

**CAISO TARIFF APPENDIX M**

Procedures for Addressing Parallel Flows

PROCEDURES FOR ADDRESSING PARALLEL FLOWS

The North American Electric Reliability Corporation's (NERC) Qualified Path Unscheduled Flow Relief for the Western Electricity Coordinating Council (WECC), Reliability Standard WECC-IRO-STD-006-0 filed by NERC in Docket No. RR07-11-000 on March 26, 2007, and approved by the Commission on June 8, 2007, and any amendments thereto, are hereby incorporated and made part of this Tariff. See [www.nerc.com](http://www.nerc.com) for the current version of the NERC's Qualified Path Unscheduled Flow Relief Procedures for WECC.

**[Eight Sheet Numbers Reserved for Future Filings.]**

**CAISO TARIFF APPENDIX N**

**[NOT USED]**

**[Ten Sheet Numbers Reserved for Future Filings.]**

**CCAISO TARIFF APPENDIX O**  
**CAISO Market Surveillance Committee**

**CAISO TARIFF APPENDIX O**  
**CAISO Market Surveillance Committee**

**1. Introduction and Purpose**

1.1 There shall be established a Market Surveillance Committee (MSC), whose role it shall be to serve as an external market advisor to the CAISO CEO and CAISO Governing Board. The MSC shall provide independent external expertise on the CAISO market monitoring process and, in particular, provide independent expert advice and recommendations to the CAISO CEO and Governing Board.

**2. Definitions**

2.1 This section intentionally left blank.

**3. Independence and Oversight**

3.1 This section intentionally left blank.

**4. Structure**

4.1 The MSC shall comprise a body of three or more independent and recognized experts whose combined professional expertise and experience shall encompass the following: (a) economics, with emphasis on antitrust, competition, and market power issues in the electricity industry; (b) experience in operational aspects of Generation and transmission in electricity markets; (c) experience in antitrust or competition law in regulated industries; and (d) financial expertise relevant to energy or other commodity trading.

4.2 Members of the MSC shall be compensated on such basis as the CAISO Governing Board shall from time to time determine. Members of the MSC shall receive prompt reimbursement for all expenses reasonably incurred in the execution of their responsibilities under this Appendix O.

4.3 Members of the MSC shall not be, and shall not be understood to be, employees or agents of the CAISO.

4.4 For each position on the MSC, the CAISO CEO shall conduct a thorough search and requisite due diligence to develop a nomination to the CAISO Governing Board, which nomination shall be consistent with meeting the combined professional expertise and experience of the MSC set forth in Section 4.1 of this Appendix O and with the criteria for independence set forth in Section 9 of this Appendix O. The CAISO Governing Board shall expeditiously consider such nominations. If the nomination is approved, the CAISO CEO shall appoint the candidate so nominated to the MSC. If the nomination is rejected, the CAISO CEO shall expeditiously proceed to develop another nomination.

**4.5** No member of the MSC shall be liable to any Market Participant under any circumstances whatsoever for any matter, including but not limited to any financial loss or loss of economic advantage resulting from the performance or non-performance by the MSC of its functions under this CAISO Tariff.

**5. Duties of the Market Surveillance Committee**

**5.1** The MSC may, upon request of DMM, the CAISO management or the CAISO Governing Board, or on its own initiative, evaluate information and data described in Section 7.1 of this Appendix O, including as may be collected by DMM on the basis of the evaluation criteria developed by DMM or on such further articulated evaluation criteria developed by the MSC.

**5.2** The MSC may, upon request of DMM, the CAISO management or the CAISO Governing Board, or on its own initiative, recommend such changes as it believes are appropriate to the CAISO Tariff, any CAISO Business Practice Manual, any CAISO agreement or any Rules of Conduct applicable in accordance with Section 22.11 of this CAISO Tariff. The CAISO Governing Board shall consider and may adopt proposed CAISO Tariff changes in accordance with Section 22.11 of this CAISO Tariff.

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

**5.4** The MSC may on its own initiative recommend that the CAISO impose Sanctions and penalties for violations of the CAISO Tariff and related protocols. Upon recommendation of the MSC, the CAISO may impose such Sanctions or penalties as it believes necessary and as are permitted under the CAISO Tariff and related protocols approved by FERC.

**5.5** The MSC may make such additional reports and recommendations as it sees fit relating to the monitoring program referred to in this CAISO Tariff, the analysis of information, the evaluation criteria or any corrective or enforcement actions proposed by DMM or proposed on its own initiative.

**5.6** The MSC may review in draft form, and provide pre-publication comment on, all quarterly and annual reports DMM produces pursuant to Section 5.2 of Appendix P.

**5.7** The MSC may review in draft form, and provide pre-submission comment on, all referrals to FERC pursuant to section Sections 11 and 12 of Appendix P.

**5.8** The MSC may not participate in the administration of CAISO's tariff or conduct prospective market mitigation.

**6. Duties of the CAISO.**

**6.1** CAISO responsibilities not expressly assigned to the MSC, DMM, or any specific individual or entity in this Appendix O remain with the CAISO.

**7. Data Access, Collection, and Retention**

**7.1** The MSC shall review the initial catalogs of information and data and of evaluation criteria developed by DMM pursuant to Sections 7.4 and 7.5 of Appendix P and shall propose such changes, additions or deletions to such catalogs or items therein as it sees fit. In so doing, the MSC shall have full discretion to specify database items or evaluation criteria for inclusion in the pertinent catalog.

**8 Information Sharing**

**8.1** All evaluations carried out by the MSC pursuant to Section 5.1 of this Appendix O, and any recommendations emanating from such evaluations, shall be embodied by the MSC in written reports to the CAISO CEO and CAISO Governing Board, and DMM, and shall be made publicly available subject to due restrictions on dissemination of confidential or commercially sensitive information. The MSC may submit any MSC report to FERC, subject to due restrictions on dissemination of confidential or commercially sensitive information.

**9. Ethics**

**9.1** Members of the MSC shall have no professional or commercial affiliation with a Market Participant where such affiliation would tend to affect, or give the appearance of affecting, their judgment in the performance of their duties.

**9.2** Members of the MSC shall not serve as officers, employees, or partners of a Market Participant.

**9.3** Members of the MSC shall have no material financial interest in any Market Participant or affiliate, with the exception of mutual funds and non-directed investments.

**9.4** Members of the MSC shall not engage in any market transactions other than in the performance of their duties under the CAISO tariff.

**9.5** Members of the MSC shall not be compensated, other than by CAISO, for any expert witness testimony or other commercial services in connection with any legal or regulatory proceeding or commercial transaction relating to the CAISO.

