

35.28 Non-discriminatory open access transmission tariff.

(a) **Applicability.** This section applies to any public utility that owns, controls or operates facilities used for the transmission of electric energy in interstate commerce and to any non-public utility that seeks voluntary compliance with jurisdictional transmission tariff reciprocity conditions.

(b) **Definitions —**

(1) **Requirements service agreement** means a contract or rate schedule under which a public utility provides any portion of a customer's bundled wholesale power requirements.

(2) **Economy energy coordination agreement** means a contract, or service schedule thereunder, that provides for trading of electric energy on an “if, as and when available” basis, but does not require either the seller or the buyer to engage in a particular transaction.

(3) **Non-economy energy coordination agreement** means any non-requirements service agreement, except an economy energy coordination agreement as defined in [paragraph \(b\)\(2\)](#) of this section.

(4) **Demand response** means a reduction in the consumption of electric energy by customers from their expected consumption in response to an increase in the price of electric energy or to incentive payments designed to induce lower consumption of electric energy.

(5) **Demand response resource** means a resource capable of providing demand response.

(6) **An operating reserve shortage** means a period when the amount of available supply falls short of demand plus the operating reserve requirement.

(7) **Market Monitoring Unit** means the person or entity responsible for carrying out the market monitoring functions that the Commission has ordered Commission-approved independent system operators and regional transmission organizations to perform.

(8) **Market Violation** means a tariff violation, violation of a Commission-approved order, rule or regulation, market manipulation, or inappropriate dispatch that creates substantial concerns regarding unnecessary market inefficiencies.

(9) **Electric storage resource** as used in this section means a resource capable of receiving electric energy from the grid and storing it for later injection of electric energy back to the grid.

(10) **Distributed energy resource** as used in this section means any resource located on the distribution system, any subsystem thereof or behind a customer meter.

(11) **Distributed energy resource aggregator** as used in this section means the entity that aggregates one or more distributed energy resources for purposes of participation in the capacity, energy and/or ancillary service markets of the regional transmission organizations and/or independent system operators.

(12) **Ambient-adjusted rating** means a transmission line rating that applies to a time period of not greater than one hour; reflects an up-to-date forecast of ambient air temperature across the time period to which the rating applies; reflects the absence of solar heating during nighttime periods where the local sunrise/sunset times used to determine daytime and nighttime periods are updated at least monthly, if not more frequently; and is calculated at least each hour, if not more frequently.

(13) **Emergency rating** means a transmission line rating that reflects operation for a specified, finite period, rather than reflecting continuous operation. An emergency rating may assume an acceptable loss of equipment life or other physical or safety limitations for the equipment involved.

(14) **Dynamic line rating** means a transmission line rating that applies to a time period of not greater than one hour and reflects up-to-date forecasts of inputs such as (but not limited to) ambient air temperature, wind, solar heating intensity, transmission line tension, or transmission line sag.

(15) **Energy Management System (EMS)** means a computer control system used by electric utility dispatchers to monitor the real-time performance of the various elements of an electric system and to dispatch, schedule, and/or control generation and transmission facilities.

(16) **Supervisory Control and Data Acquisition (SCADA)** means a computer system that allows an electric system operator to remotely monitor and control elements of an electric system.

(c) Non-discriminatory open access transmission tariffs.

(1) Every public utility that owns, controls, or operates facilities used for the transmission of electric energy in interstate commerce must have on file with the Commission an open access transmission tariff of general applicability for transmission services, including ancillary services, over such facilities. Such tariff must be the *pro forma* tariff promulgated by the Commission, as amended from time to time, or such other tariff as may be approved by the Commission consistent with the principles set forth in Commission rulemaking proceedings promulgating and amending the *pro forma* tariff.

(i) Subject to the exceptions in [paragraphs \(c\)\(1\)\(ii\), \(c\)\(1\)\(iii\), \(c\)\(1\)\(iv\), and \(c\)\(1\)\(v\)](#) of this section, the open access transmission tariff, which tariff must be the *pro forma* tariff required by Commission rulemaking proceedings promulgating and amending the *pro forma* tariff, and accompanying rates must be filed no later than 60 days prior to the date on which a public utility would engage in a sale of electric energy at wholesale in interstate commerce or in the transmission of electric energy in interstate commerce.

(ii) If a public utility owns, controls, or operates facilities used for the transmission of electric energy in interstate commerce, it must file the revisions to its open access transmission tariff required by Commission rulemaking proceedings promulgating and amending the *pro forma* tariff, pursuant to section 206 of the FPA and accompanying rates pursuant to section 205 of the FPA in accordance with the procedures set forth in Commission rulemaking proceedings promulgating and amending the *pro forma* tariff.

