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FEDERAL ENERGY REGULATORY COMMISSION

18 CFR Part 40

(Docket Nos. RM06-8-000 and AD05-7-000)

Long-Term Firm Transmission Rights in Organized Electricity Markets

Long-Term Transmission Rights in Markets Operated by Regional Transmission  
Organizations and Independent System Operators

February 2, 2006

AGENCY: Federal Energy Regulatory Commission.

ACTION: Notice of Proposed Rulemaking

SUMMARY: The Federal Energy Regulatory Commission is proposing to amend its regulations to require transmission organizations that are public utilities with organized electricity markets to make available long-term firm transmission rights that satisfy certain guidelines established in this proceeding. The Commission is taking this action pursuant to section 1233(b) of the Energy Policy Act of 2005, Pub. L. No. 109-58, § 1233(b), 119 Stat. 594, 960 (2005).

DATES: Comments are due March 13, 2006. Reply comments are due March 27, 2006.

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UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;  
Nora Mead Brownell, and Suedeen G. Kelly.

Long-Term Firm Transmission Rights in Organized Electricity Markets      Docket No. RM06-8-000

Long-Term Transmission Rights in Markets Operated by Regional Transmission Organizations and Independent System Operators      Docket No. AD05-7-000

NOTICE OF PROPOSED RULEMAKING

February 2, 2006

**I. Introduction**

1. On August 8, 2005, the Energy Policy Act of 2005 (EPAcT 2005)<sup>1</sup> became law. Pursuant to the requirement in section 1233 of EPAcT 2005,<sup>2</sup> which added a new section 217 to the Federal Power Act (FPA), the Commission is proposing to amend its regulations to require each transmission organization that is a public utility with one or more organized electricity markets to make available long-term firm transmission rights that satisfy guidelines established by the Commission in this rulemaking. The Commission proposes to require each such transmission organization to file, no later than **[INSERT DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, either: (1) tariff sheets and rate schedules that make available

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<sup>1</sup> Pub. L. No. 109-58, 119 Stat. 594 (2005).

<sup>2</sup> Pub. L. No. 109-58, § 1233(b), 119 Stat. 594, 960.

long-term firm transmission rights that are consistent with the guidelines set forth in the Final Rule; or (2) an explanation of how its current tariff and rate schedules already provide long-term firm transmission rights that are consistent with the guidelines set forth in the Final Rule. Transmission organizations that are approved by the Commission after **[INSERT DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]** must meet the requirements of the proposed rule before commencing operation.

2. New section 217(b)(4) of the FPA provides:

The Commission shall exercise the authority of the Commission under this Act in a manner that facilitates the planning and expansion of transmission facilities to meet the reasonable needs of load-serving entities to satisfy the service obligations of the load-serving entities, and enables load-serving entities to secure firm transmission rights (or equivalent tradable or financial rights) on a long-term basis for long-term power supply arrangements made, or planned, to meet such needs.<sup>3</sup>

Section 1233(b) of EPAct 2005 requires:

Within 1 year after the date of enactment of this section and after notice and an opportunity for comment, the Commission shall by rule or order, implement section 217(b)(4) of the Federal Power Act in Transmission Organizations, as defined by that Act with organized electricity markets.<sup>4</sup>

3. In this Notice of Proposed Rulemaking (NOPR), we propose guidelines for the design and administration of long-term firm transmission rights that transmission

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<sup>3</sup> Pub. L. No. 109-58, § 1233, 119 Stat. 594, 958.

<sup>4</sup> Id. at 960.

organizations with organized electricity markets<sup>5</sup> would make available to all transmission customers. As described in more detail below, the Commission will allow regional flexibility in setting the terms of the rights, but long-term firm transmission rights must be made available with terms (and/or rights to renewal) that are sufficient to meet the needs of load-serving entities to hedge long-term power supply arrangements made or planned to satisfy a service obligation. While we propose that long-term firm transmission rights be made available to all transmission customers, in the event that a transmission organization cannot accommodate all requests for long-term firm transmission rights over existing transmission capacity, we propose to require that a preference be given to load-serving entities with long-term power supply arrangements used to meet service obligations. The other properties we believe long-term firm transmission rights must have are discussed in the proposed guidelines below. These guidelines will give transmission organizations, in consultation with market participants, the flexibility to propose alternative designs that reflect regional preferences and accommodate the regional market design, while also ensuring that the objectives of Congress expressed in new section 217(b)(4) of the FPA are met.

4. In proposing this rule, the Commission seeks to provide increased certainty regarding the congestion cost risks of long-term transmission service in organized electricity markets that will help load-serving entities and other market participants make

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<sup>5</sup> See “Definitions” below.

new investments and other long-term power supply arrangements. We understand that specifying and allocating long-term firm transmission rights supported by existing transfer capability will raise difficult issues that must be addressed in this rulemaking and in its implementation over time. We note, however, that long-term rights are available to market participants in a direct manner, namely by supporting an expansion or upgrade of grid transfer capability. As described in more detail below, the Commission's policy is that market participants that request and support an expansion or upgrade in accordance with their transmission organization's prevailing rules for cost responsibility and allocation must be awarded a long-term firm transmission right for the incremental transfer capability created by the expansion or upgrade. Such a long-term transmission right must be for a term equal to the life of the new facilities, or for a lesser term if requested by the funding entity. The transmission organization tariffs must clearly and specifically provide for this arrangement, if they do not already.

## **II. Definitions**

5. The Commission proposes several definitions in this NOPR. We set forth those proposed definitions in this section, since these defined terms are used extensively in the background discussion and proposed guidelines that follow. The Commission seeks comment on whether these definitions are appropriate.

**A. Transmission Organization**

6. The Commission proposes a definition for “transmission organization” that is similar to the definition provided in EPAct 2005.<sup>6</sup> Specifically, we propose to include the word “independent” in the last clause of the EPAct 2005 definition, such that transmission organization would mean “a Regional Transmission Organization, Independent System Operator, independent transmission provider, or other independent transmission organization finally approved by the Commission for the operation of transmission facilities.”<sup>7</sup> We make this clarification to the definition in EPAct 2005 because we interpret section 1233(b) of the legislation to require that long-term firm transmission rights be made available in the currently existing independent entities approved to operate transmission facilities that have organized electricity markets (as defined below), and any such independent entities that are created in the future.<sup>8</sup> We seek comments on whether this definition appropriately captures the intent of section 1233(b) of EPAct 2005.

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<sup>6</sup> Pub. L. No. 109-58, § 1233, 119 Stat. 594, 985.

<sup>7</sup> See id. at 942, 985.

<sup>8</sup> The transmission organizations that currently have an organized electricity market are ISO New England, Inc. (ISO-NE), New York Independent System Operator, Inc. (New York ISO), PJM Interconnection, Inc. (PJM), California Independent System Operator, Inc. (CAISO), and Midwest Independent Transmission System Operator, Inc. (Midwest ISO). Southwest Power Pool is currently developing its market.

**B. Load-Serving Entity and Service Obligation**

7. The Commission proposes to define the terms “load-serving entity” and “service obligation,” for purposes of the proposed rule, exactly as they are defined in section 217 of the FPA. Specifically, we propose to define load-serving entity to mean “a distribution utility or electric utility that has a service obligation.”<sup>9</sup> We propose to define service obligation to mean “a requirement applicable to, or the exercise of authority granted to, an electric utility under Federal, State or local law or under long-term contracts to provide electric service to end-users or to a distribution utility.”<sup>10</sup> We seek comment on whether it is necessary to expand or clarify these definitions in the Final Rule.

**C. Organized Electricity Market**

8. EAct 2005 and section 217 of the FPA do not define “organized electricity market.” The Commission proposes to define organized electricity market as “an auction-based market where a single entity receives offers to sell and bids to buy electric energy and/or ancillary services from multiple sellers and buyers and determines which sales and purchases are completed and at what prices, based on formal rules contained in Commission-approved tariffs, and where the prices are used by a transmission organization for establishing transmission usage charges.” We intend for the Final Rule

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<sup>9</sup> See *id.* at 957. In section 1291 of EAct 2005, “electric utility” is defined as “a person or Federal or State agency (including an entity described in section 201(f) [of the FPA]) that sells electric energy.” *Id.* at 984.

<sup>10</sup> See *id.* at 958.



we develop in this proceeding to apply to any transmission organization with a day-ahead and/or real-time (or “spot”) bid-based energy market that is the transmission provider in its region.<sup>11</sup> These markets could either be administered by the transmission organization itself or by another entity. The definition we propose here is intended to ensure that the Final Rule covers all such transmission organizations, either existing or developed in the future. We seek comment on whether the scope of this definition is appropriate or whether it should be revised.

**D. Long-Term Power Supply Arrangement**

9. Section 217(b)(4) of the FPA requires the Commission to exercise its authority to enable load-serving entities to obtain firm transmission rights on a long-term basis “for long-term power supply arrangements made . . . or planned” to meet service obligations.<sup>12</sup> While “long-term power supply arrangements” is not defined in the legislation, section 217(b)(1)(A) of the FPA suggests that a load-serving entity has a long-term power supply arrangement if it “owns generation facilities, markets the output of Federal generation facilities, or holds rights under one or more wholesale contracts to purchase electric energy, for the purpose of meeting a service obligation.” For purposes of this proposed rule, we propose to use similar language to define “long-term power

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<sup>11</sup> As noted above, the transmission organizations that currently have an organized electricity market are ISO-NE, New York ISO, PJM, CAISO, and Midwest ISO. Southwest Power Pool is currently developing its market.

<sup>12</sup> Pub. L. No. 109-58, § 1233, 119 Stat. 594, 958 (emphasis added).

supply arrangements.” Specifically, we propose to define “long-term power supply arrangements” to mean “the ownership of generation facilities, rights to market the output of Federal generation facilities with a term of longer than one year, or rights under one or more wholesale contracts to purchase electric energy with a term of longer than one year, for the purpose of meeting a service obligation.”<sup>13</sup>

### **III. Background**

#### **A. The Development of ISOs and RTOs**

10. In Order No. 888, the Commission found that undue discrimination and anticompetitive practices existed in the provision of electric transmission service in interstate commerce, and determined that non-discriminatory open access transmission service was one of the most critical components of a successful transition to competitive wholesale electricity markets.<sup>14</sup> Accordingly, the Commission required all public utilities that own, control or operate facilities used for transmitting electric energy in

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<sup>13</sup> While we consider long-term as “more than one year” in the context of defining a long-term power supply arrangement, later in this NOPR we note that we consider “long-term” in the context of the appropriate terms for long-term firm transmission rights to be terms and/or renewal rights that cover the multiple years necessary to support a long-term power supply arrangement. See *infra* at P 55.

<sup>14</sup> Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, Order No. 888, 61 FR 21540 (May 10, 1996), FERC Stats. & Regs. ¶ 31,036 at 31,682 (1996), order on reh’g, Order No. 888-A, 62 FR 12274 (March 14, 1997), FERC Stats & Regs. ¶ 31,048 (1997), order on reh’g, Order No. 888-B, 81 FERC ¶ 61,248 (1997), order on reh’g, Order No. 888-C, 82 FERC ¶ 61,046 (1998), aff’d in relevant part sub nom. Transmission Access Policy Study Group v. FERC, 225 F.3d 667 (D.C. Cir. 2000), aff’d sub nom. New York v. FERC, 535 U.S. 1 (2002).

interstate commerce to file open access transmission tariffs (OATTs) containing certain non-price terms and conditions and to “functionally unbundle” wholesale power services from transmission services.<sup>15</sup>

11. In addition, the Commission found in Order No. 888 that Independent System Operators (ISOs) had the potential to aid in remedying undue discrimination and accomplishing comparable access.<sup>16</sup> To guide the voluntary development of ISOs, Order No. 888 set forth 11 principles for assessing ISO proposals submitted to the Commission.<sup>17</sup> Following Order No. 888, several voluntary ISOs were established and approved by the Commission.

