

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

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

Docket No. AD05-7-000

Comments of the
Electricity Consumers Resource Council (ELCON)
and the American Iron and Steel Institute (AISI)

The Electricity Consumers Resource Council (ELCON) and the American Iron and Steel Institute (AISI) appreciate the opportunity to submit comments on the Commission Staff's May 11, 2005 discussion paper, "Long-Term Transmission Rights Assessment" (Staff Discussion Paper). In this docket, FERC has taken the limited step of soliciting comments from interested parties in regard to the need for and establishment of long-term transmission rights within the LMP-based organized markets operated by RTOs and ISOs.

Introduction

To date, only the New York ISO (NYISO) attempted to offer Financial Transmission Rights (FTRs) for a term greater than one year. However, the NYISO temporarily suspended its long-term FTR auction due to concerns the auction was undervaluing these FTRs. Adequate demand for long-term FTRs may not have materialized because New York lacks a liquid forward market that would generate

sufficient demand for this product. Thus creating long-term FTRs must not be a goal in itself. It must be part of a larger initiative to establish forward contracting in the organized markets.

The lack of liquid and transparent long-term forward markets for transmission rights is one of a number of concerns industrial end-users and other parties have recently risen regarding the organized markets.¹ For example, ELCON recommended in its April 2005 Special Report that the Commission should open an inquiry into the short-term nature of FTRs as one of many potential factors that impede the formation of liquid forward markets in the FERC-approved organized markets.² ELCON also recommended that the Commission require transmission providers to offer long-term transmission rights to loads.³ While ELCON and AISI appreciate the May 11 invitation for comments, and we take the present assessment quite seriously as indicated below by the depth of our responses to the questions posed in the Staff Discussion Paper, we believe strongly that the Commission must go further and open a more formal inquiry into long-term transmission rights and related issues that are inhibiting forward market development in the organized markets. We believe that engaging such an inquiry on a piece-meal basis is procedurally inefficient and not in the interests of end-use consumers—the stakeholders most harmed by market failures. FERC needs to also

¹ See, for example, American Public Power Association, *Restructuring at the Crossroads: FERC Electric Policy Reconsidered*, December 2004.

² See *Problems in the Organized Markets*, A Special Report of the Electricity Consumers Resource Council, April 2005 (Special Report) at 17.

³ Id. at 18.

initiate an inquiry to investigate the economic impediments to new transmission investment. Forward market signals may not be sufficient in themselves to facilitate the development of transmission upgrades that provide significant net cost benefits to broad groups of consumers.

Furthermore, it is important for the Commission to consider in such an inquiry the impact that the legacy of average cost pricing with integrated generation and transmission planning has on customers where locational market-based congestion management systems are introduced. Industrial customers selected their plant locations before LMP was implemented. ELCON and AISI believe it is important for the Commission to realize that in most instances it is impossible for end-use customers to change their location due to changes in electricity prices, and in many cases cannot practically interrupt or curtail service. Market-based congestion management systems should not penalize end-use customers who are located in the “wrong” place. Instead, rather than being penalized for power consumption, end-use customers in such locations should be positively incented to interrupt or curtail usage. Moreover, it may not ultimately be just and reasonable to maintain a market-based congestion management approach without first remedying the legacy of integrated generation and transmission planning through the construction of substantial new infrastructure.

In our written comments below, we provide preliminary answers to most of the questions posed in the May 11 Discussion Paper. In general, we believe that long-term transmission rights are desirable, feasible, and workable, but only under the right

conditions. Furthermore, we encourage the Commission to consider a congestion management regime based on physical rights, and not limit its focus to a regime based solely on financial rights.

Responses to Staff Discussion Paper Questions

What are the needs of market participants for long-term transmission rights in RTO markets?

From the perspective of large industrial consumers, there are two major needs in regard to long-term transmission rights in RTO markets:

1. The ability to substantially forward hedge transmission congestion charges at a reasonable cost for 3 to 5 years (or longer), and
2. The ability to transparently determine the forward all-in market price for power for 3 to 5 years (or longer).

