

The Transmission Provider shall provide the following Coordination Services:

Reliability Coordination Service, and Interconnected Operations and Congestion Management Service. These services shall be provided to entities whose facilities are not included in the Transmission System in accordance with this Module F and other applicable terms and conditions of this Tariff.

## Preamble

The Transmission Provider provides reliability coordination services for the Balancing Authorities and Transmission Operators that are Transmission Owners in accordance with the ISO Agreement, the Balancing Authority Agreement and other applicable tariffs. Pursuant to this Part I of Module F, the Transmission Provider shall provide comparable Reliability Coordination Service to entities that are not Transmission Owners on the terms and conditions set forth below.

To be eligible for Reliability Coordination Service, a Reliability Coordination Customer must be an operating entity that is a NERC Registered Balancing Authority, a NERC Registered Transmission Operator, or an owner of transmission facilities that are part of the Bulk Electric System as determined under NERC procedures. An entity is not eligible for Reliability Coordination Service if, during the time service is provided under this Part I, it is a signatory to the ISO Agreement. The Transmission Provider reserves the right to deny service under this Part I if the transmission facilities of the applicant are more appropriately located in a different Reliability Coordinator Area. As a condition to obtaining Reliability Coordination Service, the Reliability Coordination Customer shall: (i) execute an applicable Service Agreement, as set forth in Section 74 and Attachment KK-1 to this Tariff, and (ii) provide to the Transmission Provider the information required under this Part.



MISO	72.1
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider will perform Reliability Coordination Service while maintaining the reliability of the Combined Reliability Systems in accordance with standards established by NERC and the relevant Regional Entity, and Good Utility Practice. The Transmission Provider shall continuously maintain its status as Reliability Coordinator and shall act as the Reliability Coordinator of the Reliability Coordination Customer Transmission Facilities throughout the term of the Service Agreement executed pursuant to Section 74 and Attachment KK-1 of this Tariff.

MISO	72.1.1
FERC Electric Tariff	
MODULES	30.0.0

The Reliability Coordination Customer shall have the same right to receive non-discriminatory reliability coordination services as those customers receiving reliability coordination services pursuant to this Tariff and the ISO Agreement.

MISO	72.1.2
FERC Electric Tariff	
MODULES	30.0.0

The Reliability Coordination Service provided under this Part shall conform to the requirements of the then-current MISO Reliability Plan on file with NERC, including the duty to comply with the NERC Reliability Coordinator Standards of Conduct, and the obligation of the Reliability Coordinator to act in the interests of the Interconnection, as set forth in Section 72.18 of this Tariff.

MISO	72.1.3
FERC Electric Tariff	
MODULES	30.0.0

To the extent required by NERC or Regional Entity standards, the Transmission Provider will enter into communication and coordination agreements with other Reliability Coordinators that border the Combined Reliability Systems.



In the event that NERC or a Regional Entity conducts an audit of the Transmission Provider's reliability coordination operations or facilities during the term of a Service Agreement executed pursuant to Section 74 and Attachment KK-1 of this Tariff, the Transmission Provider will notify affected Reliability Coordination Customers of the audit and provide them a copy of the audit report when publicly available, and will implement without undue delay all reasonable mitigation or remedial measures required to address deficiencies, if any, identified by such reliability or similar audit.

MISO	72.3
FERC Electric Tariff	
MODULES	30.0.0

Reliability Coordination Service shall consist of the specific tasks and functions required of Reliability Coordinators by the NERC Reliability Standards, as they may be amended from time to time, including, but not limited to, the following tasks:

MISO	72.3.1
FERC Electric Tariff	
MODULES	30.0.0

Continuously monitor the Reliability Coordination Customer Transmission Facilities to ensure operational reliability of the Combined Reliability Systems;

MISO	72.3.2
FERC Electric Tariff	
MODULES	30.0.0

Provide on-line network modeling using state estimation and real-time contingency analysis in the operating time frame;

MISO	72.3.3
FERC Electric Tariff	
MODULES	30.0.0

Provide operations engineering services, such as analyses of the Combined Reliability Systems' adequacy and security for day-ahead operations, conducting voltage collapse studies when requested, and support for Operating Guides as needed;

MISO	72.3.4
FERC Electric Tariff	
MODULES	30.0.0

Monitor and advise the Reliability Coordination Customer of voltage support and supplies of reactive power;

MISO	72.3.5
FERC Electric Tariff	
MODULES	30.0.0

Monitor and assess abnormal Reliability Coordination Customer ACE deviations and system frequency deviations;

MISO	72.3.6
FERC Electric Tariff	
MODULES	30.0.0

Use TLR procedures to relieve actual or potential operating security limit violations;



MISO	72.3.7
FERC Electric Tariff	
MODULES	30.0.0

Support power system restoration activities;

MISO	72.3.8
FERC Electric Tariff	
MODULES	30.0.0

Support transmission map maintenance for the Reliability Coordination Customer Transmission

Facilities; and

MISO	72.3.9
FERC Electric Tariff	
MODULES	30.0.0

Monitor the Reliability Coordination Customer's compliance requirements with applicable NERC and Regional Entity standards and support such compliance with data as required.

MISO	72.4
FERC Electric Tariff	
MODULES	30.0.0

As the Reliability Coordinator for the Reliability Coordination Customer, the Transmission Provider shall have the authority to monitor and direct the Reliability Coordination Customer's actions with respect to the Reliability Coordination Customer Transmission Facilities as provided in this Section 72, in order to preserve the integrity and reliability of the Bulk Electric System.

MISO	72.5
FERC Electric Tariff	
MODULES	30.0.0

Notwithstanding the foregoing, the Reliability Coordination Customer may also monitor the Reliability Coordination Customer Transmission Facilities.

MISO	72.6
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider shall monitor on a continuous basis and direct actions with respect to the Reliability Coordination Customer Transmission Facilities, so as to ensure that operating parameters are maintained in accord with NERC and Regional Entity standards.

MISO	72.7
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider shall periodically perform load-flow and stability studies of the Reliability Coordination Customer Transmission Facilities to identify and address reliability problems.

MISO	72.8
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider shall be responsible for the exchange of operating information related to the Reliability Coordination Customer Transmission Facilities with adjoining Reliability Coordinators and other operating entities within the Combined Reliability Systems that require Reliability Coordination Customer operational data for reliability-related purposes or for calculation of ATC and its components.



MISO	72.8.1
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider will submit data for the Combined Reliability Systems via the Interregional Security Network.

MISO	72.8.2
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider will participate in conference calls with other Reliability Coordinators (including NERC Hotline discussions), notify other Reliability Coordinators of potential problems in the Combined Reliability Systems, and provide study results to other Reliability Coordinators as necessary. The Transmission Provider shall notify the Reliability Coordination Customer of potential problems in the Combined Reliability Systems or neighboring systems that will have or may have a reliability impact on the Reliability Coordination Customer Transmission Facilities.

MISO	72.9
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider shall develop, for approval by the NERC Operating Committee, a regional reliability plan and procedures for responding to Emergencies that include the Reliability Coordination Customer Transmission Facilities.

MISO	72.10
FERC Electric Tariff	
MODULES	30.0.0

For the purposes of mitigating an IROL or SOL violation so as to return the Combined Reliability Systems to a reliable state, the Transmission Provider shall have authority to direct the Reliability Coordination Customer to:

MISO	72.10.1
FERC Electric Tariff	
MODULES	30.0.0

Redispatch generating facilities interconnected to the Combined Reliability Systems to the same extent that the Reliability Coordination Customer is entitled to redispatch such facilities under its transmission tariff and other applicable agreements;

MISO	72.10.2
FERC Electric Tariff	
MODULES	30.0.0

Reconfigure the Reliability Coordination Customer Transmission Facilities, including requiring changes to the transmission maintenance and outage schedules of the Reliability Coordination Customer;

MISO	72.10.3
FERC Electric Tariff	
MODULES	30.0.0

Modify interchange;

MISO	72.10.4
FERC Electric Tariff	
MODULES	30.0.0

Reduce load to mitigate a critical condition, up to and including shedding of firm load;



MISO	72.10.5
FERC Electric Tariff	
MODULES	30.0.0

Direct actions to be taken by transmission operators, balancing authorities, generator operators, transmission service providers, load-serving entities, and purchasing-selling entities within the Combined Reliability Systems to preserve the integrity and reliability of the Combined Reliability Systems, which shall be taken without delay, but within no longer than 30 minutes; and

MISO	72.10.6
FERC Electric Tariff	
MODULES	30.0.0

Initiate the control action or emergency procedure to relieve a potential or actual IROL violation without delay, but within no longer than 30 minutes. The Transmission Provider shall be able to utilize all resources, including load shedding, to address an IROL violation.

MISO	72.11
FERC Electric Tariff	
MODULES	30.0.0

The Reliability Coordination Customer shall retain the authority to receive, confirm, and implement interchange and other Transmission Service schedules, subject to the Transmission Provider's authority as set forth in Section 72.10.3 of this Tariff. The Reliability Coordination Customer shall not have authority to institute a TLR or EEA, but may request that the Transmission Provider take such action.