(iii) If a public utility owns, controls, or operates transmission facilities used for the transmission of electric energy in interstate commerce, such facilities are jointly owned with a non-public utility, and the joint ownership contract prohibits transmission service over the facilities to third parties, the public utility with respect to access over the public utility's share of the jointly owned facilities must file the revisions to its open access transmission tariff required by Commission rulemaking proceedings promulgating and amending the *pro forma* tariff pursuant to section 206 of the FPA and accompanying rates pursuant to section 205 of the FPA in accordance with the procedures set forth in Commission rulemaking proceedings promulgating and amending the *pro forma* tariff.

(iv) Any public utility whose transmission facilities are under the independent control of a Commission-approved ISO or RTO may satisfy its obligation under [paragraph \(c\)\(1\)](#) of this section, with respect to such facilities, through the open access transmission tariff filed by the ISO or RTO.

(v) If a public utility obtains a waiver of the tariff requirement pursuant to [paragraph \(d\)](#) of this section, it does not need to file the open access transmission tariff required by this section.

(vi) Any public utility that seeks a deviation from the *pro forma* tariff promulgated by the Commission, as amended from time to time, must demonstrate that the deviation is consistent with the principles set forth in Commission rulemaking proceedings promulgating and amending the *pro forma* tariff.

(vii) Each public utility's open access transmission tariff must include the standards incorporated by reference in [part 38 of this chapter](#).

(2) Subject to the exceptions in [paragraphs \(c\)\(2\)\(i\)](#) and [\(c\)\(3\)\(iii\)](#) of this section, every public utility that owns, controls, or operates facilities used for the transmission of electric energy in interstate commerce, and that uses those facilities to engage in wholesale sales and/or purchases of electric energy, or unbundled retail sales of electric energy, must take transmission service for such sales and/or purchases under the open access transmission tariff filed pursuant to this section.

(i) For sales of electric energy pursuant to a requirements service agreement executed on or before July 9, 1996, this requirement will not apply unless separately ordered by the Commission. For sales of electric energy pursuant to a bilateral economy energy coordination agreement executed on or before July 9, 1996, this requirement is effective on December 31, 1996. For sales of electric energy pursuant to a bilateral non-economy energy coordination agreement executed on or before July 9, 1996, this requirement will not apply unless separately ordered by the Commission.

(ii) [Reserved]

(3) Every public utility that owns, controls, or operates facilities used for the transmission of electric energy in interstate commerce, and that is a member of a power pool, public utility holding company, or other multi-lateral trading arrangement or agreement that contains transmission rates, terms or conditions, must have on file a joint pool-wide or system-wide open access transmission tariff, which tariff must be the *pro forma* tariff promulgated by the Commission, as amended from time to time, or such other open access transmission tariff as may be approved by the Commission consistent with the principles set forth in Commission rulemaking proceedings promulgating and amending the *pro forma* tariff.

(i) For any power pool, public utility holding company or other multi-lateral arrangement or agreement that contains transmission rates, terms or conditions and that is executed after October 11, 2011, this requirement is effective on the date that transactions begin under the arrangement or agreement.

(ii) For any power pool, public utility holding company or other multi-lateral arrangement or agreement that contains transmission rates, terms or conditions and that is executed on or before May 14, 2007, a public utility member of such power pool, public utility holding company or other multi-lateral arrangement or agreement that owns, controls, or operates facilities used for the transmission of electric energy in interstate commerce must file the revisions to its joint pool-wide or system-wide open access transmission tariff required by Commission rulemaking proceedings promulgating and amending the *pro*

forma tariff pursuant to section 206 of the FPA and accompanying rates pursuant to section 205 of the FPA in accordance with the procedures set forth in Commission rulemaking proceedings promulgating and amending the *pro forma* tariff.

(iii) A public utility member of a power pool, public utility holding company or other multi-lateral arrangement or agreement that contains transmission rates, terms or conditions and that is executed on or before July 9, 1996 must take transmission service under a joint pool-wide or system-wide open access transmission tariff filed pursuant to this section for wholesale trades among the pool or system members.

(4) Consistent with [paragraph \(c\)\(1\)](#) of this section, every Commission-approved ISO or RTO must have on file with the Commission an open access transmission tariff of general applicability for transmission services, including ancillary services, over such facilities. Such tariff must be the *pro forma* tariff promulgated by the Commission, as amended from time to time, or such other tariff as may be approved by the Commission consistent with the principles set forth in Commission rulemaking proceedings promulgating and amending the *pro forma* tariff.

(i) Subject to [paragraph \(c\)\(4\)\(ii\)](#) of this section, a Commission-approved ISO or RTO must file the revisions to its open access transmission tariff required by Commission rulemaking proceedings promulgating and amending the *pro forma* tariff pursuant to section 206 of the FPA and accompanying rates pursuant to section 205 of the FPA in accordance with the procedures set forth in Commission rulemaking proceedings promulgating and amending the *pro forma* tariff.

