

CASE STUDY

DER Integration and Grid Modernization Roadmap

BACKGROUND

Main Public Utilities Commission (MPUC) is a government agency in the state of Maine, responsible for regulating public utilities such as electricity, natural gas, telecommunications, and water companies. MPUC was seeking to partner with an experienced consulting firm to investigate the design and operation of the distribution system by the two investor-owned utilities operating within the state.

CHALLENGE

This investigation required a series of reports about current utility practices, public stakeholder input and perspective on distribution system needs, a gap analysis comparing current tools and practices to those likely to be necessary to meet future needs, and a roadmap detailing key changes and investments to address the identified gaps.

SOLUTION

EPE, on behalf the Maine PUC, developed separate grid modernization and DER integration roadmaps for the two investor-owned utilities in the state of Maine. These roadmaps were based on an investigation and gap analysis of current utility practices covering key areas including:

- Software, Data, and Integrations
- Forecasting, Planning, and Justification
- DER Interconnection
- Distribution Control Center

As part of the project, EPE, in partnership with Grid Strategies, solicited feedback from a number of public stakeholders to understand their needs, priorities, and expectations with regard to grid modernization and DER integrations. Public stakeholder feedback was used to create a gap analysis report comparing utility and stakeholder needs to current capabilities. From these gaps, EPE developed roadmaps for each utility which illustrated worthwhile changes to existing practices as well as new systems and capabilities to address anticipated challenges. A public webinar presented the roadmaps to MPUC, utilities, and interested parties for review and questions.

CLIENT



TYPE

Publicly-Owned Utility (POU)

SECTOR

Distribution

ISO

ISO-NE

LINE OF BUSINESS

Grid Modernization

SERVICES PROVIDED

- Distribution Planning & Operations
- Technical Investigation
- Best Practice Identification
- Recommendation Development
- Roadmap Development

LOCATION

State of Maine

COMPLETED DATES

2021 - 2022



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