Creating A Clean, Affordable, Equitable and Resilient Energy Future For the Commonwealth

COMMONWEALTH OF MASSACHUSETTS
DEPARTMENT OF ENERGY RESOURCES

Grid Modernization Advisory Council

September 13, 2024

Roll Call & Agenda

Item	Time
Welcome, Roll Call, Agenda	1:00 – 1:05
Public Comment Period	1:05 – 1:20
Meeting Minutes Review and Voting Updates from the Executive Committee	1:20 – 1:30
ESMP Order Review • GMAC Opening Thoughts • GMAC Consultant Summary and Discussion	1:30 – 2:40
10-minute Break	*2:40 – 2:50*
ESMP Order Review • EDC Next Steps • GMAC Next Steps	2:50 – 3:30
2024 Meeting Schedule	3:30 – 3:40
Stakeholder Engagement Materials and GMAC Logo	3:40 – 3:55
Close	3:55 – 4:00

Public Comment

- 15-minute period for public comment
- Speakers will have up to **3 minutes** to speak on any topics of interest related to the GMAC. Once everyone who has pre-registered has provided comment, others may speak, as time allows.
- Please state your name and affiliation before delivering your comment.

Meeting Minutes

- Calling for vote to finalize:
  - June 13, 2024 GMAC minutes
  - August 9, 2024 Executive Committee minutes

- *Motion to approve the June 13th minutes [as distributed/as corrected]?*
- *Motion to approve the August 9th ExCom minutes [as distributed/as corrected]?*

Updates from the Executive Committee

- **2025 GMAC Budget Filing**
  - The CY2025 GMAC budget is due to the DPU by **October 18, 2024**.
  - DOER and the GMAC consultants are preparing filing materials.
    - Actively thinking about 2025 budget activities based on ESMP Order
  - The ExCom will meet September 27, 2024 to discuss the CY2025 budget.

GMAC Opening Thoughts on ESMP Order

- The GMAC consultants will summarize the DPU's ESMP Order by section.
  - The consultants will pause after each section for GMAC discussion.

- Before doing so, we now invite any interested GMAC members to share initial reactions and thoughts on the outcomes of the ESMP Order.

Wired Group

Synapse
Energy Economics, Inc.

Department of Public Utilities 8/28/2024 Order on Massachusetts Electric Sector Modernization Plans in Dockets DPU 24-10/11/12

Summary of Key Department Findings

for the Massachusetts Grid Modernization Advisory Council

Synapse Energy Economics
Wired Group

September 13, 2024

Outline of This Presentation

1. Glossary

2. Summary of the Department Order

- Including questions for discussion throughout

3. Next Steps for the GMAC

4. Appendix

- **Sections 92B and 92C of the Massachusetts 2022 Climate Act**

1. Glossary

ARR	Annual Reliability Report
CBOs	community-based organizations
CESAG	Community Engagement Stakeholder Advisory Group
CIP	Capital Investment Project
DER	distributed energy resource
DR	demand response
EDC	electric distribution company
EE	energy efficiency
ESMP	Electric-Sector Modernization Plan
ESS	energy storage system
EV	electric vehicle
ISRE	Infrastructure, Safety, Reliability, and Electrification
HP	heat pumps
LTSPP	long-term system planning process
NWAs	non-wires alternatives
PV	photovoltaic
TVR	time-varying rates
VPP	virtual power plant

2. Summary of the Department Order

Summary of the Department Order: Outline

Order Contents

I. Introduction and Procedural History

II. Statutory Requirements

III. Description of Companies and Current State of Distribution System

IV. Framework for Review

V. Grid Modernization Advisory Council

VI. Forecasts and Demand Assessments

VII. Electric Sector Modernization Plans

VIII. Cost Recovery Framework

IX. Bill Impacts

X. Metrics

XI. Reporting Requirements

XII. Order

These slides cover the ESMP Order sections that are presented in bold.

They provide a summary of only the Department's analysis and findings.

They do not provide background or the positions of the parties.

We will pause after key sections for GMAC discussion

IV. Framework for Review (1) (pp. 27-61)

Summary of Findings

The question for the Department to resolve:

- Whether Sec. 92B dictates that the scope of investments and Department review (1) is limited to new, incremental ESMP investments, or (2) also includes non-ESMP (core) investments. (pp. 44-45)

The Department finds that the scope of its review is limited to the new, discrete, and incremental ESMP investments (p. 49).

The Department declines to make the ESMPs each company's central distribution system planning document (pp. 55-56).

IV. Framework for Review (2) (pp. 27-61)

Department Assessment of 92B

The Department finds that the 92B subsections play the following roles:

- **92B(a)** Identifies the goals the EDCs must pursue in developing an ESMP.
- **92B(b)** Requires ESMPs to describe specific elements relevant to the ESMP (p. 48).
- **92B(c)** Identifies the necessary considerations for plan development only (p. 48). Outlines the elements that must inform the development of the ESMP prior to submission to the Department (p. 49).
- **92B(d)** Establishes the standards by which the Department must approve a plan (p. 47).
- **92B(e)** Determines that ESMPs shall propose discrete, specific, enumerated investments, and alternatives to such investments, to achieve multiple goals of grid modernization (p. 49).

IV. Framework for Review (3) (pp. 27-61)

Department Rationale for Limiting Scope

GECA argues that 92B(c)(ii) requires ESMPS to include a summary of "all proposed and related investments" and alternatives, suggesting a broad scope of review.

- The Department rejects this argument, claiming that the Legislature identified a clear distinction between 92B(c) and the other sections in 92B, because 92B(c) is introduced with the terms "in developing a plan pursuant to 92B(a)" instead of the terms "in a plan developed pursuant to 92B(a)" (p. 48).
- Thus, the Department declines to interpret the language of 92B(c) as expanding the scope of its review (p. 49).

(1) The Department also finds that the language of 92B(a), (b), and (c) evince a clear intent to submit a plan that proposes "discrete, specific, enumerated investments and alternatives (p. 49).

- Because these three subsections repeatedly use terms "improve/improvements" and "increase/increased" that indicate investments above and beyond business-as-usual investments (pp. 49-50).

(2) The Department also finds that 92B(c) bolsters its determination of scope because it applies to the considerations required for developing the plan that precedes the plan itself (p. 50).

IV. Framework for Review (4) (pp. 27-61)

Department Rationale for Limiting Scope

The Department also finds that 92B(c)(ii) expressly limits the summary of investments to those "that have been reviewed, are under consideration or have been approved" by the Department previously (p. 51).

- Such a summary prepared in developing an ESMP informs and provides context for the "discrete, specific, enumerated investments" that the company must propose with its ESMP pursuant to Section 92B(e) (p. 51).

Similarly, the law does not refer to 92B(b) for Department approval of the plans (p. 52).

- Accordingly, the Department considers the descriptions provided in response to Section 92B(b)(i) through (ix) as informational only (p. 52).

In contrast, the last sentence of Section 92B(b) provides that the electric distribution companies shall identify customer benefits for "all proposed investments and alternative approaches"

- Thus, the logical interpretation of this sentence is that it only applies to any "discrete, specific, enumerated investments" proposed pursuant to Section 92B(e) (p. 52).
- As such, the net benefits requirement in Section 92B(d) only applies to the proposed ESMP investments (p. 52).

IV. Framework for Review (5) (pp. 27-61)

Department Rationale for Limiting Scope

(3) Due process considerations as well as the safety, security, and reliability of the electric system rely upon a narrow reading of 92B. And there is a need for finality in Department orders (p. 52)

- Otherwise, the ESMP process would (1) disrupt or undermine the adjudicatory process of matters pending or already decided by the Department, and (2) negatively disrupt distribution system planning practices (p. 53).