(ii) If a Commission-approved ISO or RTO can demonstrate that its existing open access transmission tariff is consistent with or superior to the *pro forma* tariff promulgated by the Commission, as amended from time to time, the Commission-approved ISO or RTO may instead set forth such demonstration in its filing pursuant to section 206 in accordance with the procedures set forth in Commission rulemaking proceedings promulgating and amending the *pro forma* tariff.

(5) Any public utility that owns transmission facilities that are not under the public utility's control must, consistent with the *pro forma* tariff required by [paragraph \(c\)\(1\)](#) of this section, share with the public utility that controls such facilities (and its Market Monitoring Unit(s), if applicable):

(i) Transmission line ratings for each period for which transmission line ratings are calculated for such facilities (with updated ratings shared each time ratings are calculated); and

(ii) Written transmission line rating methodologies used to calculate the transmission line ratings for such facilities provided under subparagraph (i).

(d) *Waivers.*

(1) A public utility subject to the requirements of this section and [18 CFR parts 37](#) (Open Access Same-Time Information System) and 358 (Standards of Conduct for Transmission Providers) may file a request for waiver of all or part of such requirements for good cause shown. Except as provided in [paragraph \(f\)](#) of this section, an application for waiver must be filed no later than 60 days prior to the time the public utility would have to comply with the requirement.

(2) The requirements of this section, [18 CFR parts 37](#) (Open Access Same-Time Information System) and 358 (Standards of Conduct for Transmission Providers) are waived for any public utility that is or

becomes subject to such requirements solely because it owns, controls, or operates Interconnection Customer's Interconnection Facilities, in whole or in part, as that term is defined in the standard generator interconnection procedures and agreements referenced in [paragraph \(f\)](#) of this section, or comparable jurisdictional interconnection facilities that are the subject of interconnection agreements other than the standard generator interconnection procedures and agreements referenced in [paragraph \(f\)](#) of this section, if the entity that owns, operates, or controls such facilities either sells electric energy, or files a statement with the Commission that it commits to comply with and be bound by the obligations and procedures applicable to electric utilities under section 210 of the Federal Power Act.

(i) The waivers referenced in this [paragraph \(d\)\(2\)](#) shall be deemed to be revoked as of the date the public utility ceases to satisfy the qualifications of this [paragraph \(d\)\(2\)](#), and may be revoked by the Commission if the Commission determines that it is in the public interest to do so. After revocation of its waivers, the public utility must comply with the requirements that had been waived within 60 days of revocation.

(ii) Any eligible entity that seeks interconnection or transmission services with respect to the interconnection facilities for which a waiver is in effect pursuant to this [paragraph \(d\)\(2\)](#) may follow the procedures in sections 210, 211, and 212 of the Federal Power Act, [18 CFR 2.20](#), and [18 CFR part 36](#). In any proceeding pursuant to this [paragraph \(d\)\(2\)\(ii\)](#):

(A) The Commission will consider it to be in the public interest to grant priority rights to the owner and/or operator of interconnection facilities specified in this [paragraph \(d\)\(2\)](#) to use capacity thereon when such owner and/or operator can demonstrate that it has specific plans with milestones to use such capacity to interconnect its or its affiliate's future generation projects.

(B) For the first five years after the commercial operation date of the interconnection facilities specified in this [paragraph \(d\)\(2\)](#), the Commission will apply the rebuttable presumption that the owner and/or operator of such facilities has definitive plans to use the capacity thereon, and it is thus in the public interest to grant priority rights to the owner and/or operator of such facilities to use capacity thereon.

(e) *Non-public utility procedures for tariff reciprocity compliance.*

(1) A non-public utility may submit an open access transmission tariff and a request for declaratory order that its voluntary transmission tariff meets the requirements of Commission rulemaking proceedings promulgating and amending the *pro forma* tariff.

(i) Any submittal and request for declaratory order submitted by a non-public utility will be provided an NJ (non-jurisdictional) docket designation.

(ii) If the submittal is found to be an acceptable open access transmission tariff, an applicant in a Federal Power Act (FPA) section 211 or 211A proceeding against the non-public utility shall have the burden of proof to show why service under the open access transmission tariff is not sufficient and why a section 211 or 211A order should be granted.

(2) A non-public utility may file a request for waiver of all or part of the reciprocity conditions contained in a public utility open access transmission tariff, for good cause shown. An application for waiver may be filed at any time.

(f) *Standard generator interconnection procedures and agreements.*

(1) Every public utility that is required to have on file a non-discriminatory open access transmission tariff under this section must amend such tariff by adding the standard interconnection procedures and agreement and the standard small generator interconnection procedures and agreement required by Commission rulemaking proceedings promulgating and amending such interconnection procedures and agreements, or such other interconnection procedures and agreements as may be required by Commission rulemaking proceedings promulgating and amending the standard interconnection procedures and agreement and the standard small generator interconnection procedures and agreement.

