzonal Congestion	40	$ 0.672	$ 27
Reliability / Minimum Load Cost Compensation	96	$ 0.765	$ 73
Reliability Must Run Generation	96	$ 0.004	$ 0
Uplift Charges	96	$ 0.042	$ 4
Wheeling Charges	96	$ 0.101	$ 10
Total Daily Charges / Daily Security Deposit			$ (800)
Level Period 102 day Security Deposit Posting Requirement			$ (81,579)

Assumptions:

MWh Percentages	
A/S % of Load	5.02%
Net Imbalance Energy Percentage	4.00%
Congestion % of Load	41.25%
Per MWh Costs	
Ancillary Services	$ 9.764
FERC Fee	$ 0.038
Grid Management Charge	$ 0.743
Imbalance Energy	$ 44.233
Interzonal Congestion	$ 0.672
Reliability / Minimum Load Cost Compensation	$ 0.765
Reliability Must Run Generation	$ 0.004
Uplift Charges	$ 0.042
Wheeling Charges	$ 0.101

Note:
Settlement calendar longest number of outstanding days is 95.
The ISO adds 7 days to the estimation to allow for administrative needs and communications to / from SC.

ATTACHMENT C

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

California Independent System Operator Corporation	))	**Docket No. ER06-700-000**

DECLARATION OF PHILIP R. LEIBER
ON BEHALF OF
THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

1. My name is Philip R. Leiber. I hold the title of Treasurer & Director of Financial Planning for the California Independent System Operator Corporation ("CAISO"). I began my employment with the CAISO in 1997 and have held my current position since 2000. As Treasurer & Director of Financial Planning, I am responsible for the CAISO's credit management function, and other functions including development of the CAISO's annual operating and capital budgets, Grid Management Charge rates, and treasury functions that include the borrowing and investing of funds, and insurance.
2. My declaration addresses two subject areas: (1) updates that the CAISO has made to the March 7, 2006 version of its Credit Policy & Procedures Guide ("Credit Guide"), and (2) an explanation of why the CAISO should not be required to include certain material in the Credit Guide in the ISO Tariff. With regard to the second subject area, on May 12, 2006, the Commission issued an order in this proceeding (the "Credit Policy Order") that, among other things, directed the CAISO to include Section A-3 of the Credit Guide in the ISO Tariff, file the rest of the Credit Guide as an attachment to the ISO Tariff, and state what provisions

the CAISO recommends removing from the ISO Tariff. On June 12, 2006, the CAISO filed a request for rehearing of the Credit Policy Order. The request for rehearing explained why the Commission should permit the CAISO to keep the entire Credit Guide out of the ISO Tariff. However, the CAISO's request for rehearing went on to explain that, at a minimum, the Commission should allow the CAISO to add more detail to the ISO Tariff regarding its credit policies while at the same time keep the Credit Guide out of the ISO Tariff. It is the directive in the Credit Policy Order to state what provisions the CAISO recommends removing from the ISO Tariff, and the latter portion of the CAISO's request for rehearing, that are the springboard for my discussion of what material in the Credit Guide the CAISO should not be required to include in the ISO Tariff.

3. Except where otherwise noted, my discussion will address the provisions of the Credit Guide in order and, for each of the sections of the Credit Guide, I will refer to both the former (*i.e.*, pre-update) section numbering of the Credit Guide and the updated section numbering, with a backslash ("/") separating the two types of section number references. In instances where a section of the Credit Guide (such as former Section A-2/updated Section A-1) also contains sub-numbered sections (such as former Section A-2.1/updated Section A-1.1), I will first discuss the provisions immediately following the main heading of the section and will then discuss the sub-numbered sections.

4. To begin, the CAISO has modified the date and CAISO logo shown on the cover page of the Credit Guide. The CAISO has updated the Revision History portion of the Credit Guide to briefly describe the changes the CAISO has made in the

Credit Guide. The CAISO has updated the Table of Contents for the Credit Guide to reflect the changes in section numbering described below.

5. In the Introduction section of the Credit Guide, the CAISO has made no changes prior to the Definitions section. The Introduction section of the Credit Guide has a general description of the Guide and a brief overview of the principles the CAISO intends to follow in enforcing its current credit procedures. These portions of the Guide provide background information for the reader, but do not govern the terms of the CAISO's credit procedures. As such, these portions of the Credit Guide need not be included in the ISO Tariff.
6. The Definitions section has been modified as follows: Use of the defined term "Protocol" has been replaced here and in the Rules of Interpretation section with "Guide" to more accurately reflect the title of the Credit Guide and to eliminate the inaccurate suggestion that the Credit Guide is one of the existing CAISO Protocols. The definitions of several terms ("Affiliated Entities," "FTR Bidder," and "Scheduling Coordinator") have been revised to bring those definitions more closely in line with the ISO Tariff definition. The definition of "Average Rating Default Probability" has been modified to state that it is based on "Credit Rating Default Probabilities" rather than "Agency Rating Default Probabilities." (The CAISO has made similar modifications in former Section A-3.2/updated Section A-2.2 of the Credit Guide.) The CAISO has made this change because the default probabilities in question come from Moody's KMV, not the individual agencies. In addition, the CAISO has changed several definitions to refer to an "issuer, counterparty, or underlying credit rating" rather than an "unsecured credit

rating," because those are the more correct terms. (The CAISO has also modified former Section A-3.2/updated Section A-2.2 of the Credit Guide to state that issuer ratings are also known as counterparty or underlying ratings.) In addition, the CAISO has added definitions of the terms "Credit Rating Default Probability" and "MKMV Default Probability" used in the Guide to clarify what those terms mean. (The CAISO has also made minor changes to former Section A-3/updated Section A-2, former Section A-3.2/updated Section 2.2, and former Section A-3.4/updated Section A-2.4 of the Credit Guide to reflect these new definitions.) Lastly, the CAISO has corrected minor errors and omissions in the Definitions section.

7. Because the Definitions section of the Credit Guide closely tracks and cross-references the definitions already in the ISO Tariff, many of these definitions need not be included in the ISO Tariff. The CAISO does agree, however, that many of the unique defined terms in the Credit Guide can be added to the definitions section of the ISO Tariff, including the definitions for: Average Rating Default Probability (ARDP), Credit Rating Default Probability, MKMV Default Probability, Nationally Recognized Statistical Rating Organizations (NRSRO), Net Assets (NA), Rated Governmental Entity, Tangible Net Worth (TNW), Unrated Governmental Entity, and Unrated Public/Private Corporation.

8. The CAISO has deleted former Section A-1 of the Credit Guide, concerning the transition from the CAISO's previous "Approved Credit Rating" approach to determining the creditworthiness of Market Participants, because the transition period during which the CAISO moved from the "Approved Credit Rating"

approach to implementation of the currently effective creditworthiness procedures has been completed. The CAISO has re-numbered the rest of the sections in Part A of the Credit Guide, and the cross-references in the Credit Guide to the sections in Part A, to reflect the deletion of former Section A-1.