12. In light of the creation of these ISOs and other changes in the electric industry, the Commission issued Order No. 2000.<sup>18</sup> In that order, the Commission concluded that traditional management of the transmission grid by vertically integrated electric utilities was inadequate to support the efficient and reliable operation of transmission facilities

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<sup>15</sup> Under functional unbundling, the public utility is required to: (1) take wholesale transmission services under the same tariff of general applicability as it offers its customers; (2) state separate rates for wholesale generation, transmission and ancillary services; and (3) rely on the same electronic information network that its transmission customers rely on to obtain information about the utility’s transmission system. *Id.* at 31,654.

<sup>16</sup> Order No. 888 at 31,655; Order No. 888-A at 30,184.

<sup>17</sup> Order No. 888 at 31,730.

<sup>18</sup> Regional Transmission Organizations, Order No. 2000, FERC Stats. & Regs. ¶ 31,089 (1999), order on reh’g, Order No. 2000-A, FERC Stats. & Regs. ¶ 31,092 (2000), aff’d sub nom. Public Utility District No. 1 of Snohomish County, Washington v. FERC, 272 F.3d 607 (D.C. Cir. 2001).

that is necessary for continued development of competitive electricity markets.<sup>19</sup>

The Commission also found that even after functional unbundling of electric utilities under Order No. 888, opportunities for undue discrimination continued to exist.<sup>20</sup> As a result, the Commission adopted rules intended to facilitate the voluntary development of Regional Transmission Organizations (RTOs). The Commission concluded that RTOs would provide several benefits, including regional transmission pricing, improved congestion management, and more effective management of parallel path flows.<sup>21</sup>

13. In Order No. 2000, the Commission established the minimum characteristics and functions that an RTO must satisfy to gain Commission approval. Minimum characteristics of an RTO include independence from market participants and operational authority over transmission facilities under its control.<sup>22</sup> Minimum functions of an RTO include ensuring the development and operation of market mechanisms to manage transmission congestion, development and implementation of procedures to address parallel path flow issues, and market monitoring.<sup>23</sup> Under Order No. 2000, the Commission has approved the voluntary formation of a number of RTOs.

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<sup>19</sup> Order No. 2000 at 30,992-93 and 31,014-15.

<sup>20</sup> Id. at 31,015-17.

<sup>21</sup> Id. at 31,024.

<sup>22</sup> Id. at 31,046 et seq.

<sup>23</sup> Id. at 31,106 et seq.

14. Most of the RTOs and ISOs operate organized markets for energy and/or ancillary services in addition to providing transmission service under a single transmission tariff. As described in more detail below, most of these markets utilize a congestion management system based on Locational Marginal Pricing (LMP). Congestion is defined as the inability to inject and withdraw additional energy at particular locations in the network due to the fact that the injections and withdrawals would cause power flows over a specific transmission facility to violate the reliability limits for that facility. The market operator manages congestion by scheduling and dispatching generators that can meet load in the presence of congestion. Financially, in LMP markets the price of congestion is measured as the difference in the cost of energy in the spot market at two different locations in the network.<sup>24</sup> When such price differences occur, a congestion charge is assessed to transmission users based on their nodal injections and withdrawals. These price differences can be variable and difficult to predict. In order to manage the risk associated with the variability in prices due to transmission congestion, these markets use various forms of Financial Transmission Rights (FTRs) (described in more detail below) to allow market participants who hold the rights to protect against such price risks. In most cases, these FTRs have terms of one year or less. The use of FTRs and their terms is also discussed in more detail below.<sup>25</sup>

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<sup>24</sup> See infra at P 21-22.

<sup>25</sup> See infra at P 23-28.

**B. Currently Available Transmission Rights**

15. In recent years, interest in long-term transmission rights in organized electricity markets has increased, stemming in large part from a desire of some market participants to obtain rights that replicate the transmission service that was available to them prior to the formation of the organized electricity markets and remains available today in regions without organized electricity markets. The principal concern of these market participants is the inability to obtain a fixed, long-term level of service under pricing arrangements that hedge the congestion cost risk that they face in the organized electricity markets. This section describes the transmission rights that are available in regions with and without organized electricity markets, and concludes with a comparison of the two types of rights.

**1. Transmission Rights in Regions without Organized Electricity Markets**

16. In general, in regions without organized electricity markets, transmission service is provided to customers under the terms of the Order No. 888 OATT, or under terms of contracts that predate the OATT. The OATT offers two types of transmission service: network integration transmission service (network service), which is a long-term firm transmission service, and point-to-point transmission service, which is available on a firm or non-firm basis and on a long-term (one year or longer) or short-term basis. Long-term firm transmission customers taking service under the OATT have the right to continue to take transmission service from the transmission provider when their contract expires

(rollover right). Transmission providers are required to expand facilities to satisfy network and point-to-point customer needs.<sup>26</sup>

17. Firm point-to-point transmission service provides for the transmission of energy between designated points of receipt and designated points of delivery. A customer taking firm point-to-point transmission service generally pays a monthly demand charge based on its reserved capacity, and it may resell the service to another customer.<sup>27</sup>

18. Network service provides the customer with flexibility to utilize its current and planned generation resources to serve its network load in a manner comparable to that in which the transmission provider utilizes its generation resources to serve its native load customers. A network customer must designate network resources, including all generation owned, purchased or leased by the network customer to serve its designated load. A network customer also must designate the individual network loads on whose behalf the transmission provider will provide network service. The network customer

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<sup>26</sup>See Order No. 888 pro forma OATT at sections 13.5, 15.4 and 28.2.

<sup>27</sup> Under the Commission's transmission pricing policy, the demand charge may reflect the higher of the transmission provider's embedded costs or incremental expansion costs. Also, if the transmission system is constrained, the demand charge may reflect the higher of embedded costs or "opportunity" costs, with the latter capped at incremental expansion costs. See Inquiry Concerning the Commission's Pricing Policy for Transmission Services Provided by Public Utilities Under the Federal Power Act, Policy Statement, 69 FERC ¶ 61,086 (1994). In practice, the demand charge is almost always determined on basis of the transmission provider's embedded costs.

pays a monthly charge for basic service based on its load ratio share of the transmission provider's transmission revenue requirement.

19. As a condition of receiving network service, a network customer agrees to redispatch its network resources as requested by the transmission provider.<sup>28</sup> The transmission provider must plan, construct, operate and maintain its transmission system in order to provide the network customer with network service over the transmission provider's system, and must designate its own resources and loads in the same manner as a network customer. If the transmission provider needs to redispatch the system due to congestion to accommodate a network customer's schedule, the costs of redispatch are passed through to the transmission provider's network customers, including its own native load, on a load-ratio basis. If a curtailment on the transmission provider's system is required to maintain reliable operation of the system, curtailments are made on a non-discriminatory basis to the extent practicable and consistent with good utility practice, with firm service having the highest priority and non-firm generally having the lowest priority.

20. The price that a transmission customer pays for OATT transmission service is usually predictable and relatively stable over the long-term. For example, a load-serving entity that has a generating facility at one location that it wishes to use to serve load at a

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<sup>28</sup> Redispatch means that, due to congestion, the utility changes the output of generators to maintain the energy balance. The output of some generators may be increased while the output of others may decrease.



second location can contract for long-term point-to-point transmission service from the generator to the load. For this service, the load-serving entity pays only a demand charge that is known in advance. Although the load-serving entity must pay the demand charge whether or not it uses its full reservation, it does not have to pay additional costs associated with transmission congestion for point-to-point transmission service even when the transmission provider must redispatch its generators to honor the firm service commitment. If the load-serving entity has generators and loads at multiple locations, it can request network service and dispatch of its generators to serve its loads in a least cost manner. The load-serving entity must pay a load ratio share of the transmission provider's Commission-approved transmission revenue requirement but, again, is not directly assigned any congestion costs. If either the transmission provider's or the load-serving entity's generators have to be redispatched to relieve congestion, then the cost of redispatch is shared by the transmission provider and all network customers on a load ratio basis. Thus, whether it takes firm point-to-point transmission service or network service, the load-serving entity faces transmission costs that are relatively stable and predictable over the term of its service agreement.

## **2. Transmission Rights in Organized Electricity Markets**

21. Each of the transmission organizations that exist today has implemented or is planning to implement an organized electricity market that uses locational pricing for electric energy. In most cases, the locational pricing system that is used is LMP. Under LMP, the price at each location in the grid at any given time reflects the cost of making

available an additional unit of energy for purchase at that location and time. In the absence of transmission congestion, all locational prices at a given time are the same.<sup>29</sup> However, when congestion is present, locational prices typically will not be the same, and the difference between any two locational prices represents the cost of congestion between those locations.

22. Because locational spot prices can vary significantly over time, a market participant potentially faces some degree of price uncertainty. Consider a load-serving entity that has a generator at one location and load at another. If there is no congestion, the generator and the load will see the same locational prices just as if they were at the same location. However, when congestion arises, locational prices will differ, and the price that the load-serving entity's generator receives typically will not be the same as the price that its load must pay.<sup>30</sup> This difference in prices is the congestion cost, and the load-serving entity must pay this cost to the transmission organization whenever power is injected and withdrawn at different locations in the transmission system under constrained conditions.

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<sup>29</sup> The inclusion of marginal losses can cause locational prices to differ across locations even in the absence of congestion. For purposes of this discussion, we will consider only the congestion component of locational price differences.

<sup>30</sup> It is important to note that, depending on the relative magnitude of the prices at the generator's location and the load's location, congestion costs can be positive or negative.

23. To reduce the uncertainty due to congestion, transmission organizations that use locational marginal pricing make FTRs available to their market participants.<sup>31</sup> An FTR is a right to receive the congestion costs paid by grid users and collected by the transmission organization for one megawatt of electricity delivered from a specified point of receipt to a specified point of delivery. The holder of an FTR receives in each hour a payment that is calculated by subtracting the price at the point of receipt from the price at the point of delivery, and multiplying the difference by the megawatt quantity.

24. In an LMP system, all spot power is purchased and sold at locational prices and all scheduled injections and withdrawals are subject to congestion charges. When there is no congestion, the prices are the same and the payments to FTR holders are zero. However, when congestion is present, prices will differ; prices for withdrawals are generally higher than prices for injections, creating a source of funds to pay the FTR holders. To ensure that the excess revenue is sufficient to meet its FTR payment obligations under normal operating conditions, the transmission organization generally subjects any award of FTRs to a simultaneous feasibility test. The simultaneous feasibility test requires that, before specific FTRs can be awarded, the transmission organization must demonstrate that the transmission system is capable of physically delivering the power flows represented by

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<sup>31</sup> We use the term FTR in this NOPR to refer generally to the financial transmission instruments used in the various organized electricity markets that currently exist. In some markets, these financial instruments are called transmission congestion contracts or congestion revenue rights.

the FTRs simultaneously with the power flows represented by all concurrently or previously awarded FTRs. Although FTRs do not convey a physical right (or obligation) to use the transmission system, the transmission organization will be at risk of not receiving sufficient revenues to meet all of its FTR payment obligations under normal operating conditions if any awarded FTRs do not meet the simultaneous feasibility test. Any time that revenues are not sufficient, the transmission organization is said to be “revenue inadequate.”<sup>32</sup>

25. The most common type of FTR, which is known as an FTR “obligation,” provides for a payment to the holder when congestion cost is positive, but also requires the holder to make a payment to the transmission organization whenever the cost is negative. Because of this feature, some transmission organizations also offer FTR “options,” which do not place a payment obligation on the rights holder. However, because FTR options require more transmission capacity than FTR obligations to meet the simultaneous

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<sup>32</sup> It should be noted that, even when all awarded FTRs meet the simultaneous feasibility test, the Transmission Organization may at times be revenue inadequate as a result of unexpected events, such as a line outage or transmission system disruption that reduces transfer capability.

feasibility test, their availability is limited.<sup>33</sup> Therefore, for purposes of the discussion in this section, we will assume that FTRs are limited to FTR obligations.<sup>34</sup>

26. If a load-serving entity holds an FTR that matches its injections and withdrawals exactly, it pays no net congestion cost.<sup>35</sup> A load-serving entity may also reduce its congestion cost risk by holding an FTR that provides a partial hedge. Typically, the FTRs that load-serving entities hold do not exactly match their use of the transmission system in each hour, but the “over” and “under” financial coverage provided by the FTRs evens out over time to provide a sufficient hedge.

