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May 31, 2007

The Honorable Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426

**Re: California Independent System Operator Corporation  
Compliance Filing  
Docket No. ER06-700-\_\_\_\_**

Dear Secretary Bose:

The California Independent System Operator Corporation ("CAISO")<sup>1</sup> submits an original and five copies of the instant filing in compliance with the Commission's "Order on Rehearing and Compliance Filings," 119 FERC ¶ 61,053, issued on April 19, 2007 in the captioned docket ("April 19 Order").

## **I. Background**

In an order issued in the captioned proceeding on May 12, 2006, the Commission stated that it found revisions the CAISO had proposed to the credit requirements and procedures in the ISO Tariff to be generally reasonable, except as discussed in that Order.<sup>2</sup> The 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 recommended removing from the ISO

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

<sup>2</sup> *California Independent System Operator Corp.*, 115 FERC ¶ 61,170, at P 20 (2006) ("May 2006 Order").

Tariff.<sup>3</sup> Pursuant to these directives, on July 11, 2006, the CAISO submitted a compliance filing in the captioned proceeding (“July 2006 Compliance Filing”) that contained two sets of changes. The first set of changes (“First Set of Changes”) was 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.<sup>4</sup> The second set of changes (“Alternative Set of Changes”) was 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 recommended removing from the ISO Tariff; the Alternative Set of Changes showed what provisions the CAISO recommended including in and removing from the Tariff.<sup>5</sup>

In the May 2006 Order, the Commission also encouraged the CAISO to work with its stakeholders to develop alternative measures for calculating the Unsecured Credit Limits of non-profit entities.<sup>6</sup> On August 9, 2006 (as corrected on August 10, 2006), the CAISO submitted a supplemental compliance filing in the captioned proceeding (“August 2006 Compliance Filing”), in which the CAISO proposed revisions to the ISO Tariff to provide for additional measures for calculating Unsecured Credit Limits of Local Publicly Owned Electric Utilities and of Unrated Governmental Entities that receive appropriations from the federal government or a state government.

The CAISO and other parties timely filed requests for rehearing of the April 19 Order.

## **II. Compliance Changes Required by the April 19 Order**

In the April 19 Order, the Commission accepted the Alternative Set of Changes, with certain modifications discussed below, and found that the CAISO does not need to file its entire Credit Guide as part of the ISO Tariff.<sup>7</sup> However, the Commission directed the CAISO to include in the ISO Tariff the eight-step process used to calculate an entity’s Unsecured Credit Limit, as detailed in Sections 12.1.1A through 12.1.1A.2 of the First Set of Changes, rather than the description of that eight-step process contained in Section 12.1.1 of the Alternative Set of Changes.<sup>8</sup> In accordance with this Commission directive, the CAISO has included Sections 12.1.1A through 12.1.1A2 of the First Set of Changes in the instant compliance filing and has deleted from this compliance filing the portions of Section 12.1.1 of the Alternative Set of Changes that describe the eight-step process.

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<sup>3</sup> *Id.* at PP 22, 32, 34-36, 42-44, 46-47.

<sup>4</sup> See July 2006 Compliance Filing, Transmittal Letter at 3-5, 11.

<sup>5</sup> See *id.*, Transmittal Letter at 5-10, 11-12.

<sup>6</sup> May 2006 Order at P 35.

<sup>7</sup> April 19 Order at PP 15, 37.

<sup>8</sup> *Id.* at PP 16, 38.

The Commission further directed that publicly available information from third parties (e.g., the Moody's KMV default probability measure) used as an input in step 2 of the eight-step process, may be referred to without being included in the ISO Tariff, but the Tariff must specify where one can find the most current input information.<sup>9</sup> In accordance with this directive, the CAISO has included in Step 2(b) of Section 12.1.1A.2 specific information about where default probability information can be found.

In addition, the Commission required the CAISO to include in the ISO Tariff the process the CAISO uses to calculate an entity's Estimated Aggregate Liability, as is described in Part C of the Credit Guide.<sup>10</sup> To comply with this directive, the CAISO has included in the instant compliance filing new Section 12.1.5A of the ISO Tariff, which contains the methodology the CAISO uses to calculate Estimated Aggregate Liability.<sup>11</sup>

The Commission also required the CAISO to capitalize the terms "tangible net worth" and "net assets" in the definition of Material Change in Financial Condition contained in Appendix A to the ISO Tariff.<sup>12</sup> The CAISO has capitalized those terms in the instant compliance filing.

