### 9. FIRM TRANSMISSION RIGHTS

### 9.1 General

9.1.1 The ISO shall make Firm Transmission Rights (each, an "FTR"), as defined in Section 9.2, available commencing effective January 1, 1999. For 1999, Commencing in 1999, on the effective date established by the ISO Board of Governors, the ISO shall make FTRs available in the amounts determined in accordance with Section 9.3, with the rights and other characteristics described in Sections 9.2, 9.6, 9.7 and 9.8, and through the auction process described in Section 9.4. Proceeds of the auction shall be distributed as described in Section 9.5. The owners of FTRs shall be entitled to share in Usage Charge revenues associated with Inter-Zonal Congestion in accordance with Section 9.6, and to scheduling priority in the event of congestion in the Day-Ahead Market, as described in Section 9.2.1.9.7. For the purpose of Section 9 of this Tariff, the term "Zone" shall be construed to mean both "Zone" and "Scheduling Point."

## 9.2 Definition and Characteristics of Firm Transmission Rights

- 9.2.1 Each FTR shall be a contractual right, subject to the terms and conditions of the ISO Tariff, that entitles the FTR Holder to receive, for each hour of the term of the FTR, a portion of the Usage Charges received by the ISO for transportation of energy—from a specific originating Zone—to a specific receiving Zone. In the event of anuneconomic curtailment to manage Day-Ahead congestion, an FTR entitles its holder to a Day-Ahead scheduling priority higher than that of a schedule using Converted Rights capacity that does not have an FTR.
- **9.2.1.1** For the purpose of Section 9 of this Tariff, the term "Zone" shall be construed to mean both "Zone" and "Scheduling Point."
- 9.2.2Each FTR shall be defined by a transmission path from an originating Zone to a contiguous receiving Zone, that is contiguous to the originating Zone. Each FTR shall entitle the FTR Holder to a share of Usage Charges attributable to Inter-Zonal Congestion for transfers on that path from the

designated originating Zone to the designated receiving Zone in accordance with Section 9.6.

This entitlement shall be the sum of:

- a)Where there is congestion in the Day-Ahead Market, the Usage Charge applicable to congestion
  management in the Day-Ahead Market times the number of FTRs, as adjusted pursuant to
  Section 9.6.3, in MWs, owned by the FTR Holder; and
- b)Where there is congestion in the Hour-Ahead Market, the Usage Charge applicable to congestion
  management in the Hour-Ahead Market shall be paid, per MW, according to the following
  priority: (i) to those submitting Adjustment Bids to sell in the Hour-Ahead Market; (ii) FTRs
  not scheduled or committed in the Day-Ahead Market; and (iii) the Transmission Owners.

An FTR is a right in one direction only. Its holder An FTR Holder shall not be entitled to share in (i) Usage Charges attributable to Inter-Zonal Congestion from the designated receiving Zone to the designated originating Zone, except as provided in Section 7.3.1.5 for a counter-schedule.; or (ii) Usage Charges payable in accordance with Section 7.3.1.5.1 to a Scheduling Coordinator that counter-schedules from the designated originating Zone to the designated receiving Zone.

9.2.39.2.2 The ISO Governing Board shall, from time to time, approve the amount of FTRs to be auctioned for each Inter-Zonal InterfaceFTR Market and the ISO shall publish this information on its Web sitethe ISO Home Page at least thirty (30) days prior to the auction. No additional FTRs auctioned as a result of changes in the ISO's defined Inter-Zonal Interfaces shall affect existing FTRs. For the initial auction of FTRs in 1999, the ISO will auction an amount of FTRs in each FTR Market equal to twenty-five (25) percent of the maximum amount that may be issued pursuant to Section 9.3. The ISO may issue FTRs in one or more auctions in any year so long as the total FTRs for any interface do not exceed the maximum amount permitted in Section 9.3.

9.2.3.19.2.2.1 Should the ISO create additional Zones or otherwise change the ISO's defined Inter-Zonal Interface, and if such changes would affect outstanding FTRs, such changes will not take effect prior to the expiration date of any such outstanding FTRs. The ISO shall also publish

an announcement of any such pending changes on its Web site the ISO Home Page and WEnet at least thirty (30) days prior to the applicable FTR auction.

