

# **ISO MARKET MONITORING & INFORMATION PROTOCOL**

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**ISO Market Monitoring and  
Information Protocol (MMIP)**

**MMIP 1 OBJECTIVES, DEFINITIONS, AND SCOPE**

**MMIP 1.1 Objectives**

This Protocol (MMIP) sets forth the workplan and, where applicable, the rules under which the ISO will monitor the ISO Markets to identify abuses of market power, to ensure to the extent possible the efficient working of the ISO Markets immediately upon commencement of their operation, and to provide for their protection from abuses of market power in both the short term and the long term, and from other abuses that have the potential to undermine their effective functioning or overall efficiency in accordance with Section 16.3 of the ISO Tariff. Such monitoring activities will be carried out by the ISO Market Surveillance Unit and the ISO Market Surveillance Committee to be established and to operate under the terms of this Protocol, as set forth below.

**MMIP 1.1.1 Means and Actions**

This Protocol sets forth the means of data collection, analysis, decision-making, formulation of corrective actions, and enforcement actions that will be instituted or undertaken by the ISO. It describes the implementation mechanisms to be created by the ISO to serve these purposes.

**MMIP 1.1.2 Reporting Requirements**

This Protocol sets forth the information dissemination, publication and reporting activities and other means of providing information that the ISO will undertake to meet its reporting requirements to regulatory agencies, ISO Participants and others. The goal of the reporting provisions of this Protocol is to adequately inform regulatory agencies, ISO Participants and others of the state of the ISO Markets, especially their competitiveness and efficiency. This function is designed to facilitate efficient corrective actions to be taken by the appropriate body or bodies when required.

**MMIP 1.2 Definitions**

**MMIP 1.2.1 Master Definitions Supplement**

Any word or expression defined in the Master Definitions Supplement to the ISO Tariff shall have the same meaning where used in this Protocol. References to a Section or Appendix are to a Section or an Appendix of the ISO Tariff. References to MMIP are to this Protocol or to the stated section, paragraph or appendix of this Protocol.

**MMIP 1.2.2 Special Terms for This Protocol**

In this Protocol, the following words and expressions shall have the meanings set opposite them:

“**Market Surveillance Unit**” means the unit established under MMIP 3.1.

“**ISO Market Surveillance Committee (ISO MSC)**” means the committee established under MMIP 5.1.

“**Activity Rules**” means the rules relating to the activities of ISO or PX Participants set forth in or referred to in the ISO and PX Tariff and Protocols.

“**ISO Home Page**” means the ISO internet home page at <http://www.caiso.com> or such other internet address as the ISO shall publish from time to time.

**MMIP 1.2.3 Rules of Interpretation**

**MMIP 1.2.3.1** Unless the context otherwise requires, if the provisions of this Protocol 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 only to aid understanding.

**MMIP 1.2.3.2** A reference in this Protocol to a given agreement, ISO Protocol 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.

**MMIP 1.2.3.3** The captions and headings in this MMIP are inserted solely to facilitate reference and shall have no bearing upon the interpretation of any of the terms and conditions of this Protocol.

**MMIP 1.2.3.4** This Protocol shall be effective as of January 1, 1998.

**MMIP 1.3 Scope**

**MMIP 1.3.1 Scope of Application to Parties**

The MMIP applies to:

**MMIP 1.3.1.1** All ISO Market Participants;

**MMIP 1.3.1.2** PX Participants;

**MMIP 1.3.1.3** The ISO.

**MMIP 1.3.2 Liability of ISO**

Any liability of the ISO arising out of or in relation to this Protocol shall be subject to Section 14 of the ISO Tariff as if references to the ISO Tariff were references to this Protocol.

**MMIP 2 PRACTICES SUBJECT TO SCRUTINY**

**MMIP 2.1 Practices Subject to Scrutiny - General**

The Market Surveillance Unit shall monitor the activities of Market Participants and other entities described in MMIP 1.3.1. It shall monitor

such activities that affect the operation of the ISO Markets and that provide indications of the phenomena set forth below in this Section 2.1 and, where appropriate, it will take such further action as it considers necessary under Section 2.3.

