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May 8, 2023

RE: Initial Recommendations on the Electric Distribution Companies' Electric-Sector Modernization Plans

To Whom It May Concern:

Pursuant to [G.L. c. 164, §§ 92B-92C](#), the Grid Modernization Advisory Council (GMAC) is charged with reviewing and providing recommendations to the state's investor-owned electric distribution companies' (EDCs) electric-sector modernization plans (ESMPs). The GMAC and ESMP system stem from the 2022 landmark law, "An Act Driving Clean Energy and Offshore Wind" (Climate Law). The Climate Law requires that the state's EDCs prepare the ESMPs to proactively upgrade the distribution system and meet multiple objectives, including:

- Improve grid reliability, communications, and resiliency;
- Enable increased, timely adoption of renewable energy and DERs;
- Promote energy storage and electrification technologies for decarbonization;
- Prepare for climate-driven impacts on transmission and distribution ("T&D") systems;
- Accommodate transportation and building electrification, and other new loads; and
- Minimize or mitigate impacts on ratepayers.

The Commonwealth's Clean Energy and Climate Plan for 2050 (2050 CECP) lays out a comprehensive and aggressive plan to achieve net zero greenhouse gas emissions. The dominant strategy to decarbonize transportation and buildings is electrification, thereby making power sector planning essential.

Distribution system planning is necessary to understand the need, cost, and benefits of upcoming grid-side investments especially because these investments have significant cost and long-term implications for the power system. The GMAC and ESMP system represent an opportunity for transparent and comprehensive integration of distribution system planning that engages a broad set of stakeholders, including policymakers and regulators.

As the Chair of the GMAC, and as the state energy office charged with developing and implementing policies and programs aimed at ensuring the adequacy, security, diversity, and cost-effectiveness of the Commonwealth's energy supply to create a clean, affordable and resilient energy future, the Department of Energy Resources (DOER) is invested in developing ESMPs that meet all the objectives outlined in the Climate Law and in the 2050 CECP.

The timeline set by the Legislature in the Climate Law is rapid, requiring the EDCs to submit draft ESMPs to the GMAC for review by September 1, 2023. The EDCs must then file final ESMPs, inclusive of GMAC feedback, with the Department of Public Utilities (DPU) by January 29, 2024. In the interest of providing initial guidance to the EDCs as they develop their first draft plans, DOER suggests the following recommendations.

## Recommendations

1. **The ESMPs should include a comprehensive and clear synthesis of existing investment areas, implementation plans, future planned investments, and ongoing metrics reporting.**

Non-technical stakeholders should be able to read and understand key utility investments, the timeline on which they will occur and why, and the EDC planning process. The Climate Law requires that the ESMPs “consider and summarize all proposed and related investments and alternatives that have been reviewed, are under consideration, or have been previously approved by the Department.” This all-inclusive synthesis effort is a critical component of the ESMPs and aligning current and future investments with planning processes. The EDCs should be clear in what is and is not included in their review, with specific references to publicly available data and maps, dockets, timelines, working group scopes, and anything else part of the distribution system planning process in the Commonwealth.

DOER recommends the EDCs synthesize investments, programs, and timelines from areas including but not limited to:

- Grid modernization (D.P.U. 21-80/81/82-A, D.P.U. 21-80/81/82-B, and dockets D.P.U. 22-40, 41, 42),
- Electric vehicle charging infrastructure programs (D.P.U. 21-90/91/92-A),
- Utility-owned storage investment plans (D.P.U. 20-69-A),
- Long-term system planning (D.P.U. 20-75-C),
- Provisional System Program capital investment projects (CIPs) (dockets D.P.U. 22-47, 22-51, 22-52, 22-53, 22-54, 22-55, 22-61, 22-170, 23-06, 23-09, 23-12),
- Energy Efficiency Three-year plans (D.P.U. 21-120-21-129).
- Rate cases (D.P.U. 18-150, D.P.U. 19-130, D.P.U. 22-22, and any proposals contained in a pending base rate case),
- Performance-based ratemaking schemes as approved in D.P.U. 18-150 and D.P.U. 22-22, and
- Distribution system reliability and safety dockets (such as the Annual Planning and Reliability Report, reporting of outage events, Service Quality Performance Reports, and vegetation management programs).

Existing and new working groups should also be summarized and synthesized including the Energy Storage Interconnection Review Group (ESIRG), the Technical Standards Review Group (TSRG), the advanced metering infrastructure stakeholder working group, clean energy transmission working group (CETWG), among others. Dockets that impact aspects of distribution system planning should also be considered, for example any impacts to electrification load from the future of gas proceeding (D.P.U. 20-80).