(4) Forecasting and distribution system planning are dynamic processes but ESMPs are filed only once every five years (p. 53).

- The Legislature did not intend to limit distribution system planning, generally, and the provision of safe, secure, and reliable electric service to a Section 92B review of investments once every five years (p. 54).

IV. Framework for Review (6) (pp. 27-61)

Department Priorities (G.L. c. 25, § 1A)

EDCs characterize base spending capital investments as core investments as

- Planned investments funded through base distribution rates to maintain the safety and reliability of the electric distribution system in the normal course of business (p. 58)

In contrast, EDCs characterize proposed ESMP investments as

- Accelerated, incremental investments that supplement and go beyond existing programs and core investments
- Investments that the Companies deem necessary over the next five years to enable progress towards decarbonization goals (p. 58)

The Department finds this distinction to be reasonable and appropriate,

- The provisioning of safe, secure, and reliable service remain core functions of the EDCs (p. 59).

During this energy transition, ensuring affordability and equity is especially important (p. 60).

IV. Framework for Review (7) (pp. 27-61)

Strategic Plan Approach

The Department finds that the 2022 Clean Energy Act establishes a new regulatory construct for grid modernization and long-term system planning (p. 63)

The Department expects the ESMPs to be each EDC's roadmap that

- Outlines how the discrete ESMP investments proposed pursuant to 92B(e) will
- Meet the planning requirements of 92b(a) (p. 63)

Flexibility should be allowed and documented in the biannual ESMP reports (p. 65)

Department approval of an ESMP is simply a finding that it meets the requirements of 92(b)

- It does not include any findings of pre-approval or preauthorization of ESMP investments (pp. 65 & 66)

This strategic plan approach is appropriate for future ESMP filings

- After the next ESMP filing, the Department may revisit this approach for subsequent ESMP filings (p. 67)

IV. Framework for Review (pp. 27-61)

Pause for GMAC Comment and Discussion

Discussion Questions to Consider:

What impacts does the Department decision to treat ESMP and non-ESMP investments differently have on future GMAC review of ESMPs?

How should the GMAC contribute to the development of future ESMPs in light of the Department's description of them as strategic planning documents?

V. Grid Modernization Advisory Council (1) (p.72-83)

Section 92C contemplates significant ongoing collaboration between EDCs and the GMAC during the period between draft ESMP filings (pp. 81-82)

Sections 92B and 92C do not mandate the EDCs to incorporate GMAC recommendations (p. 76)

- In future ESMPs, the EDCs should explain in more complete detail the basis of their decisions on each GMAC recommendation (p. 78)

The Department declines to require CESAG to operate within existing GMAC structure (p. 79)

- CESAG include EDCs, CBOs, and an environmental or advocacy group
- CESAG and GMAC serve different purposes

The Department declines to require a joint forecasting working group within GMAC (p. 80)

- This would override typical distribution system planning or provision of safe and reliable electric service
- Forecasting is a dynamic process and ESMPs occur only every five years
- It is inappropriate for the Department to substitute its own judgment for that of utility management

V. Grid Modernization Advisory Council (2) (p.72-83)

The Department declines to require the EDCs to (p. 80):

- Share their forecasts with the GMAC two years in advance of the deadline for submitting the next draft ESMPs to the GMAC
- Form subgroups of GMAC and non-GMAC members to develop recommendations on sector-specific forecasts
- Update their forecasts to include GMAC recommendations before determining the scale or scope of investments in subsequent draft ESMPs

The Department encourages the EDCs and the GMAC to engage in at least the following (p. 82):

- Company presentations on the Companies' forecasting methodologies to develop the GMAC's knowledge of each company's forecasting methodologies
- Discussion of least cost investments in the electric distribution systems, as well as the process of identifying alternatives to investments or financing of investments to minimize or mitigate impacts on ratepayers.

Prior to filing the draft ESMPs, the Department encourages the GMAC to allow EDCs to (p. 83):

- present summaries of their draft ESMPs
- conduct technical sessions for the GMAC

V. Grid Modernization Advisory Council (p.72-83)

Pause for GMAC Comment and Discussion

Discussion Questions to Consider:

What topics should the GMAC and EDCs engage in?

- In addition to those recommended by the Department: load forecasting, least-cost resources, alternatives, investment prioritization

Technical Sessions:

- What topics would the GMAC like EDCs to cover?
- When would the GMAC like the EDCs to hold technical sessions?

What steps should be taken to coordinate the CESAG and the GMAC Equity Working Group?

GMAC plans for the remainder of 2024 and 2025:

- How frequently should the GMAC meet?
- What topics should the GMAC cover?
- Is there a role for subcommittees?
- What type of support will the GMAC seek from GMAC consultants?

VI. Forecasts and Demand Assessments (1) (p.83-140)

The Department finds that the EDCs met the forecast and demand assessment requirements of Section 92B(b)(iii) and (c)(i) (p. 128).

EDC's ESMP forecasting methodologies are consistent with their methodologies for capital planning and are the same as the five and ten-year forecasts included in each EDC's Annual Reliability Report (ARR) (pp. 129-130).

Department also finds EDCs forecasting methods are consistent and reasonably account for DER adoption and electrification trends (pp. 134-135).

Department declines to require EDCs to include uniform assumptions in five- and ten- year forecasts for DR, HP, EE and building efficiency codes, EV, energy storage, and solar PV (p. 138).

- Establishing a forecasting method with uniform inputs and assumptions could reduce reliability of forecasts due to regional or system differences (pp. 136-137).
- Forecasting methods are a matter for utility management's judgement (p. 138)
- Uncertainty around DR, HP, EE, EV, storage, PV, building efficiency codes, and customer-specific spot-loads could reduce reliability of forecasts and result in planning for investments based on load that may or may not occur (p. 138)

Department declines to require EDCs to include sensitivity analyses in five- and ten- year forecasts, because EDCs would base investments solely on base-case scenario (p. 139).

VI. Forecasts and Demand Assessments (2) (pp. 83-140)

In biannual ESMP reports, EDCs are required to:

- Provide a comparison of the forecasted demand (according to the most recently updated ARR) and actual demand, separated by component (baseload and DERs) for each year (p. 140)

In the next ESMP filing, EDCs are required to: (pp. 139-141)

- Include scenario analysis of rate design in forecasts
- Include analysis to support least-cost distribution system planning to meet clean energy goals
- Collaborate with GMAC and stakeholders on sensitivity analyses for 2050 long-term demand assessment
- Separately model demand response and other demand management programs not managed under the ISO-NE wholesale market
- Separately model EE impacts, including building efficiency code implementation
- Demonstrate how they accounted for TVRs
- Demonstrate how they accounted for building weatherization on the HP demand forecast

VI. Forecasts and Demand Assessments (pp. 83-140)

Pause for GMAC Comment and Discussion

Discussion Questions to Consider:

How should the GMAC contribute to the EDC's development of DER assumptions to be used in short-term and long-term forecasts?

How should the GMAC contribute to the EDC's accounting for uncertainty in the short-term and long-term forecasts?