**MMIP 2.1.1 Anomalous Market Behavior**

Anomalous market behavior, which is defined as behavior that departs significantly from the normal behavior in competitive markets that do not require continuing regulation or as behavior leading to unusual or unexplained market outcomes. Evidence of such behavior may be derived from a number of circumstances, including:

- MMIP 2.1.1.1** withholding of Generation capacity under circumstances in which it would normally be offered in a competitive market;
- MMIP 2.1.1.2** unexplained or unusual redeclarations of availability by Generators;
- MMIP 2.1.1.3** unusual trades or transactions;
- MMIP 2.1.1.4** pricing and bidding patterns that are inconsistent with prevailing supply and demand conditions, e.g., prices and bids that appear consistently excessive for or otherwise inconsistent with such conditions; and
- MMIP 2.1.1.5** unusual activity or circumstances relating to imports from or exports to other markets or exchanges.

The Market Surveillance Unit shall evaluate, on an ongoing basis, whether the continued or persistent presence of such circumstances indicates the presence of behavior that is designed to or has the potential to distort the operation and efficient functioning of a competitive market, e.g., the strategic withholding and redeclaring of capacity, and whether it indicates the presence and exercise of market power or of other unacceptable practices.

**MMIP 2.1.2 Abuse of Reliability Must-Run Unit Status**

Where Generating Units are determined by the ISO to be Reliability Must-Run Units, circumstances that indicate that such Generating Units are being operated in a manner that will adversely affect the competitive nature and efficient workings of the ISO Markets.

**MMIP 2.1.3 Gaming**

"Gaming", or taking unfair advantage of the rules and procedures set forth in the PX or ISO Tariffs, Protocols or Activity Rules, or of transmission constraints in periods in which exist substantial Congestion, to the detriment of the efficiency of, and of consumers in, the ISO Markets. "Gaming" may also include taking undue advantage of other conditions that may affect the availability of transmission and generation capacity, such as loop flow, facility outages, level of hydropower output or seasonal limits on energy imports from out-of-state, or actions or behaviors that may otherwise render the system and the ISO Markets vulnerable to price manipulation to the detriment of their efficiency.

**MMIP 2.1.4 ISO and PX Design Flaws**

Design flaws and inefficiencies in the ISO Tariff, ISO Protocols and operational rules and procedures of the ISO, including the potential for problems between the ISO and other independent power exchanges including the PX, insofar as they affect the ISO Markets which may be evident from anomalous market behavior monitored under MMIP 2.1.1 above, from evidence of gaming monitored under MMIP 2.1.3 above, or from other activities.

**MMIP 2.1.5 Market Structure Flaws**

With respect to flaws in the overall structure of the California energy markets that may reveal undue concentrations of market power in Generation or other structural flaws, the Market Surveillance Unit shall provide such information or evidence of such flaws and such analysis as it may conduct to the ISO CEO, the ISO Market Surveillance Committee or to the ISO Governing Board, subject to due protections of confidential or commercially sensitive information. After due internal consultation, if instructed by any of such ISO institutions or persons, the Market Surveillance Unit shall also provide such information or evidence to the appropriate regulatory and antitrust enforcement agency or agencies, subject to due protections of confidential or commercially sensitive information. The Market Surveillance Unit shall, provide such other evidence, views, analyses or testimony as may be appropriate or required and as it is reasonably capable of providing to assist the investigations of such agencies.

**MMIP 2.2 Practices Subject to Scrutiny Pending Divestiture**

In the transition periods pending completion of the various divestiture plans undertaken by certain of the IOU's ("the pre-divestiture period"), the Market Surveillance Unit shall undertake the following measures to monitor the special circumstances that may affect the operation of the ISO Markets during this period and may recommend corrective actions as provided in Section 2.3.

**MMIP 2.2.1 Exercises of Horizontal Market Power**

The Market Surveillance Unit shall consider issues that have been raised that some ISO Participants may be able to exercise horizontal market power in the short term during this transition period.

**MMIP 2.2.2 IOU Mitigation Plans**

The Market Surveillance Unit shall review all IOU mitigation plans, as approved and modified by the FERC and other regulatory agencies, that might affect the competitiveness of and the efficient operation of the ISO Markets. In consultation with the Compliance Unit of the PX, the Market Surveillance Unit shall analyze what further actions may be necessary to ensure the effective implementation of these mitigation plans with respect to the ISO Markets, and may make such recommendations for further actions as it considers appropriate to the ISO CEO and Governing Board, the FERC, the CPUC or other regulatory agencies. The Market Surveillance Unit shall monitor the

ongoing implementation of such plans to the extent feasible within the area of its responsibility, capability and resources.

