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YOU SAY ISO, I SAY TRANSCO, LET'S CALL THE WHOLE THING OFF

WHY THE FERC'S ELECTRIC UNBUNDLING INITIATIVES WON'T WORK WITHOUT FUNDAMENTAL CHANGE.

*Lawrence J. Spiwak**

[*38] IT'S BEEN THREE YEARS SINCE THE FEDERAL ENERGY Regulatory Commission forced "functional unbundling" in Order 888, yet U.S. electric utility markets are a mess. Power outages and price spikes are common, new investment in transmission facilities is down by almost half and consumers have yet to enjoy the benefits promised by competition, though regulatory intervention continues apace. Typically, government officials blame everyone but themselves.

Now comes a new effort to put things right. The panacea *du jour* would have the FERC divide the country arbitrarily into regional districts to better manage the movement of electricity across the nation's interstate transmission grid. It would require all utilities to join some kind of regional transmission organization (RTO) by year's end.¹ Will this new vision turn the tide?

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¹ Notice of Delegation and Assignment under Section 202(a) of the Federal Power Act, 63 Fed. Reg. 53,889 (Oct. 7, 1998). Several weeks earlier, in remarks before the Sixth DOD/NARUC National Electricity Forum, FERC Chair Hoecker had announced his intention to complete a generic proceeding to "vastly accelerate the establishment of ISOs or transcos, as appropriate, in every region of the country." (<http://www.ferc.fed.us/intro/oea/hoec12-9.pdf>)

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Sadly, the answer is no. While everyone has been mired in the minutiae of imposing RTOs, both FERC and the industry have missed the big picture over the emerging market structure post-Order 888. Rather, the problem lies with the FERC's overall policy paradigm.

That is to say, the FERC has built its restructuring model on two flawed assumptions. First, it believes that firms will never be able to produce efficiently on an integrated basis. Second, and as a consequence of the first, it believes it can intervene and create efficient input markets – both *sua sponte* and *sui generis* – by unbundling transmission from bulk power sales. Until these significant analytical defects are fixed, any talk of unilaterally imposing mandatory regional grid institutions is simply premature and a political “red herring.” Contrary to recent statements by FERC officials, the fundamental problem with restructuring efforts is not the lack of mandatory of RTOs per se, but the fact that the FERC's overall restructuring policy initiatives – including the mandatory imposition of RTOs in whatever form they may take (ISOs, transcos, gridcos, etc.) – simply are a very inefficient way to organize the market.²

Indeed, there is nothing wrong in theory with the general concept of an RTO, be it ISO, a for-profit transco, *39 gridco or whatever. Indeed, it is difficult to argue against the FERC's 11 principles governing the formation of independent system operators. Taken individually, each ISO principle might well appear pro-competitive.³ For example, who would discount the value of eliminating

² In fact, three of the five ISOs approved to date simply codify long-standing tight power pool arrangements where utilities have agreed to coordinate for construction, reliability and load management purposes. See, e.g., New England Power Pool, 79 FERC ¶ 61,374 (1997), reh'g pending (order conditionally authorizing NEPOOL ISO) (NEPOOL I); New England Power Pool, 83 FERC ¶ 61,045 (1998), reh'g pending (order on NEPOOL tariff and restructuring) (NEPOOL II); Pennsylvania-New Jersey-Maryland Interconnection, et al., 81 FERC ¶ 61,257 (1997), reh'g pending (order conditionally authorizing establishment of PJM ISO) (PJM); Central Hudson Gas & Electric Corporation, et al., 83 FERC ¶ 61,352 (1998), reh'g pending (order conditionally authorizing establishment of New York ISO) (Central Hudson).

³ For example, the U.S. Department of Justice is a supporter of the general notion of ISOs, but, as discussed infra, also recognizes the inherent flaws with FERC's overall paradigm. On the other hand, FERC Commissioner Curt Hebert believes that the ISO principles are themselves
(Footnote Continued. . . .)

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“pancaked” rates?⁴ And the FERC certainly is correct that the wider the control area, the more efficient it is to monitor and dispatch the grid. Why else would utilities join forces to operate efficiently as multi- state holding companies? (See , Still Fighting Consolidation?) Forcing an RTO on a shaky and flawed market structure already badly distorted by FERC regulation, however, is not going to maximize consumer welfare. Faced with this reality, therefore, FERC should abandon its aggressive attempts at transmission “central-planning” and return to economic first principles before the proverbial “eggs” become too far scrambled to repair.

Sidebar: Still Fighting Consolidation? Congress Had It Right 70 Years Ago.

Congress recognized nearly 70 years ago that it is perfectly appropriate to permit registered public utility holding companies to continue to control one or more additional integrated public utility systems. In the Public Utility Holding Company Act of 1935, Congress told regulators to allow vertical integration if they should find no other way to achieve the economic efficiency offered by vertical integration.