27. In general, transmission organizations provide FTRs on an annual basis to load-serving entities and others that pay access charges or fixed transmission rates. Load-serving entities receive FTRs either through direct allocation or through a two-step process in which the load-serving entity first is allocated auction revenue rights (ARRs) and then purchases FTRs in an auction.<sup>36</sup> The revenues from the auction flow back to the

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<sup>33</sup> The need for more capacity is due to the fact that the Transmission Organization cannot assume that the FTR options will provide any “counterflows” when it conducts the simultaneous feasibility test.

<sup>34</sup> See infra at P 72-79 for a more complete discussion of the properties of FTR obligations and FTR options.

<sup>35</sup> This net result is reached because congestion charges billed to the load-serving entity (or any other party that holds FTRs) are exactly offset by FTR payments.

<sup>36</sup> ARR's confer the right to collect revenues from the subsequent FTR auction. For example, the holder of an ARR between location A and location B knows that it will collect revenues equal to the market clearing price of an FTR between location A and location B. An ARR can, but does not need to, exactly match an FTR. In some Organized Electricity Markets, a market participant must submit a bid for FTRs in the

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load-serving entity and other ARR holders and thus defray the cost of purchasing the FTRs in the auction. Transmission organizations currently offer ARRs and FTRs with terms of one year or less. Although details vary by transmission organization, the allocation is based largely on historical uses of the system as measured by peak loads, but also allows market participants some flexibility to choose among transmission paths. Most transmission organizations also allocate long-term ARRs and FTRs to any party that invests in transmission upgrades that increase transmission capability. FTRs can be traded in annual and monthly transmission organization auctions or bilaterally outside the auction.

28. Since the state of the transmission system and market prices change from year to year, the annual allocation allows market participants to re-configure their transmission rights requests each year to reflect such changes. The annual reconfiguration also helps the transmission organization to manage exposure to situations where payments to FTR holders can exceed congestion revenues. Revenue shortfalls can occur due to changes in the transmission grid or in the availability of generators that have a major impact on power flows. If such changes are expected to be long-lasting, the transmission organization is able to adjust the quantity and configuration of rights made available in the next annual cycle. However, a load-serving entity may receive fewer FTRs or ARRs

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auction to convert its ARRs to FTRs, while in other Organized Electricity Markets a market participant can convert its ARRs to FTRs directly and is not required to bid in the auction.

than it requests due to factors outside of its control, such as changes in the network, the network flow assumptions or the FTR nominations of other participants. As a result, load-serving entities are uncertain from year to year whether they will obtain the FTRs needed to support long-term power supply arrangements, including investment in generation resources.

**3. Comparison of Transmission Rights in Regions with and without Organized Electricity Markets**

29. There are several important differences between transmission service under the OATT and transmission rights in organized electricity markets that use LMP and FTRs. However, the differences that are most relevant for purposes of this NOPR concern the management of congestion, the recovery of congestion costs and the availability of long-term service arrangements.

30. Under the OATT, the transmission provider manages congestion by redispatching its own or its customers' network resources as needed to accommodate a transmission constraint; the OATT provides no mechanism by which firm point-to-point transmission customers can participate directly in congestion management. However, in organized electricity markets, the transmission organization manages congestion through the use of locational prices. This means that all available resources under an LMP system can participate in redispatch for congestion management because they all receive the congestion price signal. As a result, a transmission organization in a region with an organized electricity market is less likely to have to invoke transmission loading relief

(TLR) procedures and service curtailments than a transmission provider under the OATT.

31. The recovery of congestion costs also differs greatly between regions with and without organized electricity markets. In regions where transmission service is provided under the OATT, a transmission customer that takes network service or firm point-to-point transmission service is not charged directly for the costs of the redispatch that may be required to accommodate its use of the transmission system. For example, a firm point-to-point transmission customer is allowed to take service up to its contractual entitlement while paying only a fixed demand charge. Also, although a network customer must pay a share of any redispatch costs that the transmission provider and other network customers incur, its cost responsibility is determined after the fact as a load ratio share of the total redispatch costs that are incurred on behalf of all users of the system over a given time period. While this type of pricing may not present the customer with a price signal that accurately reflects all of the costs occasioned by the customer's use of the system, it lowers the transmission customer's price uncertainty. In addition, both network service and firm point-to-point transmission service can be obtained under long-term contracts. These attributes of OATT transmission service result in a less volatile price for transmission service over a long-term, which in turn can help facilitate the planning and financing of large generation facilities and other long-term power supply arrangements.



32. In contrast, a transmission organization in a region with an organized electricity market recovers congestion costs through the locational pricing of energy. Because locational prices include a congestion cost component (which can be positive, negative or zero), a participant in an organized electricity market faces the prospect of paying a congestion charge for many of its transactions. For example, as explained above, a load-serving entity that has generation at one location and load at another, but does not hold FTRs, is at risk of incurring congestion costs, which may not be predictable. Also, although that load-serving entity can avoid congestion costs by holding FTRs, it still faces a congestion price risk if its spot sales and purchases or scheduled injections and withdrawals do not correspond exactly to its allocated (or purchased) FTRs. Clearly, locational pricing and price-based congestion management provide the market participant with much of the information it needs to make cost effective decisions regarding energy consumption and use of the transmission system (as well as investment in new generation and transmission upgrades). However, the FTRs that transmission organizations currently provide to hedge congestion charges for using existing transmission capacity (as opposed to incremental transmission expansions) are generally available for terms of only one year or less. This can create uncertainty for the market participant because, in any given year, its award of FTRs may not be sufficient to meet its needs. Some market participants have expressed concern that this uncertainty makes it more difficult to finance long-term power supply arrangements.

33. The Commission believes that some of the problems of uncertainty in organized electricity markets can be overcome and the objectives of section 217(b)(4) of the FPA can be met through the introduction of long-term firm transmission rights. However, for a variety of reasons that are discussed below, transmission rights in organized electricity markets cannot always be designed in a way that captures all of the features of the transmission rights that have long been available under the OATT. Consequently, the Commission's objective in issuing this NOPR is to present a framework within which transmission organizations and their market participants can design and implement long-term firm transmission rights in the organized electricity markets that are compatible with the design of those markets, in particular retaining the advantages of price-based congestion management, and meet the reasonable needs of market participants.

**C. Staff Paper on Long-Term Transmission Rights**

34. Prior to the enactment of EPAct 2005, the Commission released a Staff Paper that provided background and solicited comments on whether long-term transmission rights

were needed in the ISO and RTO markets, and if so, how to implement them.<sup>37</sup>

This section provides an overview of the comments to the notice.

35. With respect to the need for and design of long-term transmission rights, the views of the respondents tended to fall into three general groups. The first group consisted of advocates of long-term transmission rights with terms in the range of 5-30 years.<sup>38</sup> These parties argue that the failure of transmission organizations to offer transmission rights with terms greater than one year is a key deficiency in the markets that produces increased financial risk due to congestion price uncertainty, the failure of forward energy markets to form, and barriers to investment in new generation capacity. The core problem expressed by these parties is that annual allocations of rights may not provide sufficient rights year-to-year to adequately cover potentially volatile congestion cost exposure. In turn, the inability to secure a known quantity of transmission rights for multiple years introduces an unacceptable degree of uncertainty into resource planning, investment and contracting.

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<sup>37</sup> Notice Inviting Comments On Establishing Long-Term Transmission Rights in Markets With Locational Pricing and Staff Paper, Long-Term Transmission Rights Assessment, Docket No. AD05-7-000 (May 11, 2005) (Staff Paper). While we are issuing this NOPR in both Docket No. RM06-8-000 and Docket No. AD05-7-000, we expect to issue our Final Rule in only Docket No. RM06-8-000. Comments in response to this NOPR should be filed in Docket No. RM06-8-000.

<sup>38</sup> See, e.g., Comments on Staff Paper of the American Public Power Association (APPA) at 1, 8, 19; Comments on Staff Paper of the Transmission Access Policy Study Group (TAPS) at 19-21; Comments on Staff Paper of the National Rural Electric Cooperative Association (NRECA) at 17-19; Comments on Staff Paper of the Electricity Consumers Resource Council (ELCON) at 9-10.

36. Most of the parties in this first group stressed that not all transmission capacity should be given over to long-term rights, but that there should be an amount sufficient to cover at least base-load generation resources and perhaps renewable energy generators.<sup>39</sup> These commenters argue that long-term rights should be FTR obligations only under certain conditions that limit financial exposure of the rights holder. Several proposed that the long-term rights should be FTR options. Otherwise, the rights could be physical rights<sup>40</sup> or modified FTRs (e.g. financial rights with physical characteristics, such as “use-or-lose” rights) designed to alter the financial settlement properties of traditional FTRs so as to reduce congestion risk.<sup>41</sup>

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<sup>39</sup> See Comments on Staff Paper of APPA at 31; Comments on Staff Paper of TAPS at 17-19. However, other parties supportive of long-term transmission rights argued that their allocation should not be tied to particular classes of generator. See, e.g., Comments on Staff Paper of ELCON at 8-9.

<sup>40</sup> See Comments on Staff Paper of Sacramento Municipal Utility District (SMUD) at 12-16; Comments on Staff Paper of City of Santa Clara, California, Silicon Valley Power (SVP) at 14-18.

<sup>41</sup> For example, a right that only provides a financial hedge when the holder submits a physical schedule (a type of “use or lose” right). See, e.g., Comments on Staff Paper of the Transmission Access Policy Study Group (TAPS) at 21-25; Comments on Staff Paper of the Electricity Consumers Resource Council (ELCON) at 12-13. Note also that several commenters argued that ISOs with LMP and financial rights should not revert to physical rights to provide long-term transmission service, nor should they allow such ISOs to offer combinations of physical and financial rights (with the exception of already awarded grandfathered rights). See, e.g., Comments on Staff Paper of ABATE at 10-11; Comments on Staff Paper of American Electric Power (AEP) at 3; Comments on Staff Paper of Cinergy at 13-14; Comments on Staff Paper of Edison Electric Institute (EEI) at 3; Comments on Staff Paper of Electric Power Supply Association (EPSA) at 6-8; Comments on Staff Paper of FirstEnergy Solutions at 8; Comments on Staff Paper of ISO/RTO Council at 2-3.

37. A second group of commenters largely agreed with the first that long-term rights should be introduced, but argued that this should take place within the framework of existing FTR market designs and follow a cautious, incremental approach. These parties, which included most of the ISOs and RTOs that submitted comments as well as many stakeholders, argued that rights of greater than one year duration would indeed find a role in the markets, but that care was needed in the design of the rights.<sup>42</sup> Most of these parties were supportive of straightforward extensions of the current FTR market design to include FTR obligations of longer terms, although perhaps with modified creditworthiness requirements and other rule changes to reflect the different risks embodied in such rights. In general, they proposed terms for such FTRs of between 2 to 5 years. They also supported limiting the quantity of system capability given over to long-term FTRs for at least an initial period.

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<sup>42</sup> See generally Comments on Staff Paper of California ISO; Comments on Staff Paper of ISO New England; Comments on Staff Paper of New York ISO; Comments on Staff Paper of PJM; Comments on Staff Paper of ISO/RTO Council. See also generally Comments on Staff Paper of New York Public Service Commission (NY PSC) and the Organization of Midwest States (OMS). On appropriate term lengths, see Comments on Staff Paper of Cinergy at 10; Comments on Staff Paper of Coral Power at 3,6; Comments on Staff Paper of DC Energy at 4-5; Comments on Staff Paper of Edison Electric Institute (EEI) at 10; Comments on Staff Paper of Electric Power Supply Association (EPSA) at 11; Comments on Staff Paper of Midwest Transmission Owners at 11; Comments on Staff Paper of Morgan Stanley at 7; Comments on Staff Paper of National Grid at 15; Comments on Staff Paper of Pacific Gas & Electric (PG&E) at 5.