**9.6** Members of the MSC shall not accept anything from a Market Participant any item with a value in excess of \$25.

**9.7** Members of the MSC shall advise the CAISO Governing Board in the event they seek employment with a Market Participant, and must disqualify themselves from participating in any matter that would have an effect on the financial interest of the Market Participant.



**9.7.1** For the purposes of this provision, the term “seeking employment” shall have the same meaning it does in 5 CFR § 2635.603, or its successor provision.

**10. CAISO-Specific Provisions**

**10.1** This section intentionally left blank.

**11 Protocol on Referrals of Investigations to the Office of Enforcement**

**11.1** This section intentionally left blank.

**12. Protocol on Referrals of Perceived Market Design Flaws and Recommended Tariff Changes to the Office of Energy Market Regulation**

**12.1** This section intentionally left blank.

**CAISO TARIFF APPENDIX P**  
**CAISO Department of Market Monitoring**

## CAISO TARIFF APPENDIX P

### CAISO Department of Market Monitoring

#### 1 Introduction and Purpose

##### 1.1 Establishment

There shall be established within the CAISO a Department of Market Monitoring (DMM).

##### 1.2 Mission Statement

To provide independent oversight and analysis of the CAISO Markets for the protection of consumers and Market Participants by the identification and reporting of market design flaws, potential market rule violations, and market power abuses.

#### 2 Definitions

2.1 This section intentionally left blank.

#### 3 Independence and Oversight

##### 3.1 Department of Market Monitoring

DMM shall report to the CAISO Governing Board on all matters pertaining to the core monitoring duties specified under Section 5 of this Appendix P, and shall have direct access to the individual CAISO Governing Board members at any time. DMM shall report to the CAISO CEO or his or her designee for administrative purposes, including matters relating to the internal administration of DMM. DMM shall advise the CAISO Governing Board about DMM's independent analysis of the CAISO's markets and its independent identification of market design flaws and market power abuses, and DMM also shall inform CAISO management about such matters.

3.2 The CAISO may not alter any reports generated by DMM or dictate the conclusions reached by DMM. The CAISO may, however, comment upon drafts of DMM reports where such right is otherwise conferred by this CAISO Tariff.

3.3 The employment of the Director of DMM shall not be terminated without the approval of the CAISO Governing Board.

#### 4 Structure

4.1 DMM shall be adequately staffed by the CAISO with full-time CAISO staff with the experience and qualifications necessary to fulfill the functions referred to in this CAISO Tariff. Such qualifications may include professional training pertinent to and experience in the operation of markets analogous to CAISO Markets, in the electric power industry, and in the field of competition and antitrust law, economics and policy. Subject to the respective oversight responsibilities as defined in this CAISO Tariff of the CAISO Governing Board and the CAISO CEO, responsibility for overseeing the conduct and operations of DMM shall be conferred upon the Director of DMM.

**4.2** Neither DMM nor any DMM employee shall be liable to any Market Participant under any circumstances whatsoever for any matter, including but not limited to any financial loss or loss of economic advantage resulting from the performance or non-performance by DMM of its functions under this CAISO Tariff.

**4.3** CAISO shall provide DMM access to the resources, personnel, and consulting assistance (internal and external) sufficient to enable DMM to carry out its duties independently as defined under this Appendix P. The CAISO shall ensure DMM personnel meet the general employment requirements applicable to CAISO employees.

## **5 Duties of Market Monitor**

### **5.1 Review of Market Rules**

DMM shall review existing and proposed market rules, tariff provisions, and market design elements and recommend proposed rule and tariff changes to the CAISO, the CAISO Governing Board, FERC staff, the California Public Utilities Commission, Market Participants, and other interested entities.

**5.1.1** DMM's review shall include, but is not limited to, identification of flaws in the overall structure of the CAISO Markets that may reveal undue concentrations of market power or other structural flaws.

**5.1.2** DMM's responsibility to propose market design changes shall not extend to effectuating its proposed market design itself.

**5.1.3** DMM must limit distribution of its identifications and recommendations to CAISO, the CAISO Governing Board, and FERC staff in the event that DMM believes broader dissemination of its identifications and recommendations could lead to exploitation of the identified market rule or design flaw. Where DMM so limits the distribution, it shall explain to FERC staff why further dissemination should be avoided.

**5.1.4** Section 5.1 of this Appendix P shall not be understood to impose upon DMM the obligation to conduct an independent evaluation of every existing market rule, tariff provision, and market design element. DMM need only report on market rule, tariff, or market design elements it otherwise believes merit evaluation and scrutiny.

**5.1.5** Per a request from the CAISO, or on its own initiative, DMM may provide a draft version of any report DMM prepares under Section 5.1 of this Appendix P to the CAISO for comment. DMM may, but shall not be required to, amend its report in light of such comment.

**5.1.6** Any report DMM makes under Section 5.1 of this Appendix P is advisory in nature and does not obligate the CAISO to effectuate the recommended market rule, tariff, or market design change.

**5.1.7** Where the CAISO disagrees with DMM's recommendation pursuant to Section 5.1 of this Appendix P or DMM disagrees with a proposed market rule, tariff, or market design change, CAISO shall notify the FERC of such disagreement. Such notification shall be made in writing to the FERC Director of the Office of Energy Market Regulation as part of a referral under Section 12 of this Appendix P.

### **5.2 Review of Market Trends and Performance**

DMM shall review and report on market trends and the performance of the wholesale markets to the CAISO, the CAISO Governing Board, FERC staff, the California Public Utilities Commission, Market Participants, and other interested entities, on at least a quarterly basis and submit a more comprehensive annual state of the market report. Unless urgency requires otherwise, all annual and quarterly reports shall first be submitted to the MSC for review.

**5.2.1** In conjunction with the annual and quarterly reports issued under Section 5.2 of this Appendix P, DMM shall hold conference calls with FERC staff, staff of the California Public Utilities Commission, Market Participants, and other interested entities to discuss market trends and the performance of the wholesale markets.

**5.3** With the exception of those CAISO Tariff provisions enumerated in Section 11.1.3 of this Appendix P, DMM shall identify and notify the FERC's Office of Enforcement staff of instances in which a Market Participant's behavior or the behavior of the CAISO itself is suspected to constitute a Market Violation.

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

**5.5** Prohibition on Tariff Administration and Market Mitigation – DMM shall not participate in the administration of CAISO's Tariff or conduct prospective market mitigation.

**5.5.1** For the purposes of Section 5.5 of this Appendix P, the term "prospective market mitigation" shall have the same meaning as provided in Commission Order No. 719, P 375.