**MMIP 2.2.3 Effects Pending Divestiture**

In the pre-divestiture period, the Market Surveillance Unit shall monitor and analyze the combined effect of the operations of the CTC and the rate freeze under which the Companies are required to operate during the pre-divestiture period on the state of competition in and the efficient operation of the ISO Markets; and the Market Surveillance Unit shall consult with the Compliance Unit of the PX with respect to such effects on both the PX and ISO Markets.

**MMIP 2.3 Response Action by ISO**

**MMIP 2.3.1 Corrective Actions**

Where the monitoring activities or any consequent investigations carried out by the Market Surveillance Unit pursuant to MMIP 2 and MMIP 4 reveal a significant possibility of the presence of or potential for exercises of market power that would adversely affect the operation of the ISO Markets, or the markets administered by the PX or otherwise operating in the State of California, the Market Surveillance Unit shall take the appropriate measures under this section and under MMIP 4, 6, and 7 to institute the corrective action most effective and appropriate for the situation or, in the case of markets administered by the PX or otherwise operating in the State of California, the Market Surveillance Unit may recommend corrective actions to the PX or to the appropriate regulatory agencies.

**MMIP 2.3.2 Further Actions**

Where the monitoring activities of or any consequent investigations carried out by the Market Surveillance Unit pursuant to MMIP 2.1 and 2.2 reveal that activities or behavior of Market Participants in the ISO Markets have the effect of, or potential for, undermining the efficiency, workability or reliability of the ISO Markets to give or to serve such Market Participants an unfair competitive advantage over other Market Participants, the Market Surveillance Unit shall fully investigate and analyze the effect of such activities or behavior and, where appropriate, make recommendations to the ISO CEO and the ISO MSC for further action by the ISO or, where necessary, by other entities. The ISO may publicize such activities or behavior and its recommendations thereof, in whatever medium it believes most appropriate. The Market Surveillance Unit may, where appropriate, make specific recommendations for amendment to rules and protocols under its control, or for referral to the PX as to rules and protocols under the PX's control, or for changes to the structure of the ISO Markets, or by referral to the PX, of the markets administered by the PX, and the Market Surveillance Unit may recommend actions, including fines or suspensions, against specific entities in order to deter such activities or behavior.

**MMIP 2.3.3 Response to Gaming Behavior**

If evidence of "gaming" or taking undue advantage exists, as described in MMIP 2.1.4, the Market Surveillance Unit shall, in cooperation with the PX Compliance Unit where appropriate, review the "gaming" behavior and/or the relationship between system conditions and market behavior and pricing in order to assess the potential for and impact of such gaming behavior, with a view to taking appropriate action, if necessary, either with respect to structural changes such as Zone changes, or to changes to the ISO or PX Tariffs, Protocols or Activity Rules, or to proscribe specific behavior by Market Participants. In carrying out such activities the Market Surveillance Unit shall in appropriate circumstances seek the advice of the ISO MSC on the merits of such actions. In appropriate circumstances, the Market Surveillance Unit may institute or arrange for ADR procedures involving Market Participants with conflicting perspectives, e.g. as to whether a particular practice is better characterized as improper gaming or legitimate aggressive competition or as to whether rule changes may resolve conflicts.

**MMIP 2.3.4 Adverse Effects of Transition Mechanisms**

Should the monitoring and analysis conducted under MMIP 2.2.3 reveal significant adverse effects of transition mechanisms on competition in or the efficient operation of the ISO Markets, the Market Surveillance Unit shall examine and fully assess the efficacy of all possible measures that may be taken by the ISO and, in consultation with the Compliance Unit of the PX, all possible measures that may be taken by the PX, in order to prevent or to mitigate such adverse effects. The Market Surveillance Unit shall make such recommendations to the CEO of the ISO and to the ISO MSC as it considers appropriate for action in this regard by the PX or the ISO or for referral to the regulatory or antitrust enforcement agencies. Such proposed measures may include, but shall not be limited to the following:

- MMIP 2.3.4.1** the use of direct bid caps as a mechanism to prevent or mitigate artificially high Market Clearing Prices caused by abuses of market power;
- MMIP 2.3.4.2** the use of contracts for differences for eliminating the incentive for Generators to bid ISO prices to artificially high levels enabled by the presence of market power;
- MMIP 2.3.4.3** calling upon Reliability Must-Run Units to operate; and to modify Reliability Must-Run Contracts;
- MMIP 2.3.4.4** bid floors to prevent or mitigate the possible exercise of below-cost bidding or predatory pricing that may arise from the incentives provided by the combined effect of the CTC and the rate freeze when the IOUs are net buyers of Energy.

The CEO and the ISO MSC shall consult on such recommendations and each may, after due consideration, propose any of such measures to the ISO Governing Board. In the event that the ISO Governing Board adopts, and where necessary obtains regulatory approval for, any

measure proposed pursuant to MMIP 2.3.4, the Market Surveillance Unit shall develop an implementation plan for such measure, and shall submit such plan to the CEO and ISO MSC. Upon approval of such plan by the CEO, the Market Surveillance Unit shall monitor the implementation and effect of such measure on the state of the ISO Markets and shall periodically report on them to the CEO and the ISO MSC.

**MMIP 3 ISO MARKET SURVEILLANCE UNIT**

**MMIP 3.1 Establishment**

There shall be established on or before ISO Operations Date within the ISO a Market Surveillance Unit that shall be responsible for the ongoing development, implementation, and execution of the ISO Market monitoring and information scheme described in this MMIP and the adherence to its objectives, as set forth in MMIP 1.1.

**MMIP 3.2 Composition**

The Market Surveillance Unit shall be adequately staffed by the ISO with full-time ISO staff with the experience and qualifications necessary to fulfill the functions referred to in this MMIP. Such qualifications may include professional training pertinent to and experience in the operation of markets analogous to ISO Markets, in the electric power industry, and in the field of competition and antitrust law, economics and policy. The Market Surveillance Unit shall be directed by a Compliance Director who shall be under the management of the ISO Chief Legal Counsel and the ISO CEO.

**MMIP 3.3 Accountability and Responsibilities**

**MMIP 3.3.1 Market Surveillance Unit**

The Market Surveillance Unit shall report and be accountable to the ISO CEO through the Chief Legal Counsel on all matters pertaining to policy and other matters that may affect the effectiveness and integrity of the monitoring function referred to in this Protocol, including matters pertaining to market monitoring, information development and dissemination and pertaining to generic or entity-specific investigations, corrective actions or enforcement.

**MMIP 3.3.2 CEO and ISO MSC**

The ISO CEO and the ISO MSC shall each have the independent authority to refer any of the matters referred to in MMIP 3.3.1 to the ISO Governing Board for approval of recommended actions.

**MMIP 3.3.3 Chief Executive Officer (CEO)**

**MMIP 3.3.3.1** The Market Surveillance Unit shall report to and be accountable to the ISO CEO through the Chief Legal Counsel on all matters relating to the day-to-day administration of the Market Surveillance Unit and the internal resources and organization of the ISO in accordance with MMIP 3.3.3.2.

**MMIP 3.3.3.2** The ISO CEO shall ensure that the Market Surveillance Unit has adequate resources and full access to data and the full cooperation of all parts of the ISO organization in developing the database necessary for the effective functioning of the Market Surveillance Unit and the fulfillment of its monitoring function. The ISO CEO shall institute within the ISO such data collection, organization and analytic activities as may be necessary for the Market Surveillance Unit to fulfill its functions and responsibilities.

**MMIP 3.3.4 Regulatory and Antitrust Enforcement Agencies**

Where considered necessary and appropriate, or where so ordered by the regulatory or antitrust agency with jurisdiction over the matter in question, or by a court of competent jurisdiction, the Market Surveillance Unit shall refer a matter through the ISO CEO to the regulatory or antitrust enforcement agency concerned, *e.g.*, in cases of serious abuse requiring expeditious investigation or action by the agency. In all such cases of direct referral, the ISO CEO shall promptly inform the ISO Governing Board and the ISO MSC of the fact of and the content of the referral.

