Before the
United States of America
Federal Energy Regulatory Commission

Electricity Market Design and Structure	**)**	
(RTO Cost Benefit Analysis Report)	**)**	**Docket Nos. RM01-12-000, et al.**

Comment of the Staff of the
Bureaus of Economics and Competition and the Office of the General Counsel
of the Federal Trade Commission[1]

April 23, 2002

[1] This comment represents the views of the staff of the Bureaus of Economics and Competition and the Office of the General Counsel of the Federal Trade Commission. They are not necessarily the views of the Federal Trade Commission or any individual Commissioner. The Commission has, however, voted to authorize the staff to submit these comments.

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I. Introduction and Summary

The staff of the Bureaus of Economics and Competition and the Office of the General Counsel of the Federal Trade Commission (FTC) appreciates this opportunity to present its views regarding ICF's study entitled "Economic Assessment of RTO Policy"[2] that was commissioned by the Federal Energy Regulatory Commission (FERC). The study reports estimated costs and benefits, attributable to generation efficiency gains and expanded wholesale trades of electricity that may be associated with establishing Regional Transmission Organizations (RTOs). The scenarios analyzed in the study include the base case (status quo), full implementation of RTOs, RTO benefits limited to transmission, establishment of demand response programs, larger RTOs, and smaller RTOs.

We encourage efforts by FERC to determine the costs and benefits associated with alternative regulatory reforms in the electric power industry, including RTOs. Providing structural remedies to

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[2] The study was released on February 26, 2002.

anticompetitive incentives for discriminatory transmission access and expanding wholesale electric power trading opportunities are likely to provide benefits to consumers as we have described in previous staff reports and comments to FERC and to state public utility commissions. The present

providers,[6] interconnection standards,[7] market based rates,[8] and FERC's strawman proposal regarding market power monitoring and mitigation.[9]

III. A Critical Methodological Issue

Loop flows and the transmission congestion that they can engender have been key concerns in assessments of market power, in the development of RTOs, and in discussions of grid reliability.[10] However, the ICF model appears to assume that the transmission system linking "subregions" is like a pipeline network in which loop flows do not occur. Due to this flawed assumption, predictions regarding electricity flows between subregions may be distorted. Models that account for loop flows exist and, other things equal, are likely to be more accurate. Evaluation of RTOs using a methodology that does not take loop flows into consideration may result in inaccurate assessments and is inconsistent with the basic premises and purposes of RTO design.[11]

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[6] FTC Staff Comment on Docket No. RM01-10-000 (Dec.20, 2001).

[7] FTC Staff Comment on Docket No. RM02-1-000 (Dec. 21, 2001).

[8] FTC Staff Comment on Docket No. EL01-118-000 (Jan. 5, 2002).

[9] FTC Staff Comment on Docket No. RM01-12-000 (Apr. 3, 2002).

[10] Unlike fluids or gases that move through a pipeline system with valves on specific routes, electric power follows the laws of physics and flows along the paths of least resistance. Power generated at point A for consumption at point B in fact flows along all transmission lines between those two points, including lines on indirect routes. Electricity does not flow along a single transmission path even if parties to a transaction assume a particular contract path for purposes of the transaction.

[11] FTC staff has not reviewed the ICF computer simulation model or data and, therefore, expresses no opinion on such details.

IV. Additional Policy Issues for which Cost/Benefit Analysis May Be Useful

Another concern with the study is that it provides estimated costs and benefits that could be attributed to expanded wholesale trades or to generation efficiency gains in general, rather than to formation of RTOs or to particular aspects of RTOs. Specifically, the study estimates the value of increasing *inter-regional trade* in wholesale electricity markets. It does not evaluate the costs and benefits of RTOs as transmission governance structures necessary to increase inter-regional trade. We believe that this flaw stems from the decision to compare costs and benefits of RTOs to the status quo, rather than to alternative policies with objectives similar to the use of RTOs. The comparison adopted in the study assumes that the next best alternative to RTOs is the status quo, which is not necessarily the case. There are likely to be other approaches to reducing transmission costs and expanding transmission capacity. This observation is not intended to suggest that the study could or should include all potential policy options with similar benefits, but the study would provide greater insight if it compared the costs and benefits of RTOs to other policy options in addition to the status quo.