Finally, the Commission accepted the ISO Tariff provisions contained in the August 2006 Compliance Filing concerning the calculation of Unsecured Credit Limits of Local Publicly Owned Electric Utilities and of Unrated Governmental Entities that receive appropriations from the federal government or a state government, subject to the requirement that the CAISO incorporate those provisions into Section 12 of the ISO Tariff.<sup>13</sup> To comply with these Commission directives, the CAISO has included the provisions in paragraphs 4(b) and 5 of Section 12.1.1A.

### **III. Listing of Materials Provided in the Instant Compliance Filing**

In addition to this transmittal letter, the instant compliance filing includes Attachments A through D. Attachment A contains clean ISO Tariff sheets reflecting all of the changes described above. The clean ISO Tariff sheets in Attachment A bear an effective date of May 14, 2006, which was the

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<sup>9</sup> *Id.* at P 17.

<sup>10</sup> *Id.* at P 16.

<sup>11</sup> New Section 12.1.5A does not include the provisions set forth in Part C of the Credit Guide that concern the Scheduling Coordinator Aggregate Liability Estimate ("SCALE"), because the CAISO no longer calculates SCALE and does not intend to resume calculating SCALE in the future. In addition, the last two sentences of the bullet point entitled "Estimated obligations" in new Section 12.1.5A.1 reflect a clarification recently provided in the Credit Guide. The CAISO plans to modify the Credit Guide posted on the ISO Website to reflect the inclusion in the instant compliance filing of the methodology for calculating Estimated Aggregate Liability.

<sup>12</sup> April 19 Order at P 39.

<sup>13</sup> *Id.* at P 47.

Commission-approved effective date shown on the ISO Tariff sheets included in the July 2006 Compliance Filing.<sup>14</sup> Attachment B shows all of the changes described above in red-line format. Attachments C and D contain two clean ISO Tariff sheets that reflect the changes to those sheets described above and that also reflect recent ISO Tariff amendments which went into effect subsequent to May 14, 2006. Attachment C contains Third Revised Sheet No. 264, which went into effect on May 9, 2007.<sup>15</sup> Attachment D contains Third Revised Sheet No. 512, which went into effect on May 22, 2007.<sup>16</sup>

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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<sup>14</sup> In the April 19 Order, the Commission also approved a May 14, 2006 effective date for the ISO Tariff provisions included in the August 2006 Compliance Filing. See April 19 Order at P 47 and Ordering Paragraph (C).

<sup>15</sup> See Amendment to the ISO Tariff to Facilitate Timely Implementation of the MRTU Markets, Docket No. ER07-613-000, at Attachment A (Sheet No. 264) (filed Mar. 9, 2007); *California Independent System Operator Corp.*, 119 FERC ¶ 61,124, at Ordering Paragraph (A) (2007).

<sup>16</sup> See Assignment of Import Capability for Resource Adequacy Purposes, Docket No. ER07-648-000, at Attachment A (Sheet No. 512) (filed Mar. 22, 2007); *California Independent System Operator Corp.*, 119 FERC ¶ 61,164, at Ordering Paragraph (2007).

## ATTACHMENT A

**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 Sections 12.1.1A, 12.1.1A.1, and 12.1.1A.2.

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.

**12.1.1A Unsecured Credit Limit Calculation.**

An Unsecured Credit Limit (UCL) for each Market Participant and FTR Bidder that is a Public/Private Corporation, a Governmental Entity, or a Local Publicly Owned Electric Utility and that requests an Unsecured Credit Limit is calculated as follows:

1. **Rated Public/Private Corporations** – The Unsecured Credit Limit 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 Unsecured Credit Limit is the lesser of \$250 million or an amount equal to the Market Participant's or FTR Bidder's 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 Unsecured Credit Limit 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. **(a) Unrated Governmental Entities Other Than Those that Receive Appropriations from the Federal Government or a State Government** – The Unsecured Credit Limit is 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.