That is, regulators should permit consolidation if they should find:

UNIQUE ECONOMIES.

- Each of such additional systems cannot be operated as an independent system without the loss of substantial economies, which can be secured by the retention of control by such holding company of such system;

GEOPOLITICAL CONVENIENCE.

- All of such additional systems are located in one state, or in adjoining states, or in a contiguous foreign country; and

MANAGEABLE GOVERNANCE.

- The continued combination of such systems under the control of such holding company is not so large (considering the state of the art and the area or region affected) as to impair the advantages of localized management, efficient operation or the effectiveness of regulation. – L.J.S.

Source: 79 U.S.C. secs. 79k (h)(1)(A)-(C).

ISO principle No. 9 states that an ISO should provide open access to the transmission system and all services under its control at non-pancaked rates pursuant to a single, unbundled, grid-wide tariff that applies to all eligible users in a non-discriminatory manner. In fact, if FERC is so concerned about eliminating pancaked rates, FERC need not wait for an ISO, because there is absolutely nothing stopping them from eliminating them right now. FERC has the authority to eliminate pancaked rates through, for example, rate design based upon mileage or network usage rather than adding up the costs of a single system and dividing by some unit. As such, FERC's notion that elimination of pancaked rates is an ISO-specific efficiency is specious at best.

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The Proof is in the Pudding: Empirical Data

When government relies on flawed policies to create a market structure conducive to competition, just the opposite occurs, as can be seen by the behavior of the U.S. electric utility industry during the years following Order 888.

This period reveals: (1) a near 50 percent drop in investment for new bulk transmission facilities; (2) a demonstrable trend in industry reconcentration; (3) no new tangible facilities-based entry (firms or capacity); and (4) attempts by some firms to go so far as to foreclose key inputs of production from would-be rivals (i.e., gas/electric hybrid mergers such as Enova).

Empirical evidence from the North American Electric Reliability Council supports this view. In its 10-year Reliability Assessment Report, issued in 1998, NERC states that under current market conditions,

Transmission providers (TPs) may find it difficult to justify investment in new transmission facilities without proper incentives. TPs [must] connect new generation at any location and provide transmission service, but may not be allowed full cost recovery by some state commissions. Transmission congestion pricing could provide price signals to encourage efficient generation siting and transmission expansion. However, until sufficient incentives are put in place, the growth in transmission capacity is not likely to keep pace with the business or reliability needs of the system.

According to NERC's most recent 10-year assessment:

- Transmission systems will be “increasingly challenged” to accommodate competitive markets;
- Electricity supply adequacy could “deteriorate in the long-term” without added capacity in generation and transmission;
- Capacity margins are at “dangerously low levels”;
- “Very few” additions to bulk transmission systems are planned throughout North America (only 6,588 miles of lines 230 kilovolt and above); and

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- Coordination of generation and transmission planning is likely to decline.

NERC concludes that system reliability in the longer term “is open to question.” As the report explains, “[b]usiness is *40 increasing upon the transmission system, but very little is being done to increase the load serving and transfer capability to the bulk transmission system.”

NERC’s conclusions appear even more alarming when the historical data is analyzed. After reviewing NERC’s 10-Year Annual Assessments pre-and post-Order 888, the empirical evidence shows that planned additions for interstate bulk transmission lines (230 kV and above) have decreased by almost 50 percent, as shown by the table.⁵

Transmission 230 kV & Above (Circuit Miles)

Assessment Period	Actual	Planned Additions	% Change from Prior Year	Total Miles Anticipated
1994-2003	150,953.00	10,400.00		161,353.00
1995-2004	150,826.00	8,851.00	-15%	159,677.00
1996-2005	153,782.00	6,818.00	-23%	160,600.00
1997-2006	151,510.00	5,834.00	-14%	157,344.00
1998-2007	150,225.00	5,587.00	-4%	155,812.00
Total Change 1994-1998			-46%	(5,541.00)

⁵ See also Coy, Peter, “Utilities: Prognosis 1997,” *Business Week*, (Jan. 13, 1997) at 118; Sturdivant, *supra* n. 5 (“Construction spending for transmission systems is already down significantly. ...”); Steve Hoffman, “Enhancing Power Grid Reliability,” *EPRI Journal* (Nov. 21, 1996).

