Too Little Money

Harvard Electricity Policy Group
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Steven T. Naumann - Exelon
Price Spikes

- Prices in the Midwest and many other regions spiked in the late 1990s:

Into Cinergy Peak Day Prices

Into Cinergy ATC Prices
Price Spikes

- Prices in the Midwest and many other regions spiked in the late 1990s:

ComEd Peak Hour Prices

![Graph showing ComEd Peak Hour Prices from 1998 to 1999 with a steady increase.](graph_image)
Merchant Generation Boom

- These spikes combined with deregulation led to a generation boom in the early 2000s:

Midwest Regional New Builds

![Bar chart showing new build MW from 1999 to 2003]
Merchant Generation Boom

ComEd New Builds & Uprates Net of Retirements
Industry-Wide Reserve Margins

The generation boom resulted in dramatically higher reserve margins

NERC Capacity Margin Projections by Year

Percent

0 5 10 15 20 25 30

Looking Forward

Projected Capacity/Load Balance

- PJM 2009 – 2010
- ECAR/MAIN 2010 – 2012
- ISO-NE 2012 – 2013
- Texas 2012 – 2013
Load Reaction

Load in MAIN Not Meeting Recommended Level of Reserves

2001 1329 MW
2002 2413 MW
Price Bust

- Dramatically lower prices

![Average ATC Electric Prices Graph](image-url)

- NEPOOL
- PJM
- ERCOT
- Cinergy/ComEd
Price Response

Into Cinergy Peak Day Prices

Peak Day Price ($/MWH)

0 500 1000 1500 2000 2500

Price Response - ComEd

ComEd Peak Hour Prices

Peak Hour Price ($/MWH)

1998 1999 2000 2001 2002
And highly leveraged generation companies have been unable to maintain their debt ratings

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<th>Nov. 2001</th>
<th>Nov. 2002</th>
<th>May 2003</th>
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Capacity Requirement

- Stabilize Boom/Bust Cycle
  - But not a bailout of prior decisions
- Market Immature - Insufficient Load Response
- Bid Caps limit ability to recover costs during hours of scarcity
- Need to ensure adequacy of supply – “iron in the ground” and deliverability
- Will developers be able to raise money? Will banks require PPA in hand?
- Midwest is wrong model – FERC did not impose price caps (see Sept. 22, 1998 Staff Report)
Capacity Requirement

- How to accomplish this?
- State Requirement
  - How does RTO deal with different (or even no) requirements?
  - Can RTO operate energy market with some areas not having generators bidding into the day-ahead market?
- RTO Requirement
  - White Paper relies on regional state committees
  - Obligation on load serving entities is the key