Rhode Island Power Sector Transformation Initiative Recommendations
Summary of Draft Report to Governor Raimondo
Stakeholder Meeting
October 23, 2017
Outline

• Recommendations to Modernize the Utility Business Model
• Recommendations to Advance Grid Connectivity & Meter Functionality
• Recommendations to Enhance Distribution System Planning
• Recommendations to Pursue Beneficial Electrification
• Implementation Vehicles
• Next Steps
Modernize the Utility Business Model
Modernize the Utility Business Model

#1 Create a Multi-Year Plan and Budget

Review rate cases as a multi-year rate plan with a rate cap that incents cost savings and shares savings with ratepayers.

Traditional Utility Economics Do Not Align with Distributed Energy Technologies

- Citation: Rocky Mountain Institute, “The Economics of Demand Flexibility”, 2015
Modernize the Utility Business Model

#2 Pay for Performance

Shift to a pay for performance model by developing performance incentive mechanisms for system efficiency, distributed energy resources and network support services.
Develop New Models for Partnership and Innovation

Promote new kinds utility partnerships to transition to an information-based utility and to develop revenues that may offset charges to end-users.
Modernize the Utility Business Model

#4 Update Service Quality Metrics to Address Today’s Priorities

Include cyber-security and customer engagement within existing service quality standards.
#5 Assess the Existing Split-Treatment of Capital and Operating Expenses

Convene stakeholders to consider total expenditure approach for future implementation to remove capital bias.
Build a Connected Distribution Grid
Build a Connected Distribution Grid

#1 Advance Advanced Meters

The utility should develop an advanced meter roll-out plan to support two-way energy flow that includes:

- Business case;
- Time varying rates;
- Implementation schedule;
- List of capabilities to be delivered in response to those enumerated by the PST process.
Build a Connected Distribution Grid

#2 Plan for Third-Party Access & Innovation

Utility should submit a plan for how advanced meter capabilities can be accessed by third-party providers, with proper privacy and security protections.
Build a Connected Distribution Grid

#3 Share the Cost Burden

Utility should share communication infrastructure through partnerships to reduce costs.
Build a Connected Distribution Grid

#4 Focus on Functionalities to Avoid Technological Obsolescence

Create a benefit-cost analysis for advanced meter functionality using the categories established in Docket 4600 and based on the business case.

Meters as tech platform for upgradeable apps: 7-Layer vs. 3-Layer OSI Reference Model
Build a Connected Distribution Grid

#5 Proactively Manage Cybersecurity

Provide annual cybersecurity briefing to Commission on threats, responses, and proactive measures.
Leverage Distribution System Information
Leverage Distribution System Information

#1 Synchronize Filings

Utility should file the Infrastructure System reliability and System Reliability Plan as a linked, synchronized DSP filing.
Leverage Distribution System Information

#2 Improve Forecasting

The utility should include detailed information on Distribution System Planning (DSP) forecasts in annual SRP/ISR filings and implement a stakeholder engagement plan during forecast development.

Source: ComEd illustration of distribution system planning aggregated capacity
Leverage Distribution System Information

#3 Establish Data Access Rules

The utility should create a data access plan to make system and customer data easily accessible to customers and third parties, with proper privacy and security protections.
Leverage Distribution System Information

**#4 Compensate Locational Value**

State regulators and policymakers should develop an implementation strategy for compensating the locational value of distributed energy resources.
Advance Beneficial Electrification
Advance Beneficial Electrification

#1 Design Rates to Increase System Efficiency

Electric vehicle rates could be designed to maximize system benefits.
Advance Beneficial Electrification

#2 Outcome-Based Metrics

Beneficial Electrification proposals should include tracking of outcome-based metrics that are relevant to consumers and public policy objectives.
Advance Beneficial Electrification

#3 Beneficial Heating

If the utility proposes beneficial heating programs beyond those it proposes in the 2018-2020 Energy Efficiency and System Reliability Program Plans, they should be consistent with the principles described here.
Implementation Vehicles

- The recommended actions will be taken through a variety of regulatory vehicles over 2017-2019 including:
  - Rate Case Docket
  - ISR Docket
  - SRP Docket
  - EE Program Plan
  - Other, as needed
Next Steps

• Stakeholder feedback on draft recommendations due by Thursday, October 26th.

• Please submit to DPUC.powertransformation@dpuc.ri.gov

• Report to be submitted to Governor Raimondo November 1.

• Additional consultation with stakeholders as implementation vehicles advance
Discussion