UNITED STATES OF AMERICA
FEDERAL TRADE COMMISSION
WASHINGTON, D.C. 20580

Comment of the Staff of the Bureau of Economics of the Federal Trade Commission(1)

Before the
FEDERAL ENERGY REGULATORY COMMISSION

In the Matter of
Entergy Services, Inc.

Docket No. EL99-57-000

May 27, 1999

I.
Introduction and Summary

The staff of the Bureau of Economics of the Federal Trade Commission (FTC) appreciates this opportunity to present its views concerning the Transco proposal of Entergy Services, Inc. (Entergy) to the Federal Energy Regulatory Commission (FERC). Entergy seeks a declaratory order from FERC that the Transco proposal is consistent with FERC's Independent System Operator (ISO) principles enumerated in FERC Order No. 888.(2) Entergy states that a declaratory order will enable it to finalize details of its Transco plan that can then be presented to all interested stakeholders and local regulatory authorities.(3)

The FTC is an independent administrative agency responsible for maintaining competition and safeguarding the interests of consumers. The staff of the FTC often analyzes regulatory or legislative proposals that may affect competition or the efficiency of the economy. In the course of this work, as well as in antitrust research, investigation, and litigation, the staff applies established principles and recent developments in economic theory and empirical analysis to competition issues.

The staff of the FTC has a longstanding interest in regulation and competition in energy markets, including proposals to reform regulation of the electric power and natural gas industries. The staff has submitted numerous comments concerning these issues at both the federal and state levels.(4) Moreover, the FTC has reviewed proposed mergers involving electric and gas utility companies.

Entergy seeks to establish a for-profit, independent transmission company affiliate (Transco) that would manage and operate the transmission lines(5) currently owned by Entergy and other transmission owners that elect to join the proposed Transco. Entergy would accomplish this by functionally unbundling(6) its generation assets from its transmission assets and placing the transmission assets in a separate affiliate, which would continue to be owned by Entergy. Transmission fees charged by the Transco would be subject to rate caps administered by FERC. Entergy describes various institutional arrangements and regulatory constraints to promote the independence of its proposed Transco affiliate, including appointment of a board to oversee the transmission assets transferred by Entergy to the proposed Transco. Entergy also describes broadly the efficiencies of vertical integration between the management and operation of the transmission grid and indicates that these efficiencies would be lost under an ISO that only manages the grid.(7)

This comment raises several issues about competition and efficiency that FERC may wish to address in its review of Entergy's Transco proposal.(8) The FTC staff believes that competition and efficiency issues identified here are of general applicability and would apply not only to Entergy's Transco proposal but also to similarly-situated proposals that FERC may be called upon to review.

Entergy's proposal may pose potential vertical and horizontal threats to competition. It also may present potential efficiency benefits, but these likely could be obtained by an ISO that would both manage and operate the transmission grid. As an alternative to Entergy's Transco proposal, FERC may wish to consider an ISO structure that would both manage and operate the transmission grid, to avoid the potential vertical and horizontal threats to competition posed by the proposed Transco while capturing the vertical integration advantages identified anecdotally by Entergy. FERC also may wish to consider informally supplementing its ISO principles with the four warning signs of competition problems that the staff has identified in prior comments to various states about ISO arrangements.

II.
Entergy Continues to Have Incentives to Vertically Discriminate Against, and Raise Costs of, its Competitors in Electricity Sales (Including Generation)

Entergy proposes a wide variety of rules to establish the independence of the proposed Transco, including an independent board of trustees arrangement. The proposed governance arrangements may be inadequate for the same reasons underlying the reservations that we expressed about FERC's open access rules in our Open Access Comment.(9) Behavioral rules leave in place the basic incentives (created by ownership of generation assets) to discriminate in transmission.(10) In particular, the Transco's management would know that its owners (Entergy and others) would benefit from certain of the Transco's practices that favor Entergy's generation assets, such as understating available transmission capacity to independent generation sources.(11) Further, discrimination by the Transco's management favoring Entergy's generation facilities likely would be difficult to detect and document because such transactions are very sensitive to timing and nuance. Our experience in enforcing the antitrust laws and in monitoring deregulation and restructuring of regulated industries strongly supports a preference for operational separation or divestiture in unbundling services.(12)

Even if Entergy's proposal were likely to be an effective substitute for operational separation or divestiture, potential entrants are likely to perceive a continued risk of discrimination in transmission services based on past experience in the industry.(13) This perceived risk of discrimination is likely to lead to less entry into generation and less competition under a Transco regime than under an ISO or other RTO regime. FERC may wish to consider the actual and perceived risk of discrimination associated with the proposed ownership structure.