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Source: NERC 10-year Reliability Assessments 1994 - 1998

At the time of this writing, various FERC officials were seeking to discount this data by arguing that owners of local generation are to blame for this decrease in planned transmission.⁶ Hardly. As discussed supra, the FERC apparently believes that with “open access,” consumers should be able to buy power from anywhere in the country and have this power wheeled directly to their doorsteps. From an economic point of view, however, the most efficient way to dispatch a grid generally is to place the generation as close to the load as possible, rather than act as some faux “commodities” trading floor (i.e., operate the grid in an inefficient manner). If this structure is impractical, however, then utilities must constantly evaluate the benefits of purchasing and transmitting cheaper, distant generation verses the possible costs of not adequately serving their native load. As such, just because you can buy cheap hydropower in the Pacific Northwest and wheel that power to Key West, Fla., at subsidized rates doesn’t mean that the idea is useful or efficient.

So Why Is This Happening?

This poor performance is directly attributable to FERC’s deliberate decision to ignore basic economic first principles when formulating its view of an efficiently restructured electric utility industry.

That is to say, given the huge sunk costs inherent to the electric industry, coupled with the long-standing societal goal – not to mention the pervasive and omnipotent regulatory regime enforcing this policy goal – of ensuring reliable service at just and reasonable rates, the historical structure that emerged ceteris

⁶ For example, according to FERC Chair James Hoecker, some sort of mandatory regional transmission institution is required, because market participants need to know that local generation owners are not blocking expansion to protect their own interests. Sept. 17 remarks, supra, n. 1.

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paribus was simply the most efficient way to allocate resources and operate a significant portion of the grid.⁷

FERC now wants to change this structure by forcing utilities to bring every single transaction out of the firm and into the market via “fundamental unbundling” – i.e., by forcing utilities to disaggregate to one degree or another their generation from their transmission facilities. The FERC hopes to achieve this goal by requiring, inter alia: (1) “network” open-access service; (2) mandatory homogeneous pro forma transmission tariffs and price posting; (3) incremental pricing of transmission service; and (4) the creation of regional

Sidebar: To Force Utilities to Join or Not - That is the Question Raging at FERC

The battle lines are forming over whether the commission should force utilities into arbitrary regional transmission districts or other regional transmission organizations.

On one hand sits FERC commissioners Massey and Hoecker, who believe that FERC should mandate some sort of RTO immediately and at all costs. For example, FERC Commissioner William Massey again recently argued that FERC should use its existing statutory authority to force the creation of RTOs without the use of so-called “goodies” and “tasty treats.” In his view, such incentive-based regulation:

erroneously implies that the FERC is powerless to achieve RTO formation by more straightforward means. We have the obligation to end undue discrimination; we have authority to condition market-based rates; we have merger authority. We ought to use these authorities. We can get this done without handing [out] our tasty treats.

Moreover, argued Massey, “[T]he treats being discussed are sweet indeed, such as allowing the purchaser of transmission assets to book the higher acquisition costs, and to depreciate over a shorter time period. [Such as allowing] a 14 percent rate of return, and switching to a “levelized” cost-of-service method that allows the double collection of depreciation expenses that have already been recovered.” (Excerpts from remarks by William L. Massey, FERC, at the American Public Power Association Annual Winter Committee Meeting, Washington, D.C., Feb. 8, 1999.)

On the other hand, commissioners Bailey and Hxbert appear opposed to mandatory RTOs. For example, Vicki Bailey recently warned that from both legal and public policy perspectives, one should be “very wary” of FERC acting as “a central planner with a large map of the utility industry on [the] wall and a magic marker at [its] disposal.” The commission, said Bailey, is “not situated in as good a position as the utilities [it] regulate[s] in determining the map and boundaries of utility companies, acting alone or in concert with other utilities, operating in the future.” (See Notice of Intent to Consult Under Section 202(a), RM099-2-000, 85 FERC (CCH) ¶ 61,304,1998; Commissioner Bailey concurring and dissenting in part).

Similarly, Commissioner Hebert just published a law review criticizing the very ISO principles upon which FERC’s RTO policies are based and called for many of the “tasty treats” so denigrated by Commissioner Massey above. (See Hebert, Curt, “The Quest for an Inventive Utility Regulatory Agenda,” 19 Energy L.J. 1, 7-13, 1998.)

Commissioner Brethitt may hold the swing vote. – L.J.S.

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transmission institutions. The question that must be asked, therefore, is whether the FERC's intended "restructured" market will be more efficient (i.e., better consumers' position by producing lower prices and more innovation) than the current status quo. A strong argument can be made – viewing the FERC's restructuring efforts *in toto* – that it will not.

1. NETWORK OPEN ACCESS.

A key component of the FERC's attempt to force transactions out of the firm and into the market is its belief that "open access" must be on a "network-service" – rather than on a "point-to-point contract-path" – basis. In this way, the FERC is attempting to turn electricity into a fungible "commodity," much like wheat or pork bellies. FERC officials such as Chair Hoecker believe that such a transformation is wholly possible because "[t]echnology has enhanced the ability of multiple power suppliers ... to use the same set of wires to transmit *41 and distribute electricity and to sell electricity from more strategically placed (and less regulated) generation assets over larger and larger geographic areas."⁸ However, while technology has certainly enabled utilities to operate the national grid in a more efficient manner, technology has not progressed so far as to render both the laws of physics and economics meaningless.

