Harvard Electricity Policy Group
Forty-Seventh Plenary Session

All The King’s Horses and All The King’s Men: Can Humpty Dumpty Be Put Together Again?

Harvard Electricity Policy Group
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Who was Humpty Dumpty?

“An egg who sits on a very narrow wall. He is very proud, rude, easily-offended, and claims to be the master of words. In the end, he (presumably) falls off the wall.”

Lewis Carroll’s own descriptions of some of the characters can be found in his article "Alice on the Stage," The Theatre, 1887.
All the King’s Horses and All the Kings Men: Can Humpty Dumpty Be Put Together Again?

A Better Question:

**Should** Humpty Dumpty Be Put Together Again?
Goals of Restructuring:
To Increase Competition in Order to Provide Benefits to Consumers

- Based on an extensive review of laws, federal regulations, and relevant literature, the goal of restructuring the electricity industry was to increase the amount of competition in wholesale and retail electricity markets.

- Increasing competition requires structural changes to the electricity industry, such as:
  1. increasing the number of buyers and sellers of electricity,
  2. improving the availability and accuracy of price information, and
  3. allowing private companies to enter into competition with existing utilities freely and fairly.

- Economists and other policy analysts expect competition to lead to a range of benefits for consumers of electricity, including lower prices and access to a wider array of retail services than have been previously available.
Goals of Restructuring:
To Increase Competition in Order to Provide Benefits to Consumers

- Based in part on success in other industries that have been restructured, competition is expected to achieve these benefits through:
  1. improvements in the efficiency of wholesale electricity generation, and
  2. innovations in retail electricity services.

- Generally, competition is expected to lead to greater efficiency and more innovations by improving the incentives for electricity suppliers to provide better and less expensive electricity service.

- Because of the importance of the electricity industry to the lives of all Americans, it is essential that any restructuring that does occur does not cause a deterioration in the reliability of the electricity system.
“Some people have no more sense than a baby!”

-- Humpty Dumpty

Carroll, Lewis. *Through the Looking Glass and What Alice Found There*. 1871
Average Retail Rate Trends Compared to Other Retail Products

- After run-up of prices during energy crisis, electricity rate increases have been significantly below inflation rates until late 1990s.

- Even recent rate increases have been modest compared to sharp increases in prices for other consumer energy products.


Courtesy of The Brattle Group
Change in Electricity Rates Compared to Other Consumer Products: 1985-2005

- Despite recent increases, compared to other consumer prices, electricity rates have decreased in real terms (increased less than CPI) over the last 20 years.
- Rate increase is less than one quarter of price increases for other consumer energy products.

Courtesy of The Brattle Group
Average Rates in Restructured and Non-Restructured States

- Significant rate increases prior to initiation of restructuring efforts
- In 1997, rates in restructured states were approximately 35% above rates in non-restructured states
- Very similar rate trends since restructuring commenced in 1997


Courtesy of The Brattle Group
Relative Rate Trends in Restructured & Non-Restructured States Since 1997

- Since restructuring discussions were initiated in the early-to-mid 1990s, rates in restructured and non-restructured states have trended similarly.
- Less-noticed increases in non-restructured states due to “routine” rate adjustments.


Courtesy of The Brattle Group
The Electricity Sector is in Transition

Current circumstances threaten the electricity enterprise:

- The “Politics” of Energy Regulation
- Unsatisfied public expectations
- Desire by some to return to the “good old days” of cost-based rate of return regulation and Integrated Resource Planning (Portfolio Management)
- Regulatory uncertainty leads to risk and significant financial pressure

The critical electricity infrastructure, and all that depends upon it, is at risk.
An Essential Resource

- Today’s electricity system is valued at $358 Billion
- Built with 1950’s technology over the last 30 to 40 years
- August 14, 2003 outage was a reminder of an increasingly strained system, costing $6 Billion
- Power unreliability costs U.S. industry over $100 Billion per year
Inherent Conflicts in the Energy Business

Marketers want prices to reflect the current market

Investors want stable returns

Public wants low, stable prices

Generators want high margins and predictable sales
A Vision for Energy in the 21st Century

- A highly reliable, affordable, environmentally friendly power system:
  - Providing essential public services while supporting the aspirations of all classes of consumers
  - Supporting an economic framework of efficient, transparent markets
  - Ensuring operational effectiveness while minimizing impact on the environment
  - Supporting the evolving needs of the U.S. economy and society
Framework for Action

- Stabilize Electricity Markets
- Protect the Environment
- Provide for the Public Good
- Educate and Empower the Consumer
- Unleash Innovation
What Will it Take to Achieve this Vision?

- A new power delivery infrastructure will cost $10 to $20 billion a year for 10 years.

- Through inadequate electricity service, the nation’s consumers are already paying for this several times over each year.

- Consumers would save $500 per year in cost of goods and services and enable thousands more in possible personal income.
Navigating the Regulatory Maze

- The electricity sector regulator’s role has to change
  - Electricity is no longer a declining cost commodity - to regulate it as such is not logical

- A newly empowered consumer coupled with open and transparent markets and supportive regulation allows for a new transformed future
Regulatory Support: What’s Needed?

- Support of and for open, transparent energy markets
- Support of R&D and infrastructure investment
- Support of a National Energy Policy
- Support of fuel diversity
- Energy-efficiency gains to satisfy all future needs
The Real Question: What is the Evolving Role of the Regulator?

In a transformed electricity sector, regulators will take a proactive, positive role:

<table>
<thead>
<tr>
<th>Past Regulatory Role</th>
<th>Future Regulatory Role</th>
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</thead>
<tbody>
<tr>
<td>Protecting Consumers</td>
<td>Protecting Markets</td>
</tr>
<tr>
<td>Delivering punishment</td>
<td>Establishing Incentives</td>
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<tr>
<td>Prosecutor of customer complaints</td>
<td>Arbitration between the consumer and the company</td>
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<tr>
<td>Discouraging rate increases</td>
<td>Ensuring open and transparent energy markets</td>
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<tr>
<td>Discouraging investment in excess capacity</td>
<td>Encouraging technology advancement</td>
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Look Back to the Past or Look Forward to the Future?

Reliance on the Past

- Repair, Replace, Rebuild
- Status quo, current opportunity optimized
- System limited to yesterday’s technology
- Reduced returns, limited upside, exposure to competition

Reliance on the Future

- Invest in a new generation of technology
- Exercise new business opportunities
- Enable system expansion
- Experience competitive advantage
Moving Forward to the Fundamentals

- Electricity is the engine of prosperity and quality of life

- Going “back-to-basics” is insufficient and may not even be possible

- Electricity is a consumer service-based enterprise and no longer a declining cost commodity and to treat it as such would be a mistake

- Open, transparent, efficient markets will, in the long-run, provide the best option for consumers
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