

Public Policy and Modernization of Energy Systems Regulatory Options

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Public Policy Objectives for Energy Sector:

Three Dimensions

- Adequacy and Reliability
- Productivity and Efficiency
- Competitiveness and Cost

Key Challenge in Meeting Policy Objectives

- Coordination / Communication between Three Principal Players
 - Regulators
 - Utility Management
 - Consumers

Achieving Policy Objectives: Roles of Regulators

- Assure Meeting of Public Policy Objectives
- Develop and Implement Meaningful Incentives for Meeting Objectives
- Develop and Implement Meaningful Price Signals for Consumers
- Develop, Implement, and Enforce Rules for an Efficient Marketplace
- Alignment of Incentives and Public Policy Objectives

Achieving Policy Objectives: Role of Management

- Effective Management
- Competent Work Force
- Smart and Timely Investment
- Strategic and Effective Technology Choices

Achieving Policy Objectives: Role of Consumers:

- Efficient Use of Energy
- Close Attention to Prices and Price Signals
- Effective Utilization of Market Options (e.g. Trading, Demand Side Management)

Obstacles to Achieving Policy Objectives

- Asymmetric Information
- Inadequate Flow of Information
- Perverse Incentives for Performance and Investment

Policy Objectives: Role of Smart Grid

- Enhances Volume of Information Flowing
- Eases Access to and Use of Information
- Provides Tools to Managers to Improve Productivity
- Provides Real Time Usable Information to Customers
- Provides Potential Market Entrants (e.g. ESCO's, Traders) with Meaningful Information

Overcoming Obstacles to Deployment of Smart Grid

- Meaningful Incentives for Investment for Utilities
 - Accelerated Depreciation and/or
 - Differentiated Rate of Return for Smart Grid Providers and/or
 - Pre-Approval of Technology or Plans and/or
 - Clear Guidelines for Investment and/or
 - Decoupling Sales and Revenues and/or
 - Altering Fixed/Variable Cost Recovery

Other, Non-Utility Focused, Regulatory Tools for Investment and Efficiency Gains

- Publicly Accessible Information Portals (OASIS) and/or
- Ease of Entry for Non-Utility Smart Grid Providers and/or
- Privacy and Access to Customer Data and/or
- Competitive Ancillary Services Markets and/or
- Independent Distribution Operator and/or
- Locational Marginal Pricing and/or
- Dynamic Pricing