Specifically, electricity is not a "commodity" in the conventional sense of the term, such as wheat, pork bellies or frozen concentrated orange juice. It cannot be stored, stacked or even touched; rather, because electricity always seeks to follow the path of least resistance, electricity only may be either used or lost (i.e., "grounded"). As such, there is no clear point of demarcation between the interstate transmission and local distribution facilities of a utility's network. Indeed, a utility's network is more than just a grid system of power lines. A utility network is a complex infrastructure with a large investment in monitoring and operating equipment with its associated communications networks and computers. To wit, power problems in Arizona can require instant and accurate operations in the Northwest to prevent a West Coast blackout. Electricity is,

⁸ Dec. 9, 1998, remarks by FERC Chair James Hoecker before the 30th Annual Conference of the Institute of Public Utilities (<http://www.ferc.fed.us/intro/oea/hoec12-9.pdf>).

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therefore, probably better characterized as a “network product” that exists only as a function of the capacity and condition of the network itself.⁹

More important, however, are the perceptions of FERC commissioners and the officials of the Clinton administration that all network industries somehow have identical, homogenous structural characteristics.¹⁰ This assumption simply isn't true.

To wit, the FERC's view of “network service” comes from a misunderstanding of how a telephone network works. The FERC thinks that under a “network service” regime, utilities would effectively operate their networks like a phone network on a “common carrier” basis and provide non-discriminatory access to all comers. While the FERC is partially correct in that a phone network, as a “common carrier” must take all comers, this is not how a telephone network operates.¹¹ A telephone network actually is the ultimate point-to-point service, because a switched telephone call literally creates a single line between the conversants. Moreover, the advent of the Internet and “packet switching” does not change this reality, because even in the new wave of “non-switched” telecommunications technology, the information “packets,” unlike electrons, have specific destinations assigned to them. In contrast, FERC's view of “network” service – unlike “point-to-point” service – basically permits one or more rivals to dictate how the actual owner of the utility network operates and dispatches its network. Yet, because of all of the difficult elements (i.e., loop flow, spinning reserve, line loss, etc.) inherent to a functioning grid, allowing multiple rivals – who are often geographically separated and therefore have very

⁹ Indeed, in a true commodity market the buyer must be able to either immediately resell the commodity, or have some specific place arranged to hold the commodity before it can be used or resold.

¹⁰ See, e.g., FERC Chair Hoecker's Dec. 9, 1998, remarks, *supra* n. 8 *passim*.

¹¹ Note: There is one other significant reason Congress classified telecom companies as common carriers that has nothing to do with “network access” – i.e., as a “common carrier,” telecom companies are not responsible for the content provided/transmitted by third parties over their networks. In today's world of the Internet and broadband communications, such immunity is more crucial than ever.

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different demand and cost characteristics – to de facto dispatch another’s system has a direct effect on optimal system efficiency and reliability.

2. MANDATORY TARIFFS.

Another significant component of the FERC’s attempt to force transactions out of the firm and into the market is its requirement that everyone (except certain utilities with few or no transmission facilities) must file homogeneous pro forma transmission tariffs.¹² (Again, the goal is to turn electricity into a fungible “commodity” that can be bought and sold on an “open” market.) In doing so, the FERC has basically stated that in its view, government – via stringent regulation – can better (i.e., more efficiently) allocate resources over the long-term than parties can through private negotiation.¹³

Moreover, this policy flies in the face of the core purpose of the Mobile- Sierra doctrine, which, at bottom, establishes a standard to determine appropriate case-by-case situations where – as a public policy matter – firms should be permitted to integrate, or government should force, transactions into the market.¹⁴ Indeed, as a general proposition, it is perfectly legitimate for

¹² Moreover, it is very unclear how mandated homogeneity will result in dynamic economic efficiencies in the long run. It is nice to see, however, that FERC officials have finally, albeit unwittingly, conceded this point as such (even though they have yet to fix this problem). See “FERC Chair Hoecker Delivers Scary Halloween Message for Industrials,” Foster Electric Report, No. 125 (Nov. 5, 1997) (reporting that FERC intends to “expand upon certain themes” such as “considering whether to revise or enlarge the pro forma tariffs to allow for product and service innovations”).

¹³ FERC’s hostility to anything long-term is completely in accord with FERC’s recent surreptitious policy to abrogate all privately negotiated, long- term contracts in its neo-competitive effort to “level the playing field.” See, e.g., *City of Bedford, Va., et al.*, 64 FERC (CCH) ¶ 61,381 (1993) (commissioners Hoecker and Santa dissenting).

