Incentive Regulation and Service Quality

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Prepared for
Harvard Electricity Policy Group
Marriott Grand Hotel
Mobile Alabama
December 11-12, 2003
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• Telecom Experience: Do Price Caps Work?
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Quality of Service

The principal national concern regarding QOS is related to service interruption and thus to transmission standards and the adequacy of access of high usage areas to low cost power generation sources.

This is California.

This is August 2003.

This is not new, but is newly acute, and will intensify as the national economy recovers.

Duuhhh...
Background

• Deregulation and All That: This Ain’t New Zealand. Really.

• August 2003: All is not for the best, and maybe this isn’t the best of all possible worlds

• Disjoint Regulation of Transmission

• NIMBY: Local Siting Procedures for Xmission Facilities Trump National Priorities for Network Stability

• States Play the Same Old Fiddles While Rome Blacks Out
Telecom Experience I: Do Price Caps Work?

“In the first round of election of price cap targets by the RBOCs, 5 of 7 companies adopted the most aggressive cost reduction targets, so that they were permitted to avoid all gain sharing (the stick) and thus could keep profits earned beyond the caps (the carrot). In the evidence presented by the RBOCs prior to their selections of price cap targets, they had claimed that they could not recover the costs of interstate service under the proposed rates of price cap decline. Judging by the performance of their common stocks relative to a broad market index, the RBOCs and their stockholders prospered.”
Telecom Experience II: Do Price Caps Work?

“In the second round, when the price cap targets were raised substantially, 5 of 7 RBOCs elected the most aggressive price cap targets, after claiming impending impoverishment. (NYNEX asserted that they would be bankrupted.) Again they prospered. In the most recent round, a single price cap target of 6.5% per year was set by the FCC. The RBOCs claimed that their productivity growth could not be exceed 2.5% per year, that their costs rose at the same rate as general national inflation.

Once again the companies prospered.”

“The lesson from this experience is that, under appropriate incentives, regulated companies regularly find ways to improve efficiency without beggaring the quality of service if service quality is appropriately monitored.”

Compressed from my testimony before the Ontario Energy Board in behalf of the Public Interest Advocacy Centre of Canada, November 1998.

The FCC had (as it turned out) effective QOS monitoring guidelines that were generally accepted and administered by the States.
Productivity and Service Quality

Both before and after changes in the required reporting of service quality, the linkage between productivity (of all inputs: total factor productivity) and service quality was very weak for most telecom companies, and more often than not negative. However, telecom service quality was not recognized as an issue as long as it seemed satisfactory. We concluded that part of the problem was in the measurement of QOS.

(Papers at NRRI and the Engineer Management Society of the IEEE with James MacDonald, Tony Chen)
Regulation and Network Technology: Telecom

• The FCC has “ruled the roost” in telecommunications.

• Interoperability of the telecom network required uniform communications protocols. This is generally acknowledged in the engineering, regulatory and political communities.

• The Congress enacted and the states enforced standards that made engineering sense.

• Rapidly advancing technology and relatively liberal depreciation (though still inadequate to recognize obsolescence) made adaptation to national standards easier.
Regulation and Network Technology: Electric Power I

Why has FERC had much less centralized authority than the FCC? Maybes follow:

• Generation technologies are far more disparate in elpo
• GTs are more state-specific, especially regarding hydro and geothermal power.
• The high transport costs of coal and oil, and the availability of natural gas add to the peculiarity of individual state situations.
• In some states, there are political bargains trading off higher rates for more (high-paying) jobs, higher state and local taxes

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Regulation and Network Technology: Electric Power II

- In some states, there are political bargains trading off higher rates for
  1. More (high-paying) jobs
  2. Higher state and local taxes
  3. Life extension for obsolete facilities

- Siting of plants and transmission right-of-way are (allowed to) stall

- Load pockets develop, are allowed to persist, benefit particular interests. High cost generation facilities are built instead of transmission facilities

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Stranded – nonperforming – assets can readily result from rational restructuring, are a legacy of “friendly” regulation.

Very large stranded assets become _regulatory assets_ (Can you spell Shoreham?)

Parts of the US electric power industry look like the Japanese banking industry. State regulators and elpo managers save face at the continuing expense of ratepayers.

These problems (pardon me – issues) can be attributed to technology interacting with the state regulatory environments.
Some More Randomly Selected Abuses

• Regular employees of a state public utility department must wait 2 years to accept a job with a firm that they have dealt with, but the commissioners may go out and work for the regulated companies immediately…

• About 1995 a large urban utility with less than 3 million customers had an authorized “public service” budget of $110 million…you do the math

• Selected industrial customers pay less than $0.02 per kWh, while other commercial and industrial customers pay up to $0.10+…
Conclusion Regarding the Current State of Affairs in Electric Power Regulation

• It’s the technology, stupid, that enables the venality of politicians and the discordant national regulation. The practice of cost of service regulation and the long cycle time for asset replacement have created a culture medium for “moral hazard”

• Thus incentive regulation in this environment is retarded

• For incentive regulation to work, the overarching interests of electric power customers must be asserted and validated through the political process

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Incentive Regulation? We Have It Now…

• But the incentives are perverse. They encourage the abuses mentioned here…

• The key to incentives directed toward better QOS is tougher and more pervasive regulation, of the appropriate type: Monitoring (auditing) is crucial. Cost of service regulation has been less successful in elpo than in telecom. The challenges are greater in elpo: technological diversity, long lived assets and state-dominated regulation.

• Effective incentives can readily be devised: the context is the problem

• Again: The interests of electric power customers must be asserted and validated through the political process
Now If
**Bear Bryant**
Were the Head of FERC
and of the Cognizant
Senate and House
Energy Committees...