

Maine Public Utilities Commission

Interim Report Regarding the Status of the Development of an Integrated Grid Plan Pursuant to Public Law, 2021, chapter 702



**Submitted to the Joint Standing Committee on Energy, Utilities
and Technology**

October 13, 2023

I. Introduction

During the 130th Legislature, [Public Law 2021, chapter 702](#) (Act) was enacted. The Act requires, among several other things, the Maine Public Utilities Commission (Commission) to initiate a proceeding by November 1, 2022, then every five years thereafter, to identify the priorities to be addressed in a filing by investor-owned transmission and distribution utilities (utilities) regarding a grid plan that will assist in the cost-effective transition to a clean, affordable and reliable electric grid. The Act specifies that the Commission is required to hold technical conferences or stakeholder workshops to identify priorities, assumptions, goals, methods and tools that will assist the utilities in developing a grid plan. Upon conclusion of the technical conferences and stakeholder workshops, the Commission is directed to issue an order directing utilities to submit a filing within 18 months of the issuance of the order that addresses the priorities identified in the proceeding and includes the additional components identified in [35-A M.R.S. § 3147\(4\)](#).

Upon receipt of the filing by utilities, the Commission is required to make those filings available for public comment for a period of no less than 60 days. The Act provides the Commission with the authority to order a utility to revise the filing to address any deficiencies. The Act allows the Commission to use the filing and the input received from interested parties in rate cases or other proceedings involving the utility.

As required by section 11 of the Act, the Commission submitted a report on December 1, 2022, to the Joint Standing Committee on Energy, Utilities and Technology (Committee) that included an assessment of the staffing and resources that may be necessary to comply with the integrated planning provisions contained in the statute. The Act provided the Committee with the authority to report out legislation on the subject matter of the report to the 131st Legislature in 2023; however, the Committee did not take the report up during the 2023 legislative sessions. The report stated that the Commission had determined the following resources are needed: consulting assistance to provide technical assistance and help in identifying priorities; consulting assistance to assist in the facilitation of the stakeholder process to identify priorities; and a new, full-time staff position requiring a background in electrical engineering to assist with the development of priorities and evaluation of grid plans filed by the utilities. The Commission will meet the requirements of the Act using existing staff and their expertise in combination with the use of consulting services for both the facilitation of the stakeholder process and for technical assistance with the development of priorities and the review of the filings submitted by the utilities. These future consulting needs will be reflected in future budget proposals by the Commission.

Section 9 of the Act requires the Commission to submit an interim report no later than October 15, 2023, regarding the status of the development of an integrated grid plan required by 35-A M.R.S. § 3147. The Act provides the Committee with the authority to report out Legislation on the subject matter of the report to the Second Regular Session of the 131st Legislature in 2024.

To date, the Commission has worked extensively on meeting the requirements of the Act, including engaging various stakeholder and the utilities to obtain input on both the process and the priorities. The table in section II of this report provides a snapshot of the steps taken thus far to identify priorities to be include the filing by the utilities.