**5.5.2** DMM may conduct retrospective mitigation to the extent it is otherwise permitted to do so under this CAISO Tariff.

**5.5.3** DMM may provide the inputs required for CAISO to conduct any prospective mitigation that is otherwise permitted under this CAISO Tariff. Such inputs may include, but are not limited to, Default Energy Bids, identification of competitive transmission Constraints, and cost calculations.

## **6 Duties of the CAISO**

**6.1** CAISO responsibilities not expressly assigned to the MSC, DMM, or any specific individual or entity in this Appendix P remain with the CAISO.

## **7. Data Access, Collection, and Retention**

**7.1** The CAISO shall provide DMM access to the CAISO's databases of market information and any other market data necessary to enable DMM to carry out its duties as defined under this Appendix P.

**7.2** Any data created by DMM, including, but not limited to, reconfiguring of the CAISO's data, will be kept within the exclusive control of DMM. This requires that the CAISO must ensure that DMM has control over which parties have access to the data, as well as control over the format and configuration of such data.

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

**7.4** To develop the information system set forth in Section 7.3 of this Appendix P, DMM 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.

**7.5** DMM shall initially develop, and shall refine on the basis of experience, a catalog of the CAISO Market monitoring indices that it will use to evaluate the data so collected.

**7.6** DMM shall evaluate and reevaluate on an ongoing basis the data categories and market monitoring indices that it has developed under Sections 7.4 and 7.5 of this Appendix P, and the information it collects and receives from various other sources, including and in particular the CAISO's operation of the CAISO Markets. Such ongoing evaluations shall provide the basis for its reporting and publication responsibilities as set forth in this CAISO Tariff, for recommendations on proposed changes to this CAISO Tariff and CAISO Business Practice Manuals and other potential rules affecting the CAISO Markets, and for the development of criteria or standards for the initiation of proposed corrective or enforcement actions. In evaluating such information, the DMM may consult the MSC or such external bodies as may be appropriate.

## **8. Information Sharing**

**8.1** Tailored Requests for Information from a State Commission to DMM – DMM shall consider requests from a State Commission for specifically identified information or data concerning general market trends and the performance of the wholesale markets. DMM may deny a request when it determines, in its sole discretion, that complying with a request would be unreasonably burdensome or if it would interfere with the core market monitoring functions of DMM as defined in Section 5 of this Appendix P. For the avoidance of doubt, this Section 8.1 of Appendix P shall not apply to otherwise enforceable subpoenas, court orders, or any other form of compulsory process issued by, or on behalf of, a State Commission.

**8.1.1** DMM may agree to provide information about general market trends or performance. If DMM determines, in its sole discretion, that this information either is market sensitive or identifies an individual Market Participant, then the information may be shared only if the State Commission with which the information will be shared agrees in writing with the CAISO that the information will not be disclosed unless the State Commission has been directed to do so by a court of competent jurisdiction. The written agreement also must specify that if a State Commission is so directed to disclose such information, the State Commission will notify the CAISO before such information is disclosed. Once the CAISO receives such notification, the CAISO must notify the affected Market Participant promptly.

**8.1.2** DMM may agree to release to a State Commission raw CAISO data, but only after the information is redacted to satisfy any concerns that DMM may have about the need to maintain confidentiality.

**8.1.2.1** If DMM agrees to provide a State Commission with raw data that pertains to a specific Market Participant, DMM shall notify the affected Market Participant and give it the opportunity to contest the accuracy of the data. The affected Market Participant may provide to DMM a written statement providing context to the data. So long as the process of providing such a written statement does not unduly delay release of the data to the State Commission, DMM shall provide an unedited copy of such written statement to the State Commission concurrently with DMM's submission of the data to the State Commission.

**8.1.2.2.** If the affected Market Participant asserts that the data to be provided is commercially sensitive, DMM shall share such sensitive information or data only if the State Commission with which the information will be shared agrees in writing with the CAISO that the information shared will not be disclosed unless the State Commission has been directed to do so by a court of competent jurisdiction. The written agreement also must specify that if a State Commission is so directed to disclose such information, the State Commission will notify the CAISO before such information is disclosed. Once the CAISO receives such notification, the CAISO must notify the affected Market Participant promptly.

**8.1.3** DMM shall not provide any requested information or data that is designed to aid an enforcement action by an instrumentality or political subdivision of **any state of the United States of America**.

**8.1.4** DMM shall not provide any requested information or data that would impinge on the Commission's confidentiality rules regarding referrals to the Commission pursuant to Sections 11 or 12 of this Appendix P.

**8.2** When publicly available reports are made to one regulatory agency with competent jurisdiction, such as the FERC, DMM may simultaneously make such reports available to other regulatory agencies with legitimate interests in their contents, such as the California Public Utilities Commission, the California Energy Commission and/or the California Attorney General.

**8.3** The final results of DMM's ongoing evaluations under Section 7.6 of this Appendix P shall routinely and promptly be submitted to the MSC for comment.

**8.4** The catalogs of data and indices developed pursuant to Sections 7.4 and 7.5 of this Appendix P shall be duly published on the CAISO Website and disseminated to all Market Participants.

### **8.5 Collection and Dissemination of Information Specific to a Market Participant**

**8.5.1** DMM may request that Market Participants or other entities whose activities may affect the operation of the CAISO Markets submit any information or data determined by DMM to be potentially relevant. This data will be subject to due safeguards to protect confidential and commercially sensitive data. Failures by Market Participants to provide such data shall be treated under Section 37. In the event of failures by other entities to provide such data, the CAISO may take whatever action is available to it and appropriate for it to take, including reporting the failure to the pertinent regulatory agency, after providing such entity the opportunity to respond in writing as to the reason for the alleged failure and may include possible exclusion from the CAISO Markets or termination of any relevant CAISO agreements or certifications. Before any such action is taken, the CAISO Market Participant shall be provided the opportunity to respond in writing as to the reason for the alleged failure.

**8.5.2** Any Market Participant may request that the CAISO provide data, including data that DMM has collected under Section 8.5.1 of this Appendix P, that the CAISO has collected concerning that Market Participant. Subject to constraints on the CAISO's resources, subject to Section 7.2 of this Appendix P, and at the CAISO's sole discretion, such data may be provided by the CAISO subject to due safeguards to protect confidential and commercially sensitive data. Where such activity imposes a significant burden or expense on the CAISO, the data may be provided on the condition that a reasonable contribution to the cost incurred by the CAISO is made to the CAISO by the requesting party.