**(b) Unrated Governmental Entities that Receive Appropriations from the Federal Government or a State Government** – The Unsecured Credit Limit is the lesser of \$250 million dollars or the amount appropriated by the federal or relevant state government for the purpose of procuring energy and energy-related products and services for the applicable fiscal year. The Unrated Governmental Entity seeking to establish an Unsecured Credit Limit pursuant to this section shall provide documentation establishing its annual appropriations.

5. **Local Publicly Owned Electric Utilities** – A Local Publicly Owned Electric Utility with a governing body having ratemaking authority that has submitted an application for an Unsecured Credit Limit shall be entitled to an Unsecured Credit Limit of \$1 million dollars without regard to its Net Assets. Such Local Publicly Owned Electric Utility shall be entitled to request an Unsecured Credit Limit based on Net Assets as provided in Section 12.1.1.A(3) or 12.1.1A(4) in order to establish an Unsecured Credit Limit as the greater of \$1 million dollars or the amount determined as provided in this Section 12.1.1A(5). A public entity that is not a Local Publicly Owned Electric Utility is not entitled to an Unsecured Credit Limit of \$1 million dollars under this Section 12.1.1A(5) but may seek to



establish an Unsecured Credit Limit as provided in any other provision of the ISO Tariff that may apply.

Public entities, including Local Publicly Owned Electric Utilities, that operate through a Joint Powers Agreement, or a similar agreement acceptable to the ISO with the same legal force and effect, shall be entitled to aggregate or assign their Unsecured Credit Limits subject to the following limitations and requirements. A public entity that is a party to a Joint Powers Agreement or similar agreement and that is also participating independently in the ISO's markets with an established Unsecured Credit Limit shall not be entitled to assign or aggregate any portion of its Unsecured Credit Limit that the public entity is using to support financial liabilities associated with its individual participation in the ISO's markets. A Local Publicly Owned Electric Utility that operates through a Joint Powers Agreement or similar agreement that desires to aggregate a portion of its Unsecured Credit Limit that is equal to or less than \$1 million dollars with one or more other Local Publicly Owned Electric Utilities that operate through that Joint Powers Agreement or similar agreement or to assign a portion of its Unsecured Credit Limit that is equal to or less than \$1 million dollars to the Joint Powers Authority shall be entitled to do so. A Local Publicly Owned Electric Utility that operates through a Joint Powers Agreement or similar agreement that desires to aggregate its Unsecured Credit Limit with one or more other Local Publicly Owned Electric Utilities that operate through that Joint Powers Agreement or similar agreement or to assign a portion of its Unsecured Credit Limit to the Joint Powers Authority that exceeds \$1 million dollars, and any public entity that is not a Local Publicly Owned Electric Utility that operates through a Joint Powers Agreement or similar agreement that desires to aggregate its Unsecured Credit Limit with one or more other Local Publicly Owned Electric Utilities that operate through that Joint Powers Agreement or similar agreement or to assign any portion of its Unsecured Credit Limit to the Joint Powers Authority, shall provide documentation that is acceptable to the

ISO and that demonstrates the Local Publicly Owned Electric Utility or public entity will assume responsibility for the financial liabilities of the Joint Powers Agency associated with the assigned or aggregated portion of the Unsecured Credit Limit. Such documentation may include a guaranty or similar instrument acceptable to the ISO.

Unsecured Credit Limits established pursuant to this Section 12.1.1A shall be subject to the ISO's consideration of the same qualitative factors that apply to all Market Participants and FTR Bidders as set forth in Section 12.1.1.1 and, accordingly, the ISO may adjust their Unsecured Credit Limits pursuant to Section 12.1.1. The \$250 million hard cap on Unsecured Credit Limits specified in Section 12.1.1 has been set with respect to the length of the current ISO Payments Calendar, *i.e.*, a maximum of 95 Trading Days of charges outstanding. Upon implementation of payment acceleration (scheduled for 2008), the ISO expects 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 Tangible Net Worth and Net Assets.**

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 Tangible Net Worth Percentage (TNWP) or Net Assets Percentage (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.