The Reliability Coordination Customer will retain authority and responsibility to address emergency situations and avoid violations that involve the Reliability Coordination Customer Transmission Facilities or its balancing authority area, including situations where TLR procedures are inapplicable or the Transmission Provider has not been able to timely address an emergency condition. The Reliability Coordination Customer's authority in this regard will include those actions identified in Section 72.10.1 through Section 72.10.4 of this Tariff, and will be limited to taking actions that involve generating and transmission facilities owned by the Reliability Coordination Customer or generating and transmission facilities that fall within the Reliability Coordination Customer's authority, including the dispatch of Network Resources under tariffs or other applicable agreements.

MISO	72.12
FERC Electric Tariff	
MODULES	30.0.0

To ensure that the Transmission Provider has the ability to direct the actions described in Section 72.10 of this Tariff, the Reliability Coordination Customer and the Transmission Provider will develop detailed Operating Guides for all existing known Flowgates and any future identified Flowgates that specify the division of reliability-related functions and the procedures for coordinating these functions.

Actions directed by the Transmission Provider pursuant to Section 72.10 of this Tariff shall be consistent with the Operating Guides for the Reliability Coordination Customer Transmission Facilities. The Transmission Provider's authority to direct these actions is limited to circumstances where such action is necessary to protect, prevent or manage emergency situations, such as abnormal system conditions that require automatic or immediate manual action to prevent or limit equipment damage or the loss of facilities or supply that could adversely affect the reliability of the Bulk Electric Systems or to restore the system to a normal operating state. The Transmission's Provider's authority to direct these actions also is subject to existing operating restrictions on transmission facilities and existing operating and environmental restrictions that limit a generator's ability to change its dispatch. The Reliability Coordination Customer shall make known to the Transmission Provider in its Service Agreement executed pursuant to Section 74 and Attachment KK-1 of this Tariff all such restrictions of which the Reliability Coordination Customer is aware, and shall without undue delay inform the Transmission Provider of any subsequent operating restrictions on transmission facilities and existing operating and environmental restrictions that limit a generator's ability to change its dispatch if such conditions arise during the time that the Transmission Provider is attempting mitigating an IROL or SOL violation so as to return the Combined Reliability Systems to a reliable state.

MISO	72.14
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider shall prepare reports, as may be requested by the Reliability Coordination Technical Committee, on reliability events within the Bulk Electric Systems that require reconfiguration of the Reliability Coordination Customer Transmission Facilities, generation redispatch or firm transmission curtailments. The report shall identify the cause of the reliability event and actions taken to prevent reoccurrence, if known to the Transmission Provider. A copy of each report shall be provided to the Reliability Coordination Technical Committee, and if required by NERC or Regional Entity requirements, to the appropriate authorities.

MISO	72.15
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider shall have a Reliability Coordinator Area restoration plan that provides coordination between the restoration plans of the Reliability Coordination Customer and other transmission operators and that ensures that reliability is maintained during system restoration events.



MISO	72.16
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider shall monitor the Reliability Coordination Customer's restoration progress when implementing the Reliability Coordination Customer's system restoration plan and shall coordinate any assistance needed by the Reliability Coordination Customer.

MISO	72.17
FERC Electric Tariff	
MODULES	30.0.0

For any Reliability Coordination Customer that is a member of a Reserve Sharing Group, the Transmission Provider will coordinate as required by NERC reliability standards with the Reliability Coordination Customer to implement deployment of reserves as required.

MISO	72.18
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider shall act in the interests of reliability for the overall Reliability Coordinator Area and the Interconnection, rather than any individual entity. The Transmission Provider will not grant any undue preference or advantage to the Reliability Coordination Customer, or subject the Reliability Coordination Customer to any undue prejudice or disadvantage, with regard to any other users of the transmission system or Market Participants under this Tariff, or with regard to the Transmission Owners, in the performance of its duties as the Reliability Coordinator, or in the use of data that may be employed by reliability, transmission, and energy market systems.

MISO	72.19
FERC Electric Tariff	
MODULES	30.0.0

Any delegation by the Transmission Provider of tasks related to the Reliability Coordination Service to another entity shall be memorialized in formal operating agreements with that entity and shall be consistent with this Part and the applicable Service Agreement. The Transmission Provider shall verify that all delegated tasks are understood, communicated, and addressed within its Reliability Coordinator Area. All responsibilities for complying with NERC and Regional Entity standards applicable to Reliability Coordinators shall remain with the Transmission Provider.

MISO	72.20
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider and the Reliability Coordination Customer will do nothing inconsistent with each other's ownership or other proprietary rights to its data, information, software, base data models and operating procedures for software or base data models.

MISO	72.21
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider and the Reliability Coordination Customer shall reasonably assist each other in establishing measures to preserve the integrity and prevent any corruption or loss of data; shall retain and preserve any of the other's data that is supplied to it during the term of the applicable Service Agreement; and shall exercise commercially reasonable efforts to preserve the integrity of the data that is supplied to it during the term of the applicable Service Agreement in order to prevent any corruption or loss of each other's data.

Notwithstanding anything to the contrary herein, nothing in this Part I of Module F shall be interpreted to require the Transmission Provider to take any action inconsistent with its filed tariffs or any Commission or NERC rule, order, practice, standard or regulation. The duties of the Transmission Provider and the Reliability Coordination Customer, as stated in this Part I of this Module F, are intended to reflect the requirements of NERC and regional reliability standards. If new or modified reliability standards applicable to the Reliability Coordination Service create a conflict or inconsistency with the terms and conditions of Part I of this Module F, the applicable Service Agreement shall be deemed amended to conform to all applicable reliability standards. To the extent necessary, the Transmission Provider will file amendments to the Tariff with the Commission to eliminate the conflict.





MISO	73.1
FERC Electric Tariff	
MODULES	30.0.0

The Reliability Coordination Customer will notify the Transmission Provider without undue delay of any breakdown, outage, or operating malfunction in its hardware, software or other control center equipment, or of any other operating difficulty that prevents, or could prevent, the Reliability Coordination Customer from understanding and communicating to the Transmission Provider the real time conditions existing in the Reliability Coordination Customer's balancing authority area or transmission system.

The Reliability Coordination Customer shall comply in all respects with the operating policies and reliability standards of NERC and of the applicable Regional Entity. In the event that NERC or a Regional Entity conducts an audit of the Reliability Coordination Customer's balancing authority or transmission operation or facilities during the term of the applicable Service Agreement, the Reliability Coordination Customer shall notify the Transmission Provider of the audit and provide it a copy of the audit report and shall implement without undue delay all reasonable mitigation or remedial measures required to address deficiencies, if any, identified by such reliability or similar audit.

The Reliability Coordination Customer will comply with any directives issued by the Transmission Provider pursuant to Section 72.10; provided that nothing in this Section 73.3 shall require the Reliability Coordination Customer to undertake any action contrary to applicable law, or that would constitute a violation of an applicable NERC or Regional Entity standard or to take any actions that would endanger the safety of employees or the public, cause damage to facilities or violate legal or regulatory requirements. If the Reliability Coordination Customer is unable to implement the directives of the Transmission Provider for any reason, it shall immediately inform the Transmission Provider of the inability to perform the directive so that the Transmission Provider may implement alternate remedial actions.

MISO	73.4
FERC Electric Tariff	
MODULES	30.0.0

Concurrently with its execution of its Service Agreement pursuant to Section 74 and Attachment KK-1 of this Tariff, the Reliability Coordination Customer shall provide the Transmission Provider with all such information as is reasonably necessary for the Transmission Provider to provide the Reliability Coordination Service, including, but not limited to, the following information:

MISO	73.4.1
FERC Electric Tariff	
MODULES	30.0.0

Transmission related Operating Guides;

MISO	73.4.2
FERC Electric Tariff	
MODULES	30.0.0

Information regarding the ratings of all transmission facilities, including methods by which the ratings of equipment are determined;

MISO	73.4.3
FERC Electric Tariff	
MODULES	30.0.0

Schedules for planned outages and the status of forced outages of the Reliability Coordination  
Customer Transmission Facilities and any generation facilities connected to those facilities  
where any such outage would affect the reliability of the Combined Reliability Systems;

MISO	73.4.4
FERC Electric Tariff	
MODULES	30.0.0

Information regarding the operation of the Reliability Coordination Customer Transmission Facilities, including, but not limited to, information relating to all breakers, switches, capacitor banks, reactors, phase shifters, and flows; and



MISO	73.4.5
FERC Electric Tariff	
MODULES	30.0.0

Transmission planning information for the Reliability Coordination Customer Transmission

Facilities that has an impact on transmission service over the Combined Reliability Systems.

MISO	73.5
FERC Electric Tariff	
MODULES	30.0.0

The Reliability Coordination Customer shall have responsibility for taking actions with respect to the Reliability Coordination Customer Transmission Facilities, so as to maintain the reliability of the Bulk Electric System in a manner consistent with NERC and applicable Regional Entity standards.

MISO	73.6
FERC Electric Tariff	
MODULES	30.0.0

All actions taken by the Reliability Coordination Customer pursuant to Section 73.5 of this Tariff shall be consistent with Operating Guides previously provided to the Transmission Provider pursuant to the applicable Service Agreement.

