Capacity Market Mischief: Avoiding Unintended Consequences

John Moore
Senior Attorney

Coal Finance 2013
Institute for Policy Integrity
New York University
March 19, 2013
Keeping Our Eyes on the Prize – Slashing Power Sector Carbon Emissions

- Dramatically expand renewables.
  - Support technologies and the markets to integrate them successfully into the grid (flexibility critical).
- Prevent coal plants from using markets to extend lives and foreclose cleaner energy options.
  - Capacity market payments
  - Reliability must run payments
- Assure comparable treatment for all resource options in grid planning.
Jurisdiction Matters

- FERC limits clean energy preferences in wholesale power markets and rates.
  - Focused on reliability – peak load and reserve margins.
  - Recent decision on ISO-NE forward capacity market rules – overrides state clean energy policy standards; related issues elsewhere.
  - Wellinghoff supports compensation framework to reward DR/DG resources.

- States focused on resource adequacy, state policies (some good, some not so good), costs.
MISO Developments

- Most states in MISO are regulated; they opposed a PJM-like capacity market as unnecessary and costly.
- New Resource Adequacy construct represents a middle ground.
- First planning year starts June 1, 2013; auction is a one year forward auction.
- Utilities can satisfy load obligations with a Fixed Resource Adequacy Plan (FRAP).
DR and EE can compete – but many state laws prevent aggregators of retail customers from competing in state – **significant untapped DSM in MISO** (includes fossil fuel backup generation).

- Planning Reserve Margin is based on zone’s peak demand – i.e., inflexible.

- Expected clearing price and likely utility behavior for procuring resources?
Lackluster energy efficiency results to date (922 MW for 2015/16 = 0.5% of cleared resources).

Significant diesel backup generation for DR – mostly in the limited run time product.
PJM integrating state price responsive demand into energy and capacity markets.
Has market sustained coal resources and limited new entry?
External access to PJM market – expect Dynegy and select other gen owners to seek more access.
67% of BUGs are diesel; 15% NG; 7% none, 4% coal.
“Reliability Must Run” Rules/Related Concerns

- Flaws – short notification time, compensation includes pollution control equipment upgrade costs, confidentiality rules – *e.g.*, *broad MISO Universal NDA*.
- PJM largely has avoided need for RMRs – *with significant new transmission projects and excess capacity buffer*.
- MISO just beginning to process retirement notifications – *plants also seeking to ride out low gas prices*. 
Problems (not everyone agrees on their urgency):

- Reliability issue – uncertain whether existing resources will be available beyond 1 year.
- Low energy market prices, inefficient market decisions about retirements.
  - No competition between existing and new generation – cheaper existing may retire.
- Need for grid flexibility to account for changing load shape, significantly more renewable energy resources.
- Enormous statewide reserve margin – but some ineffective resources in wrong place.
Shifting Load Shape Demands Flexibility

Net load

Megawatts

11,000
13,000
15,000
17,000
19,000
21,000
23,000
25,000
27,000

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

Significant change starting in 2015

2013

2015

2020

increased ramp

Potential over-generation

California ISO
Finding the Right Sweet Spot

Q: Where is Energy Efficiency?
Our Preferences

- Reward fast-acting, flexible dispatchable resources to better integrate wind and solar.
  - Emphasize regionalism/larger energy markets.
- Assure comparable treatment for demand side resources in markets and planning.
  - Improve RMR rules
  - Integrate state and regional grid planning (Order 1000).
  - Allow demand side resources in regulated states to access energy and ancillary services markets.
- Capacity markets – a costly substitute for resource planning which don’t address emerging grid needs.
For Additional Information

John N. Moore  
Senior Attorney  

Sustainable FERC Project  
Natural Resources Defense Council  
2 North Riverside, Suite 2250  
Chicago, Illinois 60606  
(312) 651-7927  
Moore.FERCProject@gmail.com  
jmoore@nrdc.org