**MMIP 3.3.5 Complaints**

Any Market Participant, or any other interested entity, may at any time submit information to or make a complaint to the Market Surveillance Unit concerning any matter that it believes may be relevant to the Market Surveillance Unit's monitoring responsibilities. Such submissions or complaints may be made on a confidential basis in which case the Market Surveillance Unit shall preserve the confidentiality thereof. The Market Surveillance Unit, at its discretion, may request further information from such entity and carry out any investigation that it considers appropriate as to the concern raised. The Market Surveillance Unit shall periodically make reports to the ISO CEO and ISO Governing Board on complaints received.

**MMIP 4 SPECIFIC FUNCTIONS OF ISO MARKET SURVEILLANCE UNIT**

**MMIP 4.1 Information Gathering and Market Monitoring Indices for Evaluation**

**MMIP 4.1.1 Information System**

The Market Surveillance Unit shall be responsible for developing an information system and criteria for evaluation that will permit it to effectively monitor the ISO Markets to identify and investigate abuses of that market, whether caused by exercises of market power or by other actions or inactions.

**MMIP 4.1.2 Data Categories**

To develop the information system set forth in MMIP 4.1.1, the Market Surveillance Unit shall initially develop, and shall refine on the basis of experience, a detailed catalog of all the categories of data it will have the means of acquiring, and the procedures it will use (including procedures for protecting confidential data) to handle such data.

**MMIP 4.1.3 Catalog of Market Monitoring Indices**

The Market Surveillance Unit shall initially develop, and shall refine on the basis of experience, a catalog of the ISO Market monitoring indices that it will use to evaluate the data so collected.

**MMIP 4.2 Evaluation of Information**

**MMIP 4.2.1 Ongoing Evaluation**

The Market Surveillance Unit shall evaluate and reevaluate on an ongoing basis the data categories and market monitoring indices that it has developed under MMIP 4.1.2 and 4.1.3, and the information it collects and receives from various other sources, including and in particular the ISO's operation of the ISO Markets. Such ongoing evaluations shall provide the basis for its reporting and publication responsibilities as set forth in this Protocol, for recommendations on proposed changes to the ISO Tariff and ISO Protocols and other potential rules affecting the ISO Markets, and for the development of criteria or standards for the initiation of proposed corrective or enforcement actions. In evaluating such information, the Market Surveillance Unit may consult the ISO MSC or such external bodies as may be appropriate.

**MMIP 4.2.2 Submission of Evaluation Results**

The final results of the Market Surveillance Unit's evaluations shall routinely and promptly be submitted simultaneously to the ISO CEO and to the ISO MSC for comment.

**MMIP 4.3 Review of Activity Rules**

When an iterative bidding process is developed that requires the application of Activity Rules, whether developed by the ISO or the PX, the Market Surveillance Unit shall review such Activity Rules for their effectiveness and consistency with its market monitoring activities and standards. The Market Surveillance Unit may at that time, and from time to time thereafter based on its experience in monitoring the ISO Markets, propose that changes be made in such Activity Rules.

**MMIP 4.4 Reports and Recommendations**

**MMIP 4.4.1 ISO CEO and Governing Board**

On the basis of the evaluation conducted under MMIP 4.2 or the review conducted under MMIP 4.3, the Market Surveillance Unit shall prepare periodic reports, as required by the ISO CEO, and specific ad hoc reports as appropriate, for the ISO CEO and ISO Governing Board on the state of competition in or the efficiency of the ISO Markets; and on its monitoring activities, the results of its evaluation and review activities, and its development and implementation of recommendations. Where appropriate, the ISO Market Surveillance Unit may recommend actions to be taken, including the amendment of the ISO Tariff and ISO Protocols and corrective or enforcement action against specific entities. Such reports shall be made not less frequently than quarterly in the case of the ISO CEO and ISO MSC and annually in

the case of the ISO Governing Board and shall contain such information and be in such form as specified by such entities. Such reports shall be made public and publicized as specified by such entities except to the extent that they contain confidential or commercially sensitive information or to the extent such entities determine that effective enforcement of the monitoring function dictates otherwise.