MISO	73.7
FERC Electric Tariff	
MODULES	30.0.0

The Reliability Coordination Customer shall be responsible for developing, maintaining and implementing a set of plans to mitigate operating emergencies.

MISO	73.8
FERC Electric Tariff	
MODULES	30.0.0

The Reliability Coordination Customer shall be responsible for developing a system restoration plan for the Reliability Coordination Customer Transmission Facilities that is consistent with the Transmission Provider's Reliability Coordinator Area system restoration plan, provided that such consistency: (a) does not endanger the supply of electricity in the Reliability Coordination Customer's balancing authority area; (b) does not endanger equipment or physical safety; and (c) does not contravene applicable state law or regulatory orders.

MISO	73.9
FERC Electric Tariff	
MODULES	30.0.0

The Reliability Coordination Customer shall provide the Transmission Provider with all of the Reliability Coordination Customer's operational data required by the Transmission Provider to perform its role as Reliability Coordinator as described in this Part.

MISO	73.10
FERC Electric Tariff	
MODULES	30.0.0

Upon request, the Reliability Coordination Customer shall provide to other balancing authorities and transmission operators, operating data necessary to allow the balancing authorities and transmission operators to perform operational reliability assessments and to coordinate reliable operations.

MISO	73.11
FERC Electric Tariff	
MODULES	30.0.0

The Reliability Coordination Customer shall provide the Transmission Provider with a document defining the criteria used by the Reliability Coordination Customer in developing its Operating Guides.



MISO	73.12
FERC Electric Tariff	
MODULES	30.0.0

The Reliability Coordination Customer shall submit its transmission and generation facility maintenance and outage schedules to the Transmission Provider in accordance with existing Transmission Provider outage coordination procedures unless otherwise agreed to by the Reliability Coordination Customer and the Transmission Provider. The Transmission Provider shall have authority to disapprove or to revise these transmission and generation schedules if they fail to meet established reliability standards or if necessary to respond to Emergency conditions.

MISO	73.13
FERC Electric Tariff	
MODULES	30.0.0

The Reliability Coordination Customer shall take such action with respect to the Reliability Coordination Customer Transmission Facilities as directed by the Transmission Provider pursuant to Operating Guides for the Reliability Coordination Customer Transmission Facilities within 30 minutes of receiving direction from the Transmission Provider.

MISO	73.14
FERC Electric Tariff	
MODULES	30.0.0

The Reliability Coordination Customer shall obtain approval of the Transmission Provider before taking out of service or reconnecting the Reliability Coordination Customer Transmission Facilities, except where delaying such actions would endanger the safety of employees or the public or would cause damage to facilities or would violate legal or regulatory requirements. When time does not permit obtaining approval for the reasons stated, the Reliability Coordination Customer shall notify the Transmission Provider at the earliest possible time.



MISO	74.1
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider shall offer a standard form Service Agreement for Reliability Coordination Service to the entity eligible to receive service under Part I of this Module F. Executed Service Agreements that contain the information required under this Part shall be filed with the Commission in compliance with applicable Commission regulations. The standard form of Service Agreement for Reliability Coordination Service is provided in Attachment KK-1 to this Tariff.

MISO	74.2
FERC Electric Tariff	
MODULES	30.0.0

If the Commission determines that regulatory filings are required to implement the Service Agreement, the Transmission Provider and the Reliability Coordination Customer shall cooperate with each other as necessary and appropriate to facilitate such filings.



MISO	75.1
FERC Electric Tariff	
MODULES	30.0.0

The initial term of the Reliability Coordination Service shall be for a period of three (3) years after the effective date of the Service Agreement executed pursuant to Section 74 and Attachment KK-1 of this Tariff. The Service Agreement shall automatically renew thereafter for successive one (1) year terms unless written notice of termination is provided not less than one year prior to the end of the initial or any subsequent term. The effective date of the Service Agreement shall be the date set forth therein or any other date as may be established by the Commission.



A Reliability Coordination Customer to which Section 12E of this Tariff applies may terminate the Service Agreement executed pursuant to Section 74 and Attachment KK-1 of this Tariff at any time during the initial term or any extension thereof with less than the required one-year notice, in the event that the statutes governing such Reliability Coordination Customer, or any provisions of this Part I of Module F or the provisions of the Tariff incorporated by reference in this Part I of Module F are changed or modified in a manner that causes a conflict with state law, regulations, or rate schedules and the review process described in Section 12E is unable to resolve such conflict.

MISO	75.3
FERC Electric Tariff	
MODULES	30.0.0

Upon written notice to the Transmission Provider that Reliability Coordination Customer is exercising its right to terminate its Service Agreement executed pursuant to Section 74 and Attachment KK-1 of this Tariff under Section 12E of the Tariff, the Transmission Provider and the Reliability Coordination Customer will work in good faith to make all required arrangements to transfer to another Reliability Coordinator as soon as possible the data, operating guides, modeling, and other requirements to permit the Reliability Coordination Customer to obtain reliability coordination service from another service provider.



MISO	76.1
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider will use the then-current NERC TLR procedures and related NAESB business practices to mitigate congestion on the Reliability Coordination Customer Transmission Facilities. If the Reliability Coordination Service under this Part is combined with the Interconnected Operations and Congestion Management Service under Part II of this Module F, the procedures for congestion management for such a Reliability Coordination Customer shall be as set forth in Part II of this Module F.



MISO	77.1
FERC Electric Tariff	
MODULES	30.0.0

Reliability Coordination Customers taking service under Part I of this Module F, shall pay for

Reliability Coordination Service in accordance with Sections 77.2 through 77.5 of this Tariff.

MISO	77.2
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider's compensation for providing Reliability Coordination Service to the Reliability Coordination Customer shall be based on the Transmission Provider's cost to provide such services, as set forth in Schedule 31, Part II, Section A of the Tariff. The calculation of the monthly charges for Reliability Coordination Service shall follow the formula set forth in Schedule 31, Part II, Section B of this Tariff. The billing and payment terms for service under this Part I of Module F are set forth in Section 7.19 of the Tariff.

MISO	77.3
FERC Electric Tariff	
MODULES	30.0.0

Upon termination of the applicable Service Agreement, except for the purpose of becoming a Transmission Owning Member of MISO, the Reliability Coordination Customer shall be responsible for payment of an allocated share of the remaining book value of all incremental capital assets associated with the provision of the services under Part I of this Module F and the applicable Service Agreement that are under development or in-service as of the Termination Date (“Incremental Reliability Coordination Assets”), and for certain financing costs associated with the Incremental Reliability Coordination Assets, as set forth in Section 77.3.1 to 77.3.3.



MISO	77.3.1
FERC Electric Tariff	
MODULES	30.0.0

For the purposes of Section 77.3 of the Tariff, the calculation of the value for Incremental Reliability Coordination Assets shall be the sum of: (a) the remaining book value of all capital assets associated with the provision of the services under Part I of this Module F and the applicable Service Agreement that were placed into service on or after December 31, 2007; and (b) the balance of all work in progress on assets associated with the provision of the Reliability Coordination Service as of the date of termination.

MISO	77.3.2
FERC Electric Tariff	
MODULES	30.0.0

In addition to payment owed for an allocated share of Incremental Reliability Coordination Assets, the Reliability Coordination Customer shall be responsible for payment of an allocated share of the remaining interest expense over the life of any outstanding debt issued subsequent to December 31, 2007 that is or was used to finance the development or acquisition of capital assets associated with the provision of the Reliability Coordination Service that were placed into service on or after December 31, 2007. The Reliability Coordination Customer shall also be responsible for payment of an allocated share of any remaining payments associated with lease obligations incurred on or after December 31, 2007 that are or were used to finance the development or acquisition of assets associated with the provision of Reliability Coordination Service that were placed into service on or after December 31, 2007.

MISO	77.3.3
FERC Electric Tariff	
MODULES	30.0.0

In computing the financial obligations outstanding as of the date of termination, the lump sum amount owed under this Section 77.3 that is associated with remaining interest payments over the life of the outstanding debt that is associated with the provision of Reliability Coordination Service shall be discounted to a net present value amount with the discount rate used equal to the expected interest rate to be earned on funds held in the investment account of the Transmission Provider.

MISO	77.3.4
FERC Electric Tariff	
MODULES	30.0.0

The Reliability Coordination Customer shall also be responsible for payment of an allocated share of the accrued current liabilities on the balance sheet of the Transmission Provider as of the date of termination of the Service Agreement.

The Reliability Coordination Customer shall pay a Load Ratio Share of these incremental financial obligations. The load ratio share shall be calculated as the Reliability Coordination Customer's monthly peak demand for the twelve months preceding the termination of the Service Agreement, relative to the sum of the monthly peak demand during that period of all Reliability Coordination Customers and all Tariff Customers receiving Network Integration Transmission Service under the Tariff. All peak demand information shall be converted into Maximum Energy Transfer data as defined in Part II, Section A, of Schedule 10 of this Tariff. The Transmission Provider shall use the non-coincident peak demand for each Reliability Coordination Customer multiplied by the number of hours in a month to derive the Reliability Coordination Customer's Maximum Energy Transfer value. The Transmission Provider shall compute Maximum Energy Transfer values for its Tariff Customers taking Network Integration Transmission Service during the preceding month from their non-coincident peak demand. The Reliability Coordination Customer shall pay the entire amount owed under this Section 77 at the time the applicable Service Agreement is terminated.