Moreover, the study assumes the move to RTOs will have a number of beneficial effects. These may or may not occur, and they may be attainable by other means. For example, one of the projected RTO benefits relative to the status quo is reducing system-wide average reserve margins from 15 to 13 percent by 2020. The use of RTOs is not necessarily the only way to reduce system-wide reserve margins.

The study also ignores the important role of the yet-to-be-specified governance structure of each RTO in determining the benefits of RTOs. As it moves forward, FERC may wish to undertake a cost/benefit analysis of the various possible governance structures of RTOs (*e.g.*, for profit, not-for-

profit, or a combination of both). We believe that this concern is of utmost importance.

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[12] FTC Staff Comment at 28.

[13] FTC staff commented on this potential approach in reference to Entergy's transco proposal in FERC Docket No. EL99-57-000 (May 27, 1999) and in Docket No. 96-UA-389 before the Public Service Commission of the State of Mississippi (Aug. 28, 1998).

Canada's transmission policies: Canadian generators and loads are integrated into the U.S. transmission grids that serve a substantial portion of the U.S. population. Assumptions about Canada's approach to transmission issues specifically, and electric power regulation generally, could materially affect the projected costs and benefits of RTO formation, particularly in the northern tier of states.[14] Hence, FERC may wish to include explicitly consideration of Canada's transmission policies in its analysis of RTO costs and benefits.[15]

Relative fuel prices and variations in rainfall conditions: Experience in the Western United States suggests that shifts in relative fuel prices and rainfall conditions can materially affect market prices for wholesale electricity and, thus, the costs and benefits of various reform options. Greater insights about the effects of fuel price volatility on RTO costs and benefits could be gained if they were also measured, for example, with higher and lower natural gas prices.[16] More generally, FERC may wish to examine whether the increased regional trading associated with RTOs is likely to dampen regional effects of changes in relative fuel prices or rainfall conditions.

Emerging generation and storage technologies: Policies that give retail customers incentives to reduce consumption from the electric power grid when wholesale prices are high have been identified as a high priority for policy reforms in both the September 2001 FTC Staff Report on retail

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[14] Integration discussions with Canadian suppliers and regulators have been reported recently. "Canadians Interested in Becoming NERTO Members Too," Restructuring Today, March 15, 2002, pp. 2 & 3.

[15] A related possibility is synchronization of the eastern and western interconnects and those of Texas and Quebec. *See*, FTC Staff Comment, FERC Docket No. RM99-2-000 (regional transmission organizations) (Aug. 16, 1999) at 18, n.31.

[16] ICF Study at 44-45.

VI. Reducing Costs in Geographic Areas where the Study Found that Costs are Likely to Exceed Benefits

In a few geographic areas, the study indicates that implementing RTOs likely would result in higher prices rather than lower prices for retail customers. The study specifies that these areas are characterized by lower-than-average costs of generation coupled with a supply curve that is more steeply sloped than those in other areas.[22] Under these circumstances, relatively small increases in exports of power to higher-cost areas can result in increased average prices in the exporting area

[22] These conditions might arise, for example, if an area uses low cost coal for base load plants with capacity sufficient to supply local demand during most periods, but uses high cost gas in antiquated peaking plants to meet demand during occasional demand spikes.

operation of, the grid. In particular, FERC may wish to examine the costs and benefits of various RTO governance structures that may provide different incentives for efficient behavior by RTOs. For example, FERC could examine whether for-profit operation of the grid through independent transmission companies, operating portions of the grid under market rules established and monitored by a non-profit, independent RTO and FERC, yields net benefits.

Further, the study omits some potentially important determinants of costs and benefits of RTO formation that FERC may wish to consider. Integration of the U.S. and Canadian grids, changes in relative fuel prices and rainfall conditions, and the pace of distributed generation development are three such omissions. Finally, FERC may wish to examine low-cost policy alternatives that would alleviate customer concerns in geographic areas where prices otherwise would be expected to rise on net as a result of increased exports brought about by RTOs.

Respectfully submitted,

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