VII.A. ESMP Term (pp.141-150)

First 5-year ESMP covers July 1, 2025 through June 30, 2030

- This will allow time to establish cost recovery mechanism and tariffs, and begin deployment (p. 146)

Schedule for the next ESMP process (p. 148):

Event	Due Date	Days Between
EDCs submit draft plans to GMAC	February 12, 2029	---
GMAC issues its recommendations to the EDCs	June 18, 2029	125
EDCs submit proposed ESMPs to the Department	September 11, 2029	85
Department issues final order	April 11, 2030	210
Next ESMP term begins	July 1, 2030	80

The Department expects the EDCs to fully account for forecast and other changes between the draft ESMPs filed with the GMAC and the proposed ESMPs filed with the Department (p. 149).

VII.A. ESMP Term

Pause for GMAC Comment and Discussion

Discussion Questions to Consider:

How should the GMAC collaborate with the EDCs in advance of the draft ESMPs, to facilitate stakeholder engagement in plan development?

The period for the EDCs to respond to the GMAC recommendations is 85 days

- How does this affect the EDCs ability to adopt GMAC recommendations?
- How does this affect the recommendations that GMAC should make?

VII.B. Integrated Energy Planning (pp. 150-159)

The Department finds that the EDC IEP proposals are reasonable and consistent with the objectives of the ESMPs and Department directives in DPU 20-80 (p. 159)

In DPU 20-80, the Department determined that coordinated and comprehensive planning between electric and gas utilities is needed to facilitate the energy transition (p. 157)

The EDC's proposed approach to collaborate with gas utilities and stakeholders to define the scope and timelines of the Joint Working Group is reasonable (p. 158)

In DPU 20-80, the Department required gas utilities to file Climate Compliance Plans (p. 158)

The Department expects EDCs ESMPs to be consistent with the Department determinations on the respective issues in DPU 20-80 (p. 159)

The Department directs the EDCs to account for future Department decisions on these issues in their future ESMPs (p. 159)

VII.B. Integrated Energy Planning

Pause for GMAC Comment and Discussion

Discussion Questions to Consider:

How should the GMAC contribute to the Joint Working Group on Integrated Energy Planning?

VII.C. Planned & Proposed Investments (1) (pp.159-273)

Investment Classification

The Department addresses the bifurcation of ESMP vs. non-ESMP investments in another section of the order (IV.C.2.c) (p. 243)

The Department declines to require EDCs to define ESMP vs. non-ESMP investments consistently (pp. 244-245)

- Flexibility in ESMP investment planning is warranted and consistent with typical distribution planning
- Each distribution system has unique characteristics and needs.
- Inclusion of investments in ESMP vs. non-ESMP categories is a matter for utility management's judgment, and not for the Department to determine

The Department directs the Companies to better coordinate to ensure consistent groupings of similar investments in future ESMP filings (p. 246)

VII.C. Planned & Proposed Investments (2) (pp.159-273)

Minimization or Mitigation of Ratepayer Impacts

The net benefits analysis is reasonable and appropriate (p. 247)

The net benefits analysis "classify reduced costs as benefits derived from the minimization or mitigation of impacts on the ratepayers" (p. 247)

The Department requires the EDCs to mitigate costs by applying for state and federal grants, loans, and tax incentives (p. 247)

The Department directs the EDCs in their typical planning processes to mitigate or delay the need for investments through (pp. 247-248):

- continuous review of forecasts and reprioritization of investments, and
- consideration of NWAs, including ESS

VII.C. Planned & Proposed Investments (3) (pp.159-273)

Grid Services Study

The Department encourages the EDCs to (p. 250):

- Collaborate with stakeholders to develop a framework that is as consistent as possible across companies
- File related updates in their biannual reports

NSTAR Electric ASAP (pp. 250-251)

- The Department will not approve this, or any other investment, in this Order
- The Department encourages Eversource to set up a stakeholder engagement process and submit a filing to the DPU

Reliability, Resiliency, and Climate-Driven Impacts

EDCs must be more consistent in their resilient investment planning (pp. 252-264):

- Use historical performance information (all-in CMI, all-in SAIDI) that includes major event data
- EDCs must assess the cost-effectiveness of targeted resiliency investments
- EDCs must cross-reference outage analysis with locations and requirements of critical facilities
- EDCs must make their CVA frameworks more consistent and resolve or justify discrepancies
- EDCs should coordinate on practices for deploying targeted resiliency investments cost-effectively
- Resiliency planning must account for both ESMP and non-ESMP investments

VII.C. Planned & Proposed Investments (4) (pp.159-273)

EV Investments

- NSTAR and Unitil must include an EV flexible interconnection offering in next ESMPs (p. 265)
- NSTAR and Unitil should submit EV managed charging proposals for Department's review soon (p. 267)
- Impacts of EV adoption on rates & rate design are beyond the scope of these proceedings (p. 267)

Substation and CIP Investments (p. 267-270)

- National Grid and NSTAR identify CIP proposals, covered by the extended Provisional Program
- National Grid and Unitil propose "network investments," outside the Provisional Program
- These proposals comply with Section 92B(a)(ii) and (v) and Section 92B(iv) through (vi)
- EDCs should ensure costs are minimized and consider alternative, lower cost solutions
- These investments should be accounted for in the LTSPP

Remaining Investments

- The EDCs have proposed identified and described investments in accordance with 92B (p. 270)
- Flexible interconnection opportunities should be explored in the LTSPP stakeholder process (p. 271)

VII.C. Planned & Proposed Investments

Pause for GMAC Comment and Discussion

Discussion Questions to Consider:

Given that the Department has approved the bifurcation of ESMP vs. non-ESMP investments, how does this affect the GMAC's review of ESMPs?

What role should the GMAC play in supporting the Department's requirement that EDCs better coordinate to ensure consistent groupings of similar investments?

What role should the GMAC play in supporting the Department's requirement that EDCs be more consistent in resiliency planning?

What role should the GMAC play in developing a framework for Grid Services Studies that is consistent across EDCs?

VII.D. Alternatives to Proposed Investments (1) (pp. 273-315)

The EDCs have complied with the 92B requirements applicable to alternatives (p. 305 & 308)

There is no reason to restrict the alternatives analysis to customer-side alternatives (p. 306)

It would not be feasible to address the full array of alternatives. Instead, EDCs should (p. 306-307):

- For both ESMP and non-ESMP investments:
  - Address the distribution system planning framework (e.g., planning, capital authorization, NWA policies)
  - Discuss how alternatives are considered in that framework
  - Discuss how and why the processes differ for developing ESMP and non-ESMP investments
- For ESMP investments only:
  - Describe the ESMP proposals for (a) non-traditional investments, or (b) foundational investments to enable non-traditional investments
  - Describe specific alternatives the company considered in developing ESMP investment proposals

VII.D. Alternatives to Proposed Investments (2) (pp. 273-315)

The proposed ESMP investments are not attributed to meeting core utility obligations (p. 307)

- Instead, they are geared toward achieving clean energy goals in compliance with 92B

The Department is not reviewing the investments for pre-approval or preauthorization

- Therefore, there is limited value for comprehensive alternatives analysis for strategic planning

Instead, more comprehensive alternatives analysis for ESMP investments are better addressed:

- For major infrastructure projects (CIPs and network) in preapproval proceedings:
  - The Provisional Program extension or the forthcoming LTSPP
- When ESMP investments are submitted to the Department for review of prudence and cost recovery

In their next ESMPs, the Department expects EDCs to summarize the status of their ESS interconnected to their systems as a result of the on-going DPU dockets on this topic

The next ESMPs should include consideration of rate design as an alternative to ESMP investments

- Including consideration of scenario analysis and designs supporting least-cost planning and clean energy goals

VII.D. Alternatives to Proposed Investments

Pause for GMAC Comment and Discussion

Discussion Questions to Consider:

What role can the GMAC play in identifying alternatives to ESMP investments?