MISO	77.3.6
FERC Electric Tariff	
MODULES	30.0.0

As to a Reliability Coordination Customer to which Section 12E of this Tariff applies, the obligation to make the payments under this Section is subordinate and junior in all respects to the obligation of the Reliability Coordination Customer to pay the principal and interest on its bonds.

MISO	77.4
FERC Electric Tariff	
MODULES	30.0.0

Each Reliability Coordination Customer shall provide to the Transmission Provider the monthly peak demand required by the Transmission Provider to calculate the applicable charge as set forth in Schedule 31 of this Tariff. Such data shall be transmitted electronically to the Transmission Provider no more than five (5) Business Days after the end of each calendar month.

During March of each calendar year, the Transmission Provider shall update the percentage cost allocations currently set forth in Table 1 and Table 2 of Schedule 31 of this Tariff. The revised percentage cost allocation values shall then be used to compute monthly charges for Reliability Coordination Service for the next twelve months as specified in Schedule 31. On or before April 1 of each year in which the applicable Service Agreement is in effect, the Transmission Provider shall provide to the Reliability Coordination Customer a copy of the applicable charge cost allocation for the twelve month period beginning April 1, and a reasonable explanation of its calculation.



MISO	77.6
FERC Electric Tariff	
MODULES	30.0.0

Notwithstanding any other provision of this Part I of Module F, all amounts paid by the Transmission Provider as the result of fines or penalties imposed by or associated with a NERC or a Regional Entity enforcement action shall be recovered pursuant to a Commission-approved Tariff charge, and the Reliability Coordination Customer shall pay its allocated share of such costs, on the same basis as other costs included in the charges set forth in Section 77 of this Tariff.



MISO	78.1
FERC Electric Tariff	
MODULES	30.0.0

A Reliability Coordination Technical Committee is hereby established. The Transmission Provider and each Reliability Coordination Customer shall be a voting member of the Reliability Coordination Technical Committee.

MISO	78.2
FERC Electric Tariff	
MODULES	30.0.0

A member's representative in the Reliability Coordination Technical Committee shall be a person of reasonable competency and with such authority as to uphold the decisions made, to the extent such decisions do not require formal approval under governing state laws and regulations.

The Reliability Coordination Technical Committee shall meet at least quarterly during the first year after the effective date of Part I of this Module F, and shall meet periodically thereafter as the Reliability Coordination Technical Committee shall, by a majority vote of three-fourths of those entitled to vote, determine to be necessary to perform its duties in a reliable and efficient manner. By a majority vote of three-fourths of those entitled to vote, the Reliability Coordination Committee may expand participation and voting rights in the Committee's proceedings to include transmission service customers of Reliability Coordination Customers that may be affected by Reliability Coordination Service under this Part I.

In cooperation with the Transmission Provider, and consistent with the requirements of this Tariff and all applicable reliability standards, the Reliability Coordination Technical Committee shall:

- a. review procedures for the implementation of the operating and technical requirements of Part I of this Module F;
- b. review and comment upon operating practices and guides to ensure the safe and reliable operation of their facilities consistent with applicable NERC and Regional Entity standards;
- c. participate in the development of Business Practices Manuals for the administration of Part I of this Module F on a reliable and economically efficient basis; and
- d. address other matters referred to in, or necessary for implementation, administration or operation of, Part I of this Module F.

MISO	78.5
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MODULES	30.0.0

Recommendations and other actions of the Reliability Coordination Technical Committee shall be by a three-fourths majority of those present and entitled to vote under the rules adopted by the Reliability Coordination Technical Committee to govern its proceedings. Nothing herein shall prohibit the Reliability Coordination Technical Committee from developing rules and procedures regarding proxy voting, and/or procedures to allow electronic meeting or voting.

MISO	78.6
FERC Electric Tariff	
MODULES	30.0.0

All proceedings and decisions of the Reliability Coordination Technical Committee shall be reduced to writing and signed by the Reliability Coordination Technical Committee representatives, but such proceedings and decisions shall not be inconsistent with and shall not serve to contradict any terms or conditions of the Tariff in effect at the time of such procedures or decisions being made or developed. Tariff changes recommended by the Reliability Coordination Technical Committee, with which MISO concurs, shall be reviewed and discussed by the Advisory Committee before filing with the Commission.



MISO	78.7
FERC Electric Tariff	
MODULES	30.0.0

Participation in the activities of the Reliability Coordination Technical Committee by the Transmission Provider or by the Reliability Coordination Customer shall not constitute a waiver by that entity of any of its rights under the Federal Power Act to initiate a proceeding, make any other filing, or advance any position regarding any matter before the Commission.

MISO	78.8
FERC Electric Tariff	
MODULES	30.0.0

The Reliability Coordination Technical Committee may coordinate its activities with the activities of the appropriate committee, subcommittee or task force of the Transmission Provider's stakeholder group dealing with similar reliability issues, and may vote to suspend some or all of the meetings of this committee in order to attend and participate in the activities of such group if the Charter of that committee, subcommittee or task force provide for such participation.

### Preamble

The Transmission Provider shall provide, subject to the terms and conditions of this Part II of Module F, specific congestion management services, including redispatch of generation within the Energy and Operating Reserve Markets, for interconnected transmission providers.



To be eligible for Interconnected Operations and Congestion Management Service under this Part, a Congestion Management Customer must: (i) be a NERC Registered Transmission Provider providing reciprocal transmission service pursuant to an open access transmission tariff or other applicable tariff using transmission facilities that are physically connected to the Transmission System; and (ii) register as a Market Participant pursuant to the Tariff. A Congestion Management Customer may not be, during the time service is provided under this Part II, a signatory to the ISO Agreement. As a condition to obtaining service, the Congestion Management Customer must execute an applicable Service Agreement, as set forth in Section 85 and Attachment KK-2 of this Tariff, and provide to the Transmission Provider the information required by this Part.



The Transmission Provider and the Congestion Management Customer (or the Congestion Management Customer's tariff administrator or Reliability Coordinator as appropriate) shall transfer to each other the following types of data and information:

- (a) Real-Time and Projected Operating Data (80.1.1);
- (b) SCADA Data (80.1.2);
- (c) EMS Models (80.1.3); and
- (d) Operations Planning Data (80.1.4).

The Transmission Provider and the Congestion Management Customer shall provide to each other the data identified in items (a) through (d) above with respect to all transmission owners for which they administer transmission service on the effective date of this Part and thereafter, whether or not they administer such transmission service as of the effective date. The Transmission Provider and the Congestion Management Customer shall cooperate to supply such data and information (to the extent such information is the subject of this Part) as the Independent Market Monitor may request in order to facilitate monitoring in accordance with the Transmission Provider's Commission approved market monitoring plan.

To ensure the accuracy of all critical operating data, the Transmission Provider and the Congestion Management Customer will designate to each other, a contact person to be available twenty-four (24) hours each day, seven (7) days per week, and an alternate contact to act in the absence or unavailability of the primary contact, to respond to any inquiries. With respect to each contact and alternate, the Transmission Provider and the Congestion Management Customer shall provide to each other the name, telephone number, e-mail address, and fax number. The Transmission Provider and the Congestion Management Customer may change a designated

MISO	80.1
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contact from time to time by notice to each other's designated representative. The Transmission Provider and the Congestion Management Customer shall transfer data to each other in a timely manner consistent with existing defined formats or such other formats to which they may agree. If any required data transfer format has not been agreed upon as of the effective date of this Part, or if the Transmission Provider or the Congestion Management Customer determines that an agreed format should be revised, it shall give notice of the need for an agreed format or revision to the other party, and the Transmission Provider and the Congestion Management Customer will jointly seek to complete development of the format within thirty (30) days of such notice. Upon agreement, development will be completed as soon as practical.



The Transmission Provider and the Congestion Management Customer shall exchange two categories of operating data, real-time information and projected information, as follows:

- a. The real-time operating information consisting of:
  - i. generation status of the units, as telemetered or as derived from the unit breaker, in each party's tariff or footprint;
  - ii. transmission line status, i.e., status of switching devices associated with each end of the line;
  - iii. balancing authority area demands;
  - iv. selected real-time telemetered bus loads where available;
  - v. scheduled use of reservations;
  - vi. critical facility limits; and
- b. Projected operating information consisting of:
  - i. merit order block loading;
  - ii. generating unit and transmission facilities maintenance schedules;
  - iii. the planned operational start-up or change dates for any permanently added, removed or significantly altered transmission segments; and
  - iv. the planned start-up testing and operational start-up or change dates for any permanently added, removed or significantly altered generation units.