¹⁴ In FERC’s pending Merger NOPR, Revised Filing Requirements Under Part 33 of the Commission’s Regulations, Notice of Proposed Rulemaking, Docket No. RM984000, 83 FERC (CCH) ¶ 61,027; 63 Fed. Reg. 20,340 (April 24, 1998), FERC makes no mention whatsoever about the efficiency enhancing characteristics of vertical integration, but instead states matter-of-factly that “vertical mergers do not directly eliminate a competitor from the market but may create or enhance the incentive for the merged firm to adversely affect prices and output in the downstream electricity market.”

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government to intervene (either by regulation or antitrust) if the economic costs imposed by a long-term contract outweigh the efficiencies created by the contract. This situation is often referred to as a “policy-relevant barrier to entry,” and is the very root of the “public interest” exception to the Mobile Sierra doctrine¹⁵ set forth in *Papago*.¹⁶ In order to determine whether a long-term contract is a “policy-relevant” barrier to entry (and, a fortiori, whether government should seek to abrogate the contract), the FERC must:

engage in a cost-benefit analysis that identifies, inter alia: (1) all possible economic efficiencies, if any, that might result ***42** from the presence of the barrier to entry; (2) all offsetting economic efficiencies that might be attributable to the barrier to entry, if any; (3) all relevant positive and negative network externalities; and (4) the estimated economic cost of eliminating the barrier to entry or minimizing its effects.¹⁷

The problem is that FERC has never conducted the analysis referenced above. Instead, it has determined that, in its opinion, there are absolutely no circumstances where it might be more efficient for parties to integrate via long-term contract.

The commission exacerbates this position by requiring all utilities (with few exceptions) to post their prices for transmission (OASIS) – just as in any other type of “traditional” commodities trading floor. However, even a cursory look at the economic literature reveals that tariffing is one of the most effective price

¹⁵ See *United Gas Co. v. Mobile Gas Corp.*, 350 U.S. 332, 339-343 (1956); *FPC v. Sierra Pacific Power Co.*, 350 U.S. 348, 353-55 (1956). Under the Mobile-Sierra doctrine, an administrative agency has the power to prescribe a change in contract rates when it finds them to be unlawful, and to modify other provisions of private contracts when necessary to serve the public interest.

¹⁶ *Papago Tribal Authority v. FERC*, 723 F.2d 950, 954 (D.C. Cir. 1983), cert. denied, 467 U.S. 1241 (1984).

¹⁷ “What Hath Congress Wrought? Reorienting Economic Analysis of Telecommunications Markets After the 1996 Act,” *Antitrust Magazine* (American Bar Association, Spring 1997) (hereinafter “*Reorienting Economic Analysis*”) at 35 & n.32 & citations therein.

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signaling mechanisms available.¹⁸ Thus, having rivals post their prices, coupled with the deliberate creation of a market that also is characterized by: (1) a diminishing number of such rivals as the industry further reconcentrates; (2) very unsophisticated customers; (3) extremely inelastic supply; and (4) a very homogeneous product in an industry that is clearly not characterized by rapid technological change and innovation, we should not be very surprised if we end up with an oligopoly that can successfully engage in tacit (if not outright explicit) collusive pricing behavior.¹⁹

3. MARGINAL COST PRICING.

The third major component of this attempt to force transactions out of the firm and into the market is the FERC's decision to price transmission at short-run marginal cost. (In this way, the "commodity" – electricity – can be bought and transmitted over great distances in the least-expensive fashion.) The problem with this approach is that, despite the theoretical advantages of ***43** marginal-cost pricing for short-run transmission transactions, from a transaction cost economics perspective, such an approach ignores the significance of asset specificity (i.e., the huge sunk costs) inherent to both interstate transmission and bulk power generation facilities. Indeed, as Oliver Williamson stated, while "[i]t is common to distinguish between fixed and variable costs, ... this is merely an accounting distinction. More relevant to the study of contracting is whether assets are redeployable or not."²⁰ In doing so, therefore, the FERC has sent a strong signal that it believes that while it might be appropriate to view generation from a dynamic perspective, it is nonetheless wholly appropriate to view transmission from a static and unchanging perspective. Moreover, existing transmission capacity (though highly constrained) is *a fortiori* sufficient to meet current and future demands.

¹⁸ Indeed, as the FCC recognized nearly 20 years ago: "Tariff posting ... provides an excellent mechanism for inducing noncompetitive pricing." See Competitive Carrier Further Notice, 84 F.C.C.2d 445 at ¶ 26-27 (1981).

¹⁹ Moreover, it is highly likely that this structure will bring an increased risk of antitrust scrutiny from enforcement agencies and other interested parties.