- Rate design alternatives
- Energy Storage System alternatives
- Other alternatives

VII.E Transmission (pp.315-318)

The Department determined that the Companies employ a coordinated approach to distribution and transmission system planning and that they have sufficiently identified the transmission system upgrades associated with their ESMP investments (p.318).

The ESMPs comply with 92B (p.318).

There was limited additional inquiry by the Department given its limited authority over transmission systems (p. 318).

VII.F. DER Interconnection Planning and Cost Allocation (1) (pp.319-347)

Long-Term System Planning Program (LTSPP)

The EDCs have complied with the requirements of 92B (p. 334)

- The EDCs must develop LTSPP proposals following the issuance of this order, in a timely manner

The EDCs must convene and facilitate an LTSPP stakeholder process (p. 338)

- Starting no later than October 1, 2024 and concluding in March 2025
- With bi-monthly stakeholder meetings, at a minimum
- By February 3, 2025, the EDCs shall submit an interim status report
- By April 4, 2025, the EDCs shall submit a final status report describing areas of agreement and disagreement
- The Department will direct next steps as soon as practical after that
- Further, the EDCs shall:
  - Designate company personnel to be responsible for oversight and management of the process
  - Invite members of the GMAC and the service list for these dockets to the process
  - Ensure each participant receives all relevant correspondence
  - Maintain a participation list and ensure communications are circulated to that list

VII.F. DER Interconnection Planning and Cost Allocation (2) (pp.319-347)

The LTSPP stakeholder process must consider the following topics (pp. 338-339):

- Factors identified by GMAC and EDCs that drive enablement of DG by hosting capacity in specific locations
- The role of flexible interconnection in deferring or negating the need for upgrades or improving operations
- Cost allocation, such as a Common System Modification fee, export tariff, etc.
- Process for changing or updating the LTSPP over time

Provisional Program Extension

The EDCs proposal to extend the Provisional Program is reasonable (pp. 342-343)

- In order to allow DER projects currently in the interconnection queue to proceed before LTSPP is established

New eligibility criteria for CIP proposals (new elements are marked in red)

- Limited in scope to specific EPS upgrades and Affected Group Studies
- Enable the interconnection of multiple DER facilities
- Include a maximum CIP fee of $500, unless there is sufficient documentation for a higher fee
- Identify specific geographic area served by EPS upgrades
- Construction can be completed within 4 years, including use of commercially reasonable efforts

VII.F. DER Interconnection Planning and Cost Allocation (3) (pp.319-347)

CIP Proposals Process

The Department provides a Provisional Program Extension Filing Checklist as Appendix A (p. 346)

- This information must be included along with the existing CIP requirements

The Department encourages the EDCs to file CIP proposals simultaneously (p. 346)

The Department will seek additional ways to streamline its review of CIP proposals (p. 347)

September 19, 2024 shall serve as the Completion Date for any Group Study with impact studies completed prior to the issuance of this Order (p. 347)

- EDCs may file a letter with the Department seeking a reasonable extension

CIPs can include reasonable additional infrastructure upgrades, beyond that of the original Group Study, necessary to fully utilize the enabled DER hosting capacity (p. 348)

VII.F. DER Interconnection Planning and Cost Allocation

Pause for GMAC Comment and Discussion

Discussion Questions to Consider:

How should the GMAC participate in the LTSPP stakeholder process?

- As the Council?
- As individual stakeholder representatives?
- What should the role of GMAC consultants be?

VII.G. Alternatives to Financing Proposed Investments (pp.348-352)

While the ESMPs include some information on alternatives, the Department expects EDCs to submit far more robust presentation of alternatives in the next set of ESMPs (p. 351)

The Department directs the EDCs to proactively submit applications for available grants, tax incentives, and low-cost financing programs (p. 351)

- Approval of the ESMPs is based the understanding that EDCs will seek to minimize costs through alternative approaches to financing investments

In their biannual reports, EDCs must include summaries of (p. 352):

- Federal grant, loan, and tax funding they have sought during the preceding reporting period
- Their planned funding sources during the following reporting period

In future ESMPs, the EDCs must provide summaries of alternative financing that are clear and conspicuous (p. 353)

VII.H. Stakeholder Engagement and Equity (1) (pp.353-385)

The Companies' equity framework is consistent with MA goals and Department policies and has potential to increase stakeholder knowledge and participation in the energy transition (p. 372).

The Department approves the proposed equity framework with modifications:

- Procedural:
  - Public-facing materials must provide meaningful opportunities for limited-English customers to access information, use clear and plain language, and by guided by the CESAG (pp. 377-378)
  - The EDCs should take steps to operationalize equity within their organizations, like NSTAR (pp. 378-379).
  - Each company should provide biannual updates on equity initiatives in their biannual reports
- Distributional and Structural:
  - The Department intends to coordinate with the EFSB to clarify each agency's role regarding CBA oversight and will consider CBA cost recovery in a subsequent phase of this proceeding or a new proceeding (p.381)
  - Where the potential for an imbalance in the benefits and burdens exists to host large electric distribution system infrastructure, the Companies shall apply the equity framework as modified herein (p. 382)
  - The EDCs should coordinate with CESAG on integrating EJ principles in siting decisions (p.383)
  - Department directs the Companies to provide updates in their biannual reports on how they are addressing distributional and structural equity in the implementation of their ESMPs (p.385)
  - The Department encourages the EDCs to collaborate with CESAG, GMAC, and the GMAC EWG (p. 385)

VII.H. Stakeholder Engagement and Equity (2) (pp.353-385)

The Department directs the companies to coordinate with the CESAG on:

- Developing additional translation best practices with the CESAG (p. 376)
- Develop clear and cohesive policies and practices in relation to when and how the Companies will translate materials into other languages and when to provide interpretation services during verbal interactions between each Company and its customers (p. 377)
- Developing policies and practices related to integrating EJ principles into their decision-making with respect to the siting of electric distribution system infrastructure projects (p. 383-384)
- Receiving input on actions that could enhance and assist in fully implementing all aspects of the equity framework (p.385)

VII.H. Stakeholder Engagement and Equity

Pause for GMAC Comment and Discussion

Discussion Questions to Consider:

How should the GMAC Equity Working Group collaborate with CESAG?

VII.I. Net Benefits (1) (pp.386-434)

The Department's net benefits review is for strategic planning; not cost recovery (p. 413)

The EDCs have established net benefits using a reasonable method and inputs (p. 416)

Alternatives to proposed investments do not need to be incorporated into the net benefits analysis, except for NWAs and ESS projects within the portfolio of ESMP projects (P. 416)

- Section 92B(b) requires a description of the alternatives that inform the net benefits analysis, but
- Section 92B(d) does not require that net benefits analysis includes inputs for alternative investments

The legislature left how to analyze net benefits largely to the Department's discretion

- The Department declines to require they include non-ESMP or alternatives (p. 417)

The analysis does not need to consider discrete investments or investment types

- 92B indicates the analysis should be for the plan as a whole (p. 417)

VII.I. Net Benefits (2) (pp.386-434)

The net benefits analysis does not need to account for locational-specific impacts, distributional equity analyses, or EJ benefits (p. 418-419)

- Location-specific values are not industry practice and might provide false accuracy
- Major infrastructure projects equity impacts would be better addressed in Provisional Program of LTSPP

The EDCs should describe equity benefits in their next ESMPs

- In the interim, the Department will explore equity metrics, locational values, and reporting requirements