The Transmission Provider and the Congestion Management Customer shall transfer data as set forth below, consistent with NERC requirements for the transfer of data by balancing authorities and Reliability Coordinators:

- i. The Transmission Provider and the Congestion Management Customer shall transfer requested SCADA Data via ICCP or ISN;
- ii. The Transmission Provider and the Congestion Management Customer shall accommodate, as soon as practical, the other party's requests for additional existing ICCP/ISN bulk transmission data points, after the request has been submitted;
- iii. The Transmission Provider and the Congestion Management Customer shall respond, as soon as practical, to the other party's requests for additional, unavailable ICCP/ISN bulk transmission data points, but in any event no more than two (2) weeks after the request has been submitted, with an expected availability target date for the requested data;
- iv. The Transmission Provider and the Congestion Management Customer shall comply with all governing confidentiality agreements executed between them relating to ICCP/ISN data; and
- v. All ICCP data transferred between the Transmission Provider and the Congestion Management Customer shall be transferred via ISN (NERCNet), unless another transfer platform is otherwise agreed upon.

MISO	80.1.3
FERC Electric Tariff	
MODULES	30.0.0

The Congestion Management Customer and the Transmission Provider shall exchange EMS models once a year in the common information model (“CIM”) format adopted by the NERC Data Exchange Working Group, or in an otherwise agreed-upon format, with monthly updates to be provided as new data becomes available. This yearly transfer will include the ISN data definition files, identification of individual bus loads, seasonal equipment ratings and one-line drawings that will be used to expedite the model conversion process. The monthly updates represent the incremental changes that have occurred to the EMS model since the last monthly update.

MISO	80.1.4
FERC Electric Tariff	
MODULES	30.0.0

Upon the written request of either the Transmission Provider or the Congestion Management Customer, the other party shall provide the information specified in Sections 80.1.4.1 through 80.1.4.11 of this Tariff. Each request shall specify the information sought and the frequency upon which it shall be provided, and, with respect to Sections 80.1.4.6, 80.1.4.7, and 80.1.4.8, the reason why provision of the information is necessary to achieve the objectives of Part II of this Module F.

If the Transmission Provider or the Congestion Management Customer receives a request under this Section, it shall provide the information promptly to the extent the information is available.

- i. Flowgate definitions including seasonal TTC, TRM, CBM, and appropriate multipliers;
- ii. Flowgates to be added to OASIS Request Evaluation processes on demand, if needed immediately for reliability;
- iii. List of Coordinated and Reciprocal Coordinated Flowgates;
- iv. List of Flowgates to recognize when processing transmission service (if different than list of Coordinated and Reciprocal Flowgates);
- v. Operating Guides; and
- vi. Requirements under Section 81.1.7 of this Tariff.

- i. Daily list of all transmission service requests, hourly increment of new requests and status changes on existing requests;
- ii. List of reservations to include and to exclude; and
- iii. Requirements under Sections 81.1.4 and 81.1.5 of this Tariff.

The Transmission Provider and the Congestion Management Customer currently meet and will continue to meet a minimum periodicity for calculating and posting AFCs. The minimum periodicity depends on the service being offered. The following AFC data will be provided:

- i. Hourly for the first seven (7) days posted at a minimum, once per hour;
- ii. Daily for days eight (8) through thirty-one (31) posted at a minimum, once per day; and
- iii. Monthly for months two (2) through thirty-six (36) posted at a minimum, once per month.

The Transmission Provider and the Congestion Management Customer will provide the following load forecast information.

- i. Hourly for next seven (7) days, daily for days three (3) through thirty-one (31), and monthly for months two (2) through thirty-six (36) submitted once a day;
- ii. Identify whether the load forecast is for Balancing Authority Area or sub-Balancing Authority Area (by company within the Balancing Authority Area) forecast;
- iii. Indicate whether this includes transmission system losses, and if it does, indicate what the percent losses are;
- iv. Identify non-conforming loads, as defined by NERC;
- v. Indicate how municipal entities, cooperatives and other entity loads are treated; indicate whether they are included in the forecast; and, if so, indicate the total load or net load after removing other entity generation; and
- vi. Requirements under Section 81.1.6 of this Tariff.



- i. Unit owner, bus location in model;
- ii. Seasonal ratings, PMIN, PMAX, QMIN, QMAX;
- iii. Station auxiliaries to extent gross generation has been reported;
- iv. Regulated bus, target voltage and actual voltage;
- v. Planned maintenance; and
- vi. Real-time output (MW & MVAR) with net generation after being reduced for station auxiliaries preferred.

- i. Deemed ownership shares;
- ii. Treatment as pseudo tie or dynamic/static schedules;
- iii. Rules for sharing output between joint owners of those units that affect the operating seam between the Transmission Provider and the Congestion Management Customer; and
- iv. Transmission arrangements between joint owners.

- i. Accredited capacity;
- ii. Planned maintenance;
- iii. Whether aggregated generation or generation by piece of equipment; and
- iv. Whether all output is tagged.

- i. Any grandfathered agreements that do not appear in OASIS; and
- ii. If tags and reservations can no longer be used to develop balancing authority area or zone net interchange, merit order block loading information will be needed for all generators in the balancing authority area/zone.

- i. List of dynamic transfers;
- ii. Identification of each dynamic transfer as a dynamic schedule or pseudo-tie, as defined by NERC; and
- iii. Requirements under Section 81.1 of this Tariff.

- i. List of controllable devices that may include: phase shifters, DC lines, and back-to-back AC/DC converters; and
- ii. Operating practices of the controllable devices.

- i. Generation Outages that are planned or forecast, as soon as practicable after they are identified, including all data specified in Section 81.1.1 of this Tariff;
- ii. Transmission Outages that are planned or forecast, as soon as practicable after they are identified, including all data specified in Section 81.1.3 of this Tariff; and
- iii. Prompt notification of all forced Outages of both generation and transmission resources.

MISO	80.2
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider and the Congestion Management Customer shall periodically confer regarding the need to transfer any information other than that identified for transfer in Section 80.1, and shall negotiate in good faith to make agreements for the transfer of such additional information as is necessary to achieve the objectives of this Part.



MISO	80.3
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider and the Congestion Management Customer shall bear their own cost of providing information to each other pursuant to Sections 80.1 and 80.2 of this Tariff.



As of the effective date of this Part, the Transmission Provider and the Congestion Management Customer shall use the NERC System Data Exchange (“SDX”) System to transfer the status of generators, Outages of all interconnections and other critical transmission facilities, and peak load forecasts, which has the capability to house daily data for the next seven (7) days, weekly data for the next month, and monthly data for the next year. The specific criteria for satisfying the requirements of this Section 81 shall be set forth in the TTC/ATC/AFC Protocol which shall be incorporated into and made a part of the Service Agreement executed by the Congestion Management Customer and the Transmission Provider pursuant to Section 85 and Attachment KK-2 of this Tariff.

MISO	81.1.1
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider and the Congestion Management Customer shall provide each other with projected status of generation availability over the next twelve (12) months. If information is available, the Transmission Provider and the Congestion Management Customer may provide more than twelve (12) months of information regarding the projected status of generation availability. The Transmission Provider and the Congestion Management Customer will update this data no less than once daily for the full posting horizon and more often as required by system conditions. The data will include complete generation maintenance schedules and the most current generator availability data, such that each party is aware of the “return date” of each generator subject to a scheduled or forced outage.

MISO	81.1.2
FERC Electric Tariff	
MODULES	30.0.0

As necessary to permit the Transmission Provider and the Congestion Management Customer to develop a reasonably accurate dispatch for the calculation of TTC and ATC/AFC values under any modeled condition, they shall provide each other with a typical generation merit order or the generation participation factors of all units on an affected balancing authority area basis. The generation merit order will be updated as required by changes in the status of the unit; however, a new generation merit order need not be provided more often than prior to each peak load season.

MISO	81.1.3
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider and the Congestion Management Customer shall provide each other with the projected status of transmission outage schedules over the next twelve (12) months or more if available. This data shall be updated no less than once daily for the full posting horizon and more often as required by system conditions. The data will include current, accurate and complete transmission facility maintenance schedules, including the “outage date” and “return date” of a transmission facility from a scheduled or forced outage.

MISO	81.1.4
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider and the Congestion Management Customer shall make available to each other their interchange schedules, as required to permit accurate calculation of TTC and ATC/AFC values. Due to the high volume of this data, the Transmission Provider and the Congestion Management Customer shall either post this data to an FTP site for download or shall request NERC to modify the IDC to allow for selected interrogation by each other.

MISO	81.1.5
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider and the Congestion Management Customer shall coordinate transmission service requests as follows:



MISO	81.1.5.1
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider and the Congestion Management Customer shall make available to each other, on an FTP site, all transmission service request information available for integration into their ATC/AFC calculation process. The Transmission Provider shall provide transmission service request information from its OASIS Node. The Congestion Management Customer shall provide transmission service request information from the Congestion Management Customer OASIS Node.

MISO	81.1.5.2
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider and the Congestion Management Customer shall develop practices for modeling their transmission service requests, including external third party requests. The Transmission Provider and the Congestion Management Customer shall provide each other with the procedures developed and implemented to model intra-party requests under the Congestion Management Customer's transmission tariff and other designated tariffs that may be used to provide transmission service.

Transactions are not included in ATC/AFC determinations if the impacts from the transmission service request are already accounted in a base case model or some other component of the ATC/AFC calculation. The Transmission Provider and the Congestion Management Customer shall create and maintain a list, on an FTP site, of transmission service requests on their OASIS Node that are not included in their own ATC/AFC determination process, so that the transmission service request is excluded in each other's analysis.