38. Finally, some respondents felt that long-term rights should not be introduced at this time.<sup>43</sup> These parties argued that the current procedures for annual allocations of FTRs with terms of one year or less were well-established and that transmission rights markets were efficient and maturing around this design. They were concerned that the introduction of multi-year rights could introduce inequity and inefficiency into the organized electricity markets, because they believe such rights will reduce the availability of FTRs with terms of one year or less that can be used to hedge shorter-term transactions. They also assert that introducing long-term rights could cause cost shifts if holders of long-term rights are given congestion risk coverage greater than that accorded to other parties. Some respondents that supported this position were from retail choice states, reflecting concerns that long-term rights could adversely affect their ability to acquire and trade transmission rights used to hedge shorter-term contracts.

39. In general, those responding to the Staff Paper did not favor a uniform, “one size fits all” approach to long-term rights. Instead, they stressed that the development of long-term transmission rights should take place in a regional context, which would allow stakeholders to balance the different needs of transmission users and reflect the characteristics of the regional grid and generation resources. Also, those responding provided suggestions on many other aspects of long-term transmission right design and

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<sup>43</sup> See, e.g., Comments on Staff Paper of Cinergy at 3; Comments on Staff Paper of Coral Power at 7. However, many of these respondents did articulate views on how long-term rights should be specified in the event that the Commission required them.

implementation. We will refer to those suggestions where relevant in some of the discussion that follows.

#### **IV. Proposed Guidelines for Design and Administration of Long-term Firm Transmission Rights in Organized Electricity Markets**

##### **A. The Commission's Proposed Approach**

40. To satisfy the requirements of section 1233(b) of EPAct 2005, and to address the concerns expressed by market participants, the Commission proposes to establish a set of guidelines for the design and administration of long-term firm transmission rights in organized electricity markets. The Commission proposes to require each transmission organization that is a public utility with one or more organized electricity markets<sup>44</sup> to file with the Commission, within 180 days, either proposed tariff sheets that make available long-term firm transmission rights that are consistent with the guidelines, or an explanation of how the transmission organization already makes such rights available. The proposed compliance procedures are discussed in more detail below.

41. The Commission recognizes that there may be many possible approaches to fulfilling this requirement of EPAct 2005. Parties commenting on the Staff Paper suggested a number of possible approaches to designing and implementing long-term transmission rights. The Commission believes that establishing guidelines for the design

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<sup>44</sup> As noted elsewhere, this proposed rule would apply whether the Organized Electricity Markets are administered by the Transmission Organization itself, or whether the Organized Electricity Markets are administered by another entity.

and administration of long-term firm transmission rights in this rulemaking, followed by development of specific long-term firm transmission right designs within the stakeholder process of each Transmission Organization with an organized electricity market, is the most appropriate course for complying with the directive of section 1233(b) of EPAct 2005. We agree with many of those commenting on the Staff Paper that a “one size fits all” long-term firm transmission right design is not appropriate, and that long-term transmission rights should be developed through regional stakeholder discussion.<sup>45</sup>

42. This flexible regional development of long-term firm transmission rights must, however, occur within certain guidelines. Accordingly, the Commission proposes guidelines for the design and administration of long-term firm transmission rights that ensure that those rights have certain properties that we believe are fundamental to meeting the objectives of section 217(b)(4) of the FPA. For example, we propose below that long-term firm transmission rights be made available with terms (and/or rights to renewal) that are sufficient to meet the needs of load-serving entities to hedge long-term power supply arrangements made or planned to satisfy a service obligation..

Additionally, as described in more detail in the guidelines that follow, we propose that

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<sup>45</sup> See, e.g., Comments on Staff Paper of APPA at 23-24; Comments on Staff Paper of Association of Businesses Advocating Tariff Equity (ABATE) and Coalition of Midwest Transmission Customers at 11-12; Comments on Staff Paper of New York ISO at 3-4; Comments on Staff Paper of New York Transmission Organizations at 3-4.



transmission organizations be required to award long-term firm transmission rights to market participants that request and support an expansion or upgrade to the transmission system in accordance with the transmission organization's prevailing rules for cost allocation. Such long-term firm transmission rights must be for a term equal to the life of the new facilities, or for a lesser term if requested by the funding entity. Also, as described in more detail below, while long-term firm transmission rights should be made available to all transmission customers, in the event that a transmission organization cannot accommodate all requests for long-term firm transmission rights over existing transmission capacity, we propose that the approach most consistent with section 217(b)(4) of the FPA is to require that a preference be given to load-serving entities with long-term power supply arrangements used to meet service obligations.

43. While we believe these and the other properties outlined in the guidelines below are critical to the successful implementation of long-term rights, we intend for the guidelines to form only a framework for further, more specific development of long-term firm transmission rights by each transmission organization. Accordingly, the guidelines should provide enough flexibility to allow each region to develop, through its usual stakeholder process, a specific long-term firm transmission right design that fits the prevailing market design and best meets the needs of market participants in that region.

44. Although we propose to allow regional flexibility in the development of long-term firm transmission rights, we recognize that allowing transmission organizations with organized electricity markets to implement different rules for these rights could lead to

regional seams issues. We seek comments on our proposal to provide regional flexibility. In particular, we ask commenters to identify features of long-term firm transmission rights that, if not consistent across transmission organizations, may interfere with the effective operation of regional markets.

## **B. Proposed Guidelines**

**Guideline (1): The long-term firm transmission right should be a point-to-point right that specifies a source (injection node or nodes) and sink (withdrawal node or nodes), and a quantity (MW).**

45. Section 217(b)(4) of the FPA requires that long-term firm transmission rights be available to support long-term power supply arrangements. Hence, we propose that the transmission rights must be specified such that they can hedge the congestion costs that may be incurred in delivering the output of particular generation resources to particular loads.<sup>46</sup> The source nodes can correspond to a single generator or a set of generators (e.g., a zone). Similarly, the sink nodes can specify a single node or set of nodes.<sup>47</sup> This

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<sup>46</sup> APPA states that, because ISO-NE offers only general system-wide ARR, there is no direct relationship between the ARRs that a market participant receives and the FTRs that the market participant may desire, given the location of its resources. See Comments on Staff Paper of APPA, attached Concept Paper - Long-Term Transmission Rights, at 16, n. 22.

<sup>47</sup> It is thus possible to define a form of network service that consists of a set of point-to-point rights, each of which specifies a source, a sink and a megawatt quantity. This, however, would differ from network service under the OATT, which does not require the customer to reserve a specific amount of capacity between its network resources and network loads.

guideline is not intended to preclude flowgate rights so long as they are designed with the same hedging properties as an equivalent long-term point-to-point right.

46. Section 217(b)(4) recognizes that there may be alternative designs for long-term firm transmission rights.<sup>48</sup> For many transmission organizations and their market participants, the most straightforward method to develop long-term firm transmission rights would be to extend the term of the auction revenue rights or FTRs that they currently allocate. These may require additional market rules, such as modified creditworthiness standards. However, we do not preclude alternative designs for long-term rights. Some possible designs are compared in Section IV.C of this NOPR.

**Guideline (2): The long-term firm transmission right must provide a hedge against locational marginal pricing congestion charges (or other direct assignment of congestion costs) for the period covered and quantity specified. Once allocated, the financial coverage provided by the right should not be modified during its term except in the case of extraordinary circumstances or through voluntary agreement of both the holder of the right and the transmission organization.**

47. In most existing organized electricity markets, LMP is used to manage congestion. The FTRs currently offered in the organized electricity markets provide a hedge against these charges, but are only offered in terms of one year or less. Because of this short term, market participants with long-term power supply arrangements are at risk of having the ARR or FTRs that they are eligible for to hedge congestion charges associated with

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<sup>48</sup> In particular, that provision states that the Commission shall exercise its authority “to enable load-serving entities to secure firm transmission (or equivalent tradable or financial rights) on a long-term basis” (emphasis added).

delivery of that power prorated during the course of the power supply arrangement.

As noted above, one criticism of the current FTR market rules is that the annual FTR allocation may produce different results from year to year in the quantity of FTRs allocated to eligible load-serving entities. APPA, for example, argues that there is a need for a mechanism to keep long-term firm transmission rights feasible in the “out” years.<sup>49</sup>

48. To address this concern, we propose that the transmission organization ensure that the long-term firm transmission rights it offers provide a hedge against congestion costs for the entire term of the right, and for the entire quantity of the right. In proposing that the financial coverage offered by the long-term rights, once awarded, not be modified, we seek to establish rights that provide a high degree of stability in terms of payments from year to year, rather than subject to uncertainty over the possibility of significant pro-rationing in the event of revenue inadequacy. We interpret the intent of section 217(b)(4) of the FPA to be that the Commission ensure the availability in organized electricity markets of long-term firm transmission rights that provide price stability to load-serving entities with long-term power supply arrangements used to satisfy their service obligations.

49. When conditions arise that cause the transmission organization to receive congestion revenues that are not sufficient to meet payment obligations to FTR holders, the transmission organization must have in place a mechanism to fully fund the rights by

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<sup>49</sup> Comments on Staff Paper of APPA at 21.

collecting the needed revenues from a set of market participants. We will not specify here how that funding should be allocated among market participants, which is a subject for stakeholder discussion, but note that ideally the rules for funding of the rights should be designed to create and improve incentives for the maintenance and expansion of the transmission system that is needed to ensure the feasibility of the long-term rights that are allocated. This might be accomplished, for example, by placing the entities that are ultimately responsible for system maintenance and expansion at risk (wholly or partially) for funding revenue shortfalls that are due to inadequate maintenance or expansion practices. The transmission organization might also define rules for transmission upgrades and expansion to support the feasibility of long-term rights.<sup>50</sup> The Commission seeks comments on funding revenue shortfalls related to the provision of long-term firm transmission rights, particularly with regard to how any necessary charges should be allocated. Should such charges be allocated to a transmission owner that is responsible for maintaining and expanding the capacity supporting the long-term firm transmission rights where the revenue shortfalls are due to inadequate maintenance or expansion? Are there appropriate methods for allocating such charges that also provide appropriate short-term and long-term incentives for transmission usage, maintenance and expansion?

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<sup>50</sup> We discuss this issue in Section V, infra.

50. Also, there may be extraordinary circumstances under which the requirement for full funding should be relaxed. For example, one such extraordinary circumstance may be a sustained, unplanned outage of a large transmission line. Such circumstances may require alternative rules for sharing of congestion cost risk than would otherwise apply.

**Guideline (3): Long-term firm transmission rights made feasible by transmission upgrades or expansions must be available upon request to any party that pays for such upgrades or expansions in accordance with the transmission organization's prevailing cost allocation methods for upgrades or expansions. The term of the rights should be equal to the life of the facility (or facilities) or a lesser term requested by the party paying for the upgrade or expansion.**

51. Most transmission organizations today allow entities that pay for network upgrades or expansions to receive the long-term firm transmission rights that would not be feasible but for those expansions. The Commission believes that this policy is fair to both new and existing users of the transmission system, promotes efficient capacity expansions by allowing users that fund the expansions to compare directly any congestion cost savings with the cost of the necessary upgrades, and provides the long-term hedge against congestion costs desired by transmission customers wishing to enter into long-term power supply arrangements. We note that the pro forma OATT adopted by the Commission in Order No. 888 requires public utility transmission providers to expand capacity, if necessary, to satisfy the needs of transmission customers.<sup>51</sup>

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<sup>51</sup> See pro forma OATT at sections 13.5, 15.4 and 28.2.

Accordingly, the tariffs of transmission organizations must clearly and specifically provide for the award of long-term firm transmission rights (as described in this proposed rule) to entities that support an expansion or upgrade in accordance with the transmission organization's prevailing cost responsibility or allocation rules. The long-term firm transmission rights would be equal to the amount of transfer capability created by the expansion or upgrade. We propose that such rights be for a term equal to the life of the facility (or facilities), or for a lesser term if requested by the funding party.

52. An issue that arises in this context concerns the possibility that granting a long-term firm transmission right that uses expanded capacity may encumber some existing transmission capacity as well. Given the integrated nature of the grid, any point-to-point transmission right made possible by a capacity expansion is likely to require use of at least some existing transfer capability in order for the right to be feasible. If the entity that has funded a capacity expansion does not have a priority to obtain long-term rights to existing capacity as proposed in guideline (5) in this NOPR,<sup>52</sup> the transmission organization must propose a procedure by which such an entity can obtain rights to existing capacity when such rights are needed to make the incremental expansion rights feasible. We ask for comment on the appropriate rules in such cases.