III.
Incentives to Reduce Competition Between Transmission and Generation Investments

A regulated, for-profit Transco may refrain from taking actions that would increase competition between transmission and generation alternatives (for example, in addressing load pockets(14)). To a considerable degree, expansions of transmission capacity and new or expanded generation within a load pocket are substitutes for each other in relieving such load situations. Without such relief, prices in the load pocket may increase at peak demand periods due either to sheer scarcity of supply or to an exercise of market power within the load pocket.

The competitive danger is that the Transco may have incentives to favor its own transmission assets relative to any generation source, thereby discouraging new generation sources in the load pocket.(15) For example, the Transco could delay connecting a new generator to the grid within the load pocket. By taking such an action, the Transco could collect the maximum transmission rates for more hours per day and for a longer period than it would otherwise because of the increased use of its transmission capacity by suppliers from outside the load pocket. As a general

proposition, a for-profit Transco may have incentives to perpetuate transmission congestion.(16) Entergy provides no specific details on this aspect of the proposal other than a pledge to provide a congestion management proposal at a future date.

In light of this possible anticompetitive behavior, FERC may wish to consider the incentives to discriminate between transmission and generation relief for load pockets as a cost of the Transco proposal. By contrast, an effective ISO would have no ownership incentives to favor one type of asset over another.

IV.
Efficiency Advantages of Vertical Integration Also May Be Available Through an ISO that Both Manages and Operates the Transmission Grid

Entergy describes certain efficiencies that it believes it will achieve because of its vertical integration between management and operation of transmission assets.(17) It maintains that these efficiencies would be retained under its Transco proposal and lost under an ISO that would only manage the transmission grid. The implied assumption of Entergy's proposal is that an ISO cannot operate transmission assets. Although current U.S. ISOs do not operate the grid in their respective areas, there is no reason why an independent, non-profit ISO could not both manage and operate the grid.(18) For example, the British ISO both operates and manages the grid.(19) Indeed, the British ISO owns the grid.(20)

FERC may wish to consider whether the economies of vertical integration identified by Entergy may be obtainable through an ISO that both manages and operates the transmission grid, and not solely through the Transco proposed by Entergy.(21) As an alternative to moving grid operations into the ISO, FERC may wish to consider allowing a Transco that would assume the grid operating responsibilities of the various members of the region's ISO but retaining the ISO for grid management. Such an arrangement could reduce operating costs if there are economies of scale or geographic scope in grid operations. It also could improve communications between grid management and operations by reducing the number of separate contacts the ISO would have to make when coordinating actions with the grid operators.

V.
Supplemental Considerations in Evaluating Regional Transmission Organization Proposals

FERC may wish to consider informally supplementing its list of ISO principles with the four danger signs of competition problems in ISO (or other RTO) proposals that FTC staff has identified in comments to various state regulatory bodies as they have considered RTO formation issues. In several instances, these danger signs correspond to elements of FERC's ISO principles, but FERC may find it useful to focus attention on competition concerns by using these four warning signs as an additional check. The four danger signs warning of risks to competition in the ISO formation process that we have identified to the states are: (1) the ISO is too small; (2) there is no plan for generation restructuring; (3) the ISO is not sufficiently independent; and (4) the ISO plan does not effectively deal with transmission congestion.

ISO Warning Sign Number One: The ISO is too small. One disadvantage of an ISO with limited geographic scope is that it may not encompass enough generating firms to mitigate generator market dominance problems.(22) With very few, if any, exceptions, a single state is too small for an ISO to obtain all the potential competition and reliability benefits of the ISO structure. An ISO that includes only one utility's service territory warrants even closer scrutiny. In contrast, several participants at FERC's April 1998 ISO Policy Conference testified that reliability and competition concerns might lead to consolidation into as few as three ISOs to cover all forty-eight contiguous states.

