

Advanced Meter Deployment

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The Regulatory Assistance Project

- RAP is a non-profit organization, formed in 1992, that provides workshops and education assistance to state government officials on electric utility regulation. RAP is funded by the Energy Foundation, US DOE and US EPA.
- RAP Mission:
RAP is committed to fostering regulatory policies for the electric industry that encourage economic efficiency, protect environmental quality, assure system reliability, and allocate system benefits fairly to all customers.



Smart Grid Benefits from Smart Meters and Prices

- Value, of course, but how much?
- And at what cost?

- We've been through this before with energy efficiency – investments through rates by all consumers for a system benefit (possibly in the premises of some, not all)



Regulatory policy is necessary to **accelerate** AMI deployment

- Expensive (PGE: \$1.74 Billion)
- Business Case Is Complex (where to start?)
- Incompatibility of Rate Design, Grid rules and Legacy equipment
- Investors seek comfort
- Consumers need help
- Private sector not mature yet?



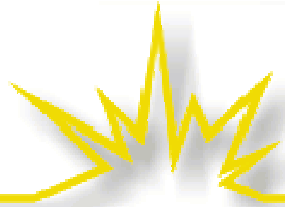
Role of the Regulator

- Sound business case – long term net benefit
 - ❖ What is included in the business case?
 - ❖ Pilots help to understand opportunity, persistence, transformation, ...
 - ❖ Cost Recovery Clarity
- Resolve competitive issues
 - ❖ If regulators want third parties for their innovation, design a system that is sensitive to third party needs
 - ◆ Information consistency that is necessary for competitors to have
 - ◆ Privacy



Regional Consistency

- Safety in numbers among states
 - ❖ Confidence in pilots and business models
- Vendors appreciate common standards over a larger market
 - ❖ Potential economies of scale and competitive environment benefits consumers
 - ❖ Avoid picking winning technology via regulation
- Regional process like MADRI can help



Observations from MADRI

- Utilities want to deploy advanced meters
 - ❖ They seem unsure about the business case
 - ◆ And they are unsure about regulators' receptivity
 - ◆ Use cost of service (ratepayer funded)
 - ❖ They want to share in business opportunities
 - ◆ They don't seem to just want to enable competition
 - ◆ But many utilities exhibit some reluctance to make needed reforms
 - ❖ Sharing info on pilots, inventory and other ideas helps
 - ❖ <http://www.energetics.com/madri/toolbox>



Other Observations

- Third parties are frustrated, but differ on how much nurturing they need
 - ❖ Meanwhile, they have many success stories
- Different strategies for different customer classes, with attention to education
- Legislators that want maximum efficiency are turning attention to smart grid, smart meters, and (most important) smart pricing