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<sup>52</sup> See infra at P 58-61.

**Guideline (4): Long-term firm transmission rights must be made available with term lengths (and/or rights to renewal) that are sufficient to meet the needs of load-serving entities to hedge long-term power supply arrangements made or planned to satisfy a service obligation. The length of term of renewals may be different from the original term.**

53. The Commission proposes to require each transmission organization to make long-term firm transmission rights available to market participants. Doing so is consistent with section 217(b)(4) of the FPA, which requires that load-serving entities be able to secure firm transmission rights on a long-term basis to support long-term power supply arrangements made or planned to meet a service obligation. This requirement raises a number of issues. First, we note that the FPA (and EPAct 2005) do not define “long-term.” Commenters on the Staff Paper expressed a wide range of views on the appropriate term for long-term transmission rights. Some commenters prefer to proceed cautiously, suggesting that a two year FTR obligation would be a reasonable, conservative starting point for implementation of long-term rights.<sup>53</sup> A number of commenters also support initial experimentation with shorter term FTRs, but are willing to consider longer terms, typically up to three to five years.<sup>54</sup>

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<sup>53</sup> See, e.g., Comments on Staff Paper of California ISO at 5; Comments on Staff Paper of New York Public Service Commission at 3.

<sup>54</sup> See, e.g., Comments on Staff Paper of Cinergy at 10; Comments on Staff Paper of Edison Electric Institute at 10.



54. Other commenters argued that the initial assignment of long-term rights should consider much longer time-frames, on the order of decades. For example, NRECA argues that the term of the rights should be matched to the RTO planning process, which is typically 5 or 10 years.<sup>55</sup> TAPS argues that long-term rights consistent with its specifications should be made available for 10 year terms with the unconditional right to renew.<sup>56</sup> APPA states that a party making an investment in a generation asset should be able to obtain a long-term right for the duration of the financing terms, which could be 20 to 30 years, or even for the duration of the asset's operating life. APPA notes that there should be flexibility in the term of the long-term right, but that perhaps there should be a minimum term that matches the transmission organization's planning and construction horizon.<sup>57</sup>

55. The Commission believes that it is reasonable to allow transmission organizations to individually develop and propose the terms of the long-term firm transmission rights they offer.<sup>58</sup> However, we consider long-term, for purposes of this rulemaking, to mean terms on the order of multiple years, sufficient to meet the needs of load-serving entities

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<sup>55</sup> See Comments on Staff Paper of NRECA at 18.

<sup>56</sup> See Comments on Staff Paper of TAPS at 19-21.

<sup>57</sup> See Comments on Staff Paper of APPA at 33.

<sup>58</sup> We expect that transmission organizations will develop their proposals in consultation with stakeholders.

with service obligations.<sup>59</sup> The Commission's primary concern here is to be responsive to the needs of load-serving entities, other market participants, and the requirements of section 217(b)(4) of the FPA. In particular, our goal is to ensure that long-term firm transmission rights are available for those who wish to obtain a more stable, long-term firm transmission right to meet their service obligations, and for those who need longer-term transmission rights to finance investments in new generation or long-term power purchase contracts. To achieve this goal, we propose this guideline, which would require that the specific rights proposed by each transmission organization in compliance with this rulemaking have term lengths (and/or rights to renewal) that are sufficient to meet the needs of transmission customers to hedge long-term power supply arrangements made or planned to satisfy a service obligation. Because market participants in different transmission organizations may have different needs, we decline to propose a specific term length or set of term lengths. New section 217(b)(4) of the FPA makes clear, however, that transmission organizations with organized electricity markets must meet the needs for long-term firm transmission service of load-serving entities with long-term power supply arrangements made, or planned, to meet their service obligations. Hence, this guideline would require that transmission organizations

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<sup>59</sup> Defining long-term in this manner, for purposes of this proposed rule, differs from our previous practice of defining long-term as "one year or more." We propose defining long-term differently in this context because the transmission organizations subject to this rulemaking already provide transmission rights with a term of one year.

with organized electricity markets offer long-term firm transmission rights with terms that meet such needs. The Commission expects that multiple-year terms will be necessary to ensure that the rights will support the financing of new generation investments or power purchase contracts.<sup>60</sup> Our view of long-term as terms of multiple years is intended to provide a range to allow transmission organizations the flexibility to individually develop and propose term lengths, subject to review by the Commission to ensure that the terms each transmission organization proposes meet the goals described above and expressed by Congress in section 217(b)(4) of the FPA.

56. We seek comments regarding the length of terms of long-term firm transmission rights. For example, we seek comments on whether regional flexibility is needed on the length of term, or whether a more specific set of terms should be included in the Final Rule. Further, we note that the issue of term length is linked to the length of the transmission organization's transmission planning and expansion cycle. As a result, we seek comments on how longer-term long-term firm transmission rights (i.e. 20 to 30 years) relate to the transmission organization's planning cycle, how such longer-term rights can be guaranteed beyond the length of the planning cycle, and whether the planning cycles of transmission organization's must be modified or extended to accommodate terms that are sufficient to meet the needs of load-serving entities to hedge

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<sup>60</sup> The ability to renew the long-term firm transmission rights will also help ensure that term lengths will be appropriate.

long-term power supply arrangements made or planned to satisfy a service obligation.<sup>61</sup>

57. With regard to rights to renew long-term firm transmission rights, the transmission organization may propose reasonable criteria regarding the availability of renewal rights, and the price at which rights may be renewed. For example, the right to renew long-term firm transmission rights may be limited to a load-serving entity that can demonstrate that the renewal right is needed to allow the load-serving entity to match the term of its transmission rights to the term of a particular long-term power supply arrangement. In addition, the transmission organization may require minimum notice periods for initiation, renewal, cancellation or conversion that accommodate the transmission organization's planning cycle or other administrative considerations. We seek comments on the relationship between the right to renew a long-term firm transmission right and transmission system planning.

**Guideline (5): Load-serving entities with long-term power supply arrangements to meet a service obligation must have priority to existing transmission capacity that supports long-term firm transmission rights requested to hedge such arrangements.**

58. When finalized, this rulemaking will require that transmission organizations with organized electricity markets make long-term firm transmission rights available to transmission customers. As noted above, section 217(b)(4) of the FPA requires the

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<sup>61</sup> This NOPR also explores transmission planning and expansion in Section V, infra.

Commission to exercise its authority to enable “load-serving entities to secure firm transmission rights (or equivalent tradable or financial rights) on a long-term basis for long-term power supply arrangements made, or planned, to meet such needs.” As we discuss elsewhere in this NOPR, in regions where existing transmission capacity is limited, transmission organizations may not be able to accommodate all requests for long-term firm transmission rights. While section 217 does not require that long-term firm transmission rights be made available only to load-serving entities with service obligations, we interpret that section to require the Commission to give load-serving entities with long-term power supply arrangements to satisfy a service obligation a preference in securing long-term firm transmission rights. In accordance with this interpretation, if there is a conflict (infeasibility) in awarding long-term rights from existing capacity (or capacity created by incremental reliability upgrades) to all parties eligible to receive them, we propose to require the transmission organizations to address this infeasibility by first giving load-serving entities with long-term power supply arrangements used to meet service obligations priority in the allocation of the rights.

59. When rights requested by eligible parties with priority (or parties without priority that are being accommodated) are not simultaneously feasible given existing transmission capacity, the transmission organization may adopt methods to allocate the requested rights to the parties prior to granting such rights. We seek comments on such methods and whether and to what extent it may be appropriate to allow transmission organizations to adopt limits on the amount of capacity they will allocate to long-term rights before

such rights are allocated. In particular, we seek comments on whether section 1233 of EPAct 2005 and new section 217(b)(4) of the FPA, read in their entirety, support such reasonable limits. Section 217(b)(4) states that the Commission must exercise its authority to meet the “reasonable needs” of load-serving entities to satisfy their service obligations. Additionally, that section requires that the Commission enable load-serving entities to secure long-term firm transmission rights for “power supply arrangements made, or planned,” to meet their service obligations.

60. In making available long term firm transmission rights for power supply arrangements “made or planned” to meet service obligations, transmission organizations may have to incorporate estimates of load growth into the award of such rights. This raises the concern that to the extent that the load growth assumptions made by load-serving entities as a basis for nominating transmission rights are overstated, some load serving entities could be awarded more long-term firm transmission rights than needed to meet service obligations, and the associated transmission capacity would not be available for allocation of transmission rights to others. The Commission seeks comment on this issue and any rules or other safeguards that address it.

61. We also seek comments on the other issues raised by this guideline. Particularly, we seek comment on how the transmission organization should allocate long-term firm transmission rights from existing capacity in light of the priority we propose in this guideline.

**Guideline (6): A long-term transmission right held by a load-serving entity to support a service obligation should be re-assignable to another entity that acquires that service obligation.**

62. The Commission believes that in general, it is appropriate to require that long-term firm transmission rights, once allocated to or obtained by a load-serving entity, be reassignable to a successor load-serving entity which, in turn, would assume any cost responsibility that holding the rights entails. This proposal is consistent with section 217(b)(3)(A) of the FPA, which requires that transmission rights held by a load-serving entity as of the date of enactment of EPAct 2005 for the purpose of delivering energy it has purchased or generated to meet a service obligation be transferred to a successor load-serving entity.<sup>62</sup> Specifically, section 217(b)(3)(A) provides:

To the extent that all or a portion of the service obligation covered by the firm transmission rights or equivalent tradable or financial transmission rights is transferred to another load-serving entity, the successor load-serving entity shall be entitled to use the firm transmission rights or equivalent tradable or financial transmission rights associated with the transferred service obligation.

This guideline would apply when a service obligation is transferred to a new load-serving entity. Such a transfer of a service obligation might occur pursuant to a state commission order, or might occur in a state with retail competition if load chooses a new supplier.

The Commission seeks comments regarding whether the reassignability we propose to

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<sup>62</sup> We note that the short-term transmission rights currently offered by transmission organizations are generally reassignable to successor load-serving entities, consistent with this statutory language. See, e.g., PJM Manual 06, Financial Transmission Rights (Revision 7, effective April 15, 2005), at <http://www.pjm.com/contributions/pjm-manuals/pdf/m06v071.pdf>

require in this guideline, consistent with section 217, should apply to all long-term firm transmission rights, regardless of how those rights were obtained. For example, what, if any, compensation should a holder of long-term rights receive when its rights are reassigned to a successor load-serving entity?

63. Section 217(b)(4) of the FPA does not discuss whether long-term firm transmission rights should be fully tradable among market participants. Allowing such rights to be fully tradable could raise issues of equity, since a load-serving entity who acquired the rights through the preference we propose in this rulemaking could then possibly sell or trade the rights at a profit. This might give load-serving entities the incentive to acquire excess long-term firm transmission rights in order to take advantage of profit opportunities through arbitrage. However, full tradability may bring benefits to the market, and allow those who could not obtain long-term rights in the initial allocation to obtain such rights later. We seek comment on these issues. Particularly, we seek comment on whether the equity issues we note above could be addressed by only permitting holders of long-term firm transmission rights to return their rights to the transmission organization at the price paid, or whether these issues could be addressed in some other manner.

**Guideline (7): The initial allocation of the long-term firm transmission rights shall not require recipients to participate in an auction.**

64. As is currently done in most transmission organization markets, the first stage in awarding transmission rights is to allocate the rights directly to eligible parties or to



allocate auction revenue rights directly and subsequently conduct an auction for transmission rights (in which parties with and without allocated rights can participate). If an auction model is adopted or continued by the transmission organization, we will require that any long-term rights allocated as auction revenue rights can be directly converted to transmission rights without participation in the auction.<sup>63</sup> This allows any party that feels uncertain about valuing its rights commercially to de facto have them allocated directly. This guideline does not preclude interested parties with long-term rights from participating in the auction if they choose.