**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 median default probability calculated by Moody's KMV (*i.e.*, MKMV) for Standard & Poor's and Moody's long-term credit rating classes is provided on the ISO Website at <http://www.caiso.com/1bd8/1bd8b09916e50.html>. Default probabilities are available from each NRSRO.
- c. 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.  $CDP \text{ for Rated Public/Private Corporations} = (ARDP * 50\%) + (MKDP * 50\%)$
- b.  $CDP \text{ for Unrated Public/Private Corporations} = MKDP * 100\%$
- c.  $CDP \text{ for Rated Governmentally Owned Utilities} = ARDP * 100\%$

**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 Section 12.1.1.1.

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

#### **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 12.1.1A. A Market Participant or FTR Bidder, upon request, will be provided a written analysis as to how the provisions in Section 12.1.1A 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

**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.

**12.1.5A Calculation of Estimated Aggregate Liability.**

**12.1.5A.1 Calculation Methodology Based on the Level Posting Period.**

Except as described in Section 12.1.5A.2, the ISO shall use the method described in this Section 12.1.5A.1 to calculate each Market Participant's Estimated Aggregate Liability. The Estimated Aggregate Liability is based on a "Level Posting Period" equal to 102 Trading Days, which represents the maximum number of Trading Days outstanding at a given time based on the ISO's Payments Calendar (95 Trading Days) plus seven Trading Days based on the allowable period for Market Participants to respond to ISO requests for additional collateral (five Business Days). The charges the ISO shall use to calculate Estimated Aggregate Liability shall be charges described or referenced in the ISO Tariff. The ISO shall calculate the Estimated Aggregate Liability for each Market Participant for a given Level Posting Period by aggregating the following obligations:

- Outstanding obligations – Any past-due open balances of amounts payable by and amounts receivable from the Market Participant, including unpaid FERC Annual Charge balances and excluding balances covered by bankruptcies.

- Invoice obligations – Obligations from either a preliminary or a final invoice that has been issue but not yet paid.
- Actual Settlement obligations – The Market Participant's preliminary and final Settlement obligations up to the date of the latest Preliminary Settlement Statement.
- Estimated obligations – Estimated charges for the Market Participant for the balance of the Level Posting Period. The ISO shall calculate estimated obligations for the Market Participant by multiplying (i) a daily average of published, actual Settlement charges for the Market Participant by (ii) the number of days remaining in the Level Posting Period for which actual Settlement data is unavailable. In calculating (i), above, the ISO shall separate the Market Participant's Settlement activity into daily market activity, monthly market activity, and Grid Management Charge activity, and shall determine the daily average of charges for each such type of activity separately based on the different frequencies with which charges for these types of activities are assessed. The daily average charges used in (i), above, shall normally be based on two months of available historical Settlement data for the Market Participant. The ISO may review the trend of Market Participant historical charges and determine that an alternative of one month or twelve months of historical charges would result in a more accurate estimate, and may use such data to calculate the daily average charges.

For a Market Participant that maintains multiple BAID numbers, the *Estimated Aggregate Liability* of the Market Participant as a legal entity shall 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. Market Participants may recommend changes to the liability estimates produced by the ISO's *Estimated Aggregate Liability* calculation through the dispute procedures described in Section 12.4.2.

**12.1.5A.2 Calculation Methodology Applicable to New Market Participants.**

Each new Market Participant (and each Market Participant that has previously been inactive) is required to post an initial Financial Security Amount to cover a minimum of 14 Trading Days of estimated obligations as well as additional Financial Security as obligations are incurred. This initial posting

requirement is based on anticipated scheduling/trading practices and overall volumes, and shall be considered to be equal to the Market Participant's Estimated Aggregate Liability. Until the amount of time elapsed from such Market Participant's initial participation in the ISO Market equals the maximum length of the ISO payment cycle (*i.e.*, 95 Trading Days), the ISO shall monitor the Market Participant's ongoing security requirement by comparing its actual obligations against its estimated obligations to determine if the Market Participant must provide any additional Financial Security Amount in order to ensure that its Estimated Aggregate Liability does not exceed its Aggregate Credit Limit. Once the amount of time elapsed from the Market Participant's initial participation in the ISO Market equals 95 Trading Days, the ISO shall begin calculating the Market Participant's Estimated Aggregate Liability pursuant to Section 12.1.5A.1.