**8.6** Information related to the Transmission Planning Process in accordance with Section 24 the release of which DMM determines may harm competitive markets shall be deemed confidential.

## **9. Ethics.**

**9.1** **DMM employees shall have no professional or commercial affiliation with a Market Participant where such affiliation would tend to affect, or give the appearance of affecting, their judgment in the performance of their duties.**

**9.2** DMM employees shall not serve as officers, employees, or partners of a **Market Participant**.

**9.3** DMM employees shall have no material financial interest in any **Market Participant** or affiliate, with the exception of mutual funds and non-directed investments.

**9.4** DMM employees shall not engage in any market transactions other than in the performance of their duties under the **CAISO** Tariff.



**9.5** DMM employees shall not be compensated, other than by CAISO, for any expert witness testimony or other commercial services in connection with any legal or regulatory proceeding or commercial transaction relating to the CAISO.

**9.6** DMM employees shall not accept from a Market Participant any item with a value in excess of \$25.

**9.7** DMM employees shall advise a supervisor (or in the case of the Director of DMM, the CAISO CEO) in the event they seek employment with a Market Participant, and must disqualify themselves from participating in any matter that would have an effect on the financial interest of the Market Participant.

**9.7.1** For the purposes of this provision, the term "seeking employment" shall have the same meaning it does in 5 CFR § 2635.603, or its successor provision.

**9.8** DMM employees shall comply with the CAISO Employee Code of Conduct, as amended from time to time.

## **10. CAISO-Specific Provisions.**

**10.1** This section intentionally left blank.

## **11. Protocol on Referrals of Investigations to the Office of Enforcement.**

**11.1** DMM shall make a non-public referral to the Commission in all instances where DMM has reason to believe that a Market Violation has occurred. DMM's non-public referral shall provide sufficient credible information to warrant further investigation by the Commission. Once DMM has obtained sufficient credible information to warrant referral to the Commission, DMM shall immediately refer the matter to the Commission and desist from independent action related to the alleged Market Violation. DMM may, however, continue to monitor for any repeated instances of the activity by the same or other entities, which would constitute new Market Violations. DMM shall respond to requests from the Commission for any additional information in connection with the alleged Market Violation it has referred.

**11.1.1** The decision to make such a referral is committed to the sole discretion of DMM. In all such cases of direct referral, DMM shall promptly inform the CAISO Governing Board, the MSC and the CAISO CEO of the fact of and the content of the referral.

**11.1.2** For the avoidance of doubt, the CAISO itself is subject to referral by DMM.

**11.1.3** Section 11.1 of this Appendix P notwithstanding, DMM may, but need not, refer to the Commission a suspected violation of the following provisions of Section 37 of this CAISO Tariff: [37.2.1; 37.2.2; 37.2.4; 37.3.1; 37.4.1, 37.4.2; 37.4.3; 37.5.2; 37.6.1; 37.6.2; and 37.6.3.].

**11.2** All referrals to the Commission of alleged Market Violations are to be in writing, whether transmitted electronically, by fax, mail, or courier. DMM may alert the Commission orally in advance of the written referral.

**11.3** The referral is to be addressed to the Commission's Director of the Office of Enforcement, with a copy also directed to both the Director of the Office of Energy Market Regulation and the General Counsel.

**11.4** The referral is to include, but need not be limited to, the following information.

**11.4.1** The name[s] of and, if possible, the contact information for, the entity[ies] that allegedly took the action[s] that constituted the alleged Market Violation[s];

**11.4.2** The date[s] or time period during which the alleged Market Violation[s] occurred and whether the alleged wrongful conduct is ongoing;

**11.4.3** The specific rule or regulation, and/or tariff provision, that was allegedly violated, or the nature of any inappropriate dispatch that may have occurred;

**11.4.4** The specific act[s] or conduct that allegedly constituted the Market Violation;

**11.4.5** The consequences to the market resulting from the acts or conduct, including, if known, an estimate of economic impact on the market;

**11.4.6** If DMM believes that the act[s] or conduct constituted a violation of the anti-manipulation rule of Part 1c, a description of the alleged manipulative effect on market prices, market conditions, or market rules;

**11.4.7** Any other information DMM believes is relevant and may be helpful to the Commission.

**11.5** Following a referral to the Commission, DMM is to continue to notify and inform the Commission of any information that DMM learns of that may be related to the referral but DMM shall not undertake any investigative steps regarding the referral except at the express direction of the Commission or Commission Staff.

**12** PROTOCOL ON REFERRALS OF PERCEIVED MARKET DESIGN FLAWS AND  
RECOMMENDED TARIFF CHANGES TO THE OFFICE OF ENERGY MARKET REGULATION.

**12.1** DMM is to make a referral to the Commission in all instances where it has reason to believe market design flaws exist that it believes could effectively be remedied by rule or tariff changes. DMM must limit distribution of its identifications and recommendations to CAISO, the CAISO Governing Board, and to the Commission in the event it believes broader dissemination could lead to exploitation of the market design flaw, with an explanation of why further dissemination should be avoided at that time.

**12.2** All referrals to the Commission relating to perceived market design flaws and recommended tariff changes are to be in writing, whether transmitted electronically, by fax, mail, or courier. DMM may alert the Commission orally in advance of the written referral.

**12.3** The referral should be addressed to the Commission's Director of the Office of Energy Market Regulation, with copies directed to both the Director of the Office of Enforcement and the General Counsel.

**12.4** The referral is to include, but need not be limited to, the following information.

**12.4.1** A detailed narrative describing the perceived market design flaw[s];

**12.4.2** The consequences of the perceived market design flaw[s], including, if known, an estimate of economic impact on the market;

**12.4.3** The rule or tariff change(s) that DMM believes could remedy the perceived market design flaw;

**12.4.4** Any other information DMM believes is relevant and may be helpful to the Commission.

**12.5** Following a referral to the Commission, DMM is to continue to notify and inform the Commission of any additional information regarding the perceived market design flaw, its effects on the market, any additional or modified observations concerning the rule or tariff changes that could remedy the perceived design flaw, any recommendations made by DMM to CAISO, stakeholders, Market Participants or state commissions regarding the perceived design flaw, and any actions taken by CAISO regarding the perceived design flaw.

**[NOT USED]**

**[NOT USED]**

**CAISO TARIFF APPENDIX Q**  
**Eligible Intermittent Resources Protocol (EIRP)**

## APPENDIX Q

### Eligible Intermittent Resources Protocol (EIRP)

#### 1 SCOPE

##### 1.1 Scope of Application to Parties

This EIRP applies to the CAISO and to:

- (a) Scheduling Coordinators (SCs);
- (b) Eligible Intermittent Resources; and
- (c) Participating Intermittent Resources.