**Guideline (8): Allocation of long-term firm transmission rights should balance any adverse economic impact between participants receiving and not receiving the right.**

65. The provision of long-term firm transmission rights may have adverse impacts on markets participants not receiving such rights. For example, to the extent that the capacity of the transmission system is encumbered by entities holding long-term firm transmission rights, entities that prefer to hold short-term transmission rights, such as load-serving entities operating in retail states,<sup>64</sup> will have fewer rights available to them than they have under annual allocation schemes that are now used. In addition, to the

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<sup>63</sup> For example, under the rules for allocation of transmission rights on file for PJM, awarded ARRs can be directly converted to FTRs in the subsequent annual auction without submission of price offers.

<sup>64</sup> Because load-serving entities in retail access states may prefer a business model that is based upon having only short-term supply arrangements, they may prefer to hold only short-term transmission rights.

extent awarded long-term rights become infeasible due to major unforeseen changes in the physical properties of the transmission system, the payment obligations to holders of long-term firm transmission rights would have to be funded by others.

66. Although some of these impacts may be unavoidable, the Commission believes, in general, that it is possible for a transmission organization to introduce long-term firm transmission rights in a way that balances their economic impact between those receiving and not receiving the rights. For example, the transmission organization could place a limit on the amount of system capacity that is available to support long-term rights. This would reduce the likelihood that the rights may become infeasible due to major unforeseen changes in physical properties of the transmission system, which in turn would reduce the possibility that the burden of funding the allocated rights would eventually fall onto other market participants. The Commission seeks comment on this issue.

67. Second, to the extent that the long-term right relieves the holder of the obligation to pay congestion costs, the value of that congestion hedge should be reflected in the price of the long-term right, insofar as possible. For example, where FTR options are offered to provide a better congestion hedge, and the FTR option encumbers more system capacity than an FTR obligation, the load-serving entity that requests such a right could be required to assume greater cost responsibility than it would if it received an FTR obligation. The additional payment may, for example, be in the form of a requirement to pay a larger share of the transmission revenue requirement.

68. Third, the transmission organization might provide for a secondary market or auction by which long-term rights holders can offer their rights for sale or reconfigure their rights, subject to any restrictions on trading that may be deemed necessary. This would provide an opportunity for transmission customers to obtain long-term rights on either a long-term or short term basis from those holding long-term rights. However, as we noted above in our discussion of guideline (6), allowing this kind of tradability could raise equity issues and could give load-serving entities with a preference the incentive to acquire excess long-term rights and later sell them at a profit.<sup>65</sup> We seek comment on these issues.

69. Finally, with regard to the pricing of long-term rights in general, the Commission proposes not to prescribe a specific methodology, whether the rights are available from existing capacity or require capacity expansion. In particular, the Commission does not propose to require a rolled-in pricing policy for long-term firm transmission rights.

Rather, consistent with current policy, the Commission proposes to allow the transmission organization flexibility to propose methods for pricing transmission rights and related services that are appropriate for its region and are the product of a stakeholder process.

70. We seek comment on ways that transmission organizations may balance any adverse economic impacts of allocating long-term firm transmission rights between

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<sup>65</sup> See supra at P 63.

participants receiving and not receiving such rights. We also seek comment on any measures that should be adopted to protect against actions by long-term firm transmission rights holders. For example, a holder of a long-term firm transmission obligation type of right may leave the transmission organization. The allocation of other transmission rights may have depended on that holder's counterflows on the grid or its payments to fulfill its obligation to the transmission organization. Are measures needed to address this situation?

**C. Alternative Designs**

71. The guidelines above are sufficiently general to allow for a range of proposals for the design of long-term firm transmission rights. To assist parties in formulating those proposals, we discuss three alternative designs that are possible under the guidelines: long-term ARR or FTR obligations, FTR options, and rights with modifications of FTR settlement or physical scheduling requirements, such as "use or lose" rights. Consistent with proposed Guideline (7), we expect that the first step under any proposed design will be a direct allocation, rather than an auction (followed possibly by voluntary participation in an auction). The prevailing design for initial allocation of ARRs or FTRs has been to assign obligation rights. At the Commission's urging and in response to market interest, in at least one current market (PJM), ARRs can subsequently be used to purchase FTR options as well as obligations through an FTR auction.

**1. Long-Term ARR or FTR Obligations**

72. We begin with the advantages and disadvantages of the prevailing designs for transmission rights in current organized electricity markets. As noted above, allocated transmission rights, whether as ARRs or FTRs, are modeled as obligation rights. The major advantage of obligations is that they allow the transmission organization to maximize the coverage of the allocated point-to-point transmission rights made available to eligible parties. As explained above, in the modeling of the transmission system power flows that supports the initial allocation, obligation rights are represented under the assumption that the counterflows associated with injections and withdrawals will be present. This limits the need to “pro-ration” eligible transmission rights, although most transmission organizations have rules for how such pro-rationing will occur if necessary (e.g., by having stages of the allocation with higher priority given to rights nominated in early stages).

73. In existing systems that directly allocate FTR obligations, allocating multi-year FTRs could be a fairly straightforward extension of the existing market design, with the need for additional rules to cover the additional risks of a multi-year financial instrument that could entail payment obligations, such as creditworthiness requirements.

74. In systems that directly allocate ARRs, the rules would be slightly different. A long-term ARR obligation would mean that for the term defined in the right, the load-serving entity would receive the right to auction revenues associated with a fixed quantity of injections and withdrawals in the FTR auction. The load-serving entity could then

either directly convert the ARR to FTR obligations on an annual basis or it can use the expected revenues to purchase FTRs of greater than one year based on the assumption that its ARR revenue eligibility will be fixed for multiple years (or it could choose not to purchase long-term FTRs but simply collect auction revenues each year). In contrast, under a direct allocation of long-term FTR obligations, the party with the rights will hold the rights for the term specified. Hence, a design that provides ARR obligations on a long-term basis will be somewhat more flexible than the allocation directly of FTRs, because it gives the parties the choice of purchasing a fixed quantity of FTRs annually or holding a longer-term FTR obligation. Thus, the directly allocated long-term ARR obligation gives a similar degree of financial certainty as the directly allocated long-term FTR obligation, but more flexibility to change actual holdings of FTRs from year to year.

75. On the other hand, under some conditions, obligations of either type – ARR or FTR -- may not provide the price certainty desired in a long-term firm transmission right. Transmission system conditions change over time -- including resource ownership and perhaps load -- such that the long-term FTR obligation may be difficult to manage financially through physical scheduling. At times, FTR obligations may become a financial liability, as noted above. ARR obligations can also become negative sources of income – a negative ARR would require the holder to pay the auction rather than collect revenues from it. It is these properties that have stimulated interest in other types of rights without the likelihood of negative payment obligations.

76. Before turning to alternative rights, we note that there could be market rules that, while not turning obligations into options, reduce the extent of the exposure to potential long-term payment obligations. As an example, long-term FTR obligations are currently awarded for incremental transmission expansions, and such rights also have potential negative payment obligations. Because parties that build transmission may not own generation with which to manage such FTR payment risk (e.g., merchant transmission operators), some organized electricity market rules (e.g., PJM) currently allow for such long-term incremental rights to be “turned back” to the transmission organization without penalty at the end of each annual allocation cycle, thus creating an option-like feature. To the extent that long-term incremental transmission rights support only a limited reliance on counterflow used by other parties in subsequent allocations of rights, such a rule may have no or limited financial impact on other parties, but if the transmission organization applied such a rule to long-term obligation rights to existing capacity, such a “turn back” rule could have more substantial financial implications – that is, require uplift charges – in some circumstances. This is a “socialization” of risk decision that is best made by stakeholders in tandem with other such decisions, such as how many long-term rights to allocate. Such socialization may assist in developing rules for long-term ARR or FTR obligations that have more desirable properties for market participants.

## 2. Long-Term FTR Options

77. For many parties seeking long-term rights (including long-term rights obtained for transmission upgrades and expansions), FTR option rights have attractive financial properties. As noted above, in contrast to the obligation right, the FTR option payment is made only when the congestion charge between the points is positive. When the congestion charge is negative, the FTR option neither pays revenues nor requires payment equal to the negative charge. As such, the holder will never face negative payment obligations.

78. The primary difficulty in allocating long-term (or short-term) FTR options is that because the counterflows are not included when modeling for revenue adequacy, the transmission organization will be able to directly allocate fewer FTR options to eligible parties than it would be able to allocate FTR obligations that assume counterflows (see discussion next). This increases the likelihood that the transmission organization would not be able to fulfill all requests for FTRs. The potential shortfall in available FTRs could be significant in some locations and rules for equitable pro-rationing could be difficult to develop.<sup>66</sup> As a result some parties would be exposed to congestion charges for transmission usage in excess of their FTR allocation.

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<sup>66</sup> The pro-rationing of FTR obligations has also created conflict over the appropriate rules in some organized markets, but the scale of the equity problem in the case of FTR options could be much greater.



79. The allocation issues posed by long-term FTR options may be mitigated in a number of ways. If parties sufficiently desire the financial risk characteristics and revenues associated with FTR options, they may be willing to accept pro-rationing with the attendant possibility of congestion charge exposure. Depending on grid capability, it is possible that the resulting exposure may be minimal. Another possibility is that, if eligibility requirements are restrictive, sufficiently few long-term FTR options will be allocated such that there is enough transmission system capability to satisfy the remaining needs for congestion hedges through FTR obligations. Another approach, similar to that currently followed in PJM for annual rights, is to assign long-term auction revenue rights modeled as obligations, and then let holders of such rights decide whether to purchase long-term FTR options or obligations in a subsequent auction. This method requires the party eligible for the long-term right to make financial decisions up-front that it may prefer not to make, however. Yet another policy option is to make sufficient investments in transmission expansion to make the desired long-term FTR options feasible. This course could be taken if the market participants determine that such investments are less expensive than any congestion cost exposure or insurance through uplift charges associated with other transmission rights schemes, some of which are discussed below.

### **3. Other Approaches to Long-Term Firm Transmission Rights**

80. The features of long-term FTR options and FTR obligations have driven some parties to propose alternative types of long-term transmission rights, some having financial settlement properties that are different from current FTRs and others combining

physical and financial features.<sup>67</sup> We review these alternative approaches simply for illustrative purposes.

81. Some transmission organizations have implemented types of multi-year transmission rights with combined financial and physical properties to solve certain transmission rights allocation problems. For example, in the Midwest ISO, parties with pre-Order 888 OATT rights were eligible for Grandfathered Agreements (GFAs) that exempted the holders from congestion charges based on locational marginal prices. Typically, such rights would be accommodated in transmission rights markets through physical set-asides or “carve-outs” that basically reserved enough transmission capacity on an “option” basis (i.e., not considering counterflows) to accommodate them. However, in the Midwest ISO footprint, there were enough of these eligible GFAs so that treating them all in this fashion would have greatly reduced the allocation of FTRs to other parties and possibly threatened the integrity of the LMP energy markets and the FTR allocation to other parties. One of the interim solutions devised by the Midwest ISO was to create the GFA “Option B” right.<sup>68</sup> The Midwest ISO models this right as an FTR obligation in the FTR allocation process, thus allowing it to capture the counterflows associated with the rights. However, instead of assigning the FTR obligation to the

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<sup>67</sup> See generally Comments on Staff Paper of APPA; Comments on Staff Paper of TAPS.

<sup>68</sup> See section 38.8.3(b), Midwest ISO Open Access Transmission and Energy Markets Tariff (TEMT), Second Revised Sheet No. 447.

eligible party, the Midwest ISO holds the right for settlement purposes. The GFA Option B holder is required to schedule transmission in the day-ahead market, upon which the congestion revenues accumulated by the right are used to “pay” its congestion charges; the holder is not assessed negative congestion charges (in most cases, the holder of such a right would not schedule power if LMPs were to create negative congestion charges, but this might not be foreseeable at all times).<sup>69</sup> If there is a revenue inadequacy, the Midwest ISO charges uplift to all market participants on a *pro-rata* basis, based on their load ratio share in the Midwest ISO market. This is thus a type of use-or-lose right that does not allow the holder to accumulate revenues in excess of congestion charges from transmission rights but does not expose the holder to negative congestion charges. However, the allocation of such rights is based on system-wide insurance, in the form of uplift, to cover any resulting revenue inadequacies.