**MMIP 4.4.2 Regulatory Agencies**

As required in the ISO Tariff or by the ISO CEO and ISO Governing Board, or as required by the regulatory agency with jurisdiction over the matters in question, the Market Surveillance Unit shall prepare reports to the FERC and other regulatory agencies, which shall be reviewed and approved by the ISO CEO and Governing Board and then submitted as required. When publicly available reports are made to one regulatory agency with competent jurisdiction, such as the FERC, the Market Surveillance Unit may simultaneously make such reports available to other regulatory agencies with legitimate interests in their contents, such as the CPUC and CEC.

**MMIP 4.4.3 ISO Market Surveillance Committee**

All reports and recommendations to be made to the ISO CEO and ISO Governing Board under MMIP 4.4.1, or to regulatory agencies under MMIP 4.4.2, unless urgency requires otherwise, shall first be submitted to the ISO MSC for comments, which comments shall be reflected in the submittal to the ISO Governing Board. In addition, the Market Surveillance Unit may submit specific reports to the ISO MSC itself, as it considers appropriate. All final reports made to external regulatory agencies shall be simultaneously submitted to the ISO MSC.

**MMIP 4.5 ISO Participants**

**MMIP 4.5.1 Collection of Data**

The Market Surveillance Unit may request the submission of any information or data determined by the Market Surveillance Unit to be potentially relevant by ISO Participants, the PX or other entities whose activities may affect the operation of the ISO market. This data will be subject to due safeguards to protect confidential and commercially sensitive data. Failures by ISO Participants to provide such data shall be treated under MMIP 4.5.2. In the event of failures by other entities to provide such data, the Market Surveillance Unit may report the failure to the ISO CEO and Governing Board or the pertinent regulatory agency, as appropriate, after providing such entity the opportunity to respond in writing as to the reason for the alleged failure.

**MMIP 4.5.2 Provision of Data by ISO Participants**

Failure by an ISO Participant to provide information requested pursuant to MMIP 4.5.1, or otherwise to cooperate in the Market Surveillance Unit's data collection or investigation activities, may be treated as grounds for action against the ISO Participant entity concerned. Such action may lead to the imposition of such penalties or sanctions as are permitted under the ISO Tariff or related protocols approved by FERC

and may include possible exclusion from the ISO Markets or termination of any relevant ISO agreements or certifications. Before any such action is taken, the ISO Participant shall be provided the opportunity to respond in writing as to the reason for the alleged failure.

**MMIP 4.5.3 Dissemination of Data**

ISO Participants may request that the ISO provide data that it has collected; and, upon approval of the ISO CEO and at his sole discretion, such data may, subject to constraints on the ISO's resources, be provided by the ISO subject to due safeguards to protect confidential and commercially sensitive data. Where such activity imposes a significant burden or expense on the ISO, the data may be provided on the condition that a reasonable contribution to the cost incurred by the ISO is made to the ISO by the requesting party.

**MMIP 4.6 External Consulting Assistance and Expert Advice**

In carrying out any of its responsibilities under this MMIP 4, including the development of an information system, market monitoring indices and evaluation criteria, and the catalogs associated therewith, and in its analysis and ongoing evaluation of these catalogs and of the Activity Rules under MMIP 4.3, the Market Surveillance Unit may hire consulting assistance subject to the budgetary approval of the ISO CEO and may seek such expert external advice as it believes necessary.

**MMIP 4.7 Cooperation with PX Compliance Unit and Market Monitoring Committee**

In carrying out its responsibilities under this Protocol, the Market Surveillance Unit may at its discretion consult or cooperate in the manner it considers most appropriate with the PX's Compliance Unit and Market Monitoring Committee, or other entities within the PX that fulfill the analogous market monitoring functions, with respect to the following:

- (a) exchange of data subject to any limitations on the ISO's ability to disclose commercially sensitive information from other Scheduling Coordinators to the ISO, monitoring methodologies and results, and information on corrective, referral or enforcement actions taken;
- (b) monitoring of market performance;
- (c) joint analysis of data, subject to any limitations on the ISO's ability to disclose commercially sensitive information from other Scheduling Coordinators to the ISO, and monitoring results of markets and Market Participant behavior;
- (d) investigations of specific market abuses; and
- (e) proposals for concerted action on enforcement measures, e.g., as to suspensions from trading.

