

Draft Synopsis of FERC Transmission Ratemaking

This paper is a simple discussion outlining the transmission cost recovery policies employed by the Federal Energy Regulatory Commission (FERC or Commission). The discussion included herein begins from the period just before the issuance of Order No. 888 in 1996. This piece in no way binds the Commission decision-making on transmission cost recovery principles, as the staff drafting this piece cannot act or speak on behalf of the Commission. This piece simply reflects a brief synopsis of the policies and precedent employed by the Commission for transmission cost recovery purposes.

Transmission facilities subject to the jurisdiction of the Commission

Historically, there has been a dividing line between the facilities that are subject to the jurisdiction of the Commission. That line has been normally defined in terms of either nominal voltage (69 kV or less) and/or facilities of a transmission provider that were not performing in interstate commerce. Beginning in the early 1990's, the Commission began to look toward open markets for power and transmission services. In doing so, the first step was the development of a required open-access transmission policy that allowed non-discriminatory access to the incumbent monopoly utility's transmission system. Thus, in 1996, the Commission issued Order No. 888, that required open, non-discriminatory transmission access under standard transmission tariffs.

It was in Order No. 888 that the Commission undertook, among other things, to develop a series of tests that would assist in the determination of what facilities, historically booked as transmission facilities (by voltage, location, usage, etc.) may actually be reclassified as local distribution facilities subject to the jurisdiction of the state.

This test, commonly referred to as the Seven Factor Test, is an important consideration in the transmission planning process. While utilities subject to the jurisdiction of the Commission must request a finding by the Commission that a refunctionalization of transmission facilities to local distribution facilities is warranted, incorporating the usefulness of the seven factor determination can help establish the jurisdiction for which cost recovery can be requested. See Appendix A for the seven factors.

FERC Transmission Cost Recovery Policies

(See Appendix B – History of Commission Action for Competition)

Prior to 1996, vertically integrated utilities normally rolled-in transmission expansion projects and socialized the costs to all ratepayers. This process was often easier and avoided the contentiousness surrounded by direct-beneficiary determinations. However, there were discrete facilities that were not grid enhancements and were often “directly assigned” to the transmission customer for which the facility was constructed. These facilities were often defined by being radial in nature and with power normally only

flowing to the load.

In 1994, the Commission issued a policy on transmission pricing that helped begin the trek toward competitive markets in electricity. In that final policy, the Commission elaborated on the transmission cost recovery principles that have since set the standard of transmission cost allocation. They included the rolled-in pricing and incremental pricing. In the final policy, it was determined that upgrades to the system caused by a transmission request can be recovered in one of two ways: rolling-in the transmission upgrades to be apportioned to all transmission customers or recovered by the transmission customer at the incremental cost of expansion. However, the Commission made clear that these recovery mechanisms were exclusive, or, in other words, must satisfy the “or” pricing. The 1994 policy continues today.

The important factor for transmission cost recovery is that the base for transmission cost recovery begins from the 1994 policy. As independent transmission system operators (ISO) and regional transmission organizations (RTO) form as a result of Order Nos. 888 and 2000, the novel approaches to cost recovery mechanisms have been enumerated by the Commission, with some success in their deployment (See Appendix C – RTO Transmission Rate Policy). Innovative ratemaking such as the mega-watt mile (based upon flow distance), direct assignment, and a mixture of postage stamp and local zonal pricing have all been discussed as options that transmission owners may undertake in order to incent transmission construction when needed and to help direct the importance of cost causation. The Commission will also entertain performance based rate proposals such as accelerated depreciation life and enhanced rates of return when the transmission facilities are turned over to the control of a single regional independent entity such as an ISO or RTO.

Recently another form of cost recovery that has come about is participant funding. Participant funding is a way of funding economic upgrades to the grid that does not roll their cost into transmission ratebase. Rather under participant funding, parties choose to fund upgrades in return for the economic benefits they create. These may come in the form of new long-term transmission rights, lower energy prices in delivery-constrained areas or higher energy prices in export-constrained areas.

