

## Governor's Energy Office

### Maine Energy Plan: Pathway to 2040 Meeting

Thursday, September 28, 2023

2:00pm – 4:00pm - Virtual meeting via Zoom

Summary Meeting Notes

## Meeting Summary

This document is a summary of the September 28, 2023, stakeholder meeting for the Maine Energy Plan: Pathway to 2040. Nearly 60 participants joined the 2-hour Zoom meeting about the initiative, which builds upon existing work and will provide a comprehensive basis to inform Maine's best pathway to 100% clean electricity and greenhouse gas emissions reductions.

During the call, the Governor's Energy Office and technical consultants with The Brattle Group and Evolved Energy Research (EER) provided an update on Pathway to 2040 modeling work. The meeting began with reflections from the technical team on the role of demand management, followed by presentations on the Pathway modeling approach and a preview of results for an Initial Reference Pathway. Opportunity for comment and participant Q&A followed each section.

## Presentations

**Celina Cunningham, Governor's Energy Office (GEO) Deputy Director** provided introductory remarks as well as background on Maine's Energy Plan and Pathway study outcomes (see slides 1-6).

**David Plumb, Consensus Building Institute (CBI)** summarized feedback from August's Kickoff webinar and previewed the agenda and goals for the second session (see slides 7 and 8).

**Dean Murphy, Brattle Group** provided an update on the status of the analysis. Guiding question: *What is (/are) the energy supply portfolio(s) that will power Maine and New England throughout the year through now to 2040* (slides 10 – 15).

**Gabe Kwok, EER**, describes the Pathway Modeling approach (slides 16 – 33).

Demand management emerged as a theme from initial feedback following the first session. To kick off the meeting, CBI facilitated a conversational Q&A on demand management with Dean Murphy of The Brattle Group and Gabe Kwok of Evolved Energy Research. The conversation addressed three main questions:

- What is demand management?
- What are other states doing in terms of assumptions for load management and how they are thinking about capital requirements?
- Can you preview how load management will be incorporated into this analysis?

The consultant team noted that the modeling will help to generate results on this issue that are specific to Maine. Broadly speaking, demand management is an essential part of the clean energy transition, as it allows for lower peaks in demand, and therefore less requirement investment in generation, transmission, and distribution infrastructure. The model takes into account demand flexibility by assigning different levels of load flexibility to the various types of energy end uses.

## Public Comment Summary

This session included three separate opportunities for participants to ask questions and provide comments, as well as post comments in the chat. The GEO expects to provide follow up responses to questions that were not addressed during this session. Themes are categorized and summarized below:

- **Location of new generation resources**, including balancing benefits and tradeoffs associated with building new clean generation near areas where demand is high and diversifying geographically to access a range of resources with different power profiles. Are land use constraints considered? Will a transmission build out map be available as part of this process?
- **Regional considerations**. How is the modeling capturing the ISO New England generation mix?
- **Demand management and resource assumptions**. How is demand management built and dispatched within the model? What percentage of electric vehicle (EV) charging is the modeling assumed to be flexible? How are different scale solar technologies (onsite and grid connected) treated in the modeling? Is there supporting material available to show technology and fuel cost assumptions, in particular around zero carbon thermal generation? Are contractual agreements treated consistently in the modeling?
- **Renewable Portfolio Standard and Renewable Energy Credits (RECs)**. Renewable Energy Credits (RECs) are a common mechanism within Renewable Portfolio Standard policies to reduce the cost of RPS compliance (EIA). How are RECs considered? How many RECs are currently sold out of state? Will RECs be an adequate vehicle as we move closer as a state to 80 or 100%? Will we need to have an accounting system that can handle hourly accounting?
  - Several participants engage in discussion around the distinction between “100% of the power purchased in Maine is renewable” and “100% of the power produced in Maine is renewable.” This raises regional implications for how much new generation in Maine is built to serve Maine versus other states.
  - Clarification was sought on the meaning of clean energy resources. The GEO clarified that clean energy resources, for example zero carbon thermal, nuclear, carbon capture and storage, and imports from non-emitting sources are examples of resources in other jurisdictions that go beyond a traditional RPS.
- **Storage** was underscored as a key technology to facilitate the energy transition. Several commenters posed questions related to how storage goals will be achieved. Are grid-scale and behind-the-meter storage treated differently in the model?
- **Equity considerations**. How does this effort support historically disadvantaged and low-income communities across Maine?
- Participant emphasized importance of maintaining a rapid pace in reduction of use and reliance on fossil fuel sources.

David Plumb (CBI) provided closing comments and highlighted next steps. Following the September 28<sup>th</sup> workshop, the consultant team will develop additional pathways exploring key variables. Relative cost impacts for each pathway will be estimated. Policy and implementation considerations will be a focus of the next session, scheduled for Thursday, November 16<sup>th</sup> from 2-4pm ([registration link here](#)).