**9.2.3.29.2.2.2** Any additional FTRs auctioned as a result of changes in the ISO's defined Inter-Zonal Interfaces shall not affect the rights associated with existing FTRs.

9.2.49.2.3 Each FTR shall be issued in the denomination of 1 MW and shall have a duration of one year, starting with the hour beginning at 12:00 a.m., on January 1 of the year for which the FTR is issued and ending with the hour beginning at 11:00 p.m., on December 31 of the same year, provided, however, that if additional FTRs are auctioned after the commencement of the calendar year for that year, those FTRs shall have a duration of the balance of the calendar year. An FTR shall not afford the FTR Holder any right to share in Usage Charges attributable to Inter-Zonal Congestion occurring in any hour before or after the term of the FTR.

**9.2.59.2.4** The portion of the Usage Chargesattributable to the Inter-Zonal Congestion affecting transfers from the originating Zone to the receiving Zone to which the FTR Holder is entitled shall be determined in accordance with Section 9.6.

9.2.69.2.5 FTR Holders shall be entitled to priority in the scheduling of Energy in the Day-Ahead Market in the circumstances and subject to the limitations as specified in Section 9.7.

**9.2.79.2.6** Any entity, with the exception of the ISO, shall be eligible to acquire FTRs by participating in the ISO's auction of FTRs, as described in Section 9.4, or by purchasing FTRs in secondary markets. To participate in the ISO's auction of FTRs, an entity must either be a certified Scheduling Coordinator or have met financial requirements equivalent to the financial certification criteria required of all Scheduling Coordinators. An entity may not acquire FTRs with a total value that exceeds the financial security provided by that entity to the ISO. In addition, an FTR Bidder must have, or have access to, the necessary technical equipment to participate in the electronic auction.

## 9.3 Maximum Number of Firm Transmission Rights

- **9.3.1** On each Inter-Zonal Interface and direction combination for which FTRs are issued, the ISO shall issue a number of FTRs that is less than or equal to the difference between:
  - (i) The WSCC Approved Path Ratingapproved path rating of the interface in the direction from the originating Zzone to the receiving Zzone or, if the interface has not received a WSCC Approved Rating, approved rating, a rating determined by a methodology that is consistent with the WSCC's rating methodology; and
  - (ii) The portion of the transfer capability of the interface used to schedule rights that have a higher scheduling priority than Converted Rights.available for transmission scheduling under Existing Contracts as Existing Rights.

# 9.4 Issuance of Firm Transmission Rights by the ISO by Auction

9.4.1 The ISO shall make FTRs available by conducting an annual primary auction of FTRs, commencing approximately two months before the beginning of the term of the FTRs; provided, however that for 1999, the primary auction shall be as determined by the ISO Board of Governors. The auction of FTRs shall be a simultaneous multi-round, clearing price auction conducted separately, and independently, and simultaneously for each Inter-Zonal Interface and direction combination for which FTRs are issued, as set forth in Section 9.4.2, for each FTR

Market. In addition, if the ISO Governing Board decides to make additional FTRs available, between annual auctions, FTRs in addition to those that were purchased in the last annual auction, the ISO may conduct additional auctions of such FTRs, in accordance with Section 9.4.2. The term of such FTRs shall only be for the remaining duration of the calendar year during which they were issued.

9.4.2 The ISO shall conduct the auction of FTRs through the following procedures:

- 9.4.2.1 At least thirty (30) days prior to the scheduled start of the auction, the ISO shall post on the ISO Home Page the following information:
  - (i) the number of FTRs to be issued for each FTR Market;
  - the starting bid price at which FTRs will be made available in each FTR Market in the first round of the auction, which price will be set in each FTR Market at a level equal to the greater of (a) \$100 per MW-year; or (b) twenty (20) percent of the ratio of the net Usage Charges collected by the ISO with respect to that FTR Market in the most recent twelve-month period for which data are available to the total MW-years of Energy scheduled over the Inter-Zonal Interface in the relevant direction during that period, provided that, if data are available for only a portion of the twelve-month period, such data shall be used on an annualized basis;
  - (iii) the formula through which the ISO will determine how much to adjust the price of FTRs in each FTR Market for subsequent rounds of the auction, including the initial coefficients to be used in the formula and the range over which the coefficients may be adjusted in accordance with Section 9.4.2.3;
  - (iv) the date and time prior to the commencement of the auction by which each entity desiring to bid on FTRs must have satisfied the necessary financial requirements as outlined in Section 9.2.6;
  - (v) the specifications for the technical equipment necessary to participate in the