(i) Any public utility that seeks a deviation from the standard interconnection procedures and agreement or the standard small generator interconnection procedures and agreement required by Commission rulemaking proceedings promulgating and amending such interconnection procedures and agreements, must demonstrate that the deviation is consistent with the principles set forth in Commission rulemaking proceedings promulgating and amending such interconnection procedures and agreements.

(ii) Any public utility that conducts interconnection studies shall be liable for and eligible to appeal certain penalties under the interconnection procedures and agreements adopted by the Commission-approved independent system operator or regional transmission organization under [paragraph \(f\)\(1\)](#) of this section following that public utility's failure to complete an interconnection study by the appropriate deadline.

(iii)-(iv) [Reserved]

(2) The non-public utility procedures for tariff reciprocity compliance described in [paragraph \(e\)](#) of this section are applicable to the standard interconnection procedures and agreements.

(3) A public utility subject to the requirements of this [paragraph \(f\)](#) may file a request for waiver of all or part of the requirements of this [paragraph \(f\)](#), for good cause shown.

(g) *Tariffs and operations of Commission-approved independent system operators and regional transmission organizations—*

(1) *Demand response and pricing—*

(i) *Ancillary services provided by demand response resources.*

(A) Every Commission-approved independent system operator or regional transmission organization that operates organized markets based on competitive bidding for energy imbalance, spinning reserves, supplemental reserves, reactive power and voltage control, or regulation and frequency response ancillary services (or its functional equivalent in the Commission-approved independent system operator's or regional transmission organization's tariff) must accept bids from demand response resources in these markets for that product on a basis comparable to any other resources, if the demand response resource meets the necessary technical requirements under the tariff, and submits a bid under the Commission-approved independent system operator's or regional transmission organization's bidding rules at or below the market-clearing price, unless not permitted by the laws or regulations of the relevant electric retail regulatory authority.

(B) Each Commission-approved independent system operator or regional transmission organization must allow providers of a demand response resource to specify the following in their bids:

- (1) A maximum duration in hours that the demand response resource may be dispatched;
- (2) A maximum number of times that the demand response resource may be dispatched during a day;
and
- (3) A maximum amount of electric energy reduction that the demand response resource may be required to provide either daily or weekly.

(ii) **Removal of deviation charges.** A Commission-approved independent system operator or regional transmission organization with a tariff that contains a day-ahead and a real-time market may not assess charge to a purchaser of electric energy in its day-ahead market for purchasing less power in the real-time market during a real-time market period for which the Commission-approved independent system operator or regional transmission organization declares an operating reserve shortage or makes a generic request to reduce load to avoid an operating reserve shortage.

(iii) **Aggregation of retail customers.** Each Commission-approved independent system operator and regional transmission organization must accept bids from an aggregator of retail customers that aggregates the demand response of the customers of utilities that distributed more than 4 million megawatt-hours in the previous fiscal year, and the customers of utilities that distributed 4 million megawatt-hours or less in the previous fiscal year, where the relevant electric retail regulatory authority permits such customers' demand response to be bid into organized markets by an aggregator of retail customers. An independent system operator or regional transmission organization must not accept bids from an aggregator of retail customers that aggregates the demand response of the customers of utilities that distributed more than 4 million megawatt-hours in the previous fiscal year, where the relevant electric retail regulatory authority prohibits such customers' demand response to be bid into organized markets by an aggregator of retail customers, or the customers of utilities that distributed 4 million megawatt-hours or less in the previous fiscal year, unless the relevant electric retail regulatory authority permits such customers' demand response to be bid into organized markets by an aggregator of retail customers.

(iv) **Price formation during periods of operating reserve shortage.**

(A) Each Commission-approved independent system operator and regional transmission organization must modify its market rules to allow the market-clearing price during periods of operating reserve shortage to reach a level that rebalances supply and demand so as to maintain reliability while providing sufficient provisions for mitigating market power. Each Commission-approved independent system operator and regional transmission organization must trigger shortage pricing for any interval in which a shortage of energy or operating reserves is indicated during the pricing of resources for that interval.

(B) A Commission-approved independent system operator or regional transmission organization may phase in this modification of its market rules.

(v) **Demand response compensation in energy markets.** Each Commission-approved independent system operator or regional transmission organization that has a tariff provision permitting demand response resources to participate as a resource in the energy market by reducing consumption of electric energy from their expected levels in response to price signals must:

(A) Pay to those demand response resources the market price for energy for these reductions when these demand response resources have the capability to balance supply and demand and when payment of the market price for energy to these resources is cost-effective as determined by a net benefits test accepted by the Commission;

(B) Allocate the costs associated with demand response compensation proportionally to all entities that purchase from the relevant energy market in the area(s) where the demand response reduces the market price for energy at the time when the demand response resource is committed or dispatched.