##### 1.2 Liability of the CAISO

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

#### 2 PARTICIPATING INTERMITTENT RESOURCE CERTIFICATION

##### 2.1 No Mandatory Participation

Eligible Intermittent Resources may elect to be scheduled and settled as the CAISO Tariff provides for Generating Units, and are not required to seek certification as Participating Intermittent Resources.

##### 2.2 Minimum Certification Requirements

Those Eligible Intermittent Resources that intend to become Participating Intermittent Resources must meet the following requirements.

###### 2.2.1 Agreements

The following agreements must be executed:

- (a) A Participating Generator Agreement that, among other things, binds the Participating Intermittent Resource to comply with the CAISO Tariff;

- (b) A Meter Service Agreement for CAISO Metered Entities; and
- (c) A letter of intent to become a Participating Intermittent Resource, which when executed and delivered to the CAISO shall initiate the process of certifying the Participating Intermittent Resource. The form of the letter of intent shall be specified by the CAISO and published on the CAISO Website.

### **2.2.2 Composition**

The CAISO shall develop criteria to determine whether one or more Eligible Intermittent Resources may be included within a Participating Intermittent Resource. Such criteria shall include:

- (a) A Participating Intermittent Resource must be at least 1 MW rated capacity.
- (b) A Participating Intermittent Resource may include one or more Eligible Intermittent Resources that have similar response to weather conditions or other variables relevant to forecasting Energy, as determined by the CAISO.
- (c) Each Participating Intermittent Resource shall be electrically connected at a single point on the CAISO Controlled Grid, except as otherwise permitted by the CAISO on a case-by-case basis as may be allowed under the CAISO Tariff.
- (d) The same Scheduling Coordinator must schedule all Eligible Intermittent Resources aggregated into a single Participating Intermittent Resource.

### **2.2.3 Equipment Installation**

A Participating Intermittent Resource must install and maintain the communication equipment required pursuant to Section 3 of this EIRP, and the equipment supporting forecast data required pursuant to Section 6 of this EIRP.

### **2.2.4 Forecast Model Validation**

The CAISO must determine that sufficient historic and real-time telemetered data are available to support an accurate and unbiased forecast of Energy generation by the Participating Intermittent Resource, according to the forecasting process validation criteria described in Section 4 of this EIRP.

### **2.2.5 Information Requirements For Participating Intermittent Resource Export Fee**

In order for the CAISO to administer, implement and calculate the Participating Intermittent Resource Export Fee, each Participating Intermittent Resource jointly with, and through, its Scheduling Coordinator must provide the CAISO with the following information and documents under the schedule and conditions set forth in this section.



The CAISO will maintain the confidentiality of all information and documents received under this section in accordance with CAISO Tariff Section 20 et seq.

- (a) A certification, in the form posted on the CAISO Website, signed by an officer of the Participating Intermittent Resource and its Scheduling Coordinator, identifying (1) the PIR Export Percentage under Section 5.3.2 of this EIRP, if any, and basis thereof, and (2) each contract to sell Energy or capacity from the Participating Intermittent Resource, including for each such contract, the counterparty, start and end dates, delivery point(s), quantity in MW, other temporal terms, i.e., seasonal or hourly limitations.

The certification must be updated by resubmission to the CAISO (1) upon a request to modify the composition of the Participating Intermittent Resource under Section 2.4.2 of this EIRP; or (2) within ten (10) calendar days of final execution of a new contract or any change in counterparty, start and end dates, delivery point(s), quantity in MW, or other temporal terms, as described above, for any prior certified contract. All other contractual changes will not trigger the obligation for recertification;

- (b) Copies of all contracts, including changes, identified in the above-referenced certification; however, price information may be redacted from the contracts provided.

Each Participating Intermittent Resource, as of November 1, 2006, must initially provide the information requested by this Section 2.2.5 in accordance with a Market Notice provided by the CAISO to Participating Intermittent Resources. All other Eligible Intermittent Resources must satisfy this Section 2.2.5 in order to become a Participating Intermittent Resource after November 1, 2006.

### **2.3 Notice of Certification**

When all requirements described in Section 2.2 of this EIRP have been fulfilled, the CAISO shall notify the Scheduling Coordinator and the representatives of the Eligible Intermittent Resources comprising the Participating Intermittent Resource that the Participating Intermittent Resource has been certified, and is eligible for the settlement terms provided under Section 11.12 of the CAISO Tariff, as conditioned by the terms of this EIRP.

### **2.4 Requirements After Certification**

#### **2.4.1 Forecast Fee**

Beginning on the date first certified, a Participating Intermittent Resource must pay the Forecast Fee for all metered Energy generated by the Participating Intermittent Resource over the duration of the commitment indicated in the letter of intent described in Section 2.2.1(c) of this EIRP.

The amount of the Forecast Fee shall be determined so as to recover the projected annual costs related to developing Energy forecasting systems, generating forecasts, validating forecasts, and monitoring forecast performance, that are incurred by the CAISO as a direct result of participation by Participating Intermittent Resources in CAISO Markets, divided by the projected annual Energy production by all Participating Intermittent Resources.

The initial rate for the Forecast Fee, and all subsequent rate changes as may be necessary from time to time to recover costs incurred by the CAISO for the forecasting conducted on the behalf of Participating Intermittent Resources, shall be posted on the CAISO Website. In no event shall the level of the Forecast Fee exceed the amount specified in CAISO Tariff Appendix F, Schedule 4.

#### **2.4.2 Modification of Participating Intermittent Resource Composition**

A Participating Intermittent Resource may seek to modify the composition of the Participating Intermittent Resource (e.g., by adding or eliminating an Eligible Intermittent Resource from the Participating Intermittent Resource). Such changes shall not be implemented without prior compliance with the written approval by the CAISO. The CAISO will apply consistent criteria and expeditiously review any proposed changes in the composition of a Participating Intermittent Resource.

#### **2.4.3 Changes in Scheduling Coordinator**

This EIRP does not impose any additional requirement for CAISO approval to change the Scheduling Coordinator for an approved Participating Intermittent Resource than would otherwise apply under the CAISO Tariff to changes in the Scheduling Coordinator representing a Generating Unit.

#### **2.4.4 Continuing Obligation**

A Participating Intermittent Resource must meet all obligations established for Participating Intermittent Resources under the CAISO Tariff and this EIRP, and must fully cooperate in providing all data, other information, and authorizations the CAISO reasonably requests to fulfill its obligation to validate forecast models, explain deviations, and implement the Participating Intermittent Resource Export Fees.