The EDCs estimates of economic benefits to be reasonable and appropriate (p. 422)

- For the next ESMPs, the EDCs shall provide results at the level of investment category

The Department has instructed the EDCs to be more consistent in defining investment categories

- But the inconsistency across categories is not relevant to the portfolio net benefit analysis (p. 423)

VII.I. Net Benefits (3) (pp.386-434)

The sensitivities used in the net benefits analysis are reasonable (p. 426)

- For the next ESMPs, the EDCs should provide summaries for all significant inputs

Regarding non-ESMP investments, the EDCs do not need to optimize them to maximize the net benefits of their ESMP investments (p. 426)

Regarding ESMP investments, 92B (p. 426):

- Requires they provide net benefits
- Does not require that they maximize net benefits
- Mitigating costs to customers or ensuring safe and reliable service, may be equally or more important
- The Department expects the EDCs to maximize the benefits, to the extent practicable

Each EDC has established net benefits in accordance with 92B(d) (p. 431)

- This finding should not be relied upon when seeking pre-approval of investments or in prudency reviews

VII.I. Net Benefits (4) (pp.386-434)

EDCs have complied with 92C requirements seeking GMAC input on their analysis (pp. 432-433)

- For future ESMPs, EDCs must include details of their net benefits analysis in draft plans provided to GMAC

EDCs shall use a similar framework for future net benefits analyses, and (p. 433)

- Analyze economic benefits by investment category
- Include the results of sensitivity analyses

VII.I. Net Benefits

Pause for GMAC Comment and Discussion

Discussion Questions to Consider:

What should the GMAC do to facilitate the incorporation of ESS projects and NWAs as alternatives to ESMP investments in net benefits analysis?

VIII. Cost Recovery Framework (1) (pp.435-447)

The Department finds it has discretion to determine ESMP cost recovery framework (p. 441)

The Department finds short-term targeted cost recovery is appropriate for ESMP costs

- Requiring EDCs to recover costs through base distribution rates could cause the EDCs to "delay, scale down, or even decline to make the investments and implement the programs in the ESMPs" (p. 443)

The Department will first establish a short-term reconciling mechanism, followed by a separate proceeding to investigate a long-term cost recovery framework (p. 444)

In response to EDC proposals the Department determined:

- ESMP costs will be included in a new reconciling mechanism, rather than including them in existing grid modernization factors, as proposed by Eversource and Unitil (p. 444)
- The Department will decide on National Grid's proposal to include ESMP costs in its proposed ISRE mechanism on or before September 30, 2024 (p. 445)

The Department provided additional guidance on specific program cost recovery :

- Provisional Program and EV program costs should remain in existing recovery mechanisms. The DPU will consider the appropriate mechanism for the LTSPP later (p. 445)
- Unitil should petition DPU for a separate EV program mechanism, as it currently recovers EV costs through its existing grid modernization factor that will expire at the end of 2025 (p. 446).

VIII. Cost Recovery Framework (2) (pp.435-447)

The Department's investigation in the second phase of this proceeding may include (p. 447):

(1) definitions of costs eligible for recovery;

(2) cost containment provisions such as budget or revenue caps;

(3) documentation required to support cost recovery;

(4) the Companies' processes for evaluating alternatives and addressing changed circumstances during the five-year ESMP terms;

(5) consideration of possible mechanisms to encourage innovative approaches designed to minimize costs for ratepayers; and

(6) planned obsolescence of the ESMP mechanism

VIII. Cost Recovery Framework

Pause for GMAC Comment and Discussion

Discussion Questions to Consider:

What role should the GMAC play in addressing cost recovery issues in future phases of this proceeding?

IX. Bill Impacts (pp.448-458)

The Department finds the EDCs correctly estimated the bill impacts of the ESMP investments and that the ESMP costs are reasonable given their associated benefits (pp. 458-459)

- The EDCs' bill impact analyses are limited to the incremental costs of the proposed ESMP investments, which the Department finds appropriate given their review of the ESMPs as strategic plans
- A comprehensive estimate of ratepayer impacts is not required by Section 92B

The Department is mindful of affordability and impacts of all costs related to achieving clean energy goals and recognizes the merit of a comprehensive analysis of ratepayer impacts (p. 458)

- EE budgets expected to increase significantly during 2025-2027 term (p. 457)
- Other program costs also expected to increase in the future (e.g., net metering, CIPs, SMART) (p. 458).
- Department will continue to prioritize affordability in related investigations (p. 458)

The Department will determine the parameters of the ESMP cost recovery mechanism, which shall include robust ratepayer protection and cost control, in the next phase of proceedings (p.459)

The Department will consider the actual bill impacts when the EDCs propose to include ESMP costs in rates (p. 459)

X. Metrics (pp.459-462)

The Department found that it was premature and unproductive to establish final performance metrics in this Order, consistent with the Department's Interlocutory Order on Scope (p.462).

- Metrics will be fully addressed in a later phase of the proceedings.

The Department will consider whether any current grid modernization or EV performance metrics should be carried forward and applied to proposed ESMP investments (p. 462)

The Department will consider stakeholder proposals for performance metrics in a later process and will provide further guidance at a later date (p. 462)

XI. Reporting Requirements (1) (p. 462-478)

The Department declines to require each company to establish a dedicated data sharing platform for stakeholders to access company data on an ongoing basis (p. 469)

- Would go beyond requirements of 92B (p.469)
- Ongoing access to data on Companies' distribution systems/planning processes is not necessary to advance the legitimate interest in monitoring ESMP implementation (p.470)
- Lack of complete understanding of security risks and CEII implications (p.471)

The Department establishes the first five-year ESMP term as July 1, 2025 through June 30, 2030 and rejects the Companies' recommendation to begin ESMP biannual reporting in 2026 (p.476)

- Biannual filing dates established as March 31 and September 30 to align with Companies' other reporting requirements (p. 475-476)
- Department does not find it appropriate to eliminate the grid modernization annual report (p. 478)

XI. Reporting Requirements (2) (p. 462-478)

The Companies shall include in their Biannual Reports (p.472-474):

ESMP investments

- Changes and reprioritization of proposed ESMP investments

Forecasts and Demand Assessments

- Comparison of the forecasted demand (according to updated ARR) and actual demand, separated by component (baseload, DERs) for each completed year in the ESMP term; and identification of variances between 5- and 10-year demand forecast components in the approved ESMP and the updated ARR 10-year demand forecast components

Integrated Energy Planning

- Progress on IRP processes including but not limited to updates on the Joint Working Group, data exchange, feasibility assessments, and targeted electrification projects

Grid Services Study

- Updates relating to the Grid Services Study and compensation framework being developed

XI. Reporting Requirements (3) (p.462-478)

Reliability, Resiliency, Climate-Driven Impacts

- Updates on finalizing CVA frameworks
- Updates on targeted resiliency investment identification and prioritization method
- Identify and explain adjustments to proposed portfolio of targeted resiliency investments
- Descriptions of planned targeted resiliency investments along with associated costs, regardless of core or ESMP classification

Energy Storage Systems

- Whether the company has conducted testing on company-owned ESS and any corresponding results

Transmission

- Updates on transmission upgrades necessitated by ESMP investments

Alternative Funding Proposals

- Summaries of federal grant, loan, and tax funding sought during the preceding reporting period and planned funding sources during the following reporting period; descriptions of efforts to coordinate with partner entities and impediments to such efforts; and identification of barriers encountered in obtaining funds and recommendations for how the Department can support company receipt of grants, loans, and tax incentives.