9. In former Section A-2/updated Section A-1 of the Credit Guide, concerning credit assessment requirements, the CAISO has added cross-references to various sections of the ISO Tariff. The CAISO has also added language to former Section A-2/updated Section A-1 to require a Market Participant or FTR Bidder to subsequently inform the CAISO of changes to contact or other relevant information contained in an Application for Unsecured Credit. That additional language tracks a requirement already contained in the ISO Tariff. Further, the CAISO has added language stating that an Application for Unsecured Credit need only be filed once, and stating that Market Participants and FTR Bidders are responsible for the timely submission of their latest financial statements either directly or by indicating where the material can be located on their company's website and/or the U.S. Securities and Exchange Commission's website. These additions to the Credit Guide correspond to similar changes to the ISO Tariff that the Commission required in the Credit Policy Order. All of the language in former Section A-2/updated Section A-1 duplicates or is very similar to language already contained in the sections of the ISO Tariff (as modified by the CAISO's compliance filing in this proceeding) for which the CAISO has added cross-references. Therefore, former Section A-2/updated Section A-1 should not be required to be included in the ISO Tariff.

10. The CAISO has modified former Section A-2.1/updated Section A-1.1 of the Credit Guide, concerning financial statements, to provide a cross-reference to the ISO Tariff. I believe the language in former Section A-2.1/updated Section A-1.1 is appropriate to be included in the ISO Tariff, because it may be useful to have in the Tariff further information regarding the submission of financial statements and the types of information that Market Participants and FTR Bidders should provide.

11. The CAISO has made no modifications to former Section A-2.2/updated Section A-1.2 of the Credit Guide, concerning rating agency reports. Former Section A-2.2/updated Section A-1.2 contains details required to determine a Market Participant's creditworthiness that the CAISO may need to update periodically to address issues that arise as the CAISO gains experience in applying its creditworthiness standards. Therefore, the section should not be required to be included in the ISO Tariff.

12. The CAISO has modified former Section A-2.3/updated Section A-1.3 of the Credit Guide, concerning qualitative and quantitative credit strength indicators other than those described elsewhere in the Credit Guide, to provide cross-references to sections of the ISO Tariff. The CAISO has also modified former Section A-2.3/updated Section A-1.3 to augment a citation to the Commission's "Policy Statement on Electric Creditworthiness." Further, the CAISO has modified the section to make the examples of Material Changes in Financial Condition more closely follow the definition of that term as found in Appendix A to the ISO Tariff, and to add a reference to the term Net Assets, which is the non-

profit counterpart to the term Tangible Net Worth applicable to for-profit entities) that is already in the definition. I believe the language in the first two paragraphs of former Section A-2.3/updated Section A-1.3 is appropriate to be included in the ISO Tariff, because it may be useful to have in the Tariff information concerning the qualitative credit strength indicators the CAISO employs pursuant to the directives in the Commission's Policy Statement on Electric Creditworthiness, and to have in the Tariff further details regarding the setting of Unsecured Credit Limits. However, the rest of the language in former Section A-2.3/updated Section A-1.3 need not be added to the ISO Tariff, because that language is very similar to the language in Section 12.1.1 of the ISO Tariff and to the definition of "Material Changes in Financial Condition" found in Appendix A to the Tariff.

13. The CAISO has modified former Section A-3/updated Section A-2 of the Credit Guide, which provides an overview of how Unsecured Credit Limits are calculated for various types of entities. The CAISO has deleted the last sentence in the last paragraph of former Section A-3/updated Section A-2, which previously stated that the cap on Unsecured Credit Limits could be further reduced by a vote of the ISO Governing Board at any time, because the sentence was inconsistent with a Commission directive in the Credit Policy Order. The last paragraph of former Section A-3/updated Section A-2 also contains implementation detail that I believe should not be required to be included in the ISO Tariff. However, I believe that the rest of former Section A-3/updated Section A-2 (with the minor edits shown therein) is appropriate to be

included in the ISO Tariff. That language describes the means of calculating Unsecured Credit Limits for each of the four types of entities (Rated Public/Private Corporations, Unrated Public/Private Corporations, Rated Governmental Entities, and Unrated Governmental Entities) that may obtain Unsecured Credit Limits, and so may be a useful addition to the ISO Tariff.

14. The CAISO has modified former Section A-3.1/updated Section A-2.1 of the Credit Guide, to add to the body of the Credit Guide information that was previously contained in a footnote. Specifically, the CAISO has added a sentence clarifying the CAISO's application of the maximum percentage of Tangible Net Worth ("TNW") and Net Assets ("NA"), which specifies that the maximum allowable percentage of TNW or NA is for the highest quality firms, and that the percentage that a Market Participant or FTR Bidder qualifies for will be reduced as its credit risk increases. The CAISO has also deleted from Section A-3.1 the erroneous words "Third-Party" from the middle of the defined term "Combined Default Probability." Former Section A-3.1/updated Section A-2.1 sets forth the maximum allowable percentages of TNW or NA which establish limits on the Unsecured Credit Limits for various categories of Market Participants and FTR Bidders. Former Section A-3.1/updated Section A-2.1 should not be required to be included in the ISO Tariff, because the CAISO needs to have the flexibility to recalibrate the percentages listed in the section from time to time in response to changing market conditions and to ensure that credit limits are set at levels that are neither too restrictive nor too permissive. These percentages are key variables that are used to determine the amount, if

any, of unsecured credit the CAISO will grant. Filing these percentages as part of the ISO Tariff will require the CAISO to file an amendment to the ISO Tariff to update these percentages. In my experience, developing an amendment to the ISO Tariff time is a time-consuming process that generally involves stakeholder input and CAISO Board approval before the amendment is even filed for FERC approval and an additional time period for FERC to act. Including former Section A-3.1/updated Section A-2.1 in the ISO Tariff will therefore delay updates to this portion of the Credit Guide needed to address often swiftly changing market conditions without improving the transparency of the provisions of the Guide.

15. The CAISO has modified former Section A-3.2/updated Section A-2.2 of the Credit Guide, concerning the eight-step process for calculating Unsecured Credit Limits, to clarify the types of entities to which the steps apply, clarify some of the terms in the table contained in former Section A-3.2/updated Section A-2.2, state that the table may be updated as often as monthly rather than a yearly basis, modify some of the steps described in former Section A-3.2/updated Section A-2.2, and correct some minor errors and omissions. I believe that a description of each step of the eight-step process is appropriate to be included in the ISO Tariff, but that the calculation details of the steps should not be required to be included in the Tariff. If this approach is accepted, the description of the steps in the ISO Tariff would be specific enough to govern the essence of the steps the CAISO will undertake, but would not contain all of the numerical detail that is found in the steps themselves. As the CAISO explained in its June 12, 2006, request for rehearing in this proceeding, the eight-step process is designed to be updated on

an ongoing basis in order to permit the CAISO to fine-tune the details of the process as needed without first having to receive approval of an ISO Tariff revision. For example, the CAISO should have the flexibility to modify, on a monthly basis, the data contained in the table in former Section A-3.2/updated Section 2.2 regarding Credit Rating Default Probabilities (a fact that the CAISO learned after finalizing its contract with Moody's KMV and subsequent to the issuance of the Credit Policy Order). There are also additional implementation details that relate to the application of these steps that will likely have implications for former Section A-3.2/updated Section A-2.2. Examples of such implications include which financial statement line items should be included in the determination of TNW and NA (such as whether or not to include restricted assets), and how often Unsecured Credit Limits will be updated based on changes in MKMV default probabilities. The CAISO will need to further consider these issues based on experience with the new credit procedures and changing market conditions and may provide further clarifications in the Credit Guide at a later date. I wish to emphasize that if a description of the eight steps were to be included in the ISO Tariff but the detailed calculations underlying these steps are not added to the ISO Tariff, Market Participants would have assurance that the basic nature of the steps could be modified only through Commission-approved revisions to the ISO Tariff, while the detailed calculations could be updated without the lengthy process required for a Tariff amendment.