82. Also in the Midwest ISO, the Commission created a related type of interim long-term congestion cost hedge for parties in persistent load pockets (called “Narrow Constrained Areas” or NCAs) that previously had firm transmission service that covered generation resources or contracts outside the load pocket.<sup>70</sup> This is called the “Expanded Congestion Cost Hedge.” The concern was that the FTR allocation would not be

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<sup>69</sup> Holders of GFA Option B rights are also exempted from marginal loss charges.

<sup>70</sup> See section 43.2.6, Midwest ISO TEMT, Substitute Second Revised Sheet No. 630.

sufficient to always cover the quantities of transmission imports covered by these parties' prior transmission rights, thus leaving them potentially exposed to high congestion charges (reflecting the expectation that LMPs in a load pocket could be substantially higher than LMPs outside the load pocket). In this case, the purpose of the right was to provide such parties with a fixed quantity of transmission service covered by a congestion hedge, even if such rights were not awarded through the FTR allocation process (that is, were not simultaneously feasible with all other nominated FTRs).<sup>71</sup> This right also requires that the holder schedule through the day-ahead market. Unlike the Midwest ISO's "Option B" GFA, this arrangement does not protect the holder from negative congestion charges associated with its allocated FTRs, but it does guarantee that the holder will receive revenues from the Midwest ISO sufficient to cover any positive congestion charges not covered through its allocated FTRs. If the Midwest ISO experiences revenue inadequacy due to these payments, it again charges uplift to all market participants on a pro-rata basis, based on their load ratio share in the Midwest ISO market.

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<sup>71</sup> This expanded hedge was made available as a market start safeguard for five years from the start of the market. Since only one region of the Midwest ISO was designated as an NCA at the start of the market, the hedge was also made available during the safeguard period for parties in any area subsequently designated as an NCA.

#### **4. Combining Different Types of Long-Term Firm Transmission Rights**

83. Most existing transmission organizations do retain some quantity of non-FTR transmission rights on their transmission systems, typically grandfathered pre-Order 888 OATT rights that are treated as physical scheduling rights. In most of these markets, these physical transmission rights do not require that a large amount of transmission capability is reserved, hence they do not greatly affect the allocation and trading of FTRs. However, as noted above, the Midwest ISO has had to accommodate a greater number of such rights than other transmission organizations and has done so on an interim basis through creation of alternative types of financial rights or other arrangements. It has sought to minimize the impact of such rights on the FTR allocation and on the exposure of market participants to uplift.

84. In the event that stakeholders' interests in different types of transmission rights are difficult to reconcile, transmission organizations may need to consider the development of different types of long-term rights simultaneously. We believe that regional stakeholder discussions are the appropriate forum for such decision-making.

85. If the transmission organization and stakeholders are considering more than one type of transmission right, we further encourage them to establish mechanisms by which holders of one kind of long-term firm transmission right can convert their rights into other rights with other characteristics offered by the transmission organization that rely on the same amount of transmission capacity. For example, a long-term right initially

awarded as an obligation could be subsequently converted to an option. However, since more transmission capacity may be necessary to support an option than to support and obligation, the holder may receive fewer options than obligations.

## V. Planning and Expansion of Transmission Facilities

86. As noted above, section 217(b)(4) of the FPA requires the Commission to exercise its authority “in a manner that facilitates the planning and expansion of transmission facilities to meet the reasonable needs of load-serving entities to satisfy the service obligations of the load-serving entities.”<sup>72</sup>

87. Additionally, many of those commenting on the Staff Paper argued that implementation of long-term firm transmission rights will not be possible unless the transmission organization has adequate transmission planning and expansion procedures in place.<sup>73</sup> According to some commenters, the inadequacy of the physical transmission system and the lack of a reliable mechanism for transmission organizations to plan and require the construction of transmission facilities are the prime impediments to both introducing long-term firm transmission rights in the organized electricity markets and ensuring that they remain simultaneously feasible over their entire term.<sup>74</sup> Several of

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<sup>72</sup> Pub. L. No. 109-58, § 1233, 119 Stat. 594, 958.

<sup>73</sup> See, e.g., Comments on Staff Paper of NRECA at 9-10; Comments on Staff Paper of Midwest TDUs at 5; Comments on Staff Paper of ELCON at 3; Comments on Staff Paper of National Grid at 1-2 and 9.

<sup>74</sup> See, e.g., Comments on Staff Paper of NRECA at 9; Comments on Staff Paper of APPA at 21-22.

those providing comments on the Staff Paper recommended specific attributes that should be included in transmission organization planning and expansion procedures.<sup>75</sup>

For example, TAPS argues that transmission organizations should have clear authority to mandate the construction of transmission facilities by transmission owners or others.<sup>76</sup>

Also, commenters asserted that transmission planning and expansion procedures adopted by transmission organizations should plan for “economic” upgrades as well as upgrades needed for reliability.<sup>77</sup>

88. We propose in this NOPR to require that transmission organizations ensure that the long-term firm transmission rights they offer remain viable and are not modified or curtailed over their entire term. In particular, the proposed guidelines would require that transmission organizations guarantee the financial coverage of the long-term firm transmission rights over their entire term.<sup>78</sup> Accordingly, transmission organizations will need to have effective planning and expansion regimes in place, and may need to expand the system where necessary to ensure that the long-term firm transmission rights can be accommodated over their entire term without modification or curtailment. Without

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<sup>75</sup> See, e.g., Comments on Staff Paper of NRECA at 11-13; Comments on Staff Paper of City of Santa Clara, California at 18-19; Comments on Staff Paper of APPA, attached Concept Paper; Comments on Staff Paper of National Grid at 8-10.

<sup>76</sup> Comments on Staff Paper of TAPS at 32.

<sup>77</sup> See, e.g., Comments on Staff Paper of TAPS at 32; Comments on Staff Paper of NRECA at 12; Comments on Staff Paper of National Grid at 10.

<sup>78</sup> See discussion of guideline (2), supra.

appropriate planning and expansion of the system where necessary, it may be difficult to ensure that long-term firm transmission rights remain financially viable without significant charges to some set of participants.

89. While we agree in general with those comments on the Staff Paper that stress the necessity of tying the availability of long-term firm transmission rights to adequate planning and expansion procedures, we will not propose specific procedures in this NOPR. The Commission believes that each transmission organization and its stakeholders should develop appropriate methods for ensuring that long-term firm transmission rights are supported by adequate planning and expansion procedures. While we do not propose specific requirements in this regard, we expect that such planning and expansion procedures will be a necessary complement to long-term firm transmission rights. The Commission encourages transmission organizations to propose such procedures as part of their filings in compliance with the Final Rule in this docket, and the Commission will consider them in light of the charge in section 217(b)(4) of the FPA that we “facilitate . . . the planning and expansion of transmission facilities to meet the reasonable needs of load-serving entities to satisfy the service obligations of the load-serving entities.” We seek additional comments regarding the relationship between long-term firm transmission rights and planning and expansion procedures in the organized electricity markets operated by transmission organizations. In particular, we seek comment on whether the Commission should require that transmission organizations file their transmission planning and expansion procedures and specific plans. We also seek



comment on whether, alternatively, the Commission should require that transmission organizations file such procedures for informational purposes, as a means for the Commission to monitor the adequacy of such plans and procedures for ensuring the adequacy of long-term firm transmission rights.

90. Additionally, we note that the pro forma OATT adopted by the Commission in Order No. 888 requires public utility transmission providers to expand capacity, if necessary, to satisfy the needs of network transmission customers and point-to-point transmission service customers.<sup>79</sup> In comments submitted in response to the Staff Paper, several entities suggested that this obligation does not exist, or is not carried out, in the organized electricity markets operated by ISOs and RTOs.<sup>80</sup> The Commission's recent Notice of Inquiry concerning the pro forma OATT sought responses from interested parties on several specific questions relating to this requirement in the pro forma OATT, including; (1) whether this provision has met transmission customers' needs, and (2) whether public utility transmission providers have fulfilled these obligations.<sup>81</sup> In this proceeding, the Commission seeks comments addressing these questions in the specific context of transmission organizations with organized electricity markets that are the

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<sup>79</sup> See pro forma OATT at sections 13.5, 15.4 and 28.2.

<sup>80</sup> See, e.g., Comments on Staff Paper of APPA at 10; Comments on Staff Paper of ABATE and Midwest Transmission Customers at 4-6; Comments on Staff Paper of Peabody Energy Corporation at 6.

<sup>81</sup> Preventing Undue Discrimination and Preference in Transmission Services, Notice of Inquiry, 112 FERC ¶ 61,299 at P 21 (2005) (NOI).

subject of this rulemaking. Where appropriate, responses should address the arguments made in response to the Staff Paper, and noted above, concerning the obligation of transmission providers to expand capacity to meet the needs of network and point-to-point transmission service customers.

91. The Commission also emphasized in the NOI that it is not proposing to change the native load preference established in Order No. 888.<sup>82</sup> The Commission sought comments, however, on whether the definition of native load service obligation in section 1233 of EAct 2005 is the same as the approach the Commission took in Order No. 888.<sup>83</sup> In this docket, the Commission seeks comments on this question with particular emphasis on how the native load preference has been applied in the organized electricity markets that are the subject of this rulemaking.

92. Finally, many of the comments received on the Staff Paper stressed a need for appropriate incentives for transmission organizations, transmission owners and market participants to construct needed upgrades and expansions to the transmission system. As we discuss above, the potential for additional charges in ensuring that the financial coverage of the long-term firm transmission rights remains intact for their entire term should provide an incentive for planning and expanding the transmission system.

Additionally, we note that in Docket No. RM06-4-000, the Commission issued a NOPR

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<sup>82</sup> Id. at P 9.

<sup>83</sup> Id.

proposing amendments to the Commission's existing regulations to promote reliable and economically efficient transmission and generation of electricity by providing incentives for increased capital investment in transmission facilities.<sup>84</sup> The Commission will consider the issues surrounding appropriate incentives for expansion of transmission facilities in that rulemaking.

## **VI. Proposed Compliance Procedures**

93. The Commission proposes to direct each public utility that is a transmission organization with an organized electricity market, within 180 days of the publication of a Final Rule in the Federal Register, to either: (1) file with the Commission tariff sheets and rate schedules that make available long-term firm transmission rights that are consistent with the guidelines set forth in section (d) of the Final Rule; or (2) file with the Commission an explanation of how its current tariff and rate schedules already provide for long-term firm transmission rights that are consistent with the guidelines set forth in paragraph (d) of the Final Rule. The Commission intends that during this 180-day time period, such transmission organizations will work with their stakeholders to develop a long-term firm transmission right that will harmonize the prevailing market design with the guidelines set forth in this Final Rule. We do not propose any specific stakeholder process, and intend that the transmission organization will use its usual process for

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<sup>84</sup> See Promoting Transmission Investment Through Pricing Reform, Notice of Proposed Rulemaking, 113 FERC ¶ 61,182 (2005).

receiving stakeholder input and filing tariff changes with the Commission. For any transmission organization that is approved by the Commission after the 180-day time period, the Commission proposes that the transmission organization satisfy the requirements set forth in this rule before commencing operation.

## **VII. Information Collection Statement**

94. The Office of Management and Budget (OMB) regulations require approval of certain information collection requirements imposed by agency rules.<sup>85</sup> Upon approval of a collection(s) of information, OMB will assign an OMB control number and an expiration date. Respondents subject to the filing requirements of this rule will not be penalized for failing to respond to these collections of information unless the collections of information display a valid OMB control number. This NOPR amends the Commission's regulations to implement some of the statutory provisions of section 1233 of EAct 2005. Particularly, section 1233 of EAct 2005 enacts a new section 217 of the FPA. New section 217(b)(4) requires the Commission to exercise its authority in a manner that facilitates the planning and expansion of transmission facilities to meet the reasonable needs of load-serving entities to satisfy their service obligations, and enables load-serving entities to secure long-term firm transmission rights to meet their service obligations. Section 1233(b) of EAct 2005 directs that Commission to, by rule or order, implement this new provision in the FPA. This proposed rule would require transmission

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<sup>85</sup> 5 CFR 1320.13 (2005).

organizations with organized electricity markets to either file tariff sheets making long-term firm transmission rights available that are consistent with guidelines established by the Commission, or to make a filing explaining how their existing tariffs already provide long-term firm transmission rights that are consistent with the guidelines. Such filings would be made under Part 35 of the Commission's regulations. The information provided for under Part 35 is identified as FERC-516.