XI. Reporting Requirements (4) (p.462-478)

Stakeholder Engagement and Equity

- Updates on how the company is addressing distributional and structural equity in the implementation of its ESMP, training its staff on equity matters, and allocating staff resources, and a description of how any lessons learned could shape the next iteration of their equity framework

Non-ESMP investments

- High-level data relating to non-ESMP investments, including summary lists of, for example, relevant DPU proceedings, docketed and non-docketed filings, related stakeholder or working groups, and key metrics

The Department intends to finalize the form and content of biannual reports in a subsequent phase of this proceeding

XI. Reporting Requirements

Pause for GMAC Comment and Discussion

Discussion Questions to Consider:

What role should the GMAC play in addressing the form and content of ESMP biannual reports in future phases of this proceeding?

What role should the GMAC play in reviewing and commenting on future filings of ESMP biannual reports?

DOER
Massachusetts Department of Energy Resources

Break

Please be ready to start again in ~10 minutes

EDC Update to GMAC on ESMP Order & Next Steps

September 13, 2024

EVERSOURCE nationalgrid Unitil

Agenda

01 Long-Term System Planning

02 CIP Filings

03 Integrated Energy Planning

04 Resilience & CVA

05 DERMS, Outside Funding and Grants

06 Stakeholder Engagement & CESAG

Long-Term System Planning

Key Findings

- The Department finds that the Companies complied with statutory requirements for Long-Term System Planning Process (LTSPP)
- The Department further acknowledged that any future long-term planning process will take time.
- Companies' recommendation to develop LTSPP proposal following the initial seven-month ESMP process found to be reasonable.
- Department emphasized the need for Companies to develop LTSPP proposals in a timely manner following the Order.
- **The Department directs the Companies to organize an LTSPP stakeholder group no later than October 1st, 2024 that lasts six-months with bi-monthly stakeholder meetings, at a minimum, file interim status update on Feb 3, 2025 and final consensus proposal by April 4th, 2025.**

1. The Companies have developed plans for an initial LTSPP Framework which was included in the ESMP.
2. The Companies will organize a six-month process beginning no later than October 1st 2024, with bi-monthly stakeholder meetings, at a minimum, to develop consensus for an LTSPP framework.
3. The Companies will assume responsibility for oversight and management of the LTSPP stakeholder process and comply with directives concerning recognition of GMAC members and all entities on the service list, communication and administration.
4. By February 3, 2025, the Companies will submit an interim status update to the Department that summarizes:
    i. a list of stakeholder meetings and attendees;
    ii. the status of any discussions with stakeholders and the process by which such discussions occurred; and
    iii. a summary of all issues on which the Companies and stakeholders have reached consensus.

CIP Filings and Next Steps

Key Findings

- The Department finds that the Provisional Program is a reasonable interim solution to connect DER projects currently in the queue while the framework for the LTSPP is being developed.
- The Department did not review the proposed ESMP CIPs for pre-approval of costs or methods.
- The Department updated the parameters of the CIP filings and established that September 19th, 2024, is the Completion Date for the purpose of triggering notification to developers for Groups with system impact studies (SIS) completed before the Order.
- **A Company has 40 business days (BD) from the September 19th, 2024, completion date to file CIP proposals; however, if the Group SIS was not completed before issuance of the Order, a Company may file a letter prior to the 40 BD deadline seeking a reasonable extension.**

1. The Companies intend to file CIP proposals for Groups with SIS completed before the order, if applicable.
2. For Group Studies still in development or execution, a Company will file a letter within 40 business days (BD) of September 19th, 2024 informing the Department of the estimated completion date for the studies and the estimated filing date for CIP proposals.
3. Eversource has developed plans for or initiated seven (7) Group Studies on (13) substations with 49 projects from multiple developers totaling 211 MW.
4. 2-3 of these Group Study CIP proposals will be completed and filed in February of 2025 after completion of the studies, and the balance will be filed by April 2025.
5. National Grid, in its ESMP, developed plans for or initiated three Group Studies. Two of the Group Studies have had attrition and have dissolved. The remaining Group Study compromises 3 substations with 5 projects totaling 19MWs. This Group Study is estimated to be completed by end of 2024.

Resilience & Climate Vulnerability Study

EVERSOURCE nationalgrid Unitil

Key Findings

- The Department found that, in light of the progressing pace of climate change, resilience planning shall consist of investments based on historical vulnerabilities as well as investments based on projections of climate hazards.
- The Department also focused on two core principles of the targeting of investments and selecting mitigations; (i) investments should be subject to a cost efficiency metric to ensure maximization of benefits without overburdening ratepayers and (ii) incorporation of critical customers to resilience plans.

1. The Companies will continue to complete their Climate Vulnerability Studies and planning associated investments.
2. The Companies will consider the need to further refine the cost benefit methods of their plans and align on methodologies.
3. The Companies will explicitly include critical customers in their resilience strategy and establish communications with stakeholders so that resilience requirements of critical facilities are met.

Integrated Energy Planning

Key Findings

- After review, the DPU found that the Companies' IEP proposals are a necessary first step in the development of an IEP process that will enable customers to transition from natural gas heating to electric heating, leading to the achievement of statewide GHG limits
- The Department found that the Companies' proposed approach to collaborate with the LDCs and stakeholders to define the scope and timelines of the Joint Working Group is reasonable and consistent with the Department's recent directives for the LDCs and Companies to develop IEP processes with broad stakeholder participation
- **The Department deferred the IEP process to DPU 20-80B Order (Future of Gas) and the upcoming CCPs to be filed on April 1, 2025**

1. The Companies have commenced work on an initial IEP Framework to which they will be seeking stakeholder comments.

2. The Companies will work to establish an IEP Working Group no later than Q4-24, subject to the Department of Public Utilities authorizing the gas and electric distribution companies to share customer proprietary data subject to non-disclosure agreements. Objective of the working group will be to achieve alignment between the LDCs and EDCs on IEP with the input from key stakeholders.

- The Companies propose the working group to include, among others:
  - LDC and EDC representation
  - Department of Energy Resources
  - Attorney Generals Office

ESMP Supports DERMS Demonstration

$69 million project is supported by investments included in the ESMP included as cost share

- **DERMS Phase II.** Full deployment of DERMS across Massachusetts, including microgrid dispatch is the foundation of the project
- **Grid Services Compensation Fund.** Participating customers will be compensated for grid services, consistent with findings of MassCEC grid services compensation study
- **Voltage Optimization.** Lessons learned in prior Grid Modernization programs will support use of DERMS dispatched DER to reduce peak demand and lower carbon emissions
- **System Planning Analytics.** Advanced system planning tools will prioritize DERMS opportunities in coordination with other regional projects (e.g., CIP, capacity upgrades, resiliency)

Federal contribution would lower costs to customers while (1) increasing the pace of delivering DERMS benefits at scale; (2) supporting robust community benefits plan, with job training for EJ and tribal communities; and (3) enabling technical support from the National Renewable Energy Laboratory and Cape Light Compact

DOE DERMS Grant Application

Seeking $23 million in cost share to demonstrate use of DERMS at scale, including coordination with the Provincetown microgrid

Partners

- National Renewable Energy Lab (NREL), Cape Light Compact (CLC)

Scope

- Augment existing microgrid with coordinated dispatch of customer DER
- Investigate options to cost-effectively expand the microgrid footprint
- Demonstrate benefits of DERMS for peak load reduction, DER integration, and system efficiency at scale