#### **2.4.5 Failure to Perform**

If the CAISO determines that a material deficiency has arisen in the Participating Intermittent Resource's fulfillment of its obligations under the CAISO Tariff and this EIRP, and such Participating Intermittent Resource fails to promptly correct such deficiencies when notified by the CAISO, then the eligibility of the Participating Intermittent Resource for the settlement accommodations provided in Section 11.12 of the CAISO Tariff shall be suspended until such time that the unavailable data is provided or other material deficiency is corrected to the CAISO's reasonable satisfaction. Such suspension shall

not relieve the Scheduling Coordinator for the deficient Participating Intermittent Resource from paying the Forecast Fee over the duration of the period covered by the letter of intent described in Section 2.2.1(c) of this EIRP.

### **3 COMMUNICATIONS**

#### **3.1 Forecast Data**

The CAISO may require various data relevant to forecasting Energy from the Participating Intermittent Resource to be telemetered to the CAISO, including appropriate operational data, meteorological data or other data reasonably necessary to forecast Energy.

#### **3.2 Standards**

The standards for communications shall be the monitoring and communications requirements for Generating Units providing only Energy; as such standards may be amended from time to time, and published on the CAISO Website.

#### **3.3 Cost Responsibility**

An applicant for certification as a Participating Intermittent Resource is responsible for expenses associated with engineering, installation, operation and maintenance of required communication equipment.

### **4 FORECASTING**

The CAISO is responsible for overseeing the development of tools or services to forecast Energy for Participating Intermittent Resources. The CAISO will use its best efforts to develop accurate and unbiased forecasts, as limited by the availability of relevant explanatory data. Objective criteria and thresholds for unbiased, accurate forecasts shall be published on the CAISO Website, and shall be used to certify Participating Intermittent Resources in accordance with Section 2.2.4 of this EIRP.

#### **4.1 Hour-Ahead Forecast**

The CAISO shall develop expert, independent hourly forecasts of Energy generation on each Participating Intermittent Resource. A forecast shall be published each hour on the half hour for each of the next seven operating hours. Other forecasts, including a Day-Ahead forecast, may be developed at the CAISO's discretion. The Scheduling Coordinator representing the Participating Intermittent Resource must use the hour-ahead forecast that is available 30 minutes prior to the deadline for submitting the HASP/RTM Bids. The CAISO shall use best efforts to provide reliable and timely

forecasts. However, if the CAISO fails to deliver the hour-ahead forecast to the Scheduling Coordinator prior to 15 minutes before the deadline for submitting HASP/RTM Bids, then the hour-ahead forecast shall be the most recent Energy forecast provided by the CAISO to the Scheduling Coordinator for the operating hour for which Bids are next due.

#### **4.2 Forecast Calibration**

The CAISO shall calibrate the forecast to eliminate bias as measured by net MWh deviations across any and all relevant time periods to minimize the expected cumulative net charges or payments that are recovered or allocated through Section 11.12 of the CAISO Tariff.

#### **4.3 Confidentiality**

The CAISO shall maintain the confidentiality of proprietary data for each Participating Intermittent Resource in accordance with Section 20 of the CAISO Tariff.

### **5 SCHEDULING AND SETTLEMENT**

#### **5.1 Schedules**

Scheduling Coordinators shall be required to submit HASP/RTM Bids(MWh) for the Generating Units that comprise each Participating Intermittent Resource that are identical, in the aggregate, to the hour-ahead forecast published for that Participating Intermittent Resource (MWh).

#### **5.2 Settlement**

After a Participating Intermittent Resource is certified, Settlement shall be determined for each Settlement Period based on consistency of Bids submitted on behalf of such Participating Intermittent Resources with the rules specified in the CAISO Tariff and this EIRP.

#### **5.3 Participating Intermittent Resource Export Fee**

##### **5.3.1 Exemptions**

After November 1, 2006, Participating Intermittent Resources shall be subject to the Participating Intermittent Resource Export Fee, as set forth in Schedule 4 of Appendix F, for Energy generated, except to the extent the Participating Intermittent Resource is exempt under one or more of the following conditions:

- (a) The owner of a Participating Intermittent Resource, as of November 1, 2006, utilizes the Energy generated from the Participating Intermittent Resource to meet its own Native Load outside the CAISO Balancing Authority Area. Should any Participating Intermittent Resource subject to this exemption increase its PMax set forth in the CAISO's Master File by modification under Section 2.4.2 of this EIRP, the exemption will not apply to the added capacity unless exempt under another subsection of this Section 5.3.1.

If the Participating Intermittent Resource subject to this exemption changes ownership, the Participating Intermittent Resource Export Fee will apply, except where the prior exempt owner demonstrates that the entire output of the Participating Intermittent Resource continues to be delivered to the exempt owner under a power purchase agreement for the purpose of serving the prior exempt owner's Native Load. The exemption will then continue only for the period of the power purchase agreement as provided in accordance with Section 2.2.5 of this EIRP and cannot exceed the MW quantity originally exempted.

- (b) A Participating Intermittent Resource demonstrates in its certification under Section 2.2.5(a) of this EIRP an export contract with a starting term prior to November 1, 2006. An export contract is any power purchase agreement to sell Energy to any entity other than a Load Serving Entity with an obligation under law or franchise to serve Demand within the CAISO Balancing Authority Area.

The exemption will apply to any extension of the current export contract through an evergreen or other existing extension provision. The exemption terminates upon termination of the export contract. Should any Participating Intermittent Resource subject to this exemption increase its PMax set forth in the CAISO's Master File by modification under Section 2.4.2 of this EIRP, the exemption will apply only to Energy generated up to the contract quantity, unless the Participating Intermittent Resource demonstrates a basis for exemption under subsection (c) for the expanded capacity.

- (c) A Participating Intermittent Resource demonstrates in its certification under Section 2.2.5(a) of this EIRP a contract to sell Energy to a Load Serving Entity with Native Load within the CAISO Balancing Authority Area. Energy service providers with contractual obligations with customers within the CAISO Balancing Authority Area would be deemed a Load Serving Entity with an obligation to serve Native Load within the CAISO Balancing Authority Area.

The exemption will apply to any extension of the current contract through an evergreen or other existing extension provision. The exemption terminates upon termination of the contract. Should any Participating Intermittent Resource subject to this exemption increase its PMax set forth in the CAISO's Master File by modification under Section 2.4.2 of this EIRP, the exemption will continue to apply only to Energy generated up to the contract quantity unless the Participating Intermittent Resource demonstrates a basis for exemption under this subsection (c) for the expanded capacity.