Participant funding requires a market-based congestion management system with a set of tradable rights (e.g., LMP with FTRs). The funding party gets the long-term property rights in the form of financial congestion hedges (e.g., FTRs) created by the upgrade. Parties, such as LSEs or generators, may fund a project independently or jointly.

Participant funding is distinct from direct assignment methods. Direct assignment of upgrade costs fall under the “higher of” pricing policy. There is no credit against embedded cost charges and the transmission customer pays the upgrade costs in return for rights. Merchant transmission with directly assigned facilities can be separately

scheduled, where participant funded network upgrades cannot. Participant funding can be an important tool in cost recovery because it avoids having local load shoulder the burden for investments that do not benefit them, by sending the right price signals for efficient siting decisions, helping to clarify upgrade responsibility, and facilitating transmission investment and economic grid expansion.

Finally, with the issuance of Order No. 2003 on standardizing interconnection, the Commission also emphasizes the cost responsibility of interconnecting large generators. Inasmuch as the proceedings regarding Order No. 2003 are continuing, this paper can not detail the outcome of the Commission's decisions on the transmission pricing matters.

Appendix A – Seven Factor Test

The Commission proposed seven indicators of local distribution to be evaluated on a case-by-case basis:

- (1) Local distribution facilities are normally in close proximity to retail customers.
- (2) Local distribution facilities are primarily radial in character.
- (3) Power flows into local distribution systems; it rarely, if ever, flows out.
- (4) When power enters a local distribution system, it is not reconsigned or transported on to some other market.
- (5) Power entering a local distribution system is consumed in a comparatively restricted geographical area.
- (6) Meters are based at the transmission/local distribution interface to measure flows into the local distribution system.
- (7) Local distribution systems will be of reduced voltage.

Appendix B - History of Commission Actions for Competition

Overview of the Federal Energy Regulatory Commission's Efforts Promoting Competition in the Electric Power Industry	
Date	Description of FERC Efforts
1985-1991	Prior to the Energy Policy Act, FERC encouraged and approved the use of market-based rates representing one of FERC's initial efforts to make the industry more efficient. Between 1985 and mid-1991, FERC addressed 31 requests to sell wholesale electric power at market-based rates (Notice of Public Conference and Request for Comments on Electricity Issues, Docket No. PL91-1-000, April 1991).
July 1993	FERC issued a policy statement regarding Regional Transmission Groups (RTGs). The purpose of RTGs was to facilitate the provision of transmission services to potential users of the transmission system and to facilitate the resolution of disputes over provision of services. It was believed by FERC that RTGs would encourage negotiated agreements between transmission providers thereby avoiding the need for potentially time-consuming and expensive litigation before FERC (Policy Statement Regarding Regional Transmission Groups, RM93-3-000, July 30, 1993).
May 1994	FERC established general guidelines for comparable transmission access for third parties. Comparable access refers to the belief that owners of the transmission grid should offer third parties access to the grid on the same or comparable basis and under the same or comparable terms and conditions as the transmission owner's use of the system. Comparable access is one of the key ingredients of an open access transmission tariff specified in Order 888 (see below) (67FERC61, 168).
October 1994	FERC issued its Transmission Pricing Policy Statement. Prior to this policy statement, FERC had allowed only postage-stamp and contract path pricing of transmission services. In this policy statement, FERC recognized the need to encourage a variety of other pricing methods that may be more suitable for competitive wholesale power markets (Transmission Policy Statement, RM93-19-001, October 1994, Final Rule Order on reconsideration and clarifying the policy statement, May 22, 1995).
April 1996	FERC issued Order 888, requiring all public utilities that own, control, or operate transmission facilities to have on file an open access non-discriminatory transmission tariff. The Order also permits public utilities to seek recovery of stranded costs associated with providing open access (Order 888, Final Rule, RM95-8-000, and RM94-7-001, April 24, 1996).
April 1996	FERC issued Order 889 establishing the Open Access Same-Time Information System.
December 1996	FERC issued a Policy Statement (Order 592) amending its procedures to evaluate potential mergers between electric utilities. The procedures were designed to streamline the merger application process, and update FERC's evaluation of the merger to consider the merger's effect on competition, its effect on rates, and its effect on regulation.
January 1997 - December 1998	FERC conditionally approved five Independent System Operators (ISOs)--California ISO, ISO-New England, New York ISO, Pennsylvania, New Jersey, Maryland (PJM) ISO (official name is PJM Interconnection), and the Midwest ISO.
December 1999	FERC issued Order 2000 asking all transmission-owning utilities, including non-public utilities, to place their transmission facilities under the control of an appropriate regional transmission organization (RTO). So that utilities could comply with this request, the characteristics and minimum functions of an appropriate RTO were defined in the Order (Order 2000, Final Rule, RM99-2-000, December 20, 1999).