II. Overview of Process

Date	Activity
September 12, 2022	The Commission initiated an inquiry to seek input on the process to be utilized to identify priorities.
November 1, 2022	The Commission issued a “Notice of Proceeding,” which included a summary of the many comments received in the inquiry and noted the Commission would provide further details on the process of this proceeding once it took all those comments into account.
January 6, 2023	The Commission issued a Procedural Order that laid out the initial process for the proceeding as well as the date for the first stakeholder workshop.
February 3, 2023	The first stakeholder workshop was held and included presentations by Central Maine Power, Versant Power and the Efficiency Maine Trust to provide stakeholders with the same baseline information and included an overview of the Commission’s plan for the proceeding including the use of a facilitator for the meetings (Electric Power Engineers (EPE)).
March 23, 2023	The second stakeholder workshop was held and included: a presentation on the facilitation process to be utilized by EPE; a presentation from the GEO on the Governor’s energy initiatives; and a presentation regarding the Maine Utility/Regulatory Reform and Decarbonization Initiative.
April 25, 2023	The third stakeholder workshop was held and included: a presentation from Lawrence Berkeley National Lab on integrated grid planning efforts across the country; presentation from Portland General Electric on the planning process in Oregon; and a panel discussion that included the OPA, the Trust, the GEO, CMP and Versant.
May 2023	Established technical working groups and developed the initial scope of the work for the meetings.
June 1, 2023	The first working group meeting was held to explore technical details regarding forecasting.
June 7, 2023	The second working group meeting was held to discuss establishing solution evaluation criteria (a clear, consistent way to assess various solutions).
June 15, 2023	The third working group meeting was held to explore technical details regarding data availability/collection. At the request of stakeholders, the Commission focused on developing a straw proposal and identifying additional information necessary to draft the proposal.
July 2023	The Commission reviewed responses to various information requests made in May and June and materials and resources filed in the docket regarding grid planning work in other states.
August 2023	The Commission sought stakeholder comments on top priorities and issues raised during initial working group meetings as well as additional information from utilities.
September 2023 - present	Stakeholder comments and information responses were filed. The Commission and its consultant are working on a straw proposal and will be seeking stakeholder comments on it and engaging stakeholders to discuss the proposal and next steps.

III. Notice of Inquiry

On September 12, 2022, the Commission opened [Docket No. 2022-00290](#) initiating an inquiry into the process to be utilized to identify priorities to be addressed in the utility grid plan filings and how best to encourage participation, especially by those stakeholders that do not frequently participate in Commission proceedings. The Commission received initial comments on October 3, 2022 from the Natural Resources Council of Maine (NRCM), Acadia Center, Union of Concerned Scientists, Conservation Law Foundation (CLF), Maine Conservation Voters, and The Nature Conservancy in Maine filing jointly; Maine Climate Action Now, Maine Youth for Climate Justice and the Sierra Club, filing jointly; the Coalition for Community Solar Access and Maine Renewable Energy Association, filing jointly; the Office of the Public Advocate (OPA); Central Maine Power (CMP); and Versant Power (Versant). Reply comments were filed on October 17, 2022, by the NRCM, Acadia Center, Union of Concerned Scientists, CLF, Maine Conservation Voters, and The Nature Conservancy in Maine, filing jointly; the Governor’s Energy Office (GEO); Versant; and CMP.

IV. Proceeding to Identify Grid Plan Priorities For Grid Filings (Docket 2022-00322)

On November 1, 2022, the Commission issued a “Notice of Proceeding” (NOP) in [Docket No. 2022-00322](#) as required by the Act. The Commission provided a summary of the comments it received in its inquiry, noted the volume and detailed nature of the comments received, and stated that the process for this proceeding would be subsequently filed in the docket.

Initial Process

On January 6, 2023, Commission Staff issued a Procedural Order laying out the initial process for this proceeding and scheduling an initial stakeholder meeting, which was held on February 3, 2023. The Commission noted that its initial process incorporated many suggestions where there was some consensus among the inquiry commenters and outlined its goal to have a transparent and robust process that is collaborative and accessible to all interested stakeholders.

At the initial stakeholder meeting, the Commission stated that it intended to initially hold several half-day stakeholder workshops and had engaged Electric Power Engineers (EPE)¹ to facilitate the meetings and provide technical support. Many commenters had recommended that the Commission hire a facilitator and EPE had recently done extensive work related to Maine’s distribution system. The Commission noted that it intended to work with its facilitator and stakeholders in determining workshop format, content, and additional process in this proceeding, that agendas would be prepared and posted in the docket in advance of each meeting, and that the Commission also intended to issue documents at various points in the process identifying areas of apparent consensus on the priorities and allow stakeholders to file written comments in response. The Commission noted that there would be multiple opportunities for stakeholder input through stakeholder workshops and written comments. In addition, the Commission stated that if individuals or entities would prefer to submit written comments on the issues in this proceeding, they could do so at any time. The Commission also created a direct link to the docket on the Commission’s homepage under Recent Orders and Cases of Note to make

¹ <https://epeconsulting.com/>

information in the docket easily accessible for individuals not familiar with the Commission’s online filing system.