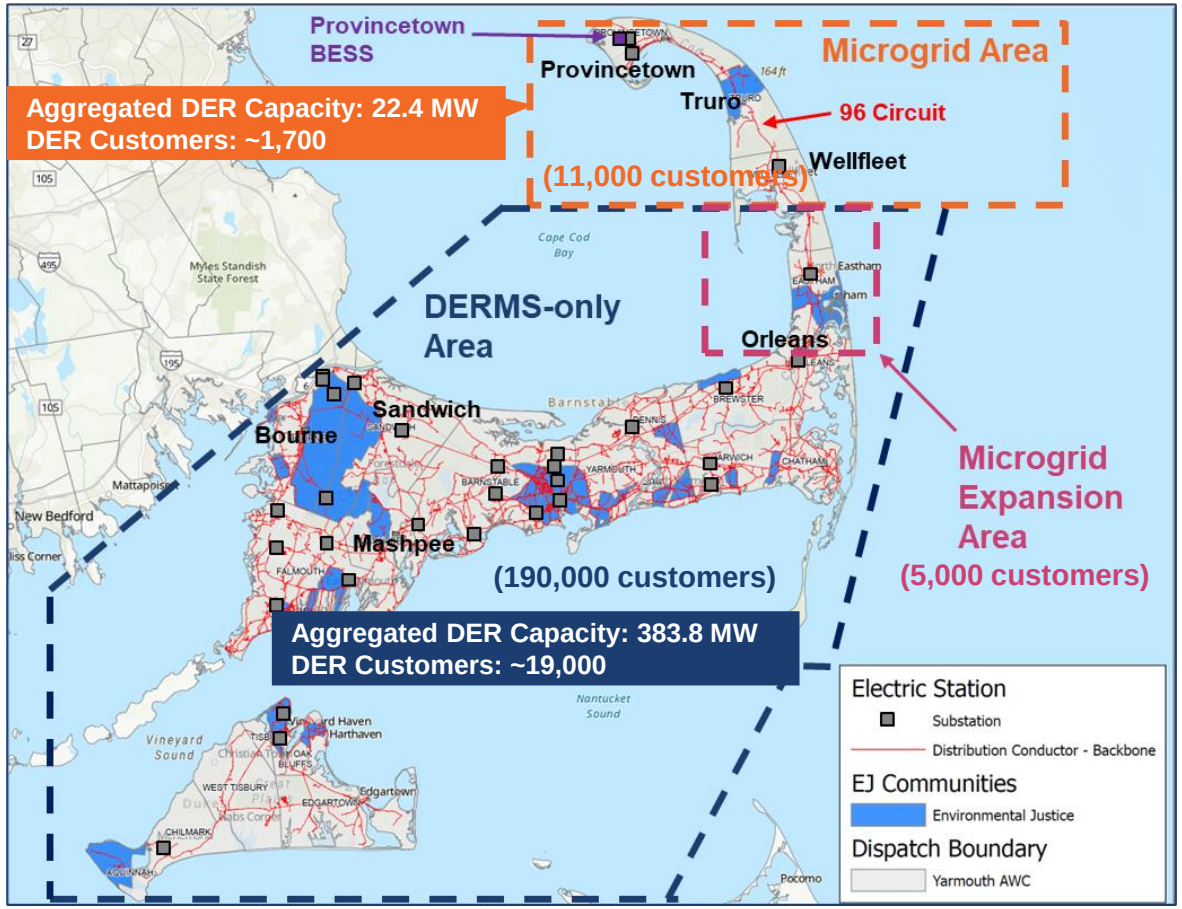
Benefits

- Strengthen reliability, resiliency, system flexibility, and T&D integration.
- Leverage award-winning Provincetown BESS/microgrid.
- Deliver a meaningful Community Benefits Plan with a clean-energy jobs pipeline to EJ, LMI, and tribal communities.
- Scalable project supports widespread use of DER as grid assets
- Reduce line losses and associated carbon emissions

Timeline

- Submitted Spring 2024, response expected late Fall 2024

System Diagram of the OCMO Demonstration Project Area



Source: Eversource

Notes: Capacity estimates are from current and in-queue customers with an assumed 10% growth in smart thermostat customers. Capacity estimates includes distributed generation as of April 2024.

Federal cost sharing to accelerate new capabilities

National Grid was awarded a $49.6M competitive grant from US DOE for its Future Grid Project, of which $23.5M has been allocated to support National Grid's proposed platform investments included in its ESMP

- **In October 2023**, National Grid was selected by DOE to receive a grant under the Grid Resilience and Innovation Partnerships (GRIP) Program for the Company's "**Future Grid Project,**" which will be kicked-off with DOE this month. As described in the Company's ESMP (at 371), the federal grant will support:
- **DERMS capabilities** such as the implementation of network-adaptive DER connections (i.e., flexible connections) to support integration of the Company's ADMS and DERMS functionality, further enhancing the ability to optimize grid assets and DER operations.
- **Active Power Restoration Services**, including new features in ADMS and DERMS to integrate and utilize customer-owned DERs on the network as part of the Company's outage restoration strategy.
- **Substation-Edge Computing.** New network management capabilities related to substation-edge computing to facilitate more dynamic (e.g., autonomous) data-driven management of the network

The awarded DOE grant will lower costs to customers, while also (1) accelerating deployment of these new capabilities and (2) supporting a robust community benefits plan, with benefits flowing to disadvantaged communities

Stakeholder Engagement & CESAG

CESAG Mission Statement: develop a statewide comprehensive stakeholder engagement framework that will enable increased transparency and stakeholder engagement such that stakeholders feel respected, understood and heard.

Department Expectations of the CESAG:

- Inform language access requirements
- Establish a policy on best practices for incorporating plain language into public-facing materials
- Further inform EDC equity policies
- Develop policies and practices for siting of electric distribution system infrastructure projects
- Coordinate with EDCs on implementation of equity framework

CESAG Facilitator RFP

- **Q1 2024**: EDCs developed RFP and shared RFP with external stakeholders for feedback.
- **Q2 2024:** Prior to sending out the RFP, the EDCs reached out to a variety of external stakeholder including members of the GMAC EWG and DOER for recommendations of potential facilitator candidates to send RFP.
- **Q2 2024**: Received 5 bids, EDCs reviewed all bids and conducted interviews in Q2 2024.
- **Q3 2024:** Selected winning bid (Archipelago Strategies Group) after receiving DPU approval to move forward with CESAG in ESMP order. EDCs are in the process of awarding contract.
- **Q4 2024**: Once facilitator is onboard, EDCs will meet to discuss timeline and potential CESAG members

CESAG MEMBERS

- **Q3 2024**: EDCs developing a draft list of potential candidates and will also work with facilitator for additional names
- Will seek additional input on potential candidates from GMAC and EWG (similar to stakeholder workshops)

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3. Next Steps

In the ESMP Process

Schedule of Next Steps in ESMP Process

Motion for reconsideration: *September 18*
Supreme Court filing: *September 30*

LTSPP process: *October 1, 2024 through April 4, 2025*

CESAG process: *commencement date to be provided by the EDCs*

CIP process:

- Completion date for any Group Study with impact studies completed prior to this Order: *September 19*
- EDCs determine if EPS upgrades identified for Group Study will be subject to a CIP: ~*October 3*
- EDCs file eligible CIPs with the Department: ~*November 18 (9/19/24 + 40 business days)*

Integrated Energy Planning Joint Working Group: *dates to be determined*

Subsequent phases of this ESMP docket: *dates to be determined by the Department post 9/30/24 National Grid Rate Case Order*

Next Steps: For the GMAC (1)

Develop plans for the remainder of 2024 and 2025:

- How frequently should the GMAC meet?
- What topics should the GMAC cover?
- Is there a role for subcommittees?
- What type of support will the GMAC seek from GMAC consultants?