MISO	81.1.6
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider and the Congestion Management Customer shall transfer peak load data for each period (e.g., daily, weekly, and monthly). Because peak load values may only apply to one (1) hour of the period, additional assumptions must be made with respect to load level when not at peak load conditions. For the next seven (7) day horizon, the Transmission Provider and the Congestion Management Customer shall either supply hourly load forecasts or they shall supply daily peak load forecasts with a load profile.

MISO	81.1.7
FERC Electric Tariff	
MODULES	30.0.0

To determine if a transmission service reservation (or interchange schedule) will impact Flowgates to an extent greater than the (firm or non firm) AFC and to assure that the Transmission Provider and the Congestion Management Customer respect each other's Flowgates, the Transmission Provider and the Congestion Management Customer will transfer Firm and Non-firm AFC for all Coordinated Flowgates. The Transmission Provider and the Congestion Management Customer will continue to accept or reject transmission service requests based upon projected loadings on their own Flowgates as well as the loadings on the other party's Flowgates so as not to exceed the posted AFC.

MISO	81.1.8
FERC Electric Tariff	
MODULES	31.0.0

The Transmission Provider and the Congestion Management Customer will transfer Flowgate Ratings as well as all limiting conditions (thermal, voltage, or stability) in accordance with Attachment M of the Tariff. The Transmission Provider and the Congestion Management Customer will update this information in a timely manner as required by changes on the transmission system.

MISO	81.1.9
FERC Electric Tariff	
MODULES	30.0.0

In accordance with Attachment LL of this Tariff, Flowgates that have a response factor equal to or greater than the distribution factor cut-off must be included in the evaluating party's model to the extent inclusion is practical. The Transmission Provider and the Congestion Management Customer shall use the response factor cut-off that the owning/operating party uses for its Flowgate in its AFC determination efforts.

The Transmission Provider and the Congestion Management Customer will ensure that all significant system changes are incorporated in their TTC/ATC/AFC calculation models.

Although this information and additional, detailed data are included in the MMWG cases, this data transfer mechanism will address the major changes that should be included in the TTC/ATC/AFC calculation models in a more timely manner. This data transfer will occur no less often than prior to each peak load season. In addition, the Transmission Provider and the Congestion Management Customer agree to transfer TTC/ATC/AFC calculation models of their transmission systems as soon as mechanisms can be established to facilitate this transfer.



MISO	81.1.11
FERC Electric Tariff	
MODULES	30.0.0

Following standardization of TTC/ATC/AFC calculations pursuant to Commission order and action by NERC and NAESB, the Transmission Provider and the Congestion Management Customer shall confer to determine whether the protocols continue to be necessary, and if so, what revisions to the protocols or this Part may be required to comply with the current standards and practices. The Transmission Provider and the Congestion Management Customer shall cooperate in good faith to implement such revisions as quickly as possible.



MISO	82.1
FERC Electric Tariff	
MODULES	30.0.0

In order to coordinate congestion management proactively, the Transmission Provider and the Congestion Management Customer agree to respect each other's determinations of AFC/ATC and curtailment priorities for real-time operations applicable to their Coordinated Flowgates (CFs). Additionally, the Transmission Provider and the Congestion Management Customer agree to respect the allocations defined by the reciprocal allocation process set forth in the Congestion Management Process (CMP), which is set forth in Attachment LL to this Tariff.

MISO	82.2
FERC Electric Tariff	
MODULES	30.0.0

The process and timing for exchanging ATC/AFC calculations and Firm Flow calculations/allocations with respect to all RCFs are set forth in the CMP.

MISO	82.3
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider's and the Congestion Management Customer's capabilities and real time actions shall be governed by and in accordance with the coordination process for RCFs, as set forth in the CMP.

MISO	82.4
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider will utilize its Unit Dispatch System (UDS) and Security-Constrained Unit Commitment (SCUC) in effect at the time to manage the portion of the flows on an RCF allocated to the Transmission Provider. The Congestion Management Customer's Reliability Coordinator will utilize NERC TLR process to manage the portion of the flows on an RCF allocated to the Congestion Management Customer.

MISO	82.5
FERC Electric Tariff	
MODULES	30.0.0

[Reserved]

If the Transmission Provider and the Congestion Management Customer have contract paths to the same entity, the combined contract path capacity will be made available for use by both parties. This will not create new contract paths for either Party that did not previously exist. The Congestion Management Customer will not be able to deal directly with companies with which it does not physically or contractually interconnect and the Transmission Provider will not be able to deal directly with companies with which it does not physically or contractually interconnect.





The Congestion Management Customer's Reliability Coordinator will use the NERC TLR procedures to mitigate congestion on the Congestion Management Customer's Transmission System. As a condition of service under this Part, the Congestion Management Customer shall redispatch generation under its control, as set forth in Section 83.2 through Section 83.6 of this Tariff, in consideration of which MISO will redispatch generation at the request of the Congestion Management Customer, as set forth in Section 83.2 through Section 83.6 of this Tariff. Redispatch under this Section shall be implemented for the purpose of relieving actual or contingency overloads on flowgates when the party requesting redispatch determines that meeting its assigned relief obligation would be operationally burdensome or the cost of relieving the actual or contingency overload would be substantial.

In the initial Service Agreement Attachment KK-2, or upon a subsequent request by either party, the Transmission Provider and the Congestion Management Customer shall confer to identify:

(i) transmission operating constraints that could result in TLR or other emergency procedures in order to alleviate the transmission constraints, the need for which could be reduced or eliminated by the redispatch of generation controlled by the Congestion Management Customer or generation which is subject to redispatch by MISO, and (ii) the generation units on the Transmission System of MISO and on the Congestion Management Customer's system, the redispatch of which would alleviate the identified transmission constraints. In the event that the Transmission Provider and the Congestion Management Customer identify additional transmission constraints and generation units, the applicable Service Agreement Attachment KK-2 may be amended to include the additional transmission constraints and generating units. Agreement to the additional transmission operating constraints or generation units shall not be unreasonably withheld.

If, pursuant to the process set forth in this Section 83.2, the Transmission Provider and the Congestion Management Customer identify units on the Congestion Management Customer's system that are not controlled by the Congestion Management Customer, the Congestion Management Customer will make a good faith effort to assist Transmission Provider to obtain an agreement between the Transmission Provider and the unit operator to provide generation redispatch, and Congestion Management Customer will facilitate the transmission of energy necessary to effect redispatch under such third party agreements, as set forth in an operating procedure developed under Section 83.3.1.

MISO	83.2
FERC Electric Tariff	
MODULES	30.0.0

MISO	83.3
FERC Electric Tariff	
MODULES	30.0.0

The following redispatch procedures shall apply to generation redispatch arising under this Part

II:

MISO	83.3.1
FERC Electric Tariff	
MODULES	30.0.0

Redispatch procedures (operation procedures) for each flowgate shall be developed and agreed upon in writing by the Transmission Provider and the Congestion Management Customer prior to providing redispatch service. The operation procedures shall include but not be limited to generator ramp rates, time commitment for the Transmission Provider's or the Congestion Management Customer's generators such as minimum run times, minimum down times and/or a fuel delivery commitment period, and transmission arrangements. Implementation of the operating procedures shall be coordinated with the Congestion Management Customer.

MISO	83.3.2
FERC Electric Tariff	
MODULES	30.0.0

If TLR is called on a transmission flowgate subject to this Part, then the Transmission Provider or the Congestion Management Customer may request that the other party redispatch one or more of the units identified pursuant to Section 83.2 hereof to alleviate the requesting party's TLR assigned impacts on the transmission flowgate.

MISO	83.3.3
FERC Electric Tariff	
MODULES	30.0.0

Upon such request, the Transmission Provider or Congestion Management Customer will redispatch one or more of the units identified pursuant to Section 83.2. In no event shall the Congestion Management Customer or the Transmission Provider be required to redispatch or cycle the output of any unit if such redispatch or cycling: (i) may impair the safe and reliable operation of the units; (ii) is inconsistent with Good Utility Practice or this Tariff, including the limitations set forth in Section 83.3.4; or (iii) is contrary to any NERC requirement, or any legal or regulatory rule, standard or prohibition.



MISO	83.3.4
FERC Electric Tariff	
MODULES	30.0.0

The Congestion Management Customer will not implement a redispatch request under this Section 83.3, unless and until the Transmission Provider verifies the availability and deliverability into the Congestion Management Customer's system of replacement power from the Energy and Operating Reserve Markets, if such power is required by the Congestion Management Customer. If the Transmission Provider and the Congestion Management Customer do not concur on the availability and deliverability of replacement power, and that the purchase of such power as described in Section 83.4 of this Tariff can be completed without creating adverse conditions elsewhere on the systems of either party, the Congestion Management Customer will not implement the redispatch request, even though the criteria set forth in Section 83.3.3(i), (ii) and (iii) have been met.

MISO	83.3.5
FERC Electric Tariff	
MODULES	30.0.0

If implementing redispatch in response to a redispatch request involves a change in ramp rate, or time commitment for the Transmission Provider's or the Congestion Management Customer's generators such as minimum run times, minimum down times and/or a fuel delivery commitment period that varies from operating procedures developed pursuant to Section 83.3.1, this information will be provided in the response to the request for redispatch and will be factored into the decision to proceed with the redispatch request.