The Commission conducted outreach efforts to interested stakeholders who do not regularly participate in Commission proceedings. The Commission reached out to inquiry commenters, including environmental groups and the GEO, to help identify and reach out to environmental justice and equity groups and other organizations and communities who do not typically participate in Commission proceedings but may be interested in this docket. The Commission also provided information to these individuals about the possibility of participant or intervenor funding to help people participate in the proceeding. In addition, the Commission contacted Maine's tribal representatives, municipal contacts, the Chamber of Commerce and the National Association of Nonprofits. Finally, the Commission had discussions with ISO-New England regarding this docket and also met with representatives of the U.S. Department of Energy and Lawrence Berkeley National Laboratory to discuss the work that they have done on grid planning in other states and the potential for additional technical or other assistance that they could provide to the Commission in this effort.

Stakeholder Meetings

Stakeholder Workshop 1 (February 3, 2023)

The Commission and stakeholders heard presentations from CMP and Versant about their current grid planning processes followed by a presentation by the Efficiency Maine Trust (Trust) related to what it currently does with respect to its Triennial Plan and electric vehicle adoption. This was based on suggestions received in the inquiry docket that a foundational knowledge or baseline understanding be established on the current state of the grid and the current process for grid planning.

The first stakeholder workshop also included a presentation from EPE regarding its “roadmap reports” (which provided recommendations for preparing the distribution system for the needs of the future) as many commenters in the inquiry agreed that the roadmap reports developed by EPE and related work in [Docket No. 2021-00039²](#) should be incorporated as a starting point because it overlaps substantially with the issues to be considered in this proceeding. The roadmap reports as well as an executive summary and summary slide presentation were filed in the docket prior to the stakeholder workshop.

Stakeholder Workshop 2 (March 23, 2023)

EPE opened with a presentation on its facilitation process. The GEO provided a presentation on the Governor’s energy initiatives that may impact or relate to the grid planning process and provided an overview of the State’s climate goals as they relate to the electric grid. There was also a presentation regarding the Maine Utility/Regulatory Reform and Decarbonization Initiative (MURRDI) and its stakeholder recommendations on how to plan, build, and operate the electric grid that is needed to meet Maine’s climate and energy requirements. Suggested background reading materials including the

² The purpose of Docket No. 2021-00039 was to conduct a comprehensive examination of the design and operation of the electric distribution system in Maine to accommodate the increasing integration and operation of Distributed Energy Resources (DER) and the potential for a substantial increase in load resulting from climate change policies and initiatives that seek to encourage electrification in the heating and transportation sectors. EPE completed its work in three phases, culminating in the following reports: (1) the Distribution System Examinations; (2) the Gap Analysis, which identified gaps between the current state of the distribution system and the needs or desired system of the future; and (3) the Roadmaps.

Maine Climate Council's reports and the MURRDI report were distributed to stakeholders in advance of the workshop. Finally, EPE conducted an interactive process to solicit engagement from stakeholders to aid in developing the priorities for grid planning. This included a discussion on potential challenges and the most important outcomes that should result from the process. EPE also laid out a proposed schedule for future meetings and discussion topics. There was discussion about the list of potential topics, many of which could be discussed at great depth, and whether the Commission could narrow the list.

Stakeholder Workshop 3 (April 25, 2023)

Lawrence Berkeley National Laboratory presented on integrated grid planning efforts across the country. Portland General Electric presented on the integrated grid planning process in Oregon. Suggested background reading materials related to grid planning work in other states were distributed to stakeholders in advance of the workshop.

Based on feedback at the March stakeholder workshop to further focus or narrow the discussions at future workshops, the Commission included a panel discussion with the OPA, the Trust, the GEO, CMP and Versant on how Maine can build off other state experiences to meet the State's clean energy and climate goals. The panel discussed the goals of the grid planning process as well as topics for deeper stakeholder discussion or technical working groups. The panel also held an initial discussion about the identification of priorities for the Commission's consideration. The Commission noted that it believed it would be helpful to have this discussion with the State entities that presented on the State's policies and the utilities doing grid planning and then solicit broader stakeholder feedback.

