

Smart Grid: Regulatory Policy Issues in Retail Electricity

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Ashley C. Brown

Executive Director, Harvard Electricity Policy Group
John F. Kennedy School of Government
Harvard University

Of Counsel, Dewey & LeBoeuf

Critical Policy Issues in Retail Markets

- Pricing
- Risks and Risk Allocation
- Cost Benefit Analysis
- Cost Allocation
- Access to Data and Privacy
- Public Education
- Capturing Benefits on Supply and Demand Sides
- Price Signals or Centralized Demand Dispatch

Pricing

- Real Time Prices Needed to Fully Capture Benefits?
- Smart Meter and Customer Premises Equipment Costs: Energy or Capacity?
- Relation to De-Coupling Sales and Profits

Risks and Risk Allocation

- Technology Risks (Telephony Visits Electricity)
 - Recovering Costs of Assets Whose Technological Obsolescence Occurs Prior to its Physical Demise
 - Keeping Pace With Rapidly Changing Technology

Risks and Risk Allocation cont'd.

- Who Is Best Equipped to Cope With Risks:
 - Utilities And Alternative Supplier Perspectives
 - Risk Minimization or Benefit Maximization
 - Regulatory Considerations (e.g. Depreciation Schedules) Recovery
 - Fear of Stranded Costs
 - Regulatory Pre-Approval
 - Symmetry Between Risk and Control (Socializing Risks)
 - Managers or Regulators Making Technology Choices

Risks and Risk Allocation cont'd.

- Who Is Best Equipped to Cope With Risks:
 - Utilities And Alternative Supplier Perspectives
 - Agility in Responding to Change
 - Regulatory or Customer Focus
 - Best Positioned to Capture Supply Side Benefits?
 - Best Positioned to Capture Demand Side Benefits?
 - Best Positioned to Seize Innovation Opportunities?
 - Unbundling Metering and Billing

Cost Benefit Analysis

- Cost Benefit Analysis
 - Supply Side Benefits (Sufficient Alone?)
 - Demand Side Benefits (Incremental or Necessary?)
 - Appropriate Technology Choices (Investment Levels) Relative to Derivable Benefits

Cost Allocation

- Will Distribution Cost Allocation Take on Same Attributes as Transmission Cost Allocation?
- Implications of Plug in Cars (Planning as well as Costs)
- Inter-Class and Intra-Class Equity Considerations
- Implications for Whether Utility or Alternative Supplier is Best Suited to Take on Responsibility for Smart Metering

Access to Data and Privacy

- What Are Privacy Expectations?
- To Whom Does Customer Data Belong?
- Balancing Privacy And Fully Enabling Competition
- Opt In vs. Opt Out

Public Education

- Need for Educating Consumers
- Role of Utilities? Regulators? Marketers?

Capturing Benefits on Supply and Demand Sides

- Recognizing Substantial Benefits to be Derived on Both Sides
- Implications of Who Assumes Responsibility for Customer Premises Equipment