### **5.3.2 Participating Intermittent Resource Export Percentage**

Based on the information required in Section 2.2.5 of this EIRP and application of the exemptions to the Participating Intermittent Resource Export Fee in Section 5.3.1 of this EIRP, the CAISO will determine a PIR Export Percentage for each Participating Intermittent Resource that will be calculated as the ratio of the Participating Intermittent Resource's PMax in the CAISO Master File minus the MW, subject to an exemption under Section 5.3.1 of this EIRP on a MW basis to the Participating Intermittent Resource's PMax in the CAISO Master File. For example, a Participating Intermittent Resource with a PMax of 100 MW and a contract with a CAISO Balancing Authority Area Load Serving Entity for 40 MW would have a PIR Export Percentage of  $(100-40)/100 = 60\%$ . A Participating Intermittent Resource with a PIR Export Percentage greater than zero (0) will be deemed an Exporting Participant Intermittent Resource. The CAISO will notify the Participating Intermittent Resource and its Scheduling Coordinator of the facility's PIR Export Percentage. Any dispute regarding the CAISO's determination of the PIR Export Percentage shall be subject to the dispute resolution procedures under Section 13 of the CAISO Tariff.

### **5.3.3 Quarterly Application of Participating Intermittent Resource Export Fee**

Each quarter the CAISO will charge Exporting Participating Intermittent Resources the Participating Intermittent Resource Export Fee, as set forth in Schedule 4 of Appendix F.

### **5.3.4 Allocation of Credit for Participating Intermittent Resource Export Fees Received**

Payments received by the CAISO from application of the Participating Intermittent Export Fee in accordance with this Section 5.3 shall be allocated as a credit on a quarterly basis to Scheduling Coordinators with Net Negative Uninstructed Deviations in proportion to the amount of Net Negative Uninstructed Deviations that each Scheduling Coordinator was assessed for Participating Intermittent Resources Settlement charges for the applicable CAISO Charge Code during the prior quarter.

### **5.3.5 Recording of Exemptions and Notice of Termination**

The CAISO will record any exemption period ending date, if applicable, for each Participating Intermittent Resource. At the conclusion of the exemption period, the CAISO will notify the Scheduling Coordinator for the Participating Intermittent Resource that the facility is no longer exempt from the Participating Intermittent Resource Export Fee.

### **5.3.6 Annual Confirmation**

On December 31 of each calendar year, each Participating Intermittent Resource shall confirm in the form posted on the CAISO Website, signed by an officer of the Participating Intermittent Resource, that the operations of the Participating Intermittent Resource are consistent with any certification(s) provided to the CAISO under Section 2.2.5 of this EIRP.

### **5.3.7 Audit Rights**

In addition to the rights set forth in CAISO Tariff Section 4.6.9, the CAISO shall have the right to contact any counterparty to a contract relied upon under Section 5.3.1 of this EIRP for purposes of determining compliance with this EIRP.

## **6 DATA COLLECTION FACILITIES**

The Participating Intermittent Resource must install and maintain equipment to collect, record and transmit data that the CAISO reasonably determines is necessary to develop and support a forecast model that meets the requirements of Section 4 of this EIRP.

### **6.1 Wind Resources**

A Participating Intermittent Resource powered by wind must install at least one meteorological tower at a project location that is representative of the microclimate within the project boundary.

The meteorological tower must rely on equipment typically used in the wind industry to continuously monitor weather conditions at a wind resource site. Data collected shall be consistent with requirements published on the CAISO Website. Such data must be gathered and telemetered to the CAISO in accordance with Section 3 of this EIRP.

If objective standards developed by the CAISO indicate that the meteorological data may not be sufficiently representative of conditions affecting Energy output or changes in Energy output by that Participating Intermittent Resource, then the CAISO may require that additional meteorological equipment be temporarily installed at another location within the project boundary. The cost of such equipment, which may be temporarily installed by the Participating Intermittent Resource or the CAISO, shall be the responsibility of the Participating Intermittent Resource.

If objective standards indicate that the data collected from such a temporary site contribute significantly to the development of an accurate and unbiased forecast, then the Participating Intermittent Resource shall be responsible for installing and arranging for the telemetry of data from an additional permanent meteorological tower at such site, and for the reasonable cost, if any, that the CAISO may have incurred to install and remove the temporary equipment. Relocation of the original meteorological tower to the new site will be allowed if the CAISO determines that a sufficiently accurate and unbiased forecast can be generated from a single relocated meteorological tower.

### **6.2 Other Eligible Intermittent Resources**

Eligible Intermittent Resources other than wind projects that wish to become Participating Intermittent Resources will be required to provide data of comparable relevance to estimating Energy generation. Standards will be developed as such projects are identified and will be posted on the CAISO Website.

**7 PROGRAM MONITORING**

The CAISO shall monitor the operation of these rules, and will in particular seek to eliminate any gaming opportunities provided by the flexibility provided Participating Intermittent Resources to self-select participation on an hourly basis.

Participating Intermittent Resources are expected to bid, schedule, and otherwise perform in good faith, and not seek to act strategically in a manner that causes financial gain through systematic behavior, where such gain results solely from the settlement accommodations provided under CAISO Tariff Section 11.12.

If requirements specified in this technical standard are not met, then Participating Intermittent Resource certification may be revoked pursuant to Section 2.4.5 of this EIRP. Any patterns of strategic behavior by Participating Intermittent Resources will be tracked, and the statistical significance of such deviations will be used by the CAISO to evaluate whether changes in the rules defined in this EIRP are appropriate.

The CAISO will monitor the impact of rules for Participating Intermittent Resources on Imbalance Energy and Regulation costs to the CAISO.

**8 AMENDMENTS**

If the CAISO determines a need for an amendment to this EIRP, the CAISO will follow the requirements as set forth in Section 15 of the CAISO Tariff.



**CAISO TARIFF APPENDIX R**  
**UDP Aggregation Protocol**

## **CAISO TARIFF APPENDIX R**

### **UDP Aggregation Protocol**

#### **1 SCOPE**

There are two types of UDP Aggregation classifications:

- (1) Basic UDP Aggregations: composed of Generating Units connected at the same substation and stepping up to the same voltage level bus bar, or
- (2) Custom UDP Aggregations: composed of Generating Units connected at different substations and/or different voltage levels, particularly where the Generating Units to be aggregated are separated by CAISO Controlled Grid facilities. Examples of a proposed custom UDP Aggregation include hydroelectric units operating on a common watershed (but having multiple different interconnection points), or geothermal units fed from a common geothermal steam supply.