**MMIP 4.8 Liability for Damages**

As provided in Section 14.1 and 14.2 of the ISO Tariff, the Market Surveillance Unit, the ISO MSC, the ISO CEO and other ISO staff shall not be liable to any Market Participant under any circumstances whatsoever for any matter described in those sections, including but not limited to any financial loss or loss of economic advantage resulting from the performance or non-performance by such ISO entities of their functions under this Protocol.

**MMIP 5 ISO MARKET SURVEILLANCE COMMITTEE**

**MMIP 5.1 Establishment**

There shall be established on or before ISO Operations Date an ISO Market Surveillance Committee (ISO MSC), whose role it shall be to provide independent external expertise on the ISO market monitoring process as described in this Protocol and, in particular, to provide independent expert advice and recommendations to the ISO CEO and Governing Board. Members of the Committee are not employees or agents of the ISO. Members are not available to provide expert witness services to the ISO or any other party in a FERC proceeding relating to the ISO, except to the extent that the ISO MSC makes an advance determination that providing such service is not inconsistent with the independence of the ISO MSC.

**MMIP 5.2 Composition**

**MMIP 5.2.1 Qualifications**

The ISO MSC shall comprise a body of three or more independent and recognized experts whose combined professional expertise and experience shall encompass the following:

**MMIP 5.2.1.1** economics, with emphasis on antitrust, competition, and market power issues in the electricity industry;

**MMIP 5.2.1.2** experience in operational aspects of generation and transmission in electricity markets;

**MMIP 5.2.1.3** experience in antitrust or competition law in regulated industries; and

**MMIP 5.2.1.4** financial expertise relevant to energy or other commodity trading.

**MMIP 5.2.2 Criteria for Independence**

Each member of the ISO MSC must meet the following criteria for independence in order to be appointed:

**MMIP 5.2.2.1** no material affiliation, through employment, consulting or otherwise, with any Market Participant or affiliate thereof consistent with the pertinent FERC Standards of Conduct; and

**MMIP 5.2.2.2** no material financial interest in any Market Participant or affiliate thereof consistent with the pertinent FERC Standards of Conduct.

**MMIP 5.3 Appointments to the ISO MSC**

For each position on the ISO MSC, the ISO CEO shall conduct a thorough search and requisite due diligence to develop a nomination to the ISO Governing Board, which nomination shall be consistent with meeting the combined professional expertise and experience of the ISO MSC set forth in MMIP 5.2.1 and with the criteria for independence set forth in MMIP 5.2.2. The ISO Governing Board shall expeditiously consider such nominations. If the nomination is approved, the ISO CEO shall appoint the candidate so nominated to the ISO MSC. If the nomination is rejected, the ISO CEO shall expeditiously proceed to develop another nomination in accordance with this MMIP.

**MMIP 5.4 Compensation and Reimbursements**

Members of the ISO MSC shall be compensated on such basis as the ISO Governing Board shall from time to time determine.

Members of the ISO MSC shall receive prompt reimbursement for all expenses reasonably incurred in the execution of their responsibilities under this MMIP 5.

**MMIP 5.5 Liability for Damages**

As provided in Section 14.1 and 14.2 of the ISO Tariff, the Market Surveillance Unit, the ISO MSC, the ISO CEO and other ISO staff shall not be liable to any Market Participant under any circumstances whatsoever for any matter described in those sections, including but not limited to any financial loss or loss of economic advantage resulting from the performance or non-performance by such ISO entities of their functions under this Protocol.

**MMIP 6 SPECIFIC FUNCTIONS OF ISO MARKET SURVEILLANCE COMMITTEE (ISO MSC)**

**MMIP 6.1 Information Gathering and Evaluation Criteria**

The ISO MSC shall review the initial catalogs of information and data and of evaluation criteria developed by the Market Surveillance Unit pursuant to MMIP 4 and shall propose such changes, additions or deletions to such catalogs or items therein as it sees fit. In so doing, the ISO MSC shall have full discretion to specify database items or evaluation criteria for inclusion in the pertinent catalog.

**MMIP 6.2 Evaluation of Information**

The ISO MSC may, upon request of the Market Surveillance Unit, the ISO CEO or the ISO Governing Board, or on its own volition, evaluate such information or data, including as may be collected by the Market Surveillance Unit on the basis of the evaluation criteria developed by the Market Surveillance Unit or on such further articulated evaluation criteria developed by the ISO MSC. In carrying out such evaluations, the ISO MSC may consult the PX's Compliance Unit and Market Monitoring Committee with respect to any matter relating to such evaluations.

