



The Role of “Demand Response” in Energy and Capacity Markets

IRPS

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○ Initial Comments

- The two “things” that can, and will, most fundamentally change the electricity industry are:
 - ✓ ***Open Access***
 - and
 - ✓ ***Demand “Response”***
- An argument can be made that “true” demand response is problematic without open access, but the two - in combination - undermine the old paradigm and, as a result will (not can!) lead to fundamental change in the industry.
- It is already here...

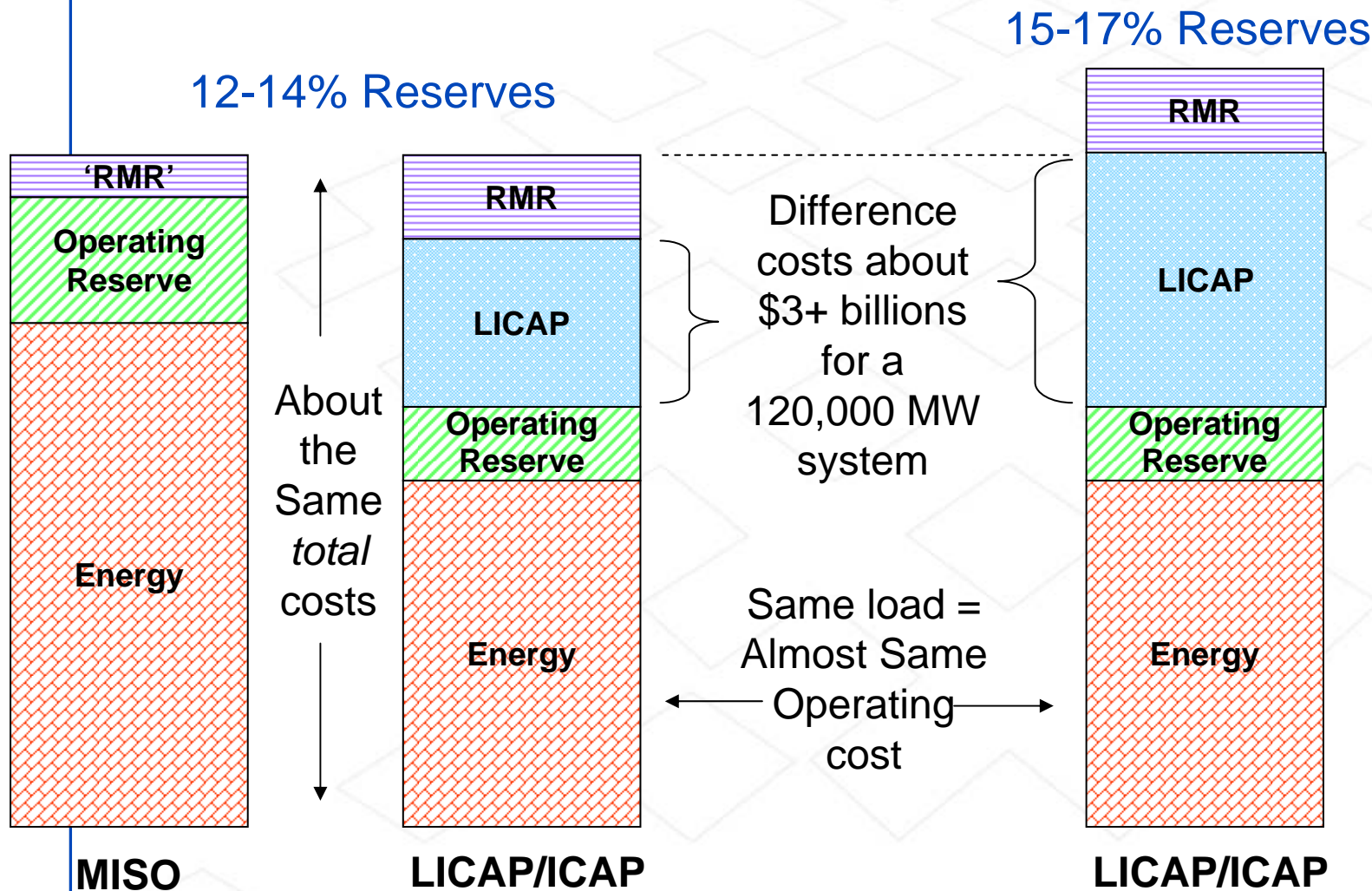
The importance of open access

- Open access - especially “true” open access, i.e non-discriminatory open access - opens up a host of problems relative to the old paradigm
 - *Unfortunately these are difficult...and, to be honest, we haven't really addressed them...yet!*
- “Closed” access has a class of solutions that are appropriate under that policy
 - Granting of franchises, reliance on cost based regulation, planning as a means to ensure outcomes, and command and control...with costs borne by captive ratepayers.
- Under “open” access these solutions don't work.
 - POLR, obligation to supply, long-term transmission rights, long term contracts, resource adequacy...etc

○ ***The effect of demand “response”***

- The industry to date has been underpinned by the “fact” that demand (=load) is unresponsive to price signals - at least close to real time, i.e. “demand” is inelastic.
- Inelastic demand allows terms/concepts like load shedding, reserve margins, and even in some sense reliability to have meaning (i.e. 1 day in 10 years).
- IF, on the other hand, real price elasticity of demand could be achieved...how would you define a reserve margin, what would load shedding mean, or what reserve margin would you know to carry?
- True price responsive demand ultimately blurs the distinction between the wholesale and retail activities...
- ***“Problems cannot be solved at the same level of awareness that created them.” Albert Einstein***

Example: Resource Adequacy Target Set by Reliability Standard



○ *The role of prices*

■ CERA Beyond the Crossroads report

- Does the following statement make sense, or more correctly under what assumption does the following statement make sense?
 - “In most regions of the United States, the power supply surplus will be disappearing between 2008 and 2012.”
- How is it possible to make that statement without reference to price?
 - “**At current prices**, in most regions of the United States, the power supply surplus will be disappearing between 2008 and 2012” or,
 - “**At expected future prices**, in most regions of the United States, the power supply surplus will be disappearing between 2008 and 2012.”

■ The fundamental **role** of price - especially under open access - must be understood.

- We are relying on price to do “things”!

○ ***Concluding remarks***

- Open access and demand response will cause fundamental change in the industry.
- Like it or not, prices matter - they inform and in turn reflect, current production and consumption decisions as well as decisions about investment.
- A “good” price reflects supply ***and*** demand!
 - Demand “response” is not optional!
- As an industry, we are currently straddling two paradigms - what are the consequences?
 - In terms of reliability and global competitiveness.