16. The CAISO has moved the portion of the Credit Guide concerning the calculation of Unsecured Credit Limits for Unrated Governmental Entities from former

Section A-4 to updated Section A-2.3, but has not modified the language in the moved portion. The language in the section should not be required to be included in the ISO Tariff, because it contains calculation details that the CAISO may need to modify based on changing market conditions and the CAISO's experience with such calculations. I note that these calculations were adopted from similar ERCOT calculations and, while they were reviewed for reasonableness, they were not tested for all of CAISO's participants for which they may apply. Accordingly, the CAISO may learn through experience that modifications should be made to specific thresholds indicated by the ratios described in former Section A-4/updated Section 2.3 if it appears that creditworthy entities are being denied unsecured credit based on the application of the formulas adopted from ERCOT. The CAISO may find other suitable ratios that demonstrate creditworthiness that could also be considered for addition to the Credit Guide. However, I believe that it would be appropriate to include a description of the section in the ISO Tariff, thus ensuring that the basic nature of the calculation could be modified only through Commission-approved revisions to the ISO Tariff.

17. The CAISO has moved the portion of the Credit Guide containing examples of Unsecured Credit Limit calculations from former Section A-3.3 to updated Section A-2.4. The CAISO has added examples to the section to comply with the Commission's directive in the Credit Policy Order to include in the Credit Guide sample calculations showing how Unsecured Credit Limits are determined for all types of Market Participants and FTR Bidders. The CAISO has also made

changes to the section to correct minor errors and omissions. The language in this section should not be required to be included in the ISO Tariff because this section consists solely of examples of how Unsecured Credit Limits would be calculated pursuant to former Section A-3.2/updated Section A-2.2 and former Section A-3.4/updated Section A-2.3. For the reasons discussed above, much of the detail in those sections should not be required to be included in the ISO Tariff, and therefore the examples relating to those sections should not be required to be included in the Tariff either.

18. The CAISO has moved the portion of the Credit Guide concerning Unsecured Credit Limit issues for Affiliated Entities from former Section A-5 to updated Section A-3. The CAISO has added to the section a cross-reference to Section 12.1.1.1 of the ISO Tariff. I note that in the case where a Market Participant has obtained a corporate guaranty from an Affiliate, the CAISO determines the maximum permissible amount of the guaranty based on the creditworthiness of the entity providing the guaranty. In such cases, the Market Participant would be informed of the initial maximum Unsecured Credit Limit of that guarantor, and any subsequent changes where the maximum limit falls below amount of the existing guaranty. Former Section A-5/updated Section A-3 contains language that is similar to language already in the cross-referenced ISO Tariff section, and therefore should not be required to be included in the ISO Tariff.

19. The CAISO has modified Part B of the Credit Guide, concerning approved forms of Financial Security, to add cross-references to Section 12.1.2 of the ISO Tariff and various subsections in Section 12.1.2. The CAISO has also changed the

word "may" to "will" in several places in the last paragraph of Part B, so that the Credit Guide tracks similar changes to the ISO Tariff that the Commission directed in the Credit Policy Order. The paragraphs in Part B for which the CAISO has added cross-references to the ISO Tariff should not be required to be included in the Tariff, because those paragraphs contain language that is similar to language already contained in the cross-referenced Tariff sections. In addition, the third paragraph in Part B (which begins with the words "The standard that the ISO will use . . .") should not be required to be included in the ISO Tariff, because that paragraph contains credit detail that is related in part to former Section A-2.2/updated Section A-1.2 of the Credit Guide (discussed above) that the CAISO may need to update from time to time. However, I believe the fourth paragraph in Part B (which begins with the words, "In those cases where a Market Participant or FTR Bidder . . ."), and the fifth and sixth paragraphs in Part B, are appropriate to be included in the ISO Tariff, because it may be useful to have in the Tariff further information related to the how the CAISO will administer certain forms of Financial Security, including cash deposits held by a third party escrow, and prepayments made directly to the CAISO. The final paragraph in Part B has been modified in accordance with Commission direction to replace the words "may" with "will" with respect to treating Financial Security that has a set expiration date and has not been renewed or replaced within a specified time period. Further in the Credit Policy Order, the Commission requested that the CAISO explain or reconsider why it requires 30 days to prevent a situation where it cannot timely act on a security instrument that may expire. Given that the CAISO's discretion has been eliminated due to replacing the word "may" with "will" in this provision, I believe that a lesser period of time is appropriate. Specifically, the CAISO proposes to replace 30 days with 7 days. This lesser period provides sufficient time for the CAISO to process a draw request for a letter of credit that might otherwise expire before renewal or replacement.

20. The CAISO has made a number of modifications to the sections in Part C of the Credit Guide, concerning the Estimated Aggregate Liability calculation, to reflect the fact (discussed in the CAISO's June 12, 2006 request for rehearing in this proceeding) that the "Scheduling Coordinator Aggregate Liability Estimate" or "SCALE" tool is not currently operative, and, as an alternative, the CAISO has used a simpler but somewhat less accurate approach to estimating liabilities based on available settlements data that was used prior to SCALE. This alternative approach is described at a high level in a new Section C-3.1 and in more detail in Appendix 1A. None of the provisions in Part C (with the exception of the second paragraph in Section C-5, discussed below) should be included in the ISO Tariff. The provisions concern the underlying detail of the SCALE tool and alternative approaches to determining Estimated Aggregate Liabilities. The CAISO requires considerable flexibility in how Estimated Aggregate Liabilities are calculated, because the CAISO's performance of the calculations is highly dependent on the reliability and availability of multiple data sources and the CAISO's ability to increase the accuracy of its liability estimates based on perfecting alternative approaches. Requiring the description of the tools used by

the CAISO to calculate Estimated Aggregate Liabilities to be included in the ISO Tariff needlessly burdens the CAISO and the Commission and will institutionalize inaccurate results due to the lengthy process required to develop, file and get approval of any tariff amendment to revise the tools for determining Estimated Aggregate Liability included in the Credit Guide.

21. In Section C-5 of the Credit Guide, concerning the CAISO's Estimated Aggregate Liability review, the CAISO has added to the first paragraph a cross-reference to Section 12.4 of the ISO Tariff. The first paragraph of Section C-5 should not be required to be included in the ISO Tariff, because the paragraph consists of language that is similar to language in the cross-referenced Tariff section. However, I believe that the second paragraph of Section C-5 is appropriate to be included in the ISO Tariff, because it may be useful to have in the Tariff further detail regarding the process for posting Financial Security.

22. The CAISO has modified Section C-6.1 of the Credit Guide, concerning Aggregate Credit Limit Utilization percentages to correct the error in limit boundaries and to note that security increase requests were recommended increases. For the reasons discussed above, none of the provisions in Part C, with the exception of the second paragraph in Section C-5, should be included in the ISO Tariff.

23. The CAISO has modified Section C-6.2 of the Credit Guide, concerning the communication of Financial Security requests, so that the section references CAISO "customer service representatives" rather than CAISO "Account Managers." "Customer service representatives" is the more accurate term that

appropriately encompasses the various CAISO staff (who have more than one job title) who are involved in this process. For the reasons discussed above, none of the provisions in Part C, with the exception of the second paragraph in Section C-5, should be included in the ISO Tariff.