    auction, which will be conducted electronically, the date and time by which bids

    must be submitted in the first round of the auction, which shall be the same for all

    FTR Markets, and the form and format in which bids must be submitted; and
  - (vi) a schedule for the conduct of subsequent rounds of the auction, including the interval between rounds of the auction and the anticipated duration of the auction.

9.4.2.2 On or before the date specified in Section 9.4.2.1(v), any entity desiring to obtain FTRs in the ISO's auction must submit, via equipment satisfying the technical requirements specified in accordance with Section 9.4.2.1(v), a bid for each FTR Market in which the entity desires to participate, specifying the number of FTRs the entity is willing to purchase at the price specified in Section 9.4.2.1(ii). All individual bids will remain confidential throughout all rounds of the auction in each FTR Market. Once submitted to the ISO, a bid for FTRs in any round of an auction may not be cancelled or rescinded by the FTR Bidder. The ISO shall announce simultaneously to all FTR Bidders the total quantity of FTRs for which valid bids are submitted for each FTR Market.

9.4.2.3 In each round of the auction following the first round, the ISO will increase the price at which FTRs are made available in each FTR Market in accordance with the formula posted in accordance with Section 9.4.2.1(iii), or in accordance with any adjustment to the coefficients in that formula that is announced by the ISO to the FTR Bidders at least one round in advance of the round for which the adjustment is made. Price increases need not be uniform for all FTR Markets. In the case of an FTR Market in which the demand for FTRs in the preceding round is less than or equal to the quantity of FTRs being made available, the price shall not increase and the auction for that FTR Market shall close. After each round of the auction, the ISO shall announce simultaneously to all FTR Bidders the total quantity of FTRs for which valid bids were submitted in each FTR Market, whether the auction for each FTR Market is closed, and, the revised prices for the following round of the auctions that remain open. Within the timeframe set by the ISO in accordance with Section 9.4.2.1(vi), each FTR Bidder may submit bids for the guantity of FTRs it desires to purchase in each FTR Market at the revised price, provided that an FTR Bidder may not bid for a number of FTRs in an FTR Market that exceeds the total number of FTRs in that FTR Market for which that entity submitted bids in the preceding round of the auction. The ISO shall conduct subsequent rounds of the auction in each FTR Market until the demand for FTRs in that FTR Market is less than or equal to the quantity of FTRs being made available, at which point the auction shall be closed in that FTR Market.

9.4.2.4 Subject to Section 9.4.2.5, each successful FTR Bidder shall receive a number of FTRs in each FTR Market equal to the number of FTRs for which it bid in the last round of the auction for that FTR Market.

9.4.2.5 For any FTR Market in which, when the auction has closed, the number of FTRs being made available exceeds the demand for FTRs in that FTR Market in the last round of the auction, each FTR Bidder shall be awarded a number of FTRs determined in accordance with the following formula, provided that, if the number of FTRs that would be awarded under the formula to an FTR Bidder that did not submit a bid in the last round of the auction is less than five percent (5%) of the initial bid submitted by that FTR Bidder for the FTR Market, that FTR Bidder shall have the option of declining the award of FTRs resulting from the formula:

N = B + [(R/TR) \* D]

<u>where</u>

- N = The total number of FTRs awarded to an FTR Bidder for an FTR
  Market, which shall be in whole MWs and shall not exceed the
  number of FTRs for which that FTR Bidder bid in the round
  preceding the final round of the auction;
- B = The number of FTRs for which an FTR Bidder bid in the final round of the auction for the FTR Market in accordance with

