NARUC

Serving the consumer interest by seeking to improve the quality and effectiveness of public utility regulation in America.

Incentivization of Infrastructure Operators—Smart Grid Investments: Regulatory Treatment

Commissioner John Betkoski, Member,
NARUC Executive Committee;
Commissioner, Connecticut Public
Utilities Regulatory Authority

10th EU-US Energy Regulators Roundtable
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What is PURA?

- **Connecticut Public Utilities Regulatory Authority**
  - **Formerly known as the Connecticut Department of Utility Control**
  - **Established in 1911, reformed in 2011**
- **Functions**
  - **Ensure rates, services provided by utilities are safe, reliable, and in the public interest**
- **Members**
  - **Three Directors—Chairman House, Vice Chairman Betkoski, Director Caron**

$4.2 Trillion Tab

- **Estimated Cost of Updating ALL Utility Infrastructure**
  - **Water--$1 trillion**
  - **Natural Gas LDCs--$10 billion**
  - **Interstate pipelines--$205 billion**
  - **Electric--$2 trillion**
  - **Telecom--$900 billion**
    - **Total--$4.2 trillion**

Source: The Cruthirds Report, July 24, 2011

Why Incentivized Rates?

- **Performance**
  - **Reward efficient, clean, lean utility service**
- **Safety**
  - **Replacement of utility infrastructure—water, gas pipelines**
- **Generation Development**
  - **CWIP for new nuclear, carbon-capture and sequestration**
- **New Technologies**
  - **Smart meters, smart grid**

Smart Meter Deployment

By November 2012, 23% of all U.S. electricity consumers had smart meters, with approx. 36 million having been deployed

Map courtesy of Google Maps; Date according to U.S. Energy Information Administration, Edison Electric Institute

Connecticut

- **Smart Meter Deployment**
  - **CL&P complete AMR metering system installation in 2005—well before ARRA funding**
    - **As 'smart meters' take hold, PURA will use cautious approach, considering consumers already invested in AMR rollout**
  - **UI advanced-meter deployment began in 2007**
    - **To date, roughly 1/3 of UI's consumers have AMR systems**
- **2013 Connecticut Comprehensive Energy Strategy**

ARRA Funding for Smart Meters

- **American Recovery and Reinvestment Act of 2009**
  - **Approx. $4 billion in federal matching grants for selected smart-grid programs**
- **Jumpstarted smart-meter projects, but still needed State commission review**
  - **Maryland PSC partial rejection**
    - **Eventually worked out differences and project won approval**
- **ARRA success unclear; Consumer concern remains**
  - **Opt-outs**
  - **Cost**
  - **Security**

NARUC Smart Grid Working Group Interactions—White House, CCIF

- **Formed in 2010 to interact with White House Grid Modernization Initiative**
- **Policy Framework for a 21st Century Grid, June 2011**
  - **'Scale what works'**
  - **Unlock innovation with focus on interoperability standards**
  - **Empower Consumers**
  - **Secure the Grid**
- **CCIF**
  - **Utilities, consumer advocates, State commission participation**
  - **Report: Grid Modernization Issues with a Focus on Consumers**

NARUC Smart Grid Principles

- **Passed in July 2011**
- **Highlights—State Commissions encouraged to:**
  - **Consider 'potential' for smart investments to improve reliability, reduce demand, provide consumer information**
  - **Require quantification of costs/benefits of investments**
  - **Ensure cost recovery is predicated on economic, reliability, environmental benefits**
- **Goal: Ensure smart investments will benefit consumers first**

State Commission Perspective

- **Put into perspective**
  - **Remember earlier slide on $4.2 trillion**
    - **Transmission upgrades, pipeline replacement, etc—all these costs are necessary**
- **Any smart-grid proposal must demonstrate public interest and reduce consumer burden**
  - **Bells and whistles are great, but investments must improve the quality of the consumer experience, not accentuate it**
- **Repeat: Ensure smart investments will benefit consumers first**

Questions?

- **Questions?**