24. In Part D of the Credit Guide, concerning the enforcement actions the CAISO may take with regard to under-secured Market Participants, the CAISO has added a cross-reference to Section 12.5 of the ISO Tariff. Part D should not be required to be included in the ISO Tariff, because Part D consists of language that is identical to language contained in the cross-referenced Tariff section.

25. The CAISO has made no changes to Part E of the Credit Guide, concerning the procedures for disputing a CAISO calculation of Estimated Aggregate Liability. I believe that Part E is appropriate to be included in the ISO Tariff (without the examples listed in Part E), because it may be useful to have in the Tariff details regarding these dispute procedures.

26. The CAISO has made no changes to Appendix 1 of the Credit Guide, concerning the SCALE liability estimation process. Appendix 1 should not be required to be included in the ISO Tariff, because Appendix 1 consists of details regarding the background and operation of the SCALE tool, which is not currently in use. The CAISO will transition to a new liability estimation tool when the Settlements and Market Clearing system is implemented in November 2007. Even if SCALE is restored to operation prior to that date, the calculations and data sources described in Appendix 1 may change.

27. The CAISO has added Appendix 1A to the Credit Guide, which concerns the

approach to estimating liabilities that the CAISO is currently using instead of SCALE (for the reasons discussed above). Appendix 1A should not be required to be included in the ISO Tariff, because Appendix 1A consists of details regarding the application of that alternative approach. As noted above, the CAISO expects to continue to enhance the CAISO's liability estimation tools over the next one to two years.

28. The CAISO has made no changes to Appendix 2 to the Credit Guide, which contains the template for the determination of an initial Financial Security posting amount. Appendix 2 should not be required to be included in the ISO Tariff, because it merely provides a simplified example of how a Market Participant might calculate an initial Financial Security posting amount to comply with the credit requirements of the CAISO. It is not a "binding" calculation. It is also a template that requires periodic update based on CAISO market changes and refinement of the estimating algorithm.

I declare under penalty of perjury that the foregoing is true to the best of my knowledge.

Executed this 10th day of July, 2006.

Philip Leiber

Philip Leiber

ATTACHMENT D

4.5.1.1 Procedure to become a Scheduling Coordinator.

4.5.1.1.1 Scheduling Coordinator Applicant makes a Request.

To become a Scheduling Coordinator, a Scheduling Coordinator Applicant must submit a written application to the ISO by mail, fax, e-mail or in person. A Scheduling Coordinator Applicant may retrieve the application and necessary information from the ISO Home Page.

4.5.1.1.2 ISO Information.

The ISO will provide the following information, in its most current form, on the ISO Home Page. Upon a request by a Scheduling Coordinator Applicant, the ISO will send the following information by mail:

(a) the Scheduling Coordinator Application Form (including the ISO Application File Template, which is Appendix T);

(b) the ISO Tariff and ISO Protocols;

(c) Interim Black Start Agreement;

(d) historical ISO charges (Note: prior to January 2, 1998, estimated ISO charges) including, but not limited to, charges for purchased Ancillary Services, ISO Grid Management Charge, ISO Grid Operations Charge, Imbalance Energy market charges, and Usage Charges to assist the Scheduling Coordinator Applicant in determining the Financial Security Amount the Scheduling Coordinator Applicant must provide; and

(e) a completed credit application for Scheduling Coordinator Applicants applying for Unsecured Credit Limits or Financial Security to be provided pursuant to Section 12.1.2.

4.5.1.1.3 Duplicate Information.

If two or more Scheduling Coordinators apply simultaneously to register with the ISO for a single meter or Meter Point for an ISO Metered Entity or if an Scheduling Coordinator applies to register with the ISO for a meter or Meter Point for an ISO Metered Entity for which an Scheduling Coordinator has already

4.5.1.1.9 Scheduling Coordinator Applicant's Response.

4.5.1.1.9.1 Scheduling Coordinator Applicant's Acceptance.

If the ISO accepts the application, the Scheduling Coordinator Applicant must return an executed Scheduling Coordinator Agreement, Meter Service Agreements, Interim Black Start Agreements, completed credit application provided pursuant to Section 12.1.1, and Financial Security provided pursuant to Section 12.1.2, as applicable.

4.5.1.1.9.2 Scheduling Coordinator Applicant's Rejection.

4.5.1.1.9.2.1 Resubmittal.

If an application is rejected, the Scheduling Coordinator Applicant may resubmit its application at any time. An additional application fee will not be required for the second application submitted within 6 months after a rejection.

4.5.1.1.9.2.2 Appeal.

The Scheduling Coordinator Applicant may also appeal against the rejection of an application by the ISO. An appeal must be submitted within 28 days following the rejection of its application.

4.5.1.1.10 Post Application Procedures Prior To Final Certification.

4.5.1.1.10.1 Scheduling Coordinator's Administrative, Financial and Technical Requirements.

The ISO will not certify that an Scheduling Coordinator Applicant has become a Scheduling Coordinator until the Scheduling Coordinator Applicant has:

(a) provided the technical/operational information required to complete the ISO Application File Template, and to comply with ISO Tariff Section 10.3;

(b) executed software licensing agreement for the software used in conducting business with the ISO in a form approved by the ISO, if applicable;

(c) bought and installed any required software for functional interface in order to Validate, Estimate and Edit meter values (VEE).

4.5.1.2 Scheduling Coordinator's Ongoing Obligations After Certification.

4.5.1.2.1 Scheduling Coordinator's Obligation to Report Changes.

4.5.1.2.1.1 Obligation to Report a Change in Filed Information.

Each Scheduling Coordinator has an ongoing obligation to inform the ISO of any changes to any of the information submitted by it to the ISO as part of the application process, including any changes to the additional information requested by the ISO and including but not limited to changes in its credit ratings. Appendix T sets forth the procedures for changing the Scheduling Coordinator's information and timing of notifying the ISO of such changes.

4.5.1.2.1.2 Obligation to Report a Change in Credit Ratings or Material Change in Financial Condition.

The SC has an ongoing obligation to inform the ISO within 5 Business Days of any change to its credit ratings or any Material Change in Financial Condition.

4.5.1.2.2 ISO's Response for Failure to Inform.

4.5.1.2.2.1 Failure to Promptly Report a Material Change.

If a Scheduling Coordinator fails to inform the ISO of a material change in its information provided to the ISO, which may affect the reliability or safety of the ISO Controlled Grid, or the financial security of the ISO, the ISO may suspend or terminate the Scheduling Coordinator's rights under the ISO Tariff in accordance with the terms of ISO Tariff Sections 12.3 and 4.5.1 respectively. If the ISO intends to terminate the Scheduling Coordinator's rights it shall file a Notice of Termination with FERC. Such termination shall be effective upon acceptance by FERC of a Notice of Termination.

4.5.2 Eligible Customers Represented by Scheduling Coordinators.

Each Scheduling Coordinator shall within ten (10) days of a request by the ISO provide the ISO with a list of the Eligible Customers which it represents at the date of the request.