**12.1.5A.3 Special Circumstances.**

**12.1.5A.3.1 Daily Adjustments and Disputes.**

Charges associated with daily adjustments and disputes that are regularly calculated by the ISO Settlement system will be included in the ISO's determinations of Estimated Aggregate Liability as the charges are calculated.

**12.1.5A.3.2 FERC Refund Orders.**

The ISO will assess its ability to reasonably calculate the charges associated with a refund before the ISO's Settlement system is re-run. If the ISO can reasonably apportion the refund charges to specific Market Participants, it will include the amounts in its calculation of Estimated Aggregate Liability for those Market Participants and will request Financial Security from them accordingly. If the ISO determines that complexities of a FERC refund order preclude the ISO from reasonably being able to include refunds in its calculation of Estimated Aggregate Liability, the ISO will not request Financial Security associated with the required refunds until the refunds are processed through the ISO Settlement system. However, if feasible, the ISO will make available to Market Participants, for informational purposes only, an aggregate forecast of the effect that providing the refunds will have on the ISO's calculation of Estimated Aggregate Liability.



**12.1.5A.3.3 ISO ADR Procedures.**

The ISO will handle transactions associated with the ISO ADR Procedures in the same manner as transactions associated with refunds provided pursuant to Section 12.1.5A.3.2.

**12.1.5A.4 FTR Auction Financial Security Requirements.**

The credit requirements related to participation in the ISO's annual Firm Transmission Rights (FTR) auction shall be 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 Aggregate Credit Limit 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 Unsecured Credit Limit 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.

**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.

**ATTACHMENT B**

**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, and 12.1.1A.2.(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.

#### **12.1.1A Unsecured Credit Limit Calculation.**

An Unsecured Credit Limit (UCL) for each Market Participant and FTR Bidder that is a Public/Private Corporation, a Governmental Entity, or a Local Publicly Owned Electric Utility and that requests an Unsecured Credit Limit is calculated as follows:

- 1. Rated Public/Private Corporations – The Unsecured Credit Limit 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 Unsecured Credit Limit is the lesser of \$250 million or an amount equal to the Market Participant's or FTR Bidder's 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 Unsecured Credit Limit 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. (a) Unrated Governmental Entities Other Than Those that Receive Appropriations from the Federal Government or a State Government – The Unsecured Credit Limit is 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.**

**(b) Unrated Governmental Entities that Receive Appropriations from the Federal Government or a State Government – The Unsecured Credit Limit is the lesser of \$250 million dollars or the amount appropriated by the federal or relevant state government for the purpose of procuring energy and energy-related products and services for the applicable fiscal year. The Unrated Governmental Entity seeking to establish an Unsecured Credit Limit pursuant to this section shall provide documentation establishing its annual appropriations.**

**5. Local Publicly Owned Electric Utilities** – A Local Publicly Owned Electric Utility with a governing body having ratemaking authority that has submitted an application for an Unsecured Credit Limit shall be entitled to an Unsecured Credit Limit of \$1 million dollars without regard to its Net Assets. Such Local Publicly Owned Electric Utility shall be entitled to request an Unsecured Credit Limit based on Net Assets as provided in Section 12.1.1.A(3) or 12.1.1A(4) in order to establish an Unsecured Credit Limit as the greater of \$1 million dollars or the amount determined as provided in this Section 12.1.1A(5). A public entity that is not a Local Publicly Owned Electric Utility is not entitled to an Unsecured Credit Limit of \$1 million dollars under this Section 12.1.1A(5) but may seek to establish an Unsecured Credit Limit as provided in any other provision of the ISO Tariff that may apply.

Public entities, including Local Publicly Owned Electric Utilities, that operate through a Joint Powers Agreement, or a similar agreement acceptable to the ISO with the same legal force and effect, shall be entitled to aggregate or assign their Unsecured Credit Limits subject to the following limitations and requirements. A public entity that is a party to a Joint Powers Agreement or similar agreement and that is also participating independently in the ISO's markets with an established Unsecured Credit Limit shall not be entitled to assign or aggregate any portion of its Unsecured Credit Limit that the public entity is using to support financial liabilities associated with its individual participation in the ISO's markets. A Local Publicly Owned Electric Utility that operates through a Joint Powers Agreement or similar agreement that desires to aggregate a portion of its Unsecured Credit Limit that is equal to or less than \$1 million dollars with one or more other Local Publicly Owned Electric Utilities that operate through that Joint Powers Agreement or similar agreement or to assign a portion of its Unsecured Credit Limit that is equal to or less than \$1 million dollars to the Joint Powers Authority shall be entitled to do so. A Local Publicly Owned Electric Utility that operates through a Joint Powers Agreement or similar agreement that desires to aggregate its Unsecured Credit Limit with one or more other Local Publicly Owned Electric Utilities that operate through that Joint