Several states across the U.S. have implemented integrated distribution system planning processes that seek to coordinate policy goals and objectives, distribution system investments, long-term planning processes, and transparent stakeholder engagement. These examples, and resources provided through the U.S. Department of Energy, should serve as a foundation of knowledge for the EDCs to reference.<sup>1</sup>

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<sup>1</sup> See, for example, the [Training Webinars on Electricity System Planning](#) provided by the New England Conference of Public Utility Commissioners (NECPUC) and National Association of Regulatory Utility Commissioners (NARUC); the [Modern Distribution Grid Project](#) provided by U.S. DOE’s Office of Electricity Delivery and Energy

2. **A common template and formatting should be used across the EDC ESMPs.** The EDCs should use a common template and format for their electric-sector modernization plans that is clear, in plain-language, and comprehensive. Technical terms should be clearly defined in an appendix and when referenced for the first time in text. DOER, in collaboration with the GMAC and EDCs, proposes to support the development of a template to share with the DPU.
3. **The EDCs should develop and define a process that provides updates for stakeholders on the status of proposed EDC ESMP strategies and timelines throughout the five-year cycle.** Many electric utility functions and components are changing as the EDCs evolve to fully integrate DERs into their operations and business models. The EDCs are required to submit two reports per year to the DPU and the Joint Committee on Telecommunications, Utilities, and Energy on the deployment of approved investments in accordance with any performance metrics included in the approved plans. The EDCs should also provide updates to stakeholders outside of any adjudicatory proceedings. Updates to the ESMP will serve to fully and clearly describe the status of processes and tools used or proposed by the EDCs as well as those currently or soon to be provided to DER developers/operators and other stakeholders tracking electrification. The EDCs should identify and propose appropriate working groups for issues or barriers identified in the ESMPs, including but not limited to interconnection, building electrification, and forecasting. The EDCs should define how any existing and proposed working group contributes to the ESMPs. Updates communicated to the GMAC and other stakeholders should include a report on progress, detailed description of implementing all necessary policies, processes, resources, and standards, and a description of how the ESMP planning and implementation efforts are organized and managed. Electric utilities in New York State, for example, submit Distribution System Implementation Plans every five years with updates to the plans every two years.<sup>2</sup>
4. **The EDCs should provide all relevant non-confidential and non-critical energy infrastructure information and data to the GMAC as appropriate to facilitate stakeholder review of information that will likely be subject to discovery at the DPU during ESMP review.** It is important that the GMAC, the DPU, and the EDCs coordinate to identify necessary data and information needed to support review of a the ESMPs. Having a complete record of the data used to prepare the ESMP in advance of the September 1<sup>st</sup> deadline for GMAC review will not only facilitate GMAC review, but the subsequent adjudicatory review by all intervenors and the DPU, both of which face compressed timelines for action. Data should be provided in a consistent format across EDCs in unlocked excel spreadsheets with all equations in cell links active and included. Due to challenges associated with sharing confidential and critical energy infrastructure information (CEII), including potential security and competitive advantage risks, it is the recommendation of DOER that data and information requests from the GMAC are limited to non-confidential and non-CEII data. The EDCs should endeavor to provide responsive data and information in such a way as to facilitate ESMP review within this limitation.
5. **The EDCs should propose a robust stakeholder engagement process in their ESMPs.** The GMAC is one avenue for stakeholder engagement but should not be the sole stakeholder entity engaged by the EDCs. The Climate Law requires that EDCs conduct technical conferences and at least two stakeholder meetings to inform the public, state and federal agencies, and companies

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Reliability and the Pacific Northwest National Laboratory; and some recent integrated distribution system plans from [New York](#), [Colorado](#), [Michigan](#), [Minnesota](#), and [Oregon](#).

<sup>2</sup> See the New York Distributed System Implementation Plans here: <https://jointutilitiesofny.org/utility-specific-pages/system-data/dsips>.

involved in “developing & installing distributed generation, energy storage, vehicle electrification systems, and building electrification systems.” Given the anticipated impact on communities of ESMP infrastructure build-out, continued stakeholder engagement and an inclusive outreach approach to communities is paramount to an open and transparent distribution system planning process. Particular attention must be paid to environmental justice communities who too often bear an unequal burden in hosting energy infrastructure yet are slow to directly benefit from the very decarbonization and clean energy assets the Commonwealth’s climate goals focus on.

6. **The EDCs should prioritize strategic planning in the first ESMP process.** There are benefits to limiting the ESMPs to be a strategic planning document that seeks to meet the objectives as written in the Climate Law, coordinate the multiple investment streams, propose future investments, and ensure stakeholder engagement and input. Such a process implicates the various DPU proceedings through which the adjudication of cost recovery of investments proposed in the ESMP are appropriate. DOER suggests that the ESMPs should be the central distribution system planning document and in any filing in which the EDC is requesting cost recovery they include a reference between their requested expenditures and their investment planning and timelines as submitted in their ESMPs.
7. **The EDCs should include a discussion of investment alternatives and alternative approaches to financing investments, and clearly communicate any proposed changes to stakeholders.** The Climate Law explicitly requires the EDCs to discuss investment alternatives (including ratemaking treatment changes, load management, flexible demand, dispatchable demand response) and alternative approaches to financing investments (like cost allocation between developers and ratepayers, and equitable allocation/sharing of costs across other states/populations). Given advancing technologies and ratemaking treatment methodologies, as well as challenges in siting and constructing infrastructure, ESMPs should explore such alternatives to traditional utility investment and ensure that investments minimize or mitigate impacts on ratepayers. These will be important components of distribution system planning and the ESMPs present an opportunity for a transparent and open discussion between the EDCs and the stakeholder community in advance of cost recovery proceedings and support consistent rate design between companies.

DOER looks forward to further discussions with the GMAC members, the electric distribution companies, and other interested stakeholders as the ESMPs are developed and finalized for submission to the Department of Public Utilities.

Signature,

A handwritten signature in black ink, appearing to read "Elizabeth Mahony", written in a cursive style.

Elizabeth Mahony  
Commissioner  
Massachusetts Department of Energy Resources