ISO Warning Sign Number Two: There is no plan for generation restructuring even when there is a potential generation market dominance problem. As a general proposition, a market power monitoring office within the ISO may not be a good substitute for up-front divestiture of generation capacity if market power is present. Several states, including California, have confronted the generation market dominance issue directly and required divestitures of key generation capacity in conjunction with forming an ISO.(23) Divestiture that simply replaces one dominant generating firm with another is unlikely to address market power problems in generation. Divestiture to multiple buyers is likely to be necessary. In evaluating divestiture proposals, it is important to address potential biases in the divestiture process as well as partial cross-ownerships of generating plants that may thwart competition. Antitrust may not be an effective policy tool for addressing existing market power created under past regulation. Hence, state public utility commissions and FERC may be in the best position to address this aspect of restructuring as part of the ISO formation process.(24)

ISO Warning Sign Number Three: The "I" part of the ISO is missing or weak. Independence is a keystone of successfully launching competition through an ISO. For competition to develop, current and prospective industry participants need to have trust in the objectivity of the ISO. If, for example, incumbent vertically integrated utilities can veto expansions of the transmission grid, or limit who may use the grid, the ISO's independence is likely to be at risk.(25) In this regard, FERC's recent order questioning the independence of the governance of the New York ISO appears to appreciate the importance of independent ISO governance.(26)

ISO Warning Sign Number Four: The ISO plan does not effectively deal with transmission congestion.(27) Failure to deal effectively with the transmission congestion problem can threaten system stability, present opportunities for generators to create or protect generation market power, and reduce the overall efficiency of the transmission grid. States that have considered this problem have included transmission congestion pricing systems in their restructuring programs.(28)

VI.
Conclusion

Entergy's Transco proposal raises two potential threats to competition. In addition, the FTC staff has raised questions about the uniqueness of the efficiency benefits described in the proposal. As presently devised, the ownership structure of the proposed Transco is unlikely to provide sufficient safeguards against discrimination in transmission access. The proposal also provides no mechanism for addressing the competitive concern about bias toward transmission (and against generation) in alleviating load pockets, and about delays in solutions to transmission congestion generally. For these reasons, FERC may wish to consider an alternative to the proposed Transco, such as an ISO as described herein.

Respectfully submitted,

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1. This comment represents the views of the staff of the Bureau of Economics of the Federal Trade Commission. They are not necessarily the views of the Federal Trade Commission or any individual Commissioner.

2. Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, FERC Order No. 888, 61 Fed. Reg. 21,540 (1996); Order on Rehearing, Order No. 888-A, 62 Fed. Reg. 12,274 (1997).

3. Entergy appears to envision its Transco proposal as an alternative to an ISO or other regional transmission organization (RTO). It is possible, however, to consider a transco as a member of an ISO or other RTO. The competitive issues discussed in this comment could be substantially ameliorated by such an arrangement, assuming that the ISO in question is fully functioning and complies with all of FERC's ISO principles.

4. The staff of the FTC has commented to the Federal Energy Regulatory Commission (FERC) on electric power regulation in Docket RM98-4-000 (Sept. 11, 1998); Docket No. PL98-5-000 (May 1, 1998); Docket Nos. ER97-237-000 and ER97-1079-000 (Feb. 6, 1998); Docket No. RM96-6-000 (May 7, 1996) and; Docket Nos. RM95-8-000 and RM94-7-001 (Aug. 7, 1995) (Open Access Comment). The staff of the FTC also has submitted comments to various state agencies, including the Public Utilities Commission of the State of California, Docket No. R.98-12-015 (distributed generation) (Mar. 17, 1999); the Alabama Public Service Commission, Docket No. 26427 (restructuring in general) (Jan. 11, 1999); the Louisiana Public Service Commission, Docket No. U-21453 (affiliate transactions) (Oct. 30, 1998); Public Utility Commission of Nevada, PUCN Docket No. 97-5034 (affiliate transactions) (Sept. 22, 1998); Mississippi Public Service Commission, Docket No. 96-UA-389 (Transco proposal) (Aug. 28, 1998); Louisiana Public Service Commission, Docket No. U-21453 (stranded costs) (Aug. 7, 1998); Michigan Public Service Commission, Case No. U-11290 (electric restructuring) (Aug. 7, 1998); West Virginia Public Service Commission, Case No. 98-0452-E-GI (electric restructuring) (July 15, 1998); Commonwealth of Virginia, Joint Subcommittee Studying Electric Industry Restructuring, SJR-91 (July 9, 1998); Public Utility Commission of Texas, Project Number 17549 (affiliate transactions) (June 19, 1998); Maine Department of the Attorney General and Public Utilities Commission, "Interim Report on Market Power in Electricity" (May 29, 1998); Louisiana Public Service Commission, Docket No. U-21453 (market power) (May 15, 1998); California Public Utilities Commission, Docket Nos. R.94-04-031 and I.94-04-032 (electric industry restructuring) (Aug. 23, 1995); and South Carolina Legislative Audit Council (section on foreign experience in electric industry restructuring) (Feb. 28, 1994). The FTC's staff comments are included on the FTC's website < http://www.ftc.gov/be/advofile.htm >.