MISO	83.3.6
FERC Electric Tariff	
MODULES	30.0.0

If there is mutual agreement between the Transmission Provider and the Congestion Management Customer to implement a redispatch request, it will be implemented at a start time that may differ from the beginning of the clock hour. Likewise, the Transmission Provider and the Congestion Management Customer each retain the right to discontinue a redispatch request in the event the redispatch is no longer needed or the generators being used for redispatch are needed to avoid a violation of the criteria set forth in Section 83.3.3 for implementing a redispatch request. The redispatch will be discontinued at a mutually agreed upon stop time which may differ from the end of the clock hour.

MISO	83.3.7
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider and the Congestion Management Customer shall operate their systems in good faith and, consistent with Good Utility Practice, to avoid dispatching generation or taking other actions for the sole purpose of causing or increasing congestion on flowgates that are subject to this Part II of Module F.

MISO	83.4
FERC Electric Tariff	
MODULES	30.0.0

The Congestion Management Customer and the Transmission Provider shall be compensated as follows for redispatch service.

MISO	83.4.1
FERC Electric Tariff	
MODULES	31.0.0

During the period of time that the Congestion Management Customer reduces the output of its units in response to a request from the Transmission Provider in accordance with Section 83.3, and does not simultaneously increase the output of one or more Congestion Management Customer units on the opposite side of the constraint to equal or exceed the decrease in output of the decremented units, the Congestion Management Customer shall purchase from the MISO Real-Time Energy and Operating Reserve Market at the Congestion Management Customer-Transmission Provider interface, a quantity of energy equal to the megawatt hour quantity of the net reduction in output for the duration of the net reduction in output. The price for such purchase shall be the Locational Marginal Price in effect over such time at the Congestion Management Customer-Transmission Provider interface node. The Transmission Provider and the Congestion Management Customer shall develop an Operating Procedure for the implementation of redispatch requests under this Agreement. If the Operating Procedure is followed for a redispatch request, the Congestion Management Customer shall not be required to pay any Revenue Sufficiency Guarantee charges for quantity deviations from Day-Ahead Schedules as specified in Section 40.3.3.2.a.i that would otherwise be associated with purchases under this Section 83.4.1 to comply with that redispatch request.

MISO	83.4.2
FERC Electric Tariff	
MODULES	33.0.0

For each occasion that the Congestion Management Customer increases the output of its units in response to a request from the Transmission Provider in accordance with Section 83.3, and does not simultaneously decrease the output of one or more Congestion Management Customer units on the opposite side of the constraint to match at least the increased output of the incremented units, the Transmission Provider shall arrange, for and on behalf of the MISO Market Participants, the delivery of a quantity of Energy from the Congestion Management Customer equal to the megawatt hour quantity of the net increase in output for the duration of the net increase in output. The price for such delivery shall be the Day-Ahead Ex Post LMP or the Hourly Real-Time Ex Post LMP at the Congestion Management Customer-Transmission Provider interface node at the time of each occasion. If the Operating Procedure referred to in the preceding Section 83.4.1 is followed for a redispatch request, the Congestion Management Customer shall not be required to pay any Revenue Sufficiency Guarantee charges for quantity deviations from Day-Ahead Schedules as specified in Section 40.3.3.2.a.i that would otherwise be associated with purchases under this Section 83.4.2 to comply with that redispatch request.

MISO	83.4.3
FERC Electric Tariff	
MODULES	30.0.0

For each occasion that the Congestion Management Customer increases the output of its units in response to a request from the Transmission Provider in accordance with Section 83.3 of this Tariff, and simultaneously decreases the output of one or more Congestion Management Customer units on the opposite side of the constraint to match the increased output of the incremented units, no purchase from the Real-Time Energy and Operating Reserve Market is required.



MISO	83.4.4
FERC Electric Tariff	
MODULES	30.0.0

In addition, the Transmission Provider shall be obligated to pay and shall pay to the Congestion Management Customer, by and on behalf of the MISO Market Participants, in accordance with the following:

When the Congestion Management Customer decreases the output of its units in response to a request from the Transmission Provider in accordance with Section 83.3 of this Tariff and there is not an offsetting and equal increase in the output of Congestion Management Customer units on the opposite side of the constraint as described in Section 83.4.1, the Transmission Provider shall pay to the Congestion Management Customer an amount equal to the amount that the Congestion Management Customer pays to the Transmission Provider for the energy purchases described in Section 83.4.1 of this Tariff, plus any transmission and transmission related charges billed to the Congestion Management Customer to effect the redispatch request (including an adjustment to reflect increased Transmission Provider energy market resettlement charges totaling \$200.00 or more in any month, related to previous redispatch events), minus the “Change in Total System Cost.”

If the amount the Congestion Management Customer pays to the Transmission Provider for energy purchases described in Section 83.4.1 of this Tariff is less than the “Change in Total System Cost,” there will be no Transmission Provider payment to the Congestion Management Customer.

When the Congestion Management Customer increases the output of its units in response to a request from the Transmission Provider in accordance with Section 83.3 of this Tariff and there is not an offsetting and equal decrease in the output of Congestion Management Customer units on the opposite side of the constraint as described in Section 83.4.2, the Transmission Provider shall pay to Congestion Management Customer an amount equal to 110% of the “Change in Total System Cost,” plus the Congestion Management Customer’s applicable start-up costs and the cost for minimum generation output, plus any transmission and transmission related charges billed to the Congestion Management Customer to effect the redispatch request (including an adjustment to reflect increased Transmission Provider energy market resettlement charges totaling \$200.00 or more in any month, related to previous redispatch events), minus the amount the Transmission Provider pays to the Congestion Management Customer for energy deliveries arranged for and on behalf of the MISO Market Participants, as described in Section 83.4.2. If 110% of the “Change in Total System Cost” is less than the amount the Transmission Provider pays to the Congestion Management Customer for energy deliveries arranged for and on behalf of the MISO Market Participants as described in Section 83.4.2, the Transmission Provider will pay the Congestion Management Customer only for its applicable start-up costs and cost for minimum generation output.

MISO	83.4.4.3
FERC Electric Tariff	
MODULES	30.0.0

When the Congestion Management Customer increases the output of its units in response to a request from the Transmission Provider in accordance with Section 83.3 of this Tariff and there is an offsetting and equal decrease in the output of Congestion Management Customer units on the opposite side of the constraint as described in Section 83.4.3, the Transmission Provider shall pay 110% of the Congestion Management Customer's "Change in Total System Cost" plus any applicable start-up costs and the cost for minimum generation output.

MISO	83.5
FERC Electric Tariff	
MODULES	30.0.0

Prior to requesting generation redispatch, the Congestion Management Customer may request a shadow price, as calculated by the Transmission Provider's SCED algorithm, that represents an estimate in \$/MWh of the redispatch cost of the Transmission Provider's generating resources to mitigate the Congestion Management Customer's assigned TLR requirements.

MISO	83.5.1
FERC Electric Tariff	
MODULES	30.0.0

If the Congestion Management Customer requests the Transmission Provider to perform a generation redispatch of the Transmission Provider's resources and the Transmission Provider can accomplish such redispatch directly through its SCED algorithm through binding of the applicable flowgate, the Congestion Management Customer shall pay the Transmission Provider for and on behalf of the MISO Market Participants in an amount equal to the amount of Energy relief volume provided on the flowgate multiplied by such shadow price. If the redispatch request is accomplished by performing a Manual Redispatch, the Congestion Management Customer shall pay the Transmission Provider for and on behalf of the MISO Market Participants in an amount equal to any compensation resulting from such Manual Redispatch as calculated pursuant to Schedule 27.

MISO	83.5.2
FERC Electric Tariff	
MODULES	33.0.0

For redispatch of generation requiring transfers of Energy in the Real-Time Energy and Operating Reserve Market, the Congestion Management Customer will receive charges or credits associated with such transfers that will be settled at the Hourly Real-Time Ex Post LMP at the Congestion Management Customer-Transmission Provider interface node, including any applicable Revenue Sufficiency Guarantee Charges for quantity deviations from Day-Ahead Schedules as specified in Section 40.3.3.2.a.i. Where re-dispatch of generation includes the additional commitment of MISO Resources, the Congestion Management Customer shall pay, in addition to previously specified charges, an amount equal to the applicable Start-Up costs and the No-Load Production Costs for the Resource.

MISO	83.5.3
FERC Electric Tariff	
MODULES	30.0.0

If the redispatch of generation by the Transmission Provider requires associated Transmission Service on the Transmission System, or on the system of the Congestion Management Customer, the Congestion Management Customer shall arrange and pay for such associated Transmission Service as required by the applicable tariff.