4.5.3 Responsibilities of a Scheduling Coordinator.

Each Scheduling Coordinator shall be responsible for:

4.5.3.1 Obligation to Pay. Paying the ISO's charges in accordance with this ISO Tariff;

11.2.10 Payments Under Section 42.1 Contracts.

The ISO shall calculate and levy charges for the recovery of costs incurred under contracts entered into by the ISO under the authority granted in Section 42.1 in accordance with Section 42.1.8 of this ISO Tariff.

11.2.11 Obligation for FERC Annual Charges.

11.2.11.1 Each Scheduling Coordinator shall be obligated to pay for the FERC Annual Charges for its use of the ISO Controlled Grid to transmit electricity, including any use of the ISO Controlled Grid through Existing Contracts scheduled by the Scheduling Coordinator. Any FERC Annual Charges to be assessed by FERC against the ISO for such use of the ISO Controlled Grid shall be assessed against Scheduling Coordinators at the FERC Annual Charge Recovery Rate, as determined in accordance with this Section 11.2.11. Such assessment shall be levied monthly against all Scheduling Coordinators based upon each Scheduling Coordinator's metered Demand and exports.

11.2.11.2 Scheduling Coordinators may elect, each year, to pay the FERC Annual Charges assessed against them by the ISO either on a monthly basis or an annual basis. Scheduling Coordinators that elect to pay FERC Annual Charges on a monthly basis shall make payment for such charges within five (5) Business Days after issuance of the monthly invoice. The FERC Annual Charges will be issued to Market Participants once a month, on the first business day after the final market and Grid Management Charge invoices are issued for the trade month. Once the final FERC Annual Charge Recovery Rate is received from FERC in the Spring/Summer of the following year, a supplemental invoice will be issued. Scheduling Coordinators that elect to pay FERC Annual Charges on an annual basis shall make payment for such charges within five (5) Business Days after the ISO issues such supplemental invoice. Scheduling Coordinators that elect to pay FERC Annual Charges on an annual basis shall maintain either an Unsecured Credit Limit or shall maintain Financial Security in accordance with Section 12.1.

transfer funds from the ISO Reserve Account to the ISO Clearing Account to clear it by close of banking business on that Payment Date pursuant to Section 11.12.2.2.

If the ISO Reserve Account is drawn upon, the ISO shall as soon as possible thereafter take any necessary steps against the defaulting Scheduling Coordinator, including making any calculations or taking any other appropriate action, to replenish the ISO Reserve Account including drawing on any credit support provided by the defaulting Scheduling Coordinator pursuant to Section 12.1 of this ISO Tariff or serving demands on any defaulting Scheduling Coordinators with an Unsecured Credit Limit.

The proceeds of drawings under any line of credit or other credit facility of the ISO Reserve Account shall be held on trust for ISO Creditors. If the Reserve Account is replenished as provided for in 11.8.5.2.1, any credits shall be held on trust for all ISO Creditors.

11.8.5.2.1 Replenishing the ISO Reserve Account Following Payment Default.

If the ISO has debited the ISO Reserve Account then:

(a) If, after the ISO has debited the ISO Reserve Account on a Payment Date, the ISO Bank receives a remittance from an ISO Debtor which has not been (but should have been, if it had been received on a timely basis) credited to the ISO Clearing Account by 10:00 am on the Payment Date and which required the debiting of the ISO Reserve Account, such remittance shall be credited to the ISO Reserve Account.

(b) The proceeds of any enforcement of Security and/or amounts recovered under proceedings shall be credited to the ISO Reserve Account.

(c) If after taking reasonable action the ISO determines that the Default Amount (or any part) and/or Interest cannot be recovered, such amounts shall be deemed to be owing by those Market Participants who were ISO Creditors on the relevant Payment Date pro rata to the net payments they received on that Payment Date and shall be accounted for by way of a charge in the next liable or reasonably anticipated by the ISO to be liable for pursuant to the ISO Tariff. The Estimated Aggregate Liability for each Market Participant or FTR Bidder shall be determined and applied by the ISO consistent with the procedures set forth in the ISO Credit Policy & Procedures Guide posted on the ISO Home Page. The ISO shall upon request provide each Market Participant or FTR Bidder with information concerning the basis for the ISO's determination of its Estimated Aggregate Liability, and the ISO's determination may be disputed in accordance with the procedures set forth in the ISO Credit Policy & Procedures Guide. The ISO shall compare each Market Participant's or FTR Bidder's Estimated Aggregate Liability against its Aggregate Credit Limit on a periodic basis.

12.2 Review of Creditworthiness.

The ISO may review the creditworthiness of any Market Participant or FTR Bidder which delays or defaults in making payments due under the ISO Tariff and, as a consequence of that review, may require such Market Participant or FTR Bidder, whether or not it an Unsecured Credit Limit, to provide credit support in the form of any of the following types of Financial Security:

(a) an irrevocable and unconditional letter of credit by a bank or financial institution reasonably acceptable to the ISO;

(b) a cash deposit standing to the credit of an interest-bearing escrow account maintained at a bank or financial institution designated by the ISO;

(c) an irrevocable and unconditional surety bond posted by an insurance company reasonably acceptable to the ISO;

(d) a payment bond certificate in the name of the ISO from a financial institution designated by the ISO; or

(e) a prepayment to the ISO.

The ISO may require the Market Participant or FTR Bidder to maintain such Financial Security for at least one (1) year from the date of such delay or default.

12.3 Posting and Releases of Financial Security.

Each Market Participant or FTR Bidder required to provide a Financial Security Amount under Section 12.1.2 shall notify the ISO of the initial Financial Security Amount that it wishes to provide at least fifteen (15) days in advance and shall ensure that the ISO has received such Financial Security Amount prior to the date the Market Participant commences activity through the ISO, or the date the FTR Bidder participates in the applicable auction of FTRs. A Market Participant or FTR Bidder may at any time increase its Financial Security Amount by providing additional Financial Security in accordance with Section 12.1.2. A Market Participant or FTR Bidder may request that its Financial Security Amount be reduced or released by making its request not fewer than fifteen (15) days prior to the date on which the reduction ore release is requested to occur. The ISO shall evaluate the request and inform the Market Participant or FTR Bidder within ten (10) Business Days either that a reduction or release of the Financial Security Amount is permissible, that a reduction or release of the Financial Security Amount is impermissible, or that the ISO requires more information from the Market Participant or FTR Bidder in order to make its determination. The ISO may decline to reduce or release a Financial Security Amount or may release a lesser amount for any of the following reasons:

(a) The Estimated Aggregate Liability for the Market Participant or FTR Bidder cannot be accurately determined due to a lack of supporting settlement charge information.

(b) The most recent liabilities of the Market Participant or FTR Bidder are volatile to a significant degree and a reduction or release of the Financial Security Amount would present a high likelihood that, after the Financial Security Amount was reduced or released, the Estimated Aggregate Liability for the Market Participant or FTR Bidder, as calculated by the ISO, would exceed its Aggregate Credit Limit.

(c) The Market Participant has provided notice or otherwise demonstrated that it is terminating or significantly reducing its participation in the ISO markets. The ISO may retain a portion of the Financial Security Amount to ensure that the Market Participant is adequately secured with respect to pending liabilities that relate to settlement re-runs or other liabilities for which the Market Participant may be responsible under this ISO Tariff.