Locational Marginal Pricing (LMP) fails to recognize the legacy of integrated generation and transmission planning under the once predominant vertically integrated structure of electric utility companies. Despite having paid for infrastructure on an average cost basis, LMP places all consumers and their suppliers on the margin, unless they can obtain pricing that allows them to substantially hedge their position at a reasonable cost. It has been the experience of ELCON and AISI members that electric suppliers in the current organized markets are not willing to offer such hedged pricing over a period greater than a year without the payment of a substantial risk premium. It is the belief of our members that this in part is the result of the inability to obtain long-term transmission rights to substantially hedge locational differences in marginal prices.

Large industrial consumers have additional concerns beyond their own need to be able to enter into forward contracts to hedge their position at a reasonable cost over a period of 3 to 5 years (or longer). Large consumers do not believe robust competition can be accomplished and sustained for an electricity energy commodity until liquid and transparent forward markets for this product are developed. Such forward markets provide invaluable information for large consumers and their suppliers in regard to long-term market trends, and give investors the ability to access long-term revenue streams that may be critical to obtaining the financing necessary for new investments.

In addition, such long-term revenue streams may be an important prerequisite for the further development of Demand Response—assuming other barriers to allowing access to markets for price-responsive loads are also removed. For example, many large consumers may be willing to interrupt or curtail their consumption if, through forward contracts, they can lock the power cost savings from such interruptions or curtailments into their forward business plans and can be assured the level of interruption or curtailment does not interfere with their ability to also deliver their product to their customers. Simple exposure to volatile spot power prices does not adequately meet the needs of large consumers nor do day-ahead and real-time Demand Response programs. In both cases, such consumers cannot readily factor any power savings from interruption or curtailment into their forward business plans and they cannot predict their exposure to interruption or curtailment of production due to high spot electricity prices. However, if there is a liquid and transparent forward market these customers

will be able to forward contract power savings at a known level of exposure to interruption or curtailment.

To summarize, long-term transmission rights are needed to support liquid and transparent long-term forward markets, which will support new investment and additional Demand Response, which in turn will assure adequate infrastructure to help ensure reliability and reasonable electricity prices.

What has been the experience with congestion pricing and transmission rights of market participants in RTO markets?

As noted above, it has been the experience of ELCON and AISI members with facilities within organized markets that it is difficult to obtain forward contracts that substantially hedge the risk of congestion charges at a reasonable price. It is also very difficult to get 100% of the FTRs that are needed to serve load. In addition, evidence shows that the reliance on the spot market in RTOs that have implemented LMP is growing. For example, in PJM real-time spot market activity averaged 40% of average load for all hours in 2003. In 1999, it was only 15%.⁴ The result is that large consumers are at risk of exposure to volatile electricity prices and potential future interruption or curtailment due to the lack of a liquid and transparent long-term forward market.

Have financial right allocations been sufficient to meet participants' needs for congestion hedging and long-term resource planning and acquisition?

While the existing financial right allocations do provide a recurring right to some allocation of FTRs or, depending on the RTO, the market value of FTRs through

⁴ PJM Market Monitoring Unit, 2003 State of the Market (March 4, 2004) at 17; 1999 State of the Market Report (June 2000) at 2.

Auction Revenue Rights (ARRs), there is no certainty for long-term customers that from year to year that FTRs or ARRs allocated in past years will be received in future years. This makes it difficult for market participants to hedge their long-term congestion risk as there is no certainty they will continue to receive their current allocation of FTRs or ARRs in the future. This inhibits the development of a long-term forward market and results in substantial premiums being placed on long-term forward contracts.

Have RTOs or market participants quantified the probability of significant changes in network topology over time due to transmission line outages or outages of major generators? Put another way, how stable are network topologies over time? What are the implications for revenue adequacy of long-term financial transmission rights? How significant is the rate of changes in generation dispatch over time to the feasibility of long-term financial rights?

Transmission topologies do change over time as new transmission facilities are added to support new service and maintain existing service. However, transmission topologies that are properly operated and planned to maintain existing transmission service will not degrade over time. Furthermore, one of the cornerstones of FERC Order No. 888 requires transmission providers (and owners) to plan their transmission system to maintain the transmission service being provided to long-term transmission customers. The amount of simultaneous feasible FTRs that are available is directly derived from the transmission capacity of the network topology. If the transmission network is operated and planned to meet the transmission planning obligation to long-term transmission customers under Order No. 888, and the creditworthiness of holders of long-term obligation FTR holders is maintained, there will be revenue adequacy for long-term financial rights.