(vi) **Settlement intervals.** Each Commission-approved independent system operator and regional transmission organization must settle energy transactions in its real-time markets at the same time interval it dispatches energy, must settle operating reserves transactions in its real-time markets at the same time interval it prices operating reserves, and must settle intertie transactions at the same time interval it schedules intertie transactions.

(2) **Long-term power contracting in organized markets.** Each Commission-approved independent system operator or regional transmission organization must provide a portion of its Web site for market participants to post offers to buy or sell power on a long-term basis.

(3) **Market monitoring policies.**

(i) Each Commission-approved independent system operator or regional transmission organization must modify its tariff provisions governing its Market Monitoring Unit to reflect the directives provided in Order No. 719, including the following:

(A) Each Commission-approved independent system operator or regional transmission organization must include in its tariff a provision to provide its Market Monitoring Unit access to Commission-approved independent system operator and regional transmission organization market data, resources and personnel to enable the MarketMonitoring Unit to carry out its functions.

(B) The tariff provision must provide the Market Monitoring Unit complete access to the Commission-approved independent system operator's and regional transmission organization's databases of market information.

(C) The tariff provision must provide that any data created by the Market Monitoring Unit, including, but not limited to, reconfiguring of the Commission-approved independent system operator's and regional transmission organization's data, will be kept within the exclusive control of the Market Monitoring Unit.

(D) The Market Monitoring Unit must report to the Commission-approved independent system operator's or regional transmission organization's board of directors, with its management members removed, or to an independent committee of the Commission-approved independent system operator's or regional transmission organization's board of directors. A Commission-approved independent system operator or regional transmission organization that has both an internal Market Monitoring Unit and an external Market Monitoring Unit may permit the internal Market Monitoring Unit to report to management and the external Market Monitoring Unit to report to the Commission-approved independent system operator's or regional transmission organization's board of directors with its management members removed, or to an independent committee of the Commission-approved independent system operator or regional transmission organization board of directors. If the internal

market monitor is responsible for carrying out any or all of the core Market Monitoring Unit functions identified in [paragraph \(g\)\(3\)\(ii\)](#) of this section, the internal market monitor must report to the independent system operator's or regional transmission organization's board of directors.

(E) A Commission-approved independent system operator or regional transmission organization may not alter the reports generated by the Market Monitoring Unit, or dictate the conclusions reached by the Market Monitoring Unit.

(F) Each Commission-approved independent system operator or regional transmission organization must consolidate the core Market Monitoring Unit provisions into one section of its tariff. Each independent system operator or regional transmission organization must include a mission statement in the introduction to the Market Monitoring Unit provisions that identifies the Market Monitoring Unit's goals, including the protection of consumers and market participants by the identification and reporting of market design flaws and market power abuses.

(ii) **Core Functions of Market Monitoring Unit.** The Market Monitoring Unit must perform the following core functions:

(A) Evaluate existing and proposed market rules, tariff provisions and market design elements and recommend proposed rule and tariff changes to the Commission-approved independent system operator or regional transmission organization, to the Commission's Office of Energy Market Regulation staff and to other interested entities such as state commissions and market participants, provided that:

(1) The Market Monitoring Unit is not to effectuate its proposed market design itself, and

(2) The Market Monitoring Unit must limit distribution of its identifications and recommendations to the independent system operator or regional transmission organization and to Commission staff in the event it believes broader dissemination could lead to exploitation, with an explanation of why further dissemination should be avoided at that time.

(B) Review and report on the performance of the wholesale markets to the Commission-approved independent system operator or regional transmission organization, the Commission, and other interested entities such as state commissions and market participants, on at least a quarterly basis and submit a more comprehensive annual state of the market report. The Market Monitoring Unit may issue additional reports as necessary.

(C) Identify and notify the Commission's Office of Enforcement staff of instances in which a market participant's or the Commission-approved independent system operator's or regional transmission organization's behavior may require investigation, including, but not limited to, suspected Market Violations.

(iii) **Tariff administration and mitigation**

(A) A Commission-approved independent system operator or regional transmission organization may not permit its Market Monitoring Unit, whether internal or external, to participate in the administration of the Commission-approved independent system operator's or regional transmission organization's tariff or, except as provided in [paragraph \(g\)\(3\)\(iii\)\(D\)](#) of this section, to conduct prospective mitigation.

(B) A Commission-approved independent system operator or regional transmission organization may permit its Market Monitoring Unit to provide the inputs required for the Commission-approved independent system operator or regional transmission organization to conduct prospective mitigation, including, but not limited to, reference levels, identification of system constraints, and cost calculations.