A number of stakeholders noted the use of technical working groups in other states where subject matter experts with knowledge and background on particular topics such as forecasting could explore more of the technical details including what gets forecasted and the various assumptions and methodologies to be used. While several other potential topics were suggested, there was general agreement from the panel of government entities and utilities on the following initial working groups: Forecasting; Solutions Evaluation Criteria; and Data Availability/Collection.

Technical Working Group Meetings

In May, the Commission established the technical working groups and developed an initial scope of work for the meetings. An initial round of working group meetings were held on June 1, June 7, and June 15, 2023. The meetings were led by Commission Staff and EPE, and were open to all stakeholders, with the intention that utilities and interested organizations would assign subject matter experts to meaningfully participate as practical. Recognizing that all stakeholders would not participate in the working groups, the Commission noted that it would share information from them with the larger stakeholder group throughout the process. The working groups discussed:

- *Forecasting*: Determining what gets forecasted, over what time period, what level of spatial granularity and using what assumptions, what entities should be responsible for providing input or data that would be integrated into the forecasts, examples from other jurisdictions and the format for presenting the forecasts.
- *Solution Evaluation Criteria*: Establishing a clear/consistent way to assess various solutions (decision-making framework) and the methodology, guidelines, and metrics that should be considered in evaluating solutions, examples from other jurisdictions, how to minimize the

possibility of overbuilding the system, whether there should be a predetermined set of solutions to consider (e.g., traditional solutions, nonwires alternatives (NWA), emerging technology solutions), whether a formal cost benefit methodology required and if so what should be considered in that methodology.

- *Data Availability/Collection*: Identifying what information different stakeholders (i.e., customers, developers, third parties) need and for what purpose, if the information exists, who owns it or collects it, who should get access to it, is the information in a format that can be widely shared without proprietary applications, if it is not currently collected, what needs to be done to obtain the information and what examples from other jurisdictions could be useful.

Several stakeholders stated that it would be helpful if the Commission could develop a straw proposal to help move the discussions forward. While the Commission had intended to do that at a later point in the docket, it was suggested that doing this sooner would help move the process forward. Based on these discussions, the Commission cancelled additional scheduled technical working group meetings to allow the Commission to follow up on information discussed at the initial technical working group meetings and seek additional information to aid it in developing a straw proposal with the intent of narrowing and focusing the work.

Written Comments and Information Requests

In August, the Commission sought comments from stakeholders regarding potential priorities discussed in prior workshop and technical group meetings. The Commission also sought comments on issues raised during the initial technical working group meetings as well as how the Commission should evaluate or determine cost-effectiveness and balance potential needed investments for what will be demanded from the system and customer affordability. Comments were filed September 1, 2023, by the GEO; OPA; the Trust; AARP Maine; the Coalition for Community Solar Access; the Acadia Center, CLF, Maine Conservation Voters, NRCM and the Union of Concerned Scientists, filing jointly; CMP and Versant.

The Commission also issued various information requests in May, June and August, which included directing CMP and Versant to report on the status of implementing the EPE roadmap report recommendations to date.

V. Next Steps

The Commission and its consultant are preparing a straw proposal to issue in the docket. The Commission will seek stakeholder written comments and reconvene stakeholders to discuss the proposal and next steps.

Because this is the first integrated grid planning proceeding in Maine, the Commission continues to be thoughtful in how it develops this process, solicits stakeholder input and learns and builds on the experiences in other states. The Commission appreciates the detailed comments and active participation by the broad range of stakeholders in this process and expects that future proceedings will move more quickly. The Commission looks forward to continuing to work collaboratively with stakeholders and the utilities in identifying the priorities and other information to be contained in the grid plans that will assist in the cost-effective transition to a clean, affordable and reliable electric grid.