#### **2 SUBMITTAL OF A REQUEST FOR UDP AGGREGATION**

Requests for UDP Aggregation are submitted to the CAISO and must include the following documentation:

- (1) A completed UDP Aggregation request form, which is available for downloading on the CAISO Website;
- (2) A simplified electrical one-line diagram, which illustrates each resource, the connection of the resources to each other and to the CAISO Balancing Authority Area;
- (3) For custom UDP Aggregations, a detailed description that explains physical operating interrelationships between the units, or, if there are no interrelationships, how the units are compatible and why an aggregation of these units for the purpose of calculating Uninstructed Deviation Penalties is reasonable.

#### **3 CAISO REVIEW OF A UDP AGGREGATION REQUEST**

Upon receipt of a completed request form and accompanying attachments, the CAISO shall review the request according to the criteria outlined herein. For basic UDP Aggregations, the CAISO shall review and approve or reject it within one week of receipt. The CAISO shall review and approve or reject a request for a custom UDP Aggregation within thirty (30) days of receipt.

### **3.1 Criteria for Reviewing a Request**

#### **3.1.1 Scheduling Coordinator and Interconnection Point**

Uninstructed Deviations may be aggregated for resources that are:

- (1) Represented by the same Scheduling Coordinator and
- (2) Connected to the same CAISO Controlled Grid bus and voltage level. The CAISO will consider, on a case-by-case basis, requests to aggregate Uninstructed Deviations among resources represented by the same Scheduling Coordinator but not sharing a common CAISO Controlled Grid bus and voltage level based on a CAISO review of impact on the CAISO Controlled Grid. In particular, the CAISO will consider whether the request concerns resources related by a common flow of fuel which cannot be interrupted without a substantial loss of efficiency of the combined output of all components; whether the Energy production from one resource necessarily causes Energy production from other resource(s); and whether the operational arrangement of resources determines the overall physical efficiency of the combined output of all of the resources.

#### **3.1.2 Additional Criteria**

Additional eligibility criteria for a UDP Aggregation are as follows:

- (1) Only Generating Units shall be eligible for UDP Aggregation. As a general rule, pump-generating Units (or a Physical Scheduling Plant [PSP] containing a pump-generating Unit) cannot be part of a UDP Aggregation. However, it is possible that Generating Units could form a UDP Aggregation comprised entirely of pump-generating Units whose operation is uniform, that is, units all operating in either Generation mode or all in pump mode, but never mixed.
- (2) UDP Aggregations cannot include any of the following:
  - (a) Load;
  - (b) Condition 2 Reliability Must-Run (RMR) Units;
  - (c) Participating Intermittent Resources; or
  - (d) Generating Units less than five (5) MW.
- (3) The resources must have CAISO direct telemetry and must be fully compliant with the CAISO's direct telemetry standards.

- (4) The Generating Units must have the same relative effect on all network elements for which the Generating Units have at least a five percent (5%) effectiveness factor, that is, for those network elements for which a one (1) MW change in the output of the Generating Unit changes the flow across that element by at least 0.05 MW. For the purposes of this item (4), the "same relative effect" means that the effectiveness factors of any Generating Unit relative to a network element cannot differ by more than ten percent (10%) from the midpoint effectiveness factor of all the units. The midpoint effectiveness is the arithmetic mean of the two most different effectiveness factors to be aggregated.
- (5) Custom UDP Aggregations involving units not directly connecting to the CAISO Controlled Grid must recognize the transfer limits and status of the intermediate local facilities.
- (6) The applicable PMax of aggregated groups of resources will exclude units that are not operating.

### **3.1.3 Approval of a Request**

If a UDP Aggregation request is approved, the CAISO shall create a new unique Resource ID, which reflects the identity or location of the units and stipulates the UDP Aggregation, but which cannot be used for scheduling purposes. The CAISO shall inform the Scheduling Coordinator of the approval and ask the Scheduling Coordinator to confirm the desired start date of the UDP Aggregation. When that confirmation has been received, the new aggregation will be entered into the CAISO systems. Unless otherwise agreed to by the Scheduling Coordinator and the CAISO, the UDP Aggregation will become effective on the first day of the month following approval. The units in an approved UDP Aggregation are obligated to follow their individual Schedules and instructions at all times.

### **3.1.4 Rejection of a Request**

If the CAISO determines that the proposed UDP Aggregation is likely to impact grid reliability or the reliability of transmission systems or equipment of intermediate entities between the relevant resources and the CAISO Controlled Grid, the request will be rejected. If the CAISO rejects a request, the CAISO shall inform the Scheduling Coordinator, and forward to it the reason for the rejection. The CAISO may suggest alternative solutions if it has adequate time and data. The Scheduling Coordinator may choose to resubmit based on the CAISO's recommendations, or to close the request.

## **4 MODIFICATIONS TO AN EXISTING UDP AGGREGATION**

### **4.1 Status of UDP Aggregation**

An approved UDP Aggregation shall be considered active until otherwise requested by the Scheduling Coordinator.

#### **4.2 Suspension by the CAISO**

The CAISO may temporarily suspend any UDP Aggregation as needed to ensure reliability. The CAISO may also suspend previously approved UDP Aggregations if, due to changes to the grid, to the aggregated Generating Units, or to the facilities connecting aggregated Generating Units to the grid, the UDP Aggregation no longer meets the criteria set forth in Sections 3.1.1 and 3.1.2 of this Appendix R.

If the CAISO must suspend the UDP Aggregation due to a Forced Outage or other unanticipated event, the CAISO shall provide notice that the UDP Aggregation has been suspended as soon as practical after the affecting event, but in no case longer than seventy-two (72) hours after that event. If the CAISO must suspend the UDP Aggregation due to future changes, the CAISO shall notify the affected Scheduling Coordinator (1) that the UDP Aggregation will be suspended and (2) when the UDP Aggregation will be suspended as soon as practical after the CAISO determines the UDP Aggregation must be suspended.

The CAISO shall write a report that explains the reason for the suspension and that specifies the effective date and time. The CAISO will forward the report to the Scheduling Coordinator and take steps to have the UDP Aggregation removed from the CAISO systems.

In the event that a resource in a UDP Aggregation changes from one Scheduling Coordinator to another, the UDP Aggregation will be suspended. In order to reinstate the aggregation, the new Scheduling Coordinator must submit a new request reflecting the change.

#### **4.3 Request for Modification by a Scheduling Coordinator**

A Scheduling Coordinator may request a modification to an existing UDP Aggregation up to once per calendar month. A request for modification will follow the same procedures as a new request.