(C) A Commission-approved independent system operator or regional transmission organization may allow its Market Monitoring Unit to conduct retrospective mitigation.

(D) A Commission-approved independent system operator or regional transmission organization with a hybrid Market Monitoring Unit structure may permit its internal market monitor to conduct prospective and/or retrospective mitigation, in which case it must assign to its external market monitor the responsibility and the tools to monitor the quality and appropriateness of the mitigation.

(E) Each Commission-approved independent system operator or regional transmission organization must identify in its tariff the functions the Market Monitoring Unit will perform and the functions the Commission-approved independent system operator or regional transmission organization will perform.

(iv) *Protocols on Market Monitoring Unit referrals to the Commission of suspected violations.*

(A) A Market Monitoring Unit is to make a non-public referral to the Commission in all instances where the Market Monitoring Unit has reason to believe that a Market Violation has occurred. While the Market Monitoring Unit need not be able to prove that a Market Violation has occurred, the Market Monitoring Unit is to provide sufficient credible information to warrant further investigation by the Commission. Once the Market Monitoring Unit has obtained sufficient credible information to warrant referral to the Commission, the Market Monitoring Unit is to immediately refer the matter to the Commission and desist from independent action related to the alleged Market Violation. This does not preclude the Market Monitoring Unit from continuing to monitor for any repeated instances of the activity by the same or other entities, which would constitute new Market Violations. The Market Monitoring Unit is to respond to requests from the Commission for any additional information in connection with the alleged Market Violation it has referred.

(B) All referrals to the Commission of alleged Market Violations are to be in writing, whether transmitted electronically, by fax, mail, or courier. The Market Monitoring Unit may alert the Commission orally in advance of the written referral.

(C) 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.

(D) The referral is to include, but need not be limited to, the following information.

(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];

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

(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;

(4) The specific act[s] or conduct that allegedly constituted the Market Violation;

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

(6) If the Market Monitoring Unit 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;

(7) Any other information the Market Monitoring Unit believes is relevant and may be helpful to the Commission.

(E) Following a referral to the Commission, the Market Monitoring Unit is to continue to notify and inform the Commission of any information that the Market Monitoring Unit learns of that may be related to the referral, but the Market Monitoring Unit is not to undertake any investigative steps regarding the referral except at the express direction of the Commission or Commission Staff.

(v) *Protocols on Market Monitoring Unit Referrals to the Commission of Perceived Market Design Flaws and Recommended Tariff Changes.*

(A) A Market Monitoring Unit is to make a referral to the Commission in all instances where the Market Monitoring Unit has reason to believe market design flaws exist that it believes could effectively be remedied by rule or tariff changes. The Market Monitoring Unit must limit distribution of its identifications and recommendations to the independent system operator or regional transmission organization and to the Commission in the event it believes broader dissemination could lead to exploitation, with an explanation of why further dissemination should be avoided at that time.

(B) 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. The Market Monitoring Unit may alert the Commission orally in advance of the written referral.

(C) 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.

(D) The referral is to include, but need not be limited to, the following information.

(1) A detailed narrative describing the perceived market design flaw[s];

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

(3) The rule or tariff change(s) that the Market Monitoring Unit believes could remedy the perceived market design flaw;

(4) Any other information the Market Monitoring Unit believes is relevant and may be helpful to the Commission.

(E) Following a referral to the Commission, the Market Monitoring Unit 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 the Market Monitoring Unit to

the regional transmission organization or independent system operator, stakeholders, market participants or state commissions regarding the perceived design flaw, and any actions taken by the regional transmission organization or independent system operator regarding the perceived design flaw.

(vi) **Market Monitoring Unit ethics standards.** Each Commission-approved independent system operator or regional transmission organization must include in its tariff ethical standards for its Market Monitoring Unit and the employees of its Market Monitoring Unit. At a minimum, the ethics standards must include the following requirements:

(A) The Market Monitoring Unit and its employees must have no material affiliation with any market participant or affiliate.

(B) The Market Monitoring Unit and its employees must not serve as an officer, employee, or partner of a market participant.

(C) The Market Monitoring Unit and its employees must have no material financial interest in any market participant or affiliate with potential exceptions for mutual funds and non-directed investments.

(D) The Market Monitoring Unit and its employees must not engage in any market transactions other than the performance of their duties under the tariff.

(E) The Market Monitoring Unit and its employees must not be compensated, other than by the Commission-approved independent system operator or regional transmission organization that retains or employs it, for any expert witness testimony or other commercial services, either to the Commission-approved independent system operator or regional transmission organization or to any other party, in connection with any legal or regulatory proceeding or commercial transaction relating to the Commission-approved independent system operator or regional transmission organization or to the Commission-approved independent system operator's or regional transmission organization's markets.