Should there be an eligibility criteria for allocation or purchase of long-term rights? Should some transmission customers have preferential access to such rights based on their historical transmission rights?

The allocation of long-term FTRs, or the market value of those long-term FTRs, should be to those who ultimately pay for the transmission system based on the historic transmission rights of their historic suppliers as available FTRs are fundamentally derived from the physical capacity of the transmission system. Where retail access has not been introduced or where customers under retail access have remained under bundled service, it may be appropriate for a utility or default supplier to hold allocated FTRs, or the market value of such FTRs, in trust for end user customers. However, when an end-use customer is eligible to select an alternate supplier and does so, the FTRs or the market value of those FTRs should be allocated to those end-use customers or those end-use customers' respective new suppliers.

FTRs should only be made available to other market participants by an auction process that is phased in and can be monitored for manipulation. It is imperative that such an auction not undervalue the forward market value of long-term FTRs nor be subject to manipulation by generation owners or other market participants.

Should such rights be reserved for particular generation resources such as base load plants? Should a limited quantity of the rights be offered? What should be the credit requirements for obtaining such rights?

ELCON and AISI believe the Commission best examines these implementation issues in a formal inquiry. However, as a preliminary response, we would offer that in the ultimate end state there should not be a limitation placed in regard to what type of

generators may be associated with long-term FTRs or what quantity of FTRs can be long-term versus short-term. The market should be allowed to decide this in the ultimate end state to maximize efficiency. Furthermore, the credit requirements for holding long-term FTRs will largely depend on whether those FTRs are option or obligation FTRs. Option FTRs should not require any additional credit requirement, as the holder of such a right is not taking on a financial obligation to changes in power flow. However, special credit considerations may be needed for long-term obligation FTRs due to the financial obligation of changing power flows associated with them and the greater likelihood that the prevailing direction of congestion will change over the long period covered by such FTRs. We recommend that any credit requirement should be the same as required in the past under bundled service, which in most cases was stipulated in a special contract with the local utility.

What term of long-term rights is desirable? Should the available terms be defined on a standard basis by the RTO or should transmission customers define the terms that they desire (within the eligibility criteria and term constraints imposed by the RTO market)? How granular should long-term rights be (week, month, season, year)?

ELCON and AISI also believe these are implementation questions that are best addressed in a more formal inquiry by the Commission. However, as a preliminary response, we would offer that long-term FTRs at a minimum will need a term that reaches out to the horizon of new investment, which we understands to be at least 3 to 5 years, in order to support the development of a liquid and transparent long-term forward market out to that horizon to support such investment. In addition, in the ultimate end-state, the granularity of long-term FTRs should be permitted to allow

monthly terms out to any term limit that may exist for long-term FTRs in order to maximize efficiency.

Are there technical impediments to the modeling of long-term rights?

There should be no technical impediment to modeling such long-term rights. There is a long legacy of transmission providers providing long-term physical rights to firm transmission customers for terms of 3, 5 or even 20 years. FTRs are derived from the physical capacity of the transmission system. Considering that long-term physical rights have been modeled with no complaints in the past, there should be no impediment to modeling long-term FTRs.

Should long-term transmission rights be obligations or options or both? If the rights are being allocated directly (*i.e.*, not through an auction), on what basis should parties be eligible to nominate options and how should the RTO address fairness issues that may arise in the allocation?

ELCON and AISI believe these issues are implementation issues as well. However, as a preliminary response, we would offer that option FTRs might be more conducive to long-term forward market development than obligation FTRs. Obligation FTRs require the holder to take on the financial obligation of changing power flows. Moreover, the longer-term nature of the FTRs in question makes it more likely that the prevailing direction of congestion may reverse making the obligation a liability for the holder. Finally, as discussed above, it may be necessary for an RTO to place more rigorous credit requirements on long-term obligation FTR holders because of the greater financial risk. Long-term option FTRs would not carry any of these risks and expenses making them a much better long-term hedging instrument for congestion costs. Thus,

as a preliminary response, we believe long-term option FTRs would better facilitate a liquid and transparent long-term forward market.

Should long-term FTRs be awarded through direct allocation? Should long-term FTRs be available through annual auctions? Are particular ARR allocation approaches (i.e., those taken by different RTOs) more suited to long-term rights than others? Are designs that allocate long-term rights to some parties but require others to purchase FTRs through an auction possible or desirable?

