New Investment Needs for the Next Decade and Beyond – The Consumer Perspective

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Jerrold Oppenheim
www.DemocracyAndRegulation.com
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Prices - Electricity

Residential Retail Price of Electricity

<table>
<thead>
<tr>
<th>Year</th>
<th>Weighted average cents/kWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>9.00</td>
</tr>
<tr>
<td>2003</td>
<td>10.00</td>
</tr>
<tr>
<td>2004</td>
<td>11.00</td>
</tr>
<tr>
<td>2005</td>
<td>12.00</td>
</tr>
<tr>
<td>July 2006</td>
<td>13.00</td>
</tr>
</tbody>
</table>

Source: Richard Rosen, Tellus Institute

Deregulated: No state regulation of generation; no price caps

Regulated:
Prices - Gas

US Natural Gas Prices ($/Mcf)

Source: US DOE EIA

Theo MacGregor & Jerrold Oppenheim  www.DemocracyAndRegulation.com
Prices – even homes

Washington, D.C. Single Family House Quarterly Price Index

Source: Office of Federal Housing Enterprise Oversight (OFHEO)
Headline profits

- TXU net +4x 2003-2006, shares +6x, while average res. rate +60%
- KKR et al. flipped Texas plants for $5B profit in < 1 year on $900M investment
- Coal and nuclear windfalls - Utilities that earned 10.5% ROE now earn 20% post-restructuring while consumers no longer get benefit of low-cost plant
- Rate increase requests up to 72%

Yet service and reliability declines
- Call centers and local offices
- Northeast Blackout of 2003
- Reliability crunches looming
Gas prices way up though consumption way down

Source: US DOE EIA
Consumers stressed: wages

Seasonally adjusted average weekly earnings, private non-farm non-supervisory workers

Source: US BLS
LIHEAP ↓ 53% 2 years

Fuel Assistance (LIHEAP) - US

Source: NCAF
### Inequality gap wider

#### AVERAGE AFTER-TAX INCOME (2003$)

<table>
<thead>
<tr>
<th>Quintile</th>
<th>1979</th>
<th>2003</th>
<th>% change</th>
<th>% per yr</th>
<th>$ change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest</td>
<td>$13,500</td>
<td>$14,100</td>
<td>4.4%</td>
<td>0.2%</td>
<td>$600</td>
</tr>
<tr>
<td>Second</td>
<td>$27,300</td>
<td>$30,800</td>
<td>12.8%</td>
<td>0.5%</td>
<td>$3,500</td>
</tr>
<tr>
<td>Middle</td>
<td>$38,900</td>
<td>$44,800</td>
<td>15.2%</td>
<td>0.6%</td>
<td>$5,900</td>
</tr>
<tr>
<td>Fourth</td>
<td>$50,900</td>
<td>$63,600</td>
<td>25.0%</td>
<td>0.9%</td>
<td>$12,700</td>
</tr>
<tr>
<td>Top</td>
<td>$89,700</td>
<td>$138,500</td>
<td>54.4%</td>
<td>1.8%</td>
<td>$48,800</td>
</tr>
<tr>
<td>Top one percent</td>
<td>$305,800</td>
<td>$701,500</td>
<td>129.4%</td>
<td>3.5%</td>
<td>$395,700</td>
</tr>
</tbody>
</table>

Source: Center on Budget and Policy Priorities
Would you lend $100B to this creditor?

Large urban gas utility with good arrearage management

Index (per $ of sales, 2003-2004 = 1.00)

Shutoffs
Uncollectibles

2003-2004
2004-2005
2005-2006

Heating Season
### Projected Rate Increases\(^{(1)}\)

<table>
<thead>
<tr>
<th>Year</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Due to Fuel Costs</td>
<td>$6,929</td>
<td>$11,227</td>
<td>$8,254</td>
<td>$8,238</td>
<td>$4,056</td>
<td>$2,467</td>
</tr>
<tr>
<td>Due to Rate Base Investment</td>
<td>$1,078</td>
<td>$3,220</td>
<td>$11,047</td>
<td>$12,872</td>
<td>$20,207</td>
<td>$11,488</td>
</tr>
<tr>
<td><strong>Total Rate Increases</strong></td>
<td><strong>$8,007</strong></td>
<td><strong>$14,447</strong></td>
<td><strong>$20,301</strong></td>
<td><strong>$21,110</strong></td>
<td><strong>$24,263</strong></td>
<td><strong>$13,955</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Y/Y Increase</th>
<th>Cumulative vs. 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>6.0%</td>
<td>10.1%</td>
</tr>
<tr>
<td>2006</td>
<td>10.1%</td>
<td>24.4%</td>
</tr>
<tr>
<td>2007</td>
<td>12.9%</td>
<td>39.2%</td>
</tr>
<tr>
<td>2008</td>
<td>11.9%</td>
<td>56.2%</td>
</tr>
<tr>
<td>2009</td>
<td>12.2%</td>
<td>66.0%</td>
</tr>
<tr>
<td>2010</td>
<td>6.3%</td>
<td></td>
</tr>
</tbody>
</table>

\(^{(1)}\) Lehman Brothers' regulated coverage universe.

*Source: Lehman Brothers Survey, FactSet.*

Dan Ford, Managing Director, Electric Utility Research, PURC, Feb. 2007
Shared infrastructure goals

- Reliability
- Safety
- Pollution control
Consumers are tapped out
First:
Reduce risk

- Prior review (pre-approval)
- Portfolio management (risk management)
- Front-end loading of rate recovery
  - Analogous to home mortgage constant payment
- Efficiency
- Review capital structure
Handle with care

- “Decoupling”
- Smart meters, demand response, real-time pricing
  - Cost-effective for small residential?
  - Low-income concerns
- Single issue rate increases
  - CWIP pre-payment
  - Infrastructure adjustment clauses
- Securitization
Decoupling

- OK for substantial efficiency investment
- Reduce return to and ratio of equity (risk reduced)
- Keep some regulatory lag incentive: transfer less than 100% of risk, maintain rate stability with max. 3%/year rate increase
- Line extension economics to reflect actual revenue
- Periodic rate cases
Low-income

- LIHEAP and state supplements
- Low-income rates
- Charitable contributions
- Arrearage management
- Credit and collection policies
- Weatherization and efficiency
- Percentage of income payments
Conference Price $20

Available from the authors here.

Or order for $25 at www.DemocracyAndRegulation.com

Or 978-283-0897
Jerrold Oppenheim is an independent consultant and attorney who has advised and represented low-income and other utility consumer advocates, labor unions, government agencies, and utilities across the country for more than 35 years. A graduate of Harvard College and Boston College Law School, he led utility litigation and argued precedent-setting cases for four Attorneys General in New York State and Massachusetts and for Legal Services in Boston, Chicago and New York City. He is a member of the Center for Public Utilities Advisory Council, New Mexico State University and has spoken and published on four continents, including Democracy And Regulation with Theo MacGregor and Greg Palast, published by Pluto Press (London) and winner of the ACLU Upton Sinclair Award.