Source: Department of Energy, Energy Information Agency

Appendix C – RTO Transmission Rate Policy

Policy for an RTO's Transmission Rates

FERC believes that effective transmission rates are essential in promoting economic efficiency in the generation and transmission sectors, and are an important factor to the success of the RTO as a stand-alone transmission business. FERC has approval responsibility for an RTO's transmission rate schedule. According to FERC policy, effective transmission rates will address the following issues:

1. **Eliminate Pancake Pricing:** Pancake pricing occurs when a transmission customer is charged separate access charges for each utility service territory crossed by the transmission customer's power transaction. Pancaking increases the price of electricity and it discourages competition in the generation sector. By combining transmission systems under one RTO, a wider area served by a single rate can be designed.
2. **Reciprocal Waiving of Access Charges Between RTOs:** FERC encourages the RTOs to waive transmission access charges for transactions that cross RTO borders. This increases the size of the competitive trading area beyond the RTO border.
3. **Uniform Access Charges:** FERC encouraged that an RTO establish one uniform access charge for all transmission customers. However, they recognized that this approach may result in cost shifting (i.e., low-cost transmission providers would see a rate increase, and high cost providers a rate decrease). As a temporary solution, FERC will allow a single rate, but that rate will vary based on where the customer is located.
4. **Congestion Pricing:** Congestion pricing is closely related to congestion management in that effective pricing of congestion problems provides the appropriate price signals to build additional transmission lines or power generation plants in order to eliminate congestion.
5. **Service to Transmission-Owning Utilities that do not Participate in an RTO:** FERC intends to permit an RTO to propose rates, terms, and conditions of transmission service that recognize the participatory status of transmission customers. In other words, a transmission customer who is also a transmission provider in the region that chose not to join the RTO, will have a different transmission tariff than other customers.
6. **Performance-Based Regulation:** Performance-based regulation (PBR) represents the concept of offering financial incentives to lower rates or costs. Under PBR, good performance can be rewarded with higher profits and poor performance can be penalized in some manner. As an alternative to cost-based regulation, FERC encourages the RTO to develop PBR proposals, although submission of a proposal is voluntary.
7. **Other RTO Transmission Rate Reforms:** To encourage investment in transmission facilities and efficiency in operation, FERC indicated that it would consider other innovative transmission pricing proposals such as a higher return on equity than previously allowed, levelized rates, or accelerated depreciation and incremental pricing for new transmission investments.
8. **Additional Ratemaking Issues:** This section of Order 2000 contained a wide range of comments on ratemaking issues not specifically addressed in the notice of proposed rulemaking. These comments cover issues ranging from alternative ratemaking methods to issues dealing with how to incorporate incentives to promote environmentally benign resources.
9. **Filing Procedures for Innovative Rate Proposals:** FERC will evaluate innovative rate proposals based on how the proposed rate treatment would help achieve the goals of an RTO. Rate moratoria or returns on equity that do not vary according to the RTO capital structure may not be included in the RTO's rate structure after January 1, 2005.

Source: Department of Energy, Energy Information Agency