**MMIP 6.3 Reports and Recommendations**

**MMIP 6.3.1 Required Reports**

All evaluations carried out by the ISO MSC pursuant to MMIP 6.2, and any recommendations emanating from such evaluations, shall be embodied by the ISO MSC in written reports to the ISO CEO and ISO Governing Board and shall be made publicly available subject to due restrictions on dissemination of confidential or commercially sensitive information. The ISO MSC may submit any report to FERC, subject to due restrictions on dissemination of confidential or commercially sensitive information.

**MMIP 6.3.2 Additional Reports**

The ISO MSC may make such additional reports and recommendations as it sees fit relating to the monitoring program referred to in this Protocol, the analysis of information, the evaluation criteria or any corrective or enforcement actions proposed by the Market Surveillance Unit or proposed of its own volition.

**MMIP 6.4 Publication of Reports and Recommendations**

Upon request of the ISO MSC, the ISO CEO shall publish reports and recommendations of the ISO MSC or incorporate them, if consistent, into the ISO's own reports or recommendations.

**MMIP 7 IMPLEMENTATION OF RECOMMENDATIONS**

**MMIP 7.1 Plan and Activity Rule Changes**

Upon recommendation of the ISO CEO, acting on the advice of the Market Surveillance Unit, or based on the independent recommendation of the ISO MSC, the ISO Governing Board may make such changes as it believes are appropriate to any ISO Protocol or Agreement or to any Activity Rules applicable in accordance with MMIP 9.

**MMIP 7.2 Tariff Changes**

Upon recommendation of the ISO CEO, acting on the advice of the Market Surveillance Unit, or based on the independent recommendation of the ISO MSC, the ISO Governing Board shall consider and may adopt proposed ISO Tariff changes in accordance with MMIP 9.

**MMIP 7.3 Sanctions and Penalties**

Upon recommendation of the ISO CEO, acting on the advice of the Market Surveillance Unit, or based on the independent recommendation of the ISO MSC, and after an audit by the Market Surveillance Unit the ISO Governing Board may impose such sanctions or penalties as it believes necessary and as are permitted under the ISO Tariff and related protocols approved by FERC; or it may make any such referral to such regulatory or antitrust agency as it sees fit to recommend the imposition of sanctions and penalties. The audit by the Market Surveillance Unit shall investigate whether the abuse or

behavior identified meets the criteria for and has such effect as to warrant the sanctions or penalties recommended.

**MMIP 8 PUBLICATION OF INFORMATION**

**MMIP 8.1 Market Monitoring Data and Indices**

The ISO Market Surveillance Unit shall, pursuant to MMIP 4.1, develop a catalog of data and indices. Upon approval of the ISO CEO, such catalogs shall be duly published on the ISO Home Page and disseminated to all ISO Participants.

**MMIP 8.2 Regular Information Publication**

The following information shall be published by the ISO Market Surveillance Unit, in a medium and form helpful to Market Participants, on a regular basis:

**MMIP 8.2.1.1** Market Clearing Prices for Energy;

**MMIP 8.2.1.2** Market Clearing Prices for Ancillary Services;

**MMIP 8.2.1.3** Aggregate Supply and Demand for each Zone;

**MMIP 8.2.1.4** Congestion and Congestion costs;

**MMIP 8.2.1.5** Generation Unit and transmission line outages; and

**MMIP 8.2.1.6** Hydro-electric Generation

**MMIP 8.3 Reports to Regulators**

The Market Surveillance Unit shall develop a schedule, format and proposed table of contents for the annual reports to FERC, and such other reports as may be required by FERC, which shall be submitted as a proposal to the ISO CEO and ISO MSC. Upon approval of such proposal, the Market Surveillance Unit shall proceed to prepare such reports according to such schedule for approval and submission by the ISO CEO to the Governing Board and to the regulatory agency concerned.

**MMIP 9 AMENDMENTS**

If the ISO determines a need for an amendment to this Protocol, the ISO will follow the requirements as set forth in Section 16 of the ISO Tariff.