²⁰ Williamson, Oliver, *The Institutions of Capitalism* (1985) at 54 (emphasis supplied).

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Wrong. For example, David Evans and Richard Schmalensee write that in network industries characterized by high fixed costs and low marginal costs such as the electric utility industry:

[F]irms that price at marginal cost would not recover their fixed costs, which are often the costs of developing innovative new products and services. To survive, they have to price well in excess of marginal cost. And, since they are making a profit at the margin on almost every unit, they often engage in price discrimination. Volume discounts, special deals and complex pricing systems are common.²¹

Accordingly, it should not take a rocket scientist to figure out that whenever regulation prohibits firms (either incumbents or, assuming “total unbundling,” a for-profit independent transco/gridco) from either recovering the full costs of their sunk investments (the FERC’s transmission pricing policy) or from engaging in legitimate discrimination to grow market share (the FERC’s homogeneous pro forma tariff requirement), the regulated firm will not find it in

Sidebar: No New Investment? Why the DOJ Warned Against Marginal Cost Pricing

Five years ago, the Antitrust Division of the U.S. Dept. of Justice warned that any attempt by the FERC to impose short-run marginal-cost pricing would discourage investment. According to the DOJ:

Investments in existing transmission facilities are “sunk”; the capacity will not [vanish] if rates fall to the level of line losses or even below that level. Rates that low would seriously undermine the incentive to make new investments. ...

Moreover, if prices for short-term transactions were well below those for long-term transactions, there would be significant substitution from long-term to short-term transactions to take advantage of the price differential. Thus, in addition to not being compensated for congestion costs and loss [of] option value, utilities also might not be compensated for capital costs associated with transactions that are, in truth, long-term.

The DOJ added that marginal cost pricing could force the FERC to adopt ration strategies to allocate resources:

If prices for short-term transactions were set too low, there would also be a need for some sort of non-price rationing of capacity at certain times. The Commission would have to determine on an hourly basis how much capacity each utility must make available to others rather than to serve native-load customers. The administrative costs would be substantial, and significant inefficiencies likely would result from inevitable errors of judgment.

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its interest (no matter what the overall business opportunity) to invest in additional facilities nor to reduce costs and innovate to compete vigorously for new customers. Quite to the contrary, given the huge network externalities and assets specificity inherent to the electric utility industry (average system cost pricing, to name the most obvious), the FERC's policies instead provide the owners of transmission facilities with the irrational (and anti-competitive) incentive to engage in entry-detering strategies to protect whatever sunk assets possible. Thus, so long as the FERC maintains such an irrational pricing policy, neither "functional unbundling" nor even "total unbundling" (full divestiture of transmission assets) will ever produce good market performance.

***44 4. MANDATORY ISO.**

The last prong of this attempt to force transactions out of the firm and into the market is the FERC's not-so-subtle hint that it wants all utilities to join some sort of regional grid institution generically, and an ISO in particular, by the end of 1999. In this way, the FERC would create a giant "faux" commodities trading floor. (Naturally, any ISO will be a public utility subject to FERC jurisdiction.)

To facilitate reaching this goal, the FERC has set out 11 principles to assess whether an ISO proposal is "properly structured." The commission already has raised some controversy under Principle No. 2, by its handling of pension rights for ISO employees. And Principle No. 11, which calls on ISOs to set up a process for automatic dispute resolution, appears to raise significant antitrust concerns.²²

FERC's Inefficient Organization of the Market

Until the major underlying analytical predicates are fixed, any talk of forcing mandatory ISOs, transcos, gridcos – or any other regional grid institution, for that matter – on the industry at this time is just premature. In fact, it is crucial to understand that there is nothing wrong with the theoretical concept of RTOs per

²² Scholars are mixed as to the level of antitrust immunity ISOs have in this process. C.f. Eaton, Jade Alice, "State Action and the New Competition: What's a Utility to Do?" *Infrastructure* (American Bar Assoc., Summer 1998) at 9; Rokash, Joshua Z., "Antitrust in the Electric Utility Industry: Regional Transmission Groups," 15 *J.L. Com.* 39 (1994).

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se; rather the primary problem is the fact that mandatory RTOs – in whatever form they may take – when coupled with the FERC’s other efforts to restructure the U.S. electric utility industry, are a very inefficient way to organize the market. So long as a market is organized in an inefficient manner, therefore, poor economic performance is inevitable.