12.4 Calculation of Ongoing Financial Security Requirements.

Following the date on which a Market Participant commences trading, if the Market Participant's Estimated Aggregate Liability, as calculated by the ISO, at any time exceeds its Aggregate Credit Limit, the ISO shall direct the Market Participant to post an additional Financial Security Amount within five (5) Business Days that is sufficient to ensure that the Market Participant's Aggregate Credit Limit is at least equal to its Estimated Aggregate Liability. The ISO shall also notify a Market Participant if at any time its Estimated Aggregate Liability exceeds 90% of its Aggregate Credit Limit. For the purposes of calculating the Market Participant's Estimated Aggregate Liability, the ISO shall include (1) outstanding charges for Trading Days for which Settlement data is available, and (2) an estimate of charges for Trading Days for which Settlement data is not yet available. To estimate charges for Trading Days for which Settlement data is not yet available, the ISO will consider available historical Settlement data, and other available operational and market data as described in the ISO Credit Policy & Procedures Guide posted on the ISO Home Page.

12.5 ISO Enforcement Actions Regarding Under-Secured Market Participants.

Following the date on which a Market Participant commences trading, if a Market Participant's Estimated Aggregate Liability, as calculated by the ISO, at any time exceeds its Aggregate Credit Limit, the ISO may take any or all of the following actions:

(a) The ISO may withhold a pending payment distribution.

(b) The ISO may limit trading, which may include rejection of Schedules and/or limiting other ISO market activity. In such case, the ISO shall notify the Market Participant of its action and the Market Participant shall not be entitled to submit further Schedules to the ISO until the Market Participant posts an additional Financial Security Amount that is sufficient to ensure that the Market Participant's Aggregate Credit Limit is at least equal to its Estimated Aggregate Liability.

(c) The ISO may require the Market Participant to post an additional Financial Security Amount in lieu of an Unsecured Credit Limit for a period of time.

(d) The ISO may restrict, suspend, or terminate a Market Participant's Service Agreement.

In addition, the ISO may restrict or suspend a Market Participant's right to schedule or require the Market Participant to increase its Financial Security Amount if at any time such Market Participant's potential additional liability for Imbalance Energy and other ISO charges is determined by the ISO to be excessive by comparison with the likely cost of the amount of Energy scheduled by the Market Participant.

the Scheduling Coordinator adds a new Schedule or modifies an existing Schedule, that Schedule must be re-validated. Scheduling Coordinators must comply with the ISO Data Templates and Validation Rules document, which contains the validation criteria for Balanced Schedules.

30.4.1.1 Stage One Validation.

During stage one validation, each incoming Schedule will be validated to verify proper content, format and syntax. The ISO will check that the Scheduling Coordinator had not exceeded its Aggregate Credit Limit and verify that the Scheduling Coordinator is certified in accordance with the ISO Tariff. The ISO will further verify that the Scheduling Coordinator has inputted valid Generating Unit and Demand location identification. Scheduled Reliability Must-Run Generation will be verified against the contract reference numbers in the ISO's Scheduling Coordinator database. A technical validation will be performed verifying that a scheduled Generating Unit's output is not beyond it's declared capacity and/or operating limits. If there is an error found during stage one validation, the Scheduling Coordinator will be notified immediately through WEnet. The Scheduling Coordinator can then look at the notification messages to review the detailed list of errors, make changes, and resubmit the Schedule if it is still within the ISO's timing requirements. Additionally, if the ISO detects an invalid contract usage (of either Existing Contract rights or Firm Transmission Rights), the ISO will issue an error message in similar manner to the Scheduling Coordinator and allow the Scheduling Coordinator to view the message(s), to make changes, and to resubmit the contract usage template(s) if it is still within the ISO's timing requirements. The Scheduling Coordinator is also notified of successful validation via WEnet.

30.4.1.2 Stage Two Validation.

During stage two validation, Schedules will be checked to determine whether each Scheduling Coordinator's aggregate Generation and external imports (adjusted for Transmission Losses) and Inter-Scheduling Coordinator Energy Trades (whether purchases or sales) equals the Scheduling Coordinator's aggregate Demand Forecast, including external exports. The Scheduling Coordinator must take into account the applicable Generation Meter Multipliers (GMMs). The Scheduling Coordinator will be notified if the counterpart trade to any Inter-Scheduling Coordinator Ancillary Service Trade has not been submitted, or is infeasible (i.e., if both Scheduling Coordinators are selling or both are buying).

Administrative Price	The price set by the ISO in place of a Market Clearing Price when, by reason of a System Emergency, the ISO determines that it no longer has the ability to maintain reliable operation of the ISO Controlled Grid relying solely on the economic Dispatch of Generation. This price will remain in effect until the ISO considers that the System Emergency has been contained and corrected.
Adverse System Impact	The negative effects due to technical or operational limits on conductors or equipment being exceeded that may compromise the safety and reliability of the electric system.
Affected System	An electric system other than the ISO Controlled Grid that may be affected by the proposed interconnection, including the Participating TOs' electric systems that are not part of the ISO Controlled Grid.
Affected System Operator	The entity that operates an Affected System.
Affiliate	An entity, company or person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with the subject entity, company, or person.
AGC (Automatic Generation Control)	Generation equipment that automatically responds to signals from the ISO's EMS control in real time to control the power output of electric generators within a prescribed area in response to a change in system frequency, tie-line loading, or the relation of these to each other, so as to maintain the target system frequency and/or the established interchange with other areas within the predetermined limits.
Aggregate Credit Limit	The sum of a Market Participant's or FTR Bidder's Unsecured Credit Limit and its Financial Security Amount, as provided for in Section 12 of the ISO Tariff.
Alert Notice	A Notice issued by the ISO when the operating requirements of the ISO Controlled Grid are marginal because of Demand exceeding forecast, loss of major Generation, or loss of transmission capacity that has curtailed imports into the ISO Control Area, or if the Hour-Ahead Market is short on scheduled Energy and Ancillary Services for the ISO Control Area.

Ancillary Services	Regulation, Spinning Reserve, Non-Spinning Reserve, Replacement Reserve, Voltage Support and Black Start together with such other interconnected operation services as the ISO may develop in cooperation with Market Participants to support the transmission of Energy from Generation resources to Loads while maintaining reliable operation of the ISO Controlled Grid in accordance with Good Utility Practice.
Ancillary Service Provider	A Participating Generator or Participating Load who is eligible to provide an Ancillary Services.
Annual Peak Demand Forecast	A Demand Forecast of the highest Hourly Demand in any hour in a calendar year, in MW.
Applicable Reliability Criteria	The reliability standards established by NERC, WECC, and Local Reliability Criteria as amended from time to time, including any requirements of the NRC.
Applicants	Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company and any others as applicable.