(F) The Market Monitoring Unit and its employees may not accept anything of value from a market participant in excess of a *de minimis* amount.

(G) The Market Monitoring Unit and its employees must advise a supervisor 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.

(4) **Electronic delivery of data.** Each Commission-approved regional transmission organization and independent system operator must electronically deliver to the Commission, on an ongoing basis and in a form and manner consistent with its own collection of data and in a form and manner acceptable to the Commission, data related to the markets that the regional transmission organization or independent system operator administers.

(5) **Offer and bid data.**

(i) Unless a Commission-approved independent system operator or regional transmission organization obtains Commission approval for a different period, each Commission-approved independent system operator and regional transmission organization must release its offer and bid data within three months.

(ii) A Commission-approved independent system operator or regional transmission organization must mask the identity of market participants when releasing offer and bid data. The Commission-approved

independent system operators and regional transmission organization may propose a time period for eventual unmasking.

(6) *Responsiveness of Commission-approved independent system operators and regional transmission organizations.* Each Commission-approved independent system operator or regional transmission organization must adopt business practices and procedures that achieve Commission-approved independent system operator and regional transmission organization board of directors' responsiveness to customers and other stakeholders and satisfy the following criteria:

(i) ***Inclusiveness.*** The business practices and procedures must ensure that any customer or other stakeholder affected by the operation of the Commission-approved independent system operator or regional transmission organization, or its representative, is permitted to communicate the customer's or other stakeholder's views to the independent system operator's or regional transmission organization's board of directors;

(ii) ***Fairness in balancing diverse interests.*** The business practices and procedures must ensure that the interests of customers or other stakeholders are equitably considered, and that deliberation and consideration of Commission-approved independent system operator's and regional transmission organization's issues are not dominated by any single stakeholder category;

(iii) ***Representation of minority positions.*** The business practices and procedures must ensure that, in instances where stakeholders are not in total agreement on a particular issue, minority positions are communicated to the Commission-approved independent system operator's and regional transmission organization's board of directors at the same time as majority positions; and

(iv) ***Ongoing responsiveness.*** The business practices and procedures must provide for stakeholder input into the Commission-approved independent system operator's or regional transmission organization's decisions as well as mechanisms to provide feedback to stakeholders to ensure that information exchange and communication continue over time.

(7) *Compliance filings.* All Commission-approved independent system operators and regional transmission organizations must make a compliance filing with the Commission as described in Order No. 719 under the following schedule:

(i) The compliance filing addressing the accepting of bids from demand response resources in markets for ancillary services on a basis comparable to other resources, removal of deviation charges, aggregation of retail customers, shortage pricing during periods of operating reserve shortage, long-term power contracting in organized markets, Market Monitoring Units, Commission-approved independent system operators' and regional transmission organizations' board of directors' responsiveness, and reporting on the study of the need for further reforms to remove barriers to comparable treatment of demand response resources must be submitted on or before April 28, 2009.

(ii) A public utility that is approved as a regional transmission organization under [§ 35.34](#), or that is not approved but begins to operate regional markets for electric energy or ancillary services after December 29, 2008, must comply with Order No. 719 and the provisions of [paragraphs \(g\)\(1\)](#) through [\(g\)\(5\)](#) of this section before beginning operations.

(8) **Frequency regulation compensation in ancillary services markets.** Each Commission-approved independent system operator or regional transmission organization that has a tariff that provides for the compensation for frequency regulation service must provide such compensation based on the actual service provided, including a capacity payment that includes the marginal unit's opportunity costs and a payment for performance that reflects the quantity of frequency regulation service provided by a resource when the resource is accurately following the dispatch signal.

(9) **Electric storage resources.**

(i) Each Commission-approved independent system operator and regional transmission organization must have tariff provisions providing a participation model for electric storage resources that:

(A) Ensures that a resource using the participation model for electric storage resources in an independent system operator or regional transmission organization market is eligible to provide all capacity, energy, and ancillary services that it is technically capable of providing;

(B) Enables a resource using the participation model for electric storage resources to be dispatched and ensures that such a dispatchable resource can set the wholesale market clearing price as both a wholesale seller and wholesale buyer consistent with rules that govern the conditions under which a resource can set the wholesale price;

(C) Accounts for the physical and operational characteristics of electric storage resources through bidding parameters or other means; and

(D) Establishes a minimum size requirement for resources using the participation model for electric storage resources that does not exceed 100 kW.

(ii) The sale of electric energy from an independent system operator or regional transmission organization market to an electric storage resource that the resource then resells back to that market must be at the wholesale locational marginal price.