That is to say, the FERC does not believe (as it should) that competition is a means to obtain better market performance through vigorous rivalry; instead, FERC’s end-goal of “competition” simply means “more choices” – i.e., the presence of “more competitors” (hence the proliferation of power marketers and the reconcentration of IOUs).²³ Yet, the only way for the FERC to achieve this goal of “more competitors” is to force every single transaction into the “market” and out of the firm. Under the FERC’s view of the world, bringing a transaction into the firm (i.e., integration) cannot by definition produce any efficiency benefits – even though the structure of the market still indicates that some degree of integration is the most efficient way to allocate resources. But this notion simply is not true. As such, FERC’s flawed paradigm is doomed to produce (and, unfortunately, is producing) poor market performance and must be discredited as such.²⁴

Yet, it is clear that the FERC does not trust the “market” either. Instead, it essentially wants to: (1) bring all transactions out of firms and into the market; yet (2) immediately bring all transactions out of the market and into a single, so-called “independent” firm (an ISO) that it can control and regulate completely.²⁵ As Oliver Williamson warned, however, such a haphazard approach simply will not work:

²³ This flawed notion of “choices” over tangible rivalry is one of the numerous hallmarks of the Clinton administration’s Comprehensive Electricity Competition Plan at Section II.A (<http://www.hr.doe.gov/electric/ceep.htm>).

²⁴ This approach also was expressly argued by FERC in its merger NOPR, where basically it argued that as a matter of law and fact, vertical integration could produce no efficiency benefits.

²⁵ Moreover, the FERC’s micro-management of the firm will simply add to the transaction costs of its own paradigm. (See, e.g., FERC’s various ISO orders where FERC had to resolve disputes regarding whether the ISO’s governing board’s employees could take a pension and for
(Footnote Continued. . . .)

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Selective intervention, whereby integration realizes adaptive gains but experiences no losses, is not feasible. Instead, the transfer of a transaction out of the market into the firm [in FERC's case, an ISO] is regularly attended by an impairment of incentives. It is especially severe in circumstances where innovation (and rewards for innovation) are important. ... Accordingly, [e]fforts to "hold incentives constant," thereby to effect incentive neutrality, thus turn out to be delusional. The problem is that none of the following is costlessly enforceable: promises by division managers to utilize assets with "due care"; promises by owners to reset transfer prices and exercise accounting discretion "responsibly"; promises to reward innovation in "full measure"; promises to preserve promotion prospects "without change"; and agreements by managers to "eschew politics."²⁶

This unbundling paradigm does not even seek to resolve a basic question of transaction costs economics – is a vertically integrated electric utility industry more efficient than a structurally separated electric utility industry?

Viewing the FERC's actions in this light, therefore, the methods behind the madness become a bit clearer: the FERC does not want rivalry, it wants choices. And because "more choices" a fortiori means "more competitors," (power brokers who, by definition, bring no additional capacity to the market²⁷), then functional unbundling is the quickest way to produce this structure – economic efficiency be damned.²⁸ Instead, the "virtual" competition provided by *45 the

how long and for how much. Both commissioners Bailey and Hebert have expressed disdain over such micro-management.)

²⁶ See Williamson, *supra* n. 20 at 161.

²⁷ See e.g., *Enova Corporation & Pacific Enterprises*, 79 FERC (CCH) ¶ 61,107 (1997); *Morgan Stanley Capital Group Inc.*, 79 FERC (CCH) ¶ 61,109 (1997).

²⁸ See Salpukas, Agis, "Utility Deregulation: Boon or Boondoggle?" *New York Times*, Feb. 1, 1997, Business section (reporting that consumers were not aware that most of the alleged savings from New Hampshire's retail-marketing plan stemmed from "the willingness of ... marketers to shave their profit margins to near zero to get a piece of the action").

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information superhighway will require the presence of constant, heavy-handed and tangible regulation, and therefore any true benefits for consumers will remain in virtual cyberspace bank accounts, rather than as cold, hard cash in their wallets.²⁹ (Like it or not, “free-ridership” does not promote consumer welfare.) Accordingly, because the “public interest standard” is a consumer welfare standard, the FERC’s unilateral imposition of regional grid institutions (ISOs, et al.) under current restructuring initiatives is *prima facie* arbitrary and capricious.

Remedies: Far from Pro Forma

Over the past several months, the popular economic buzzwords that FERC officials have been bandying about are vague references (without citations of course) to the Structure-Conduct-Performance Paradigm of Modern Industrial Organization.³⁰ However, notions of structure, conduct and performance are not severable “factors,” but are actually interdependent economic concepts of each other. Structure, in turn, affects the conduct and behavior of firms in the market.

If the FERC wants a market structure where the most efficient way to allocate resources is to transact in the market rather than to integrate via the firm, then it must lay the correct framework. So far, the commission has failed to provide the market with the correct economic incentives to make this transformation.³¹

The root of the industry’s problems is not the lack of “competitors” per se, but the lack of sufficient transmission facilities. When capacity is constrained, there are two ways to mitigate bottleneck control: (1) impose economic regulation on the owner of the facility to mitigate its ability to raise prices and restrict output; and, in the end always the more effective measure, (2) promote

²⁹ Indeed, any notion that “state-sponsored, managed competition” can either actually maximize consumer welfare or be sustained in the long-term is simply specious at best.