Approved Load Profile	Local Regulatory Authority approved Load profiles applied to cumulative End-Use Meter Data in order to allocate consumption of Energy to Settlement Periods.
Approved Maintenance Outage	A Maintenance Outage which has been approved by the ISO through the ISO Outage Coordination Office.
"Area Control Error (ACE)"	The sum of the instantaneous difference between the actual net interchange and the scheduled net interchange between the ISO Control Area and all adjacent Control Areas and the ISO Control Area's frequency correction and time error correction obligations.
Authorized Users	A person or an entity identified as an authorized user in a meter service agreement between the ISO and an ISO Metered Entity or a meter service agreement between the ISO and a SC.
Automatic Mitigation Procedure (AMP)	The market power mitigation procedure described in Attachment A to Appendix P.
Available Transfer Capacity	For a given transmission path, the capacity rating in MW of the path established consistent with ISO and WECC transmission capacity

Energy Export	For purposes of calculating the Grid Management Charge, Energy included in an interchange Schedule submitted to the ISO, or dispatched by the ISO, to serve a Load located outside the ISO's Control Area, whether the Energy is produced by a Generator in the ISO Control Area or a resource located outside the ISO's Control Area.
Entitlements	The right of a Participating TO obtained through contract or other means to use another entity's transmission facilities for the transmission of Energy.
Environmental Dispatch	Dispatch designed to meet the requirements of air quality and other environmental legislation and environmental agencies having authority or jurisdiction over the ISO.
Estimated Aggregate Liability	The sum of a Market Participant's or FTR Bidder's known and reasonably estimated potential liabilities for a specified time period arising from charges described in the ISO Tariff, as provided for in Section 12 of the ISO Tariff.
Ex Post GMM	GMM that is calculated utilizing the real-time Power Flow Model in accordance with Section 27.2.1.2.1.2.
Ex Post Price	The Hourly Ex Post Price, the Dispatch Interval Ex Post Price, the Resource-Specific Settlement Interval Ex Post Price, or the Zonal Settlement Interval Ex Post Price.
Ex Post Transmission Loss	Transmission Loss that is calculated based on Ex Post GMM.
Existing Contracts	The contracts which grant transmission service rights in existence on the ISO Operations Date (including any contracts entered into pursuant to such contracts) as may be amended in accordance with their terms or by agreement between the parties thereto from time to time.
Existing High Voltage Facility	A High Voltage Transmission Facility of a Participating TO that was placed in service on or before the Transition Date defined in Section 4.2 of Schedule 3 of Appendix F.
Existing Rights	Those transmission service rights defined in Section 16.2.1.1 of the ISO Tariff.

Facility Owner An entity owning transmission, Generation, or distribution facilities connected to the ISO Controlled Grid.

Facility Study An engineering study conducted by a Participating TO to determine required modifications to the Participating TO's transmission system, including the cost and scheduled completion date for such

	modifications that will be required to provide needed services.
Facility Study Agreement	An agreement between a Participating TO and either a Market Participant, Project Sponsor, or identified principal beneficiaries pursuant to which the Market Participants, Project Sponsor, and identified principal beneficiaries agree to reimburse the Participating TO for the cost of a Facility Study.
Fed-Wire	The Federal Reserve Transfer System for electronic funds transfer.
FERC	The Federal Energy Regulatory Commission or its successor.
FERC Annual Charges	Those charges assessed against a public utility by the FERC pursuant to 18 C.F.R. § 382.201 and any related statutes or regulations, as they may be amended from time to time.
FERC Annual Charge Recovery Rate	The rate to be paid by Scheduling Coordinators for recovery of FERC Annual Charges assessed against the ISO for transactions on the ISO Controlled Grid.
FERC Annual Charge Trust Account	An account to be established by the ISO for the purpose of maintaining funds collected from Scheduling Coordinators for FERC Annual Charges and disbursing such funds to the FERC.
Final Approval	A statement of consent by the ISO Control Center to initiate a scheduled Outage.
Final Day-Ahead Schedule	The Day-Ahead Schedule which has been approved as feasible and consistent with all other Schedules by the ISO based upon the ISO's Day-Ahead Congestion Management procedures.
Final Hour-Ahead Schedule	The Hour-Ahead Schedule of Generation and Demand that has been approved by the ISO as feasible and consistent with all other Schedules based on the ISO's Hour-Ahead Congestion Management procedures.
Final Invoice	The invoice due from a RMR Owner to the ISO at termination of the RMR Contract.
Final Schedule	A Schedule developed by the ISO following receipt of a Revised Schedule from a Scheduling Coordinator.

Financial Security	Any of the types of financial instruments listed in Section 12 of the ISO Tariff that are posted by a Market Participant or FTR Bidder.
Financial Security Amount	The level of Financial Security posted in accordance with Section 12 of the ISO Tariff by a Market Participant or FTR Bidder.
Final Settlement Statement	The restatement or recalculation of the Preliminary Settlement Statement by the ISO following the issue of that Preliminary Settlement Statement.
Forbidden Operating	The operating region of a resource wherein the resource cannot

	separately, in relation to its meters at points of connection of its Service Area with the systems of other utilities.
ISO Metered Entity Meter Service Agreements	The meter service agreements between the ISO and ISO Metered Entities.
ISO Operations Date	The date on which the ISO first assumes Operational Control of the ISO Controlled Grid.
ISO Outage Coordination Office	The office established by the ISO to coordinate Maintenance Outages in accordance with Section 9.3 of the ISO Tariff.
ISO Payments Calendar	A calendar published by the ISO showing the dates on which Settlement Statements will be published by the ISO and the Payment Dates by which invoices issued under the ISO Tariff must be paid.
ISO Protocols	The rules, protocols, procedures and standards promulgated by the ISO (as amended from time to time) to be complied with by the ISO Scheduling Coordinators, Participating TOs and all other Market Participants in relation to the operation of the ISO Controlled Grid and the participation in the markets for Energy and Ancillary Services in accordance with the ISO Tariff.
ISO Register	The register of all the transmission lines, associated facilities and other necessary components that are at the relevant time being subject to the ISO's Operational Control.
ISO Reserve Account	The account established for the purpose of holding cash deposits which may be used in or towards clearing the ISO Clearing Account.
ISO Surplus Account	The account established by the ISO pursuant to Section 11.8.5.3.
ISO Tariff	The California Independent System Operator Corporation Operating Agreement and Tariff, dated March 31, 1997, as it may be modified from time to time.

Energy	instructed by the ISO or which the ISO Tariff provides will be paid at the price for Uninstructed Imbalance Energy.
Unit Commitment	The process of determining which Generating Units will be committed (started) to meet Demand and provide Ancillary Services in the near future (e.g., the next Trading Day).
Unsecured Credit Limit	The level of credit established for a Market Participant or FTR Bidder that is not secured by any form of Financial Security, as provided for in Section 12 of the ISO Tariff.
Usage Charge	The amount of money, per 1 kW of scheduled flow, that the ISO charges a Scheduling Coordinator for use of a specific Congested Inter-Zonal Interface during a given hour.
Validation, Estimation and Editing (VEE)	Applies to Meter Data directly acquired by the ISO. Validation is the process of checking the data to ensure that it is contiguous, within pre-defined limits and has not been flagged by the meter. Estimation and Editing is the process of replacing or making complete Meter Data by using data from redundant meters, schedules, PMS or, if necessary, statistical estimation.
Value Added Network (VAN)	A data communications service provider that provides, stores and forwards electronic data delivery services within its network and to subscribers on other VANs. The data is mostly EDI type messages.
Voltage Limits	For all substation busses, the normal and post-contingency Voltage Limits (kV). The bandwidth for normal Voltage Limits must fall within the bandwidth of the post-contingency Voltage Limits. Special voltage limitations for abnormal operating conditions such as heavy or light Demand may be specified.
Voltage Support	Services provided by Generating Units or other equipment such as shunt capacitors, static var compensators, or synchronous condensers that are required to maintain established grid voltage criteria. This service is required under normal or System Emergency conditions.
Waiver Denial Period	The period determined in accordance with Section 40.1.6.