(10) **Transparency —**

(i) **Uplift reporting.** Each Commission-approved independent system operator or regional transmission organization must post two reports, at minimum, regarding uplift on a publicly accessible portion of its website. First, each Commission-approved independent system operator or regional transmission organization must post uplift, paid in dollars, and categorized by transmission zone, day, and uplift category. Transmission zone shall be defined as the geographic area that is used for the local allocation of charges. Transmission zones with fewer than four resources may be aggregated with one or more neighboring transmission zones, until each aggregated zone contains at least four resources, and reported collectively. This report shall be posted within 20 calendar days of the end of each month. Second, each Commission-approved independent system operator or regional transmission organization must post the resource name and the total amount of uplift paid in dollars aggregated across the month to each resource that received uplift payments within the calendar month. This report shall be posted within 90 calendar days of the end of each month.

(ii) **Reporting Operator-Initiated Commitments.** Each Commission-approved independent system operator or regional transmission organization must post a report of each operator-initiated commitment listing the size of the commitment, transmission zone, commitment reason, and

commitment start time on a publicly accessible portion of its website within 30 calendar days of the end of each month. Transmission zone shall be defined as a geographic area that is used for the local allocation of charges. Commitment reasons shall include, but are not limited to, system-wide capacity, constraint management, and voltage support.

(iii) **Transmission constraint penalty factors.** Each Commission-approved independent system operator or regional transmission organization must include, in its tariff, its transmission constraint penalty factor values; the circumstances, if any, under which the transmission constraint penalty factors can set locational marginal prices; and the procedure, if any, for temporarily changing the transmission constraint penalty factor values. Any procedure for temporarily changing transmission constraint penalty factor values must provide for notice of the change to market participants.

(11) A resource's incremental energy offer must be capped at the higher of \$1,000/MWh or that resource's cost-based incremental energy offer. For the purpose of calculating Locational Marginal Prices, Regional Transmission Organizations and Independent System Operators must cap cost-based incremental energy offers at \$2,000/MWh. The actual or expected costs underlying a resource's cost-based incremental energy offer above \$1,000/MWh must be verified before that offer can be used for purposes of calculating Locational Marginal Prices. If a resource submits an incremental energy offer above \$1,000/MWh and the actual or expected costs underlying that offer cannot be verified before the market clearing process begins, that offer may not be used to calculate Locational Marginal Prices and the resource would be eligible for a make-whole payment if that resource is dispatched and the resource's actual costs are verified after-the-fact. A resource would also be eligible for a make-whole payment if it is dispatched and its verified cost-based incremental energy offer exceeds \$2,000/MWh. All resources, regardless of type, are eligible to submit cost-based incremental energy offers in excess of \$1,000/MWh.

(12) **Distributed energy resource aggregators.**

(i) Each independent system operator and regional transmission organization must have tariff provisions that allow distributed energy resource aggregations to participate directly in the independent system operator or regional transmission organization markets.

(ii) Each regional transmission organization and independent system operator, to accommodate the participation of distributed energy resource aggregations, must establish market rules that address:

(A) Eligibility to participate in the independent system operator or regional transmission organization markets through a distributed energy resource aggregation;

(B) Locational requirements for distributed energy resource aggregations;

(C) Distribution factors and bidding parameters for distributed energy resource aggregations;

(D) Information and data requirements for distributed energy resource aggregations;

(E) Modification to the list of resources in a distributed energy resource aggregation;

(F) Metering and telemetry system requirements for distributed energy resource aggregations;

(G) Coordination between the regional transmission organization or independent system operator, the distributed energy resource aggregator, the distribution utility, and the relevant electric retail regulatory authorities; and

(H) Market participation agreements for distributed energy resource aggregators.

(iii) Each regional transmission organization and independent system operator must establish a minimum size requirement for distributed energy resource aggregations that does not exceed 100 kW.

(iv) Each regional transmission organization and independent system operator must accept bids from a distributed energy resource aggregator if its aggregation includes distributed energy resources that are customers of utilities that distributed more than 4 million megawatt-hours in the previous fiscal year. An independent system operator or regional transmission organization must not accept bids from a distributed energy resource aggregator if its aggregation includes distributed energy resources that are customers of utilities that distributed 4 million megawatt-hours or less in the previous fiscal year, unless the relevant electric retail regulatory authority permits such customers to be bid into RTO/ISO markets by a distributed energy resource aggregator.

(13) ***Transmission line ratings.***

(i) Each Commission-approved independent system operator or regional transmission organization must establish and maintain systems and procedures necessary to allow any public utility whose transmission facilities are under the independent control of the independent system operator or regional transmission organization to electronically update transmission line ratings for such facilities (for each period for which transmission line ratings are calculated) at least hourly, with such data submitted by those public utility transmission owners directly into the independent system operator's or regional transmission organization's EMS through SCADA or related systems.

(ii) [Reserved]

[Order 888, [61 FR 21693](#), May 10, 1996]