

Resource/Supply Adequacy

HEPG

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Comment

- Is something missing from this statement?
 - In most regions of the United States, the power supply surplus will be disappearing between 2008 and 2012.
- Most see this as a "factual" statement the accuracy of which can be determined.
- Inherent in this statement is a set of assumptions that influence both the supporting analysis and any resulting conclusions.



What if...

- ...we change the statement to:
 - *At current prices,* in most regions of the United States, the power supply surplus will be disappearing between 2008 and 2012.
 - Notice how these three words dramatically changes the way in which we view the problem...in how we analyze the problem.
 - The three words illustrate the "slippery slope" between central planning and markets.



Materiality

- Claim:
 - From a number of different perspectives, no topic being discussed at the wholesale market level is more important than resource adequacy.

• In particular:

- Investment is expensive.
- Physical capital is long lasting.
- Physical infrastructure affects current and future decisions, e.g. current prices, type of investment, location of investment, timing of investment.
- Other questions:
 - Relationship between "generation" adequacy and transmission capacity.
 - Market design/monitoring/mitigation.
 - Role of the RTO.



Apologies...

- ...to decision makers...but this is a difficult topic that goes to the very core of the institutional structure underlying the industry.
 - Jurisdiction.
 - Reserve margins.
 - POLR.
- There are two fundamental paradigms at play "Trust is fine but control is better".
 - Central planning, e.g centralized decision making.
 - Market, e.g. decentralized decision making.
- Artificial separation between reliability and economics cannot nor should be continued.



Starting point...

- As alluded to, the choice of a starting point is critical.
 - Do you begin by assuming the market cannot deliver the socially desirable outcome and a central planning mechanism is required or vice versa?
 - In effect, do you start by assuming market failures are insurmountable...or do you start by identifying the market failures/obstacles and determining whether these are immutable?
 - To date, there is a lack of actual evidence to suggest the market failures are insurmountable...they may be entrenched but that is a different problem.



Market "Failures"

- Some of the primary reasons that have been given as to why a market cannot be relied upon:
 - Price/offer caps...politically unacceptable to eliminate caps...leads to "missing money".
 - Price volatility...price spikes necessary to compensate peaking units are politically unacceptable.
 - Regulatory remorse...regulators will retroactively impose price caps.
 - Planning reserve margins...shortage conditions will not be tolerated.



The important point...

- ... is these problems exist under a market or central planning...
 - For example, trying to limit price levels or price volatility doesn't make the "problem" go away it just necessitates a different solution...what are the inherent problems and unintended consequences of the "alternative" solution?
 - There is no free lunch...risk exists and one objective should be to design structures that facilitates risk management at least cost.



Fundamental question

- There is an issue that is more fundamental than these market failures...why is the long term price signal in power markets so weak or even non-existent?
 - This is an industry characterized by asset specificity, large capital outlay, network externalities, volatility and we should expect, therefore, that prudent risk management would dictate a high degree of contract cover (for what length?)...and that is essentially what happens in a regulated environment where the regulatory compact substitutes for commercial contracts.
 - A key question that needs to be addressed is whether or not the political/regulatory/commercial environment under open access can accomplish through contracts what was accomplished through franchises and regulation.
 - What impediments in the institutional infrastructure prevent commercial contracting from accomplishing what occurred under regulation (e.g. an effective long term contract)?



MISO - current situation

- MISO began operation of an "energy" market based on LMP on April 1, 2005...
 - Large geographic, political and electrical diversity.
 - No RTO administered capacity or ancillary services markets.
 - Continuation of NERC requirements with regard to capacity (codified under Module E of the MISO Tariff).
 - Have been engaged with stakeholders in discussions through the Resource Adequacy and Supply Adequacy Working Groups.
 - FERC requirement to "address" lack of a capacity market by June
 6, 2006...State and Market Participation expectations.



MISO - capacity mechanism

- Released a Draft White Paper on Resource Adequacy that emphasizes an energy only market with long term contracting for both energy and transmission as a means to ensure the appropriate amount of "iron in the ground."
- Key takeaway is that a lot of work remains...dialogue with stakeholders has been positive...but we are still early in the process and are working through the issues.