Powers Agreement or similar agreement or to assign a portion of its Unsecured Credit Limit to the Joint Powers Authority that exceeds \$1 million dollars, and any public entity that is not a Local Publicly Owned Electric Utility that operates through a Joint Powers Agreement or similar agreement that desires to aggregate its Unsecured Credit Limit with one or more other Local Publicly Owned Electric Utilities that operate through that Joint Powers Agreement or similar agreement or to assign any portion of its Unsecured Credit Limit to the Joint Powers Authority, shall provide documentation that is acceptable to the ISO and that demonstrates the Local Publicly Owned Electric Utility or public entity will assume responsibility for the financial liabilities of the Joint Powers Agency associated with the assigned or aggregated portion of the Unsecured Credit Limit. Such documentation may include a guaranty or similar instrument acceptable to the ISO.

Unsecured Credit Limits established pursuant to this Section 12.1.1A shall be subject to the ISO's consideration of the same qualitative factors that apply to all Market Participants and FTR Bidders as set forth in Section 12.1.1.1 and, accordingly, the ISO may adjust their Unsecured Credit Limits pursuant to Section 12.1.1. The \$250 million hard cap on Unsecured Credit Limits specified in Section 12.1.1 has been set with respect to the length of the current ISO Payments Calendar, i.e., a maximum of 95 Trading Days of charges outstanding. Upon implementation of payment acceleration (scheduled for 2008), the ISO expects 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 Tangible Net Worth and Net Assets.**

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 Tangible Net Worth Percentage (TNWP) or Net Assets Percentage (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.

**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 median default probability calculated by Moody's KMV (i.e., MKMV) for Standard & Poor's and Moody's long-term credit rating classes is provided on the ISO Website at <http://www.caiso.com/1bd8/1bd8b09916e50.html>. Default probabilities are available from each NRSRO.
- c. 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 Section 12.1.1.1.**

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

**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 12.1.1A. A Market Participant or FTR Bidder, upon request, will be provided a written analysis as to how the provisions in Section 12.1.1A and this section were applied in setting its Unsecured Credit Limit.

\* \* \*

#### **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.

**12.1.5A Calculation of Estimated Aggregate Liability.**

**12.1.5A.1 Calculation Methodology Based on the Level Posting Period.**

Except as described in Section 12.1.5A.2, the ISO shall use the method described in this Section 12.1.5A.1 to calculate each Market Participant's Estimated Aggregate Liability. The Estimated Aggregate Liability is based on a "Level Posting Period" equal to 102 Trading Days, which represents the maximum number of Trading Days outstanding at a given time based on the ISO's Payments Calendar (95 Trading Days) plus seven Trading Days based on the allowable period for Market Participants to respond to ISO requests for additional collateral (five Business Days). The charges the ISO shall use to calculate Estimated Aggregate Liability shall be charges described or referenced in the ISO Tariff. The ISO shall calculate the Estimated Aggregate Liability for each Market Participant for a given Level Posting Period by aggregating the following obligations:

- Outstanding obligations – Any past-due open balances of amounts payable by and amounts receivable from the Market Participant, including unpaid FERC Annual Charge balances and excluding balances covered by bankruptcies.
- Invoice obligations – Obligations from either a preliminary or a final invoice that has been issued but not yet paid.
- Actual Settlement obligations – The Market Participant's preliminary and final Settlement obligations up to the date of the latest Preliminary Settlement Statement.
- Estimated obligations – Estimated charges for the Market Participant for the balance of the Level Posting Period. The ISO shall calculate estimated obligations for the Market

Participant by multiplying (i) a daily average of published, actual Settlement charges for the Market Participant by (ii) the number of days remaining in the Level Posting Period for which actual Settlement data is unavailable. In calculating (i), above, the ISO shall separate the Market Participant's Settlement activity into daily market activity, monthly market activity, and Grid Management Charge activity, and shall determine the daily average of charges for each such type of activity separately based on the different frequencies with which charges for these types of activities are assessed. The daily average charges used in (i), above, shall normally be based on two months of available historical Settlement data for the Market Participant. The ISO may review the trend of Market Participant historical charges and determine that an alternative of one month or twelve months of historical charges would result in a more accurate estimate, and may use such data to calculate the daily average charges.