95. The Commission is submitting these reporting requirements to OMB for its review and approval under section 3507(d) of the Paperwork Reduction Act.<sup>86</sup> Comments are solicited on the Commission's need for this information, whether the information will have practical utility, the accuracy of provided burden estimates, ways to enhance the quality, utility, and clarity of the information to be collected, and any suggested methods for minimizing the respondent's burden, including the use of automated information techniques.

Burden Estimate: The Public Reporting burden for the requirements contained in the NOPR is as follows:

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<sup>86</sup> 44 U.S.C. 3507(d) (2000).

Data Collection	Number of Respondents	No. of Responses	Hours Per Response	Total Annual Hours
FERC-516				
Transmission Organizations with Organized Electricity Markets	6	1	1180	7,080

Total Annual hours for Collection: (Reporting + recordkeeping, (if appropriate)) = 7,080 hours.

Information Collection Costs: The Commission seeks comments on the costs to comply with these requirements. It has projected the average annualized cost to be the total annual hours of 7,080 times \$150 = \$1,062,000.

Title: FERC-516 “Electric Rate Schedule Filings”

Action: Proposed Collections

OMB Control No: 1902-0096

Respondents: Business or other for profit, and/or not for profit institutions.

Frequency of Responses: One time to initially comply with the rule, and then on occasion as needed to revise or modify.

Necessity of the Information: This proposed rule, if adopted, would implement the Congressional mandate of the Energy Policy Act of 2005 to make long-term transmission rights available in transmission organizations with organized electricity markets. This mandate addresses an identified need for transmission organizations with organized electricity markets to provide longer-term transmission rights that can aid load-serving

entities in financing long-term power supply arrangements to meet their service obligations. Making long-term firm transmission rights available will also provide increased certainty regarding the long-term costs of transmission service in organized electricity markets. As a result, long-term firm transmission rights will allow load-serving entities to more effectively plan their power supply portfolios, and encourage load-serving entities and other participants in organized electricity markets to make long-term investments in power supply arrangements.

Internal review: The Commission has reviewed the requirements pertaining to transmission organizations with organized electricity markets and determined the proposed requirements are necessary to meet the statutory provisions of the Energy Policy Act of 2005.

96. These requirements conform to the Commission's plan for efficient information collection, communication and management within the energy industry. The Commission has assured itself, by means of internal review, that there is specific, objective support for the burden estimates associated with the information requirements.

97. Interested persons may obtain information on the reporting requirements by contacting: Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426 [Attention: Michael Miller, Office of the Executive Director, Phone: (202) 502-8415, fax: (202) 273-0873, e-mail: [michael.miller@ferc.gov](mailto:michael.miller@ferc.gov)]. Comments on the requirements of the proposed rule may also be sent to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, D.C. 20503

[Attention: Desk Officer for the Federal Energy Regulatory Commission], e-mail: [oir\\_submission@omb.eop.gov](mailto:oir_submission@omb.eop.gov).

### **VIII. Environmental Analysis**

98. The Commission is required to prepare an Environmental Assessment or an Environmental Impact Statement for any action that may have a significant adverse effect on the human environment.<sup>87</sup> The Commission has categorically excluded certain actions from this requirement as not having a significant effect on the human environment. Included in the exclusion are rules that do not substantially change the effect of legislation.<sup>88</sup> The rule proposed in this NOPR falls within this categorical exemption because it implements the requirements of EPAct 2005 relating to long-term firm transmission rights in organized electricity markets. Accordingly, neither an environmental impact statement nor environmental assessment is required.

### **IX. Regulatory Flexibility Act Certification**

99. The Regulatory Flexibility Act of 1980<sup>89</sup> generally requires a description and analysis of rules that will have significant economic impact on a substantial number of small entities. Most, if not all, of the transmission organizations to which the

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<sup>87</sup> Regulations Implementing the National Environmental Policy Act, Order No. 486, 52 FR 47897 (Dec. 17, 1987), FERC Stats. & Regs. Preambles 1986-1990 ¶ 30,783 (1987).

<sup>88</sup> 18 C.F.R. § 380.4(2)(ii) (2005).

<sup>89</sup> 5 U.S.C. §§ 601-12 (2000).



requirements of this rule would apply do not fall within the definition of small entities.<sup>90</sup> Therefore, the Commission certifies that this rule will not have a significant economic impact on a substantial number of small entities. Accordingly, no regulatory flexibility analysis is required.

#### **X. Comment Procedures**

100. The Commission invites interested persons to submit comments on the matters and issues proposed in this notice to be adopted, including any related matters or alternative proposals that commenters may wish to discuss. Comments are due **March 13, 2006**.

Reply comments are due **March 27, 2006**. Comments and reply comments must refer to Docket No. RM06-8-000,<sup>91</sup> and must include the commenter's name, the organization they represent, if applicable, and their address in their comments. Comments and reply comments may be filed either in electronic or paper format.

101. Comments and reply comments may be filed electronically via the eFiling link on the Commission's web site at <http://www.ferc.gov>. The Commission accepts most standard word processing formats and commenters may attach additional files with

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<sup>90</sup> The RFA definition of "small entity" refers to the definition provided in the Small Business Act, which defines a "small business concern" as a business that is independently owned and operated and that is not dominant in its field of operation. See 15 U.S.C. § 632 (2000).

<sup>91</sup> While we are issuing this NOPR in both Docket No. RM06-8-000 and Docket No. AD05-7-000, we expect to issue our Final Rule in only Docket No. RM06-8-000. Comments in response to this NOPR should be filed in Docket No. RM06-8-000 only.

supporting information in certain other file formats. Commenters filing electronically do not need to make a paper filing. Commenters that are not able to file comments and reply comments electronically must send an original and 14 copies of their comments to: Federal Energy Regulatory Commission, Office of the Secretary, 888 First Street, N.E., Washington, D.C., 20426.

102. All comments and reply comments will be placed in the Commission's public files and may be viewed, printed, or downloaded remotely as described in the Document Availability section below. Commenters on this proposal are not required to serve copies of their comments and reply comments on other commenters.

**XI. Document Availability**

103. In addition to publishing the full text of this document in the Federal Register, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the Internet through the Commission's Home Page (<http://www.ferc.gov>) and in the Commission's Public Reference Room during normal business hours (8:30 a.m. to 5:00 p.m. Eastern time) at 888 First Street, N.E., Room 2A, Washington D.C. 20426.

104. From the Commission's Home Page on the Internet, this information is available in the Commission's document management system, eLibrary. The full text of this document is available on eLibrary in PDF and Microsoft Word format for viewing, printing, and/or downloading. To access this document in eLibrary, type the docket number excluding the last three digits of this document in the docket number field.

105. User assistance is available for eLibrary and the Commission's website during normal business hours. For assistance, please contact FERC Online Support at 1-866-208-3676 (toll free) or (202)502-8222 (e-mail at [FERCOnlineSupport@FERC.gov](mailto:FERCOnlineSupport@FERC.gov)), or the Public Reference Room at (202) 502-8371, TTY (202)502-8659 (e-mail at [public.referenceroom@ferc.gov](mailto:public.referenceroom@ferc.gov)).

List of Subjects in 18 C.F.R. Part 40

Electric power rates; Electric utilities.

By direction of the Commission.

Magalie R. Salas,  
Secretary.

In consideration of the foregoing, the Commission proposes to amend Subchapter B, Chapter I, Title 18, Code of Federal Regulations, by adding a new Part 40 as follows:

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## SUBCHAPTER B – REGULATIONS UNDER THE FEDERAL POWER ACT

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### PART 40 – LONG-TERM FIRM TRANSMISSION RIGHTS IN ORGANIZED ELECTRICITY MARKETS

Sec.

40.1 – Requirement that Transmission Organizations with Organized Electricity Markets offer Long-Term Transmission Rights

AUTHORITY: 16 U.S.C. § 791a – 825r and section 217 of the Federal Power Act, 16 U.S.C. § \_\_\_\_.

#### **§ 40.1 Requirement that Transmission Organizations with Organized Electricity Markets Offer Long-Term Transmission Rights.**

(a) Purpose. This section requires a transmission organization with one or more organized electricity markets (administered either by it or by another entity) to make available long-term firm transmission rights, pursuant to section 217(b)(4) of the Federal Power Act, that satisfy the guidelines set forth in paragraph (d) of this section. This section does not require that a specific type of long-term firm transmission right be made available, and is intended to permit transmission organizations flexibility in satisfying the guidelines set forth in paragraph (d) of this section.

(b) Definitions. As used in this section:

(1) Transmission Organization means a Regional Transmission Organization, Independent System Operator, independent transmission provider, or other independent transmission organization finally approved by the Commission for the operation of transmission facilities.

(2) Load-serving entity means a distribution utility or an electric utility that has a service obligation.

(3) Service obligation means a requirement applicable to, or the exercise of authority granted to, an electric utility under Federal, State, or local law or under long-term contracts to provide electric service to end-users or to a distribution utility.

(4) Organized Electricity Market means an auction-based market where a single entity receives offers to sell and bids to buy electric energy and/or ancillary services from multiple sellers and buyers and determines which sales and purchases are completed and at what prices, based on formal rules contained in Commission-approved tariffs, and where the prices are used by a transmission organization for establishing transmission usage charges.

(5) Long-term power supply arrangements means the ownership of generation facilities, rights to market the output of Federal generation facilities with a term of longer than one year, or rights under one or more wholesale contracts to purchase electric energy with a term of longer than one year, for the purpose of meeting a service obligation.

(c) General rule.

(1) Every public utility that is a transmission organization and that owns, operates or controls facilities used for the transmission of electric energy in interstate commerce and has one or more organized electricity markets (administered either by it or by another entity) must file with the Commission, no later than **[INSERT DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]**, one of the following:

- (i) Tariff sheets and rate schedules that make available long-term firm transmission rights that are consistent with the guidelines set forth in paragraph (d) of this section; or
- (ii) An explanation of how its current tariff and rate schedules already provide for long-term firm transmission rights that are consistent with the guidelines set forth in paragraph (d) of this section.

(2) Any transmission organization that is approved by the Commission for operation after **[INSERT DATE 180 DAYS AFTER PUBLICATION OF FINAL RULE IN THE FEDERAL REGISTER]** and has one or more organized electricity markets (administered either by it or by another entity) must satisfy this general rule before commencing operation.

(d) Guidelines for Design and Administration of Long-term Firm Transmission Rights. Transmission organizations subject to paragraph (c) of this section must make available long-term firm transmission rights that satisfy the following guidelines:

- (1) The long-term firm transmission right should specify a source (injection node or nodes) and sink (withdrawal node or nodes), and a quantity (MW).
- (2) The long-term firm transmission right must provide a hedge against day-ahead

locational marginal pricing congestion charges (or other direct assignment of congestion costs) for the period covered and quantity specified. Once allocated, the financial coverage provided by the right should not be modified during its term except in the case of extraordinary circumstances or through voluntary agreement of both the holder of the right and the transmission organization.

(3) Long-term firm transmission rights made feasible by transmission upgrades or expansions must be available upon request to any party that pays for such upgrades or expansions in accordance with the transmission organization's prevailing cost allocation methods for upgrades or expansions. The term of the rights should be equal to the life of the facility (or facilities) or a lesser term requested by the party paying for the upgrade or expansion.

(4) Long-term firm transmission rights must be made available with terms (and/or rights to renewal) that are sufficient to meet the needs of load-serving entities to hedge long-term power supply arrangements made or planned to satisfy a service obligation. The length of term of renewals may be different from the original term.

(5) Load-serving entities with long-term power supply arrangements to meet a service obligation must have priority to existing transmission capacity that supports long-term firm transmission rights requested to hedge such arrangements.

(6) A long-term transmission right held by a load-serving entity to support a service obligation should be re-assignable to another entity that acquires that service obligation.

(7) The initial allocation of the long-term firm transmission rights shall not require recipients to participate in an auction.

(8) Allocation of long-term firm transmission rights should balance any adverse economic impact between participants receiving and not receiving the right.