Controversies and Sources of Resistance to Smart Grid Deployment

Harvard Electricity Policy Group
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Ashley C. Brown
Executive Director, Harvard Electricity Policy Group
Harvard Kennedy School
Harvard University
Critical Policy Issues / Flash Points in Smart Grid Deployment

- 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: Fixed or Variable?
- 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
- 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?
Cost Benefit Analysis

- Supply Side Benefits (Sufficient Alone?)
- Demand Side Benefits (Incremental or Necessary?)
- Appropriate Technology Choices (Investment Levels) Relative to Derivable Benefits and For Whom?
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?
- Are Stakes High Enough to Attract Customer Attention / Effort?
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
- Manufacturers, Vendors and Standardization
Price Signals or Centralized Demand Dispatch

- Relative Costs of Two Approaches
- Impact on Consumer Behavior and Consciousness
- Assurance of Customer Responses
- Competitive Implications