For a Market Participant that maintains multiple BAID numbers, the Estimated Aggregate Liability of the Market Participant as a legal entity shall 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. Market Participants may recommend changes to the liability estimates produced by the ISO's Estimated Aggregate Liability calculation through the dispute procedures described in Section 12.4.2.

**12.1.5A.2 Calculation Methodology Applicable to New Market Participants.**

Each new Market Participant (and each Market Participant that has previously been inactive) is required to post an initial Financial Security Amount to cover a minimum of 14 Trading Days of estimated obligations as well as additional Financial Security as obligations are incurred. This initial posting requirement is based on anticipated scheduling/trading practices and overall volumes, and shall be considered to be equal to the Market Participant's Estimated Aggregate Liability. Until the amount of time elapsed from such Market Participant's initial participation in the ISO Market equals the maximum length of the ISO payment cycle (i.e., 95 Trading Days), the ISO shall monitor the Market Participant's ongoing security requirement by comparing its actual obligations against its estimated obligations to determine if the Market Participant must provide any additional Financial Security Amount in order to ensure that its

Estimated Aggregate Liability does not exceed its Aggregate Credit Limit. Once the amount of time elapsed from the Market Participant's initial participation in the ISO Market equals 95 Trading Days, the ISO shall begin calculating the Market Participant's Estimated Aggregate Liability pursuant to Section 12.1.5A.1.

**12.1.5A.3 Special Circumstances.**

**12.1.5A.3.1 Daily Adjustments and Disputes.**

Charges associated with daily adjustments and disputes that are regularly calculated by the ISO Settlement system will be included in the ISO's determinations of Estimated Aggregate Liability as the charges are calculated.

**12.1.5A.3.2 FERC Refund Orders.**

The ISO will assess its ability to reasonably calculate the charges associated with a refund before the ISO's Settlement system is re-run. If the ISO can reasonably apportion the refund charges to specific Market Participants, it will include the amounts in its calculation of Estimated Aggregate Liability for those Market Participants and will request Financial Security from them accordingly. If the ISO determines that complexities of a FERC refund order preclude the ISO from reasonably being able to include refunds in its calculation of Estimated Aggregate Liability, the ISO will not request Financial Security associated with the required refunds until the refunds are processed through the ISO Settlement system. However, if feasible, the ISO will make available to Market Participants, for informational purposes only, an aggregate forecast of the effect that providing the refunds will have on the ISO's calculation of Estimated Aggregate Liability.

**12.1.5A.3.3 ISO ADR Procedures.**

The ISO will handle transactions associated with the ISO ADR Procedures in the same manner as transactions associated with refunds provided pursuant to Section 12.1.5A.3.2.

**12.1.5A.4 FTR Auction Financial Security Requirements.**

The credit requirements related to participation in the ISO's annual Firm Transmission Rights (FTR) auction shall be 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 Aggregate Credit Limit 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 Unsecured Credit Limit 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.

\* \* \*

**[Master Definitions Supplement,  
Appendix A to the ISO Tariff]**

**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 ~~T~~angible ~~N~~et ~~w~~orth or ~~N~~et ~~a~~ssets for the Market Participant or FTR Bidder's preceding fiscal year, calculated in accordance with generally accepted accounting practices.



**ATTACHMENT C**

**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 or CRRs. 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 or CRRs) 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 Sections 12.1.1A, 12.1.1A.1, and 12.1.1A.2.

**ATTACHMENT D**

**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.

**Maximum Import**

**Capability**

A quantity in MW determined by the ISO for each branch group into the ISO Control Area to be deliverable to the ISO Control Area based on ISO study criteria.

## 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 31<sup>st</sup> day of May, 2007.

  
Sidney M. Davies  
Sidney M. Davies