Warning Notice	A Notice issued by the ISO when the operating requirements for the ISO Controlled Grid are not met in the Hour-Ahead Market, or the quantity of Regulation, Spinning Reserve, Non-Spinning Reserve, Replacement Reserve and Supplemental Energy available to the ISO does not satisfy the Applicable Reliability Criteria.
Weekly Peak Demand Forecast	Demand Forecast of the highest Hourly Demand in any hour in a period beginning at the start of the hour ending 0100 on Sunday and ending at the end of the hour ending 2400 the following Saturday, in MW.

The information provided for this application will be treated as confidential information

PART A

SCHEDULING COORDINATOR APPLICATION FORM

This application is for approval as a Scheduling Coordinator ("SC") by the California Independent System Operator Corporation ("ISO") in accordance with the ISO Tariff.

I. **Administrative Requirements**

SC Applicant's Legal Name:

____

Address of principal place of business:

____

____

____

Authorized Representative: ____

Address: _________________________________

____

Phone: _________________________________

Fax: _________________________________

E-mail: _________________________________

Type of entity: ____

(Municipal utility, power marketer, investor owned utility, federal or state entity or other)

State of Incorporation or Partnership: ____________________

Proposed commencement date for service: ____________________

II. **Scheduling Coordinator Customer Information**

2.1 The information required under Part C, the ISO Application File Template, must be provided for represented Scheduling Coordinator Metered Entities, which are Generators. The Scheduling Coordinator Applicant must submit all requested information prior to final certification, which must occur fourteen (14) days before the commencement of service.

2.2 Information for Scheduling Coordinator Metered Entities, which are End Users or Eligible Customers, must be kept in a standard business format based on generally accepted accounting principals. The ISO shall have the right to inspect and audit a Scheduling Coordinator's accounts and files relating to its Scheduling Coordinator Metered Entities after giving two Business Days notice in writing.

2.3 The Scheduling Coordinator Applicant must submit a list of all ISO Metered Entities, which it will represent.

III. **Security Requirement**

3.1 The Scheduling Coordinator Applicant will submit a credit application to apply for an Unsecured Credit Limit as set forth in the ISO Tariff and the ISO Credit Policy & Procedures Guide: (yes/no).

3.2 The Scheduling Coordinator Applicant will provide Financial Security in a form listed in Section 12.1.2 of the ISO Tariff: (yes/no).

Acceptable forms of Financial Security include:

(a) an irrevocable and unconditional letter of credit issued by a bank or financial institution that is reasonably acceptable to the ISO;

(b) an irrevocable and unconditional surety bond issued by an insurance company that is reasonably acceptable to the ISO;

(c) an unconditional and irrevocable guaranty issued by a company that is reasonably acceptable to the ISO;

(d) a cash deposit standing to the credit of the ISO in an interest-bearing escrow account maintained at a bank or financial institution that is reasonably acceptable to the ISO;

(e) a certificate of deposit in the name of the ISO issued by a bank or financial institution that is reasonably acceptable to the ISO;

(f) a payment bond certificate in the name of the ISO issued by a bank or financial institution that is reasonably acceptable to the ISO; or

(g) a prepayment to the ISO.

3.3 The Scheduling Coordinator Applicant must provide its bank account information before final certification. The Scheduling Coordinator Applicant's bank must be capable of performing Fed-Wire System transfers.

IV. <u>Technical Requirements</u>

4.1 Does the Scheduling Coordinator Applicant have the computer hardware, software and communication capabilities for interface compatibility with the ISO system for data transmission, for electronic data interchange (EDI) and for Fed-Wire System transfer accounts? (yes / no) If no, please submit a proposed completion date to be fully operational so that an ISO staff site visit can be arranged.

4.2 For Loads and Generating Units located within the ISO Controlled Grid, does the Scheduling Coordinator Applicant have any scheduling restrictions imposed by the parties they represent? (yes / no) If yes, provide full details on a separate sheet of paper.

4.3 Does the Scheduling Coordinator Applicant have adequate staffing to operate a Scheduling Coordinator's operational facility twenty-four (24) hours a day for 365 days a year? (yes / no). If no, please submit a proposed completion date to be fully operational so that an ISO staff site visit can be arranged.

V. <u>Third Party Contractual Requirements</u>

5.1 The Scheduling Coordinator Applicant confirms that all of its Scheduling Coordinator Customers which are located within the ISO Controlled Grid and which should execute agreements with the ISO have entered into or will enter into, prior to the certification of the Scheduling Coordinator Applicant, all required agreements with the ISO to enable them to meet the requirements of the ISO Tariff: (yes / no).

(a) Represented Generators have signed Participating Generator Agreements: (yes / no).

(b) Represented UDCs have signed UDC Operating Agreements and Meter Service Agreements: (yes / no).

(c) Represented ISO Metered Entities have signed Meter Service Agreements: (yes / no).

(d) Wholesale Customers it will represent have warranted to the Scheduling Coordinato Applicant that they are eligible for wholesale transmission service pursuant to the provisions of the FPA Section 212(h): (yes / no).

(e) Each End-Use Customer it will represent which requests Direct Access service has warranted to the Scheduling Coordinator Applicant that the End-Use Customer is eligible for such service: (yes / no).

5.2 The SCHEDULING COORDINATOR Applicant confirms that all of the parties which it represents as Scheduling Coordinator Customers have granted it all necessary agency authority, whether actual, implied or inherent, to enable the Scheduling Coordinator to perform all of its obligations under the ISO Tariff: (yes / no).

5.3 Notwithstanding 5.2, the Scheduling Coordinator confirms that it will have the primary responsibility, as the principal, for all Scheduling Coordinator payment obligations under the ISO Tariff : (yes / no).

VI. Additional Information and Obligations

6.1 The Scheduling Coordinator Applicant agrees to provide such further information to the ISO as the ISO may deem necessary to process the application and certify the Scheduling Coordinator Applicant as a Scheduling Coordinator now and on a continuing basis.

6.2 Subject to the ISO Tariff, the Scheduling Coordinator Applicant agrees to promptly report to the ISO within seven (7) Business Days or earlier any changes regarding the information provided by it referred to in the ISO Tariff and in the application with the exception of the security requirement data referred to in Part III of Part A in this Appendix which must be updated within five (5) Business Days. The Scheduling Coordinator shall be responsible if a failure to submit revised technical data more promptly extends the period during which schedules are rejected by the ISO.

6.3 The Scheduling Coordinator Applicant agrees to enclose herein the non-refundable application fee of $500 to cover the application processing costs, site visit and costs of providing ISO Tariff.

Please make check payable to:

The California Independent System Operator Corporation

6.4 Scheduling Coordinator Applicant agrees to promptly execute and return the Scheduling Coordinator Agreement, Meter Service Agreements, Interim Black Start Agreements, software licensing agreement, completed credit application, and/or Financial Security as applicable, and Fed-Wire System bank account number, after receiving its application approval letter from the ISO.

6.5 Final certification is contingent upon Scheduling Coordinator Applicant fulfilling all financial and technical requirements as referenced in the ISO Tariff (including Part C of this Appendix, the ISO Application File Template).

Scheduling Coordinator Applicant certifies by its signature on this Application Form that:

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon all parties on the official service list compiled by the Secretary in the above-captioned proceeding, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, California this 11th day of July, 2006.

Sidney M. Davies BRM

Sidney M. Davies