The amounts paid by the Transmission Provider to the Congestion Management Customer for redispatch during any hour under this Part will be funded from congestion charges collected as part of the real-time settlement. To the extent that congestion charges collected as part of the real-time settlement are not sufficient to fund the payment to the Congestion Management Customer, the remaining payment shall be funded pro rata by Market Participants on a load ratio share basis, where load ratio share is equal to: the sum of a Market Participant's (i) withdrawals at Commercial Nodes, excluding withdrawals associated with Carved-Out GFAs and (ii) Exports, divided by the sum of all withdrawals at commercial nodes (excluding withdrawals at commercial nodes with Carved-Out GFAs) and all Export Schedules for all applicable Market Participants in the hour or hours during which redispatch was provided by the Congestion Management Customer. The amounts paid to the Transmission Provider from the Congestion Management Customer for redispatch during any hour under this Part will be added to the congestion charges collected as part of the real-time settlement and distributed to Market Participants on a load ratio share basis, where load ratio share is equal to: the sum of a Market Participant's (i) withdrawals at Commercial Nodes, excluding withdrawals associated with Carved-Out GFAs and (ii) Exports, divided by the sum of all withdrawals at commercial nodes (excluding withdrawals at commercial nodes with Carved-Out GFAs) and all Export Schedules for all applicable Market Participants in that Hour.

MISO	83.7
FERC Electric Tariff	
MODULES	30.0.0

The billing and payment terms for this Part shall be as set forth in Section 7.20 of this Tariff.

MISO	83.7.1
FERC Electric Tariff	
MODULES	30.0.0

When applicable, the Transmission Provider shall pay the Congestion Management Customer all sums due for each redispatch request, determined in accordance with Section 83.3 and Section 83.4 above. Within twelve (12) calendar days of each redispatch event, the Congestion Management Customer shall provide an invoice showing the hours, and the costs incurred by Congestion Management Customer during each hour, and any other costs (including the Transmission Provider's energy market and transmission charges described in Sections 83.4.4.1 and 83.4.4.2) to comply with a redispatch request under this Part. Failure to provide the invoice within the twelve day period will not excuse, but may delay, payments due to the Congestion Management Customer until the next scheduled settlement period.

Purchases of energy by the Congestion Management Customer from the Transmission Provider under Section 83.4.1 of this Part, redispatch costs incurred by the Congestion Management Customer under Section 83.5 of this Part, and Market Participant charges normally billed to the Congestion Management Customer, will be netted against sums owing to the Congestion Management Customer for redispatch service under this Part. The Transmission Provider will invoice or pay the Congestion Management Customer the net amount owed or credited for all energy purchases and other Congestion Management Customer Market Participant charges, pursuant to the terms and conditions of Section 7.20 of this Tariff.

MISO	83.7.2
FERC Electric Tariff	
MODULES	30.0.0

All net settlements owing to the Congestion Management Customer shall be due and payable by the Transmission Provider pursuant to the terms and conditions of the Tariff, whether or not a Party disputes all or any portion of the amount owing to the Congestion Management Customer for redispatch service under this Part. Payment or acceptance of disputed amounts shall not be a waiver of a party's right to challenge the correctness of that amount, or to pursue dispute resolution process of the Tariff including Commission review of the correctness of such amounts. Net settlements owing to the Transmission Provider shall be due and payable pursuant to the terms and conditions of Section 7.20 of this Tariff.

MISO	83.7.3
FERC Electric Tariff	
MODULES	30.0.0

As to a Congestion Management Customer to which Section 12E of this Tariff is applicable, the obligation to make the payments under this Section is subordinate and junior in all respects to the obligation of the Congestion Management Customer to pay the principal and interest on its bonds.



MISO	84.1
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider and the Congestion Management Customer acknowledge that voltage control and reactive power coordination are essential to maintain reliability. Therefore, the Transmission Provider and the Congestion Management Customer shall establish procedures (“Voltage and Reactive Power Coordination Procedures”) by which their respective Reliability Coordinators shall conduct such coordination.

MISO	84.2
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider and the Congestion Management Customer will perform regional transmission and generation outage coordination in order to identify proposed transmission and generation maintenance that would create unacceptable reliability-related system conditions and will work with the facility owners to provide remedial steps to be taken in advance of such proposed maintenance.



MISO	84.3
FERC Electric Tariff	
MODULES	30.0.0

The objectives of the planning coordination process are to make certain that appropriate and adequate reviews of transmission planning functions are performed between the Transmission Provider and the Congestion Management Customer on a collaborative basis to ensure comparability, efficiency and timeliness. The Transmission Provider and the Congestion Management Customer shall coordinate their planning processes by exchanging planning information required under this Part, and through joint cooperation between their respective Planning Authorities, as set forth in Attachment FF of the Tariff.

MISO	84.4
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider and the Congestion Management Customer shall make transmission capacity available within their transmission systems for generation reserve sharing. Subject to any applicable Commission rules, regulations or orders, the Transmission Provider and the Congestion Management Customer shall reserve the required TRM, or its equivalent, for its generation reserve sharing pool requirements. The party responsible for making transmission capacity available for the reserve sharing obligation shall bear the costs of any redispatch required to make the transmission capacity available.



MISO	85.1
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider shall offer a standard form Service Agreement for Interconnected Operations and Congestion Management Services to the entity eligible to receive the Interconnected Operations and Congestion Management Service. Executed Service Agreements that contain the information required under this Part shall be filed with the Commission in compliance with applicable Commission regulations. The standard form of Service Agreement for Interconnected Operations and Congestion Management Services is provided in Attachment KK-2 to this Tariff.

MISO	85.2
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider and the Congestion Management Customer shall cooperate in good faith in making any filings before the Commission that may be required to implement the terms of this Part or any applicable Service Agreement or to facilitate their effective dates. Whenever practicable, such filings shall be made simultaneously with each other.



MISO	86.1
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider and the Congestion Management Customer shall keep complete and accurate records relating to the performance of their respective obligations, as well as any calculations necessary in the performance of such obligations, under this Part and shall maintain such data as may be necessary for the purpose of ascertaining that their performance, or calculations in support of such performance, conforms to the standards set forth in this Part, including, but not limited to, data supporting the calculation of TTC, TRM, ATC/AFC, and RCF allocations.

MISO	86.2
FERC Electric Tariff	
MODULES	30.0.0

The Transmission Provider and the Congestion Management Customer shall maintain the complete and accurate records required by Section 86.1 for a period of one year from the end of the fiscal year during which the obligations were performed. Within that one year period, either the Transmission Provider or the Congestion Management Customer may request in writing copies of the records of the other party to the extent reasonably necessary to verify that the performance, or calculations in support of such performance, conforms to this Part. The costs of the data review, including costs related to retrieving, compiling, reproducing and analyzing any data requested pursuant to this provision shall be borne by the party making the request.



MISO	86.3
FERC Electric Tariff	
MODULES	30.0.0

Any access to the Transmission Provider's books and records shall be subject to applicable confidentiality and CEII requirements and procedures, as may be provided in the Tariff or Commission rules, regulations or orders.



MISO	87.1
FERC Electric Tariff	
MODULES	30.0.0

Nothing in this Part II shall be interpreted to modify any prior agreement between the Transmission Provider and the Transmission Owners regarding revenue distribution.

For any charges not invoiced pursuant to Section 83.7 of this Tariff, the Congestion Management Customer shall render invoices to the Transmission Provider for amounts due in accordance with the Congestion Management Customer's customary billing practices and payment shall be due in accordance with the Congestion Management Customer's customary payment requirements. All payments shall be made in immediately available funds payable to the Congestion Management Customer by wire transfer pursuant to instructions set out by the Transmission Provider and the Congestion Management Customer from time to time. Interest on any amounts not paid when due shall be calculated in accordance with the methodology specified for interest on refunds in the Commission's regulations at 18 C.F.R. § 35.19a(a)(2)(iii).



MISO	88.1
FERC Electric Tariff	
MODULES	30.0.0

The initial term of the Interconnected Operations and Congestion Management Service shall be for a period of three (3) years after the effective date of the Service Agreement executed pursuant to Section 85 and Attachment KK-2 of this Tariff. The Service Agreement shall automatically renew thereafter for successive one (1) year terms unless written notice of termination is provided not less than one year prior to the end of the initial or any subsequent term. The Service Agreement shall also terminate and cease to be effective upon the mutual agreement by the parties to terminate the Service Agreement or upon Commission order terminating the Service Agreement. The effective date of the Service Agreement shall be the date set forth therein or any other date as may be established by the Commission.

MISO	88.2
FERC Electric Tariff	
MODULES	30.0.0

A Congestion Management Customer to which Section 12E of this Tariff applies may terminate its Service Agreement executed pursuant to Section 85 and Attachment KK-2 of this Tariff at any time during the initial term or any extension thereof with less than the required one-year notice, in the event that the statutes governing such Congestion Management Customer, or any provisions of this Part II of Module F, or the provisions of the Transmission Provider's Tariff incorporated by reference in this Part II Module F, are changed or modified, in a manner that causes a conflict with state law, regulations, or rate schedules and the review process described in Section 12E of this Tariff is unable to resolve such conflict.

MISO	88.3
FERC Electric Tariff	
MODULES	30.0.0

Upon written notice to the Transmission Provider that Congestion Management Customer is exercising its right to terminate its Service Agreement under Section 88.2 of this Tariff, the Transmission Provider and the Congestion Management Customer will work in good faith to make all required arrangements to resume as soon as possible, but not to exceed thirty (30) days from such written notice, all normal operating conditions and provide transmission service on their respective systems without regard to the requirements of this Part II.