  Section 9.4.2.4 (or zero, if the FTR Bidder did not bid in that round);
- R = The difference between the number of FTRs for which the FTR

  Bidder bid in the round preceding the final round of the auction

  and B, but not less than zero;

- TR = The total of the demand reductions (R) for all FTR Bidders that

  submitted bids in the last round of the auction (treating the failure

  by an FTR Bidder to submit a bid as a bid of zero); and
- D = The difference between the total demand for FTRs in the final
  round of the auction and the quantity of FTRs being made
  available for the FTR Market.
- 9.4.2.6 The price of FTRs in an FTR Market shall be the last price at which the demand for FTRs in the FTR Market exceeded or equaled the quantity of FTRs being made available pursuant to Section 9.4.2.1(i), except that, if the demand for FTRs in an FTR Market in the first round of the auction was less than the quantity of FTRs being made available for that FTR Market, the price of FTRs in that FTR Market shall be the first round price and each FTR Bidder in that FTR Market will receive a number of FTRs equal to the quantity of bids they submitted in the first round. Any remaining FTRs in that FTR Market will not be awarded in that auction.
- 9.4.2.7 Each FTR Bidder shall pay the ISO an amount equal to the sum, for all FTR Markets, of the products of the FTR price in each FTR Market (determined in accordance with Section 9.4.2.6) and the total quantity of FTRs awarded to that FTR Bidder in that FTR Market (determined in accordance with Section 9.4.2.4 or Section 9.4.2.5, as applicable). FTR Bidders shall pay the amount determined in accordance with the foregoing sentence within ten (10) business days of receiving an invoice from the ISO by making payment to the ISO Clearing Account in accordance with Section 11.10. If the FTR Bidder fails to make timely payment of the full amount due, the ISO may enforce any guarantee, letter of credit or other credit support provided by the defaulting FTR Bidder in accordance with Section 9.4.2.7 and, if the ISO is required to institute proceedings to collect any unpaid amount, the defaulting FTR Bidder shall pay interest on the unpaid amount at the ISO Default Interest Rate for the period from the Payment Date until the date on which payment is remitted to the ISO Clearing Account.

- 9.5 Distribution of Auction Revenues Received by the ISO for Firm Transmission Rights
- 9.5.1 For each Inter-Zonal Interface and direction for which an FTR is defined, the total proceeds received by the ISO through the auction described in Section 9.4 shall be allocated and paid by the ISO to the Participating TO in proportion to their Converted Rights associated withthat is entitled in accordance with Section 7.3.1.6 to receive Usage Charge revenues with respect to the corresponding Inter-Zonal Interface. Each Participating TO shall credit its FTR auction proceeds against its Access Charge.
- **9.5.2** In the event the transmission facilities or rights making up an Inter-Zonal Interface with respect to which FTRs are defined are owned by more than one Participating TO, the proceeds of the auction of such FTRs shall be allocated to those Participating TOs in proportion to their Converted Rights associated with the Inter-Zonal Interface.—as of the date of the FTR auction.

## 9.6 Distribution of Usage Charges to FTR Holders

- **9.6.1** For each FTR, the The FTR Holder shall be entitled to receive from the ISO a portion of the total Usage ChargesCongestion revenues related to Inter-Zonal Congestion calculated by the ISO in the Day-Ahead Market and collected by the ISO with respect to the Inter-Zonal Interface and direction combination for which the FTR was defined. This portion equals the Usage Charge calculated by the ISO in the Day-Ahead Market for the transfer of 1 MWof Energy from the originating zoneZone to the receiving zoneZone during each hour in which Usage Charges are payable,apply, multiplied by the number of FTRs owned by that FTR Holder, subject to adjustment in accordance with Section 9.6.3.
- 9.6.2 In addition, an FTR holder shall be entitled to receive a portion of the additional <a href="net\_usage">net\_usage</a>
  Charges related to Inter-Zonal Congestion calculated by the ISO in the Hour-Ahead Market and collected by the ISO with respect to the Inter-Zonal Interface and direction combination for which the FTR was defined, <a href="mailto:subject to adjustment in accordance with Section 9.6.3">net\_usage Charges in the Hour-Ahead Market proportionate to the share of the Usage Charges it received in the Day-Ahead Market in accordance with Section 9.6.1.
- **9.6.3** When the Day Ahead scheduling capability of an Inter-Zonal Interface <u>and direction</u> is less than its <u>normal</u> scheduling capacity, <u>determined in accordance with Section 9.3</u>, prior to the Day-Ahead

