

Challenging the Traditional Utility Business Model

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Characteristics of *Ancien Regime*

- Limited Upside Potential
- Asymmetric Downside Risks
- Absence of Meaningful Price Signals
- Limited Spectrum for Socializing/Privatizing Risks
- Bundled non-Discreet Services and Incentives

Critical Industry Changes

- Rapidly Changing Technology
- Changing Nature of Consumer Needs and Demands
- More Consumer Options
- Greater Awareness of Externalities

Emergence of Competition and Unbundling

- Potential of Service Specific Focus:
 - Generation
 - Transmission
 - Distribution
 - Energy Sales
 - Metering and Billing
 - Demand Side Services

Core vs. Non-Core Services

- Core: Transmission and Distribution
- Non-Core: Everything Else
- Who Is Best Positioned to Perform Core Services?
- Who Is Best Positioned to Perform Non-Core Services?

Erosion from Core Services Revenue Example: Net Metering

- Inefficient Pricing of Distributed Generation
- Treating More Costs as Fixed
- Diluting Efficient and “Green” Price Signals
- Socially Regressive Allocation of Revenue Responsibility
- Inefficient Resource Allocation

Misalignment of Risks and Rewards (Example: Smart Meters)

- 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
- Lost Revenue Risks (Decoupling Sales and Revenues)

Risks and Risk Allocation (Cont.)

- 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?

Conclusion

- Greater Unbundling of Services
- Service Specific Focus
- Limit Utilities to Core Services
- Open Market for Non-Core Services