³⁰ See, e.g., Hoecker, Sept. 17 speech, *supra* n. 1: “One cannot be a true believer in competition and an agnostic about market structure.”

³¹ According to NERC, to insure a continuing resource adequacy, the risk of failing to serve the customer must be recognized in incorporated in price structures. NERC 1998 Report at 35.

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new facilities-based entry. Tragically, FERC has overreached egregiously on the first prong, and has all but ignored the latter. Only by adopting a comprehensive policy that concurrently attacks both prongs will FERC be successful, however. Each are discussed briefly below:

Above all, the FERC must find ways to encourage investment in infrastructure. As a start, it must permit utilities to price transmission based upon incremental rather than embedded costs. Similarly, it must permit utilities to engage in lawful (not “undue”) discrimination and product differentiation (e.g., volume discounts) and, as such, the FERC must eliminate homogeneous pro forma tariffs. There are, however, other regulatory options should the FERC decide to use them.

Among other ideas, the FERC could impose special rules during a brief transition period to encourage new investment. For instance, it could:

- Presume all rates for new transmission facilities to be just and reasonable for a time to accelerate cost recovery;
- Defer “open access” requirements to ensure capital recovery;
- Expedite environmental assessments or remove other barriers that could delay or deter new construction;
- Use its “bully pulpit” to beseech Congress to enact incentive programs for transmission construction, or to give the FERC authority to preempt state franchise rights.

Again, decision-makers must be reminded that the market does not need more “competitors” per se; what the market needs is more transmission capacity.

Unfortunately, given the huge sunk costs, network externalities and operational characteristics and inherent requirements, the transmission grid will retain perpetually some natural monopoly characteristics, regardless of total capacity. (Indeed, the characteristics of the U.S. electricity industry are completely inapposite to the characteristics of the U.S. long-distance industry, where it is possible to have multiple competing facilities-based networks.)

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The question to be asked, therefore, is whether it is possible to create some sort of organizational structure that can mitigate the grid operator's ability to raise prices or restrict output but at the same time still provide the operator with correct incentive to operate the network in a more efficient manner and improve the economic performance of the market.

Absolutely. Remember, vertical integration is not necessarily a bad thing – again, it is a question of balance. Thus, it should be possible for educated and reasonable people to develop an Open Access paradigm that is: (a) priced correctly; (b) resolves stranded cost issues in an equitable manner; and (c) both ensures system reliability and promotes new investment. If we have learned from our mistakes, therefore, this would entail, at minimum: ***46**

- Eliminating the current flawed concept of “network service”;
- Eliminating homogeneous pro forma tariffs to permit product differentiation and lawful discrimination (e.g., volume discounts); and
- Pricing transmission on an incremental basis, rather than on short-run marginal costs.

Only then should discussions resume about regional grid institutions – voluntary, not mandatory – that make the market operate more efficiently.

Some might see these proposals as a return to the unsatisfactory world that prevailed before Order 888. Not at all.

Since the passage of the Energy Policy Act of 1992, the problem has not been one of market participants per se, but more a problem of naked regulatory failure. Indeed, since 1992, the FERC has had the authority to resolve transmission disputes under Sections 211 and 212 of the Federal Power Act, but nonetheless it has preferred to ignore the plain language of these statutes, relying instead on the “unduly preferential” standard in the ratemaking provisions in Sections 205 and 206 of the FPA. Yet the FERC could have used its authority under all four statutes to improve complaint procedures under current Open Access tariffs (e.g., a “rocket docket”) to resolve interconnection and transmission disputes.

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Structural separation – like all forms of regulation – is a matter of degree. The FERC should have dedicated more attention to balancing the benefits and harms of integration before unilaterally (and erroneously) deciding that all forms of integration are essentially per se illegal. Indeed, a regional transmission institution need not employ a mandatory ISO.

If the FERC can fix the structural problems, then perhaps some lesser form of mandatory structural separation among wholly owned generation, transmission and marketing affiliates (with stringent accounting safeguards) might prove sufficient to achieve the policy goals behind FERC's "11 Principles." Obviously, the devil is in the details, and various plans should be debated openly and thoroughly.

Nothing above should be construed to mean that the commission should play an active role in the current attempt to restructure the U.S. electricity industry nor, more broadly, that economically correct restructuring is impossible. Quite to the contrary, the FERC has a very legitimate and important role to play and, with some serious thought, market performance can be improved with well-reasoned, forward-looking public policies. However, we should not be surprised when the FERC's misguided and ill-formed efforts to "fundamentally unbundle" the U.S. electric industry continue to produce more economic harms than public-interest benefits.

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