5. Management of the grid entails making decisions about how, when, and by whom the transmission grid will be used. These are the functions that have been assumed by ISOs in areas such as California, and the Pennsylvania, New Jersey, and Maryland (PJM) interconnection (which now also includes Delaware and the District of Columbia). Operation of the grid entails its physical maintenance and improvement. These functions have been retained by the original transmission owners in existing ISOs in the U.S.

6. Functional unbundling of generation assets from transmission assets entails behavioral rules forbidding a vertically integrated utility from discriminating against independent generation sources in granting access to the utility's transmission assets.

7. Transco Proposal at 17-19. In its August, 1998, related filing before Public Service Commission of the State of Mississippi, Entergy provided examples of specific efficiencies of vertical integration. For example, Entergy maintained that because of its integrated teams of planning and operations engineers, it has been able to develop solutions to transmission problems that planning engineers alone (working for an ISO) could not have developed. Entergy Mississippi Proposal, Appendix A at 1, filed with the Mississippi Public Service Commission (Aug. 7, 1998).

8. The staff of the FTC filed a comment on Entergy's Transco proposal with the Public Service Commission of Mississippi which is the basis for the competitive observations in this comment. See supra, note 4.

9. The FTC Bureau of Economics staff's Open Access Comment to FERC can be obtained from the FTC's website < http://www.ftc.gov/be/advofile.htm (V950008)>.

10. Vertical discrimination and raising rivals' costs are potential competitive concerns in the electric industry because the transmission system is likely to remain a monopoly, with regulatory protections against entry as well as other entry impediments. A vertically integrated monopolist in such circumstances may have incentives to favor its own generation assets and discriminate against competitors by offering inferior or higher-priced access to the transmission grid or by seeking other methods to raise costs of rival electricity suppliers. Absent such downstream market power, the competitive concerns about vertical integration are likely to be less severe.

11. The anticompetitive behavior described here may occur regardless of whether the proposed Transco has for-profit or non-profit status.

12. If the antitrust authorities were reviewing a merger in which the acquiring entity was only in the business of generation and distribution of electric power and the acquired entity was a transmission provider in the same geographic market, an important antitrust concern would be the potential harm to consumers and competition of vertical discrimination in access to transmission services. The antitrust authorities would question the effectiveness of a remedy to this potential vertical discrimination that included an independent affiliate arrangement, such as the one proposed by Entergy here. In determining whether this remedy would be sufficient, the antitrust authorities would have to balance the inherent difficulties of effectively monitoring such an arrangement (because the incentives to discriminate would remain intact with this type of remedy) against whether to block the merger or require operational unbundling.

13. See, e.g., "Petition for a Rulemaking on Electric Power Industry Structure and Commercial Practices and Motion to Clarify and Reconsider Certain Open-Access Commercial Practices," filed with FERC by Altra Energy Technologies, Inc. and others on March 25, 1998.

14. A load pocket exists when transmission constraints are such that additional load in an area must be met primarily with generation facilities inside that area. We have not performed a study of current or prospective load pockets in Entergy's retail franchise territories. FERC may wish to do so in evaluating the Transco proposal. See FTC Bureau of Economics Staff, Comment to the Maine Office of Attorney General and Public Utilities Commission (1998), for a discussion of generation and transmission alternatives for alleviating load pockets < http://www.ftc.gov/be/advofile.htm (V980011)>.