Market, the financial entitlements of FTR Holders associated with anthat FTR Market to Usage Charge revenues shall not be reduced until and unless the scheduling capacity available to non-FTR Holders hasentitlements of Participating TOs associated with that FTR Market to Usage Charge revenues in accordance with Section 7.3.1.6 have been reduced to zero. In that event, the financial entitlements associated with the corresponding FTRs shall be multiplied by a factor equal to the amount of scheduling capability available to FTR hHolders divided by the number of FTRs. When the Day Ahead scheduling capability of an Inter-Zonal Interface and direction is greater than its scheduling capacity, determined in accordance with Section 9.3, prior to the Day—Ahead Market, the entitlements of FTR Holders associated with that FTR Market to Usage Charge revenues shall not be increased.

- 9.6.4 When the congestion Usage Charges calculated and collected by the ISO from-both the Day-Ahead Market and the Hour-Ahead Market with respect to transfers across an Inter-Zonal Interface in a particular direction result in a net obligation to the ISO, in the circumstances described in Section 7.3.1.7, the provisions of this Section 9.6 shall continue to apply, and FTR Holders shall be required to pay the ISO these amounts.
- 9.6.5 The ISO will calculate the congestion Usage Charge revenues to be credited or debited to the account of each FTR Holder on an hourly basis. Such calculation will identify the Inter-Zonal Interface and direction to which each credit or debit applies.

### 9.7 Scheduling Priority of FTR Holders

9.7.1 FTRs will not affect the ISO's dispatch and operation of the ISO Controlled Grid except that each FTR Holder will have a priority, as described in this Section 9.7, for the scheduling of Energy in the Day-Ahead Market when an Inter-Zonal Interface experiences Inter-Zonal Congestion in the direction for which its FTR is defined. Any FTRs not used in Preferred Schedules in the Day-Ahead Market for any hour have no scheduling priority for that hour in the trading day. FTR Holders shall have no scheduling priority in the Hour-Ahead Market or in real time operations.

- **9.7.2** When Inter-Zonal Congestion is experienced or projected to be experienced in the Day-Ahead Market, the ISO shall first attempt to relieve the Inter-Zonal Congestion using Adjustment Bids submitted by Scheduling Coordinators in accordance with Section 7.2.4.
- **9.7.2.1** If the ISO is unable to relieve the Day-Ahead Inter-Zonal Congestion using Adjustment Bids, then the ISO will allocate Day-Ahead inter-zonal transmission capacity first to schedules of Market Participants that are using Existing Contract rights that have higher scheduling priority than Converted Rights capacity and second to Market Participants who hold FTRs and have indicated to the ISO that they wish to exercise their scheduling priority option. The ISO will allocate any remaining transmission capacity to remaining Market Participants' schedules pro rata.
- 9.7.3 When the scheduling capability of an Inter-Zonal Interface is less than or greater than its normal scheduling capability prior to the Day-Ahead Market, as described in Section 9.6.3, the priority scheduling rights of FTR Holders, as described in Section 9.7.2, shall remain constant (in MWs) to the extent that the total scheduling rights of FTR Holders do not exceed the total Interface scheduling capability of the associated Inter-Zonal Interface after adjustments have been made for transmission capacity allocated to Existing Contract rights that have higher scheduling priority than Converted Rights. If the total Interface scheduling capability, adjusted for transmission capacity allocated to Existing Contract rights that have higher scheduling priority than Converted Rights, is less than the total of all scheduling capability represented by FTR holders who have chosen to exercise the FTR scheduling priority option, scheduling capability shall be allocated to FTR Holders pro rata.