ELCON and AISI believe these are implementation issues best addressed through a formal inquiry by the Commission. However, as noted above, we believe long-term FTRs, or the market value of such long-term FTRs, should be allocated to those who ultimately pay for the transmission system because FTRs are fundamentally derived from the physical capacity of the transmission system. Where retail access has not been introduced, or where customers under retail access have remained under bundled service, it may be appropriate for a utility or default supplier to hold allocated FTRs, or the market value of such FTRs, in trust for end-use customers. However, when an end-use customer is eligible to select an alternate supplier and does so, the FTRs, or the market value of those FTRs, should be allocated to the end-use customer or its new supplier. FTRs should only be made available to other market participants by an auction process that is phased in and can be monitored for manipulation. It is imperative that such auctions not undervalue the forward market of long-term FTRs nor be subject to manipulation by generation owners or other market participants.

Should long-term financial rights be fully funded or subject to revenue shortfalls due to transmission network changes? How should potential revenue shortfalls be allocated?

Long-term FTRs should generally be funded as fully as practicable as is generally done today within the RTOs that currently operate LMP markets. It should be the obligation of RTOs and transmission owners to minimize the likelihood of any revenue shortfalls by fulfilling their obligation to operate and plan the transmission system to meet existing long-term firm transmission service commitments, including long-term FTRs.

If long-term rights are amended based on forecasted grid conditions, but maintenance of the grid declines, resulting in future infeasibility, which parties should be responsible for maintaining the revenue adequacy of rights?

As a preliminary response, ELCON and AISI offer that it may be appropriate to pass on to transmission owners the cost of any revenue adequacy shortfalls identified by RTOs as being caused by poor transmission operations, planning or maintenance as an incentive for transmission owners to properly perform these functions to the best of their ability and to the extent it is within their responsibility.

Are purely physical scheduling rights necessary as an alternative to financial rights to ensure stable transmission prices over the long term? If so, which model of such rights is the most appropriate to the RTO market context? What rules for transmission scheduling and RTO market participation should be required for holders of such rights?

It is the position of ELCON and AISI that it is not self-evident that the current RTO market model based on LMPs and FTRs is superior in practice to a model based on physical rights. We believe that in considering what can be done to better develop liquid and transparent forward markets the Commission should give serious consideration to exploring alternative congestion pricing models based on physical

rights. To the extent LMP remains in use, we believe the Commission needs to explore more “physical-like” FTRs such as option FTRs and FTRs defined on flowgates.⁵ Furthermore, it is important for the Commission under any future congestion management approach, whether it be based on LMP or physical rights, to consider the impact that the legacy of average cost pricing with integrated generation and transmission planning has on customers where locational market-based congestion management systems are introduced. Furthermore, ELCON and AISI believe it is important for the Commission to realize that many end-use customers cannot generally change their location due to price, and in many cases cannot practically interrupt or curtail service. Market-based congestion management systems should not penalize end-use customers who are located in the “wrong” place. Instead, rather than being penalized for power consumption, end-use customers in such locations should be positively incented to interrupt or curtail usage. Moreover, it may not ultimately be just and reasonable to maintain a market-based congestion management approach without first remedying the legacy of integrated generation and transmission planning through the construction of substantial new infrastructure.

Respectfully submitted,

**The Electricity Consumers Resource Council (ELCON) and
The American Iron and Steel Institute (AISI)**

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⁵Flowgates are a modeled transmission line or transformer that can become limiting during system operation and for which representation is made in the NERC security coordinator model. A flowgate may consist of the total interface between control areas, a partial interface, an interface within a control area that consists of a single line or transformer, or a defined set of any of these facilities. Flowgates are generally defined through NERC processes.

Notices and Communications

Notices and communications should be addressed to:

John P. Hughes
Vice President, Technical Affairs
Electricity Consumers Resource Council
(ELCON)
1333 H Street, NW
West Tower, Suite 800
Washington, DC 20005
Voice: (202) 682-1390
Email: jhughes@elcon.org

James Schultz
Vice President, Environment and Energy
American Iron and Steel Institute
(AISI)
1140 Connecticut Avenue
Suite 705
Washington, DC 20036
Voice: (202) 452-7180
Email: jschultz@steel.org