15. The incentive to favor transmission enhancements over local generation in order to relieve load pockets may exist even though transmission rates are constrained by regulation. The reason is that a new local generation investment may reduce demand for transmission to such an extent that the profit-maximizing price for transmission service, after completion of the local generation facility, may fall below the regulatory rate limit.

16. Rate caps or rate-of-return regulation of transmission may dampen this incentive to prolong transmission congestion. Longer regulatory lags in adjusting rates may increase this incentive.

17. Transco Proposal at 17-19. In its Transco proposal to the Public Service Commission of Mississippi last year, Entergy presented examples of specific cost savings that it believes it has achieved because of the vertical integration of management and operation of transmission assets. Entergy Mississippi Proposal, supra note 7, Appendix A. We assume that Entergy continues to support these cost savings.

18. It is also possible to envision an ISO that manages the whole grid in its service area (similar to current U.S. ISOs) and operates the grid in only part of this area (similar to British ISOs).

19. See James Barker, Jr., Bernard Tenenbaum, and Fiona Wolf, Governance and Regulation of Power Pools and System Operators: An International Comparison, 382 World Bank Technical Papers 25 (1997). This source also compares the structures and governance of ISOs in the United Kingdom; Victoria, Australia; Alberta, Canada; and Norway/Sweden.

20. Id. at 25.

21. In the context of the hypothetical merger discussed supra, note 12, the efficiencies attributed to the Transco are unlikely to be cognizable efficiencies as defined in the DOJ/FTC Horizontal Merger Guidelines because they could be achieved with an alternative, less anticompetitive arrangement (e.g., an ISO that also operates the grid).

22. Another disadvantage may be that it does not provide enough diversity in generation (with respect to number and type of generators) to optimize system reliability.

23. The National Association of Regulatory Utility Commissioners (NARUC) adopted a resolution at its 1998 Annual Summer Meeting in which NARUC advocates that states have a continuum of options for the mitigation of market power and that states be authorized to require divestiture of generation assets where appropriate and necessary. NARUC, Resolution Relating to Market Power in a Restructured Electric Power Industry (July 29, 1998).

24. The Administration's recent proposals respond to this concern by recommending that Congress give FERC (in consultation with the FTC and DOJ) authority to require divestiture of generation assets by generating firms that have market power in the context of wholesale competition or (in conjunction with the states) retail competition. "Comprehensive Electricity Competition Plan" (Apr. 15, 1999) <http://home.doe.gov/policy/ceca.htm >.

25. See James Barker Jr., Bernard Tenenbaum, and Fiona Wolf, supra note 19 (a report on international comparisons of ISO governance systems written in part by FERC staff); Alex Henley, Contrasts in Restructuring Wholesale Electric Markets: England/Wales, California, and the PJM, 11 Elect. J. 24 (Aug./Sept. 1998).

26. See FERC, Order Denying in Part and Granting in Part Rehearing and Clarification, Rejecting Proposed Settlement and Authorizing Transfer of Jurisdiction Transmission Facilities, Docket Nos. ER97-1523-000 and 001, OA 97-470-000 and 002, and EC 99-31-000, 87 FERC Stats. & Regs. 61,135 (Apr. 30, 1999).

27. "Transmission congestion" refers to conditions in which transmission lines are being used to full capacity and additional transmission efforts between a generator and load reduce the efficiency of other transmissions on the grid. Transmission congestion is most likely during peak demand (load) periods.

28. A variety of transmission congestion pricing systems have been approved by FERC for use by ISOs, and FERC may wish to compare the effects of the different systems as more experience is gained. California, for example, opted for a "zonal transmission pricing" approach. The PJM ISO has chosen to address transmission congestion problems with much more narrowly defined pricing zones. PJM's approach is termed "locational marginal pricing" or "nodal pricing." Locational marginal pricing is a transmission pricing system that attempts to take full account of transmission loop flows. Loop flows are a complication of the physics of electricity (electricity follows the path of least resistance) that results in transmission congestion arising in places and at times that are counter to the intuitive, traditional view of transmission as a point-to-point delivery of electric energy. Locational marginal pricing assesses congestion charges based on the transmission congestion caused throughout the transmission system by a particular transaction.