## **9.7.4** The scheduling priority of FTR Holders:

- Shall not apply in the Hour-Ahead Market or in real-time dispatch and operation of the ISO Controlled Grid;
- ii) Shall not apply to any transfer of Energy other than a transfer across the Inter-Zonal Interface in the direction for which the FTR was defined during the hour or hours during which the circumstances described in Section 9.7.2.1 apply; and

(iii) Shall not be transferable, except in connection with a transfer of the FTR that is registered with the ISO, as described in Section 9.8.

# 9.8 Assignment of Firm Transmission Rights

- 9.8.1 An FTR may be assigned, sold, or otherwise transferred by the FTR Holder to any entity eligible to be an FTR Holder in full MW increments, either for the entire term of the FTR or for any portion of that term providing, however, that any such transfer shall be in full hour increments that correspond to the FTR issued to the FTR Holder. The FTR Holder of record may shall register the transfer of the FTR with the ISO by notifying the ISO through the form specified for that purpose by the ISO. AtISO, and within the number of business days following the transfer published by the ISO on the ISO Home Page and WEnet but no later than such time as the ISO shall specify before the deadline applicable to scheduling Energy in the Day-Ahead Market, the FTR Holder of record will notify the ISO of (i) the identity of the entity to which the FTRs have been transferred; (ii) the quantity and identification numbers of the FTRs being transferred and (iii) the portion of the term of the FTR for which they are transferred. After the ISO receives such notice, the transferee shall be considered the FTR Holder of record with respect to the portion of the term of the FTR that is transferred. In order to use the Scheduling Priority of an FTR, pursuant to section 9.7, an FTR must be registered with the ISO.
- 9.8.2 Alternatively, an FTR Holder may choose not to register the transfer of an FTR with the ISO.

  In that event, the ISO will not recognize the transfer for any purpose under the ISO Tariff and the rights and obligations of the transferor and the transferee shall be solely as set forth in any agreement between them. The ISO shall have no authority or responsibility for enforcing any such agreement.

  The ISO shall publish on the ISO Home Page such information concerning the concentration of ownership of FTRs in each FTR Market as determined by the ISO Board of Governors from time to time.
- **9.8.3** \_\_To facilitate the operation of secondary markets in FTRs, the ISO shall post on WENet-and the ISO Home Page: (i) at the request of such entities, the identity of entities that hold FTRs that have been registered with the ISO, together with the quantity and identification numbers of the FTRs held by such

entities; and (ii) the name and a contact telephone number or telecopy number of any entity that operates a secondary market in FTRs and that requests the ISO to post such information.

7.3.1.6 ISO Disbursement of Net Usage Charge Revenues. The ISO will determine the net Usage Charges on an interface-by-interface basis by subtracting the Usage Charge fees paid to Scheduling Coordinators from the Usage Charge fees paid by Scheduling Coordinators. The net Usage Charge revenues collected by the ISO for each Inter-Zonal Interface shall be, subject to the provisions of Section 7.3.1.7 of the ISO Tariff, paid to: (i) FTR Holders, in accordance with Section 9.6; and (ii) to the extent not paid to FTR Holders, to Participating TOs who own the Inter-Zonal Interfaces (to be credited in turn by them to their Transmission Revenue Balancing Account)-s, or, for those Participating TOs that do not have such accounts, to their transmission revenue requirements).

FTR (Firm Transmission Right)

A contractual right, subject to the terms and conditions of the ISO Tariff, that entitles the FTR

Holder to receive, for each hour of the term of the FTR, a portion of the Usage Charges received by the ISO for transportation of energy from a specific originating Zone to a specific receiving Zone and, in the event of an uneconomic curtailment to manage Day-Ahead congestion, to a Day-Ahead scheduling priority higher than that of a schedule using Converted Rights capacity that does not have an FTR.

**FTR Bidder** 

An entity that submits a bid in an FTR auction conducted by the ISO in accordance with Section 9.4 of the ISO Tariff.

FTR Holder

The owner of an FTR, as registered with the ISO.

**FTR Market** 

A transmission path from an originating Zone to a contiguous receiving Zone for which FTRs are auctioned by the ISO in accordance with Section 9.4. of the ISO Tariff.