Discuss topics related to the next phases of this docket

- ESMP cost recovery
  - Definition and documentation of costs eligible for recovery
  - Cost containment provisions
  - Process for evaluating alternatives
  - Mechanisms to minimize costs to ratepayers
- Form and content of biannual reports
- ESMP metrics

Next Steps: For the GMAC (2)

Collaborate with EDCs before the next ESMPs:

- The Department encourages at least the following: (p. 81)
  - EDC presentations on their forecasting method, including differences in assumptions and methods
  - Discussion of least-cost investments in electric distribution systems
  - Identifying alternatives to investments or financing to minimize or mitigate impacts on ratepayers
- Additional topics to collaborate with EDCs on
  - Exploring the EDC's investment reprioritization process based on updated forecasts
  - Practices for identifying and analyzing NWAs and VPPs
  - Methods for assessing the potential to increase utility DER programs to offset infrastructure needs
  - Rate designs to mitigate infrastructure needs
  - Integrated energy planning with the LDCs
  - Methods to account for uncertainty and risk in short- and long-term system planning
  - Planning practices and assumptions for how ESMP investments will meet clean energy goals
    - Including how they are consistent with the Massachusetts Clean Energy and Climate Plans

Next Steps: For the GMAC (3)

Review and comment on the biannual status reports

- First one is due September 30, 2025
- The Department did not set up a process for review and comment on these reports, but comments from GMAC might be warranted

Request EDCs to conduct technical sessions, for example:

- On progress of the LTSPP process
- On progress of the IEP Joint Working Group
- On discussions with CESAG
- On the first biannual status report
- On updates to the CIP process
- On future phases of the Department ESMP docket

Stakeholder Engagement Materials

- DOER and the consultants have been working on stakeholder engagement materials throughout the summer.
  - Thank you to the GMAC members/EDC communications teams who offered feedback in group meetings/via email.
  - Thank you to Marybeth Campbell for organizing a focus group of community-facing contacts in August.

- Materials development has been focused on:
  1. **New Page on GMAC Website:** Includes introductory information on electric grid planning, summaries of ESMPs and GMAC, and roles of different grid planning entities (ex. DOER, DPU, EDCs, CESAG).
     - Includes Supplementary information on relevant orders, links to other ESMP-related pages, and links to resources on incentives, bill assistance, and relevant contact information.
  2. **Two Factsheets:** Digital factsheets targeting 101 and 201 level education on Massachusetts' grid modernization efforts using plain-spoken language. Factsheets will be translated into the top 5 spoken languages in the Commonwealth.

What do GMAC members think of latest iterations? (next slides)

101 Level
Target Audience:
Ratepayers/LMI Ratepayers

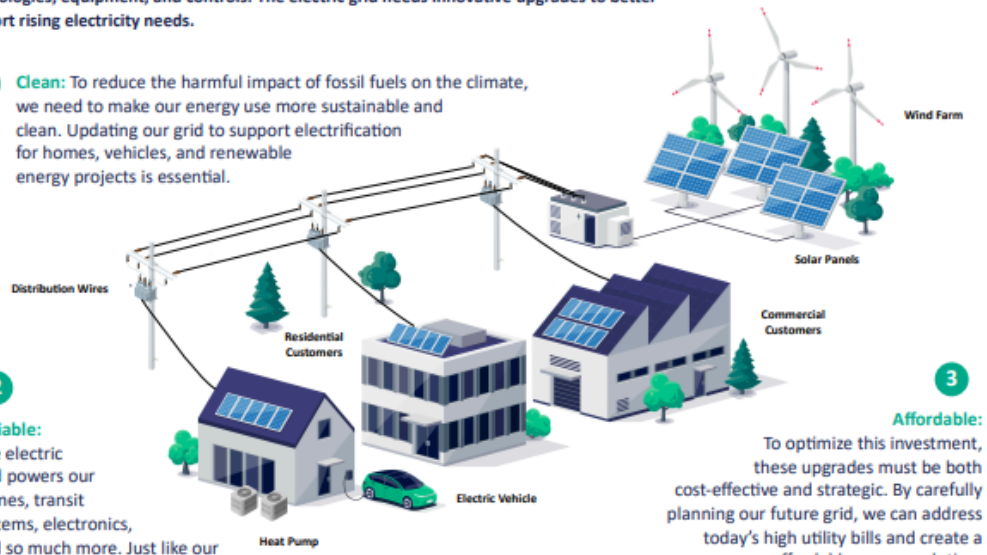
Your Electric Grid, Your Future: Get Involved

Because your electricity should be clean, affordable, and reliable.

The Grid Modernization Challenge

Think of the electric grid as a large network of power lines that carries electricity from power plants to your home so you can use it to turn on your lights. Grid modernization is the process of updating the grid to make it more resilient through new technologies, equipment, and controls. The electric grid needs innovative upgrades to better support rising electricity needs.

1 **Clean:** To reduce the harmful impact of fossil fuels on the climate, we need to make our energy use more sustainable and clean. Updating our grid to support electrification for homes, vehicles, and renewable energy projects is essential.



2 **Reliable:** The electric grid powers our homes, transit systems, electronics, and so much more. Just like our roads, we need to update our grid infrastructure (wires, poles, and substations). To meet future demand our grid infrastructure will need to support double the amount of electricity we use now.

3 **Affordable:** To optimize this investment, these upgrades must be both cost-effective and strategic. By carefully planning our future grid, we can address today's high utility bills and create a more affordable energy solution.

Turning Massachusetts' Challenge into Progress

Massachusetts' 2022 Climate Law requires utilities to develop strategic plans for modernizing the electric grid and advancing an equitable clean energy future. The plans must:

- promote renewable energy and energy storage adoption
- improve the grid's reliability and resiliency to the impacts of climate change
- enable electrified transportation and buildings
- minimize impacts on customers

Learn More About Your Electric Grid!

Massachusetts is convening a stakeholder group that provides recommendations on best practices for grid modernization planning. The Grid Modernization Advisory Council (GMAC) represents many interests and organizations, including low-income consumers, environmental advocacy groups, and the renewable energy industry.

Take the next step to learn more about your electric grid by visiting our website! Sign up for the GMAC newsletter at mass.gov/gmac for regular updates on our activities Send us questions or public comments at MA-GMAC@mass.gov.

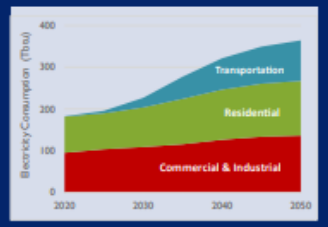
201 Level
Target Audience:
Municipal Leaders/
Communities hosting
infrastructure

Your Electric Grid, Your Community

Have a say in your community's energy infrastructure!

A Closer Look: Innovative grid solutions are becoming a reality in Massachusetts. The Hyde Park Battery Project by Eversource is addressing rising energy demand in several Boston neighborhoods whose electrical substations are already at full capacity. Community input will guide plans for siting and paying for this project to support Boston's clean and reliable energy future.

Why Modernize the Grid?



We need to double our electricity supply by 2050 to meet the Commonwealth's climate goals as more people purchase electric vehicles and switch from fossil fuel burning to electric heating systems. This means that our grid infrastructure needs to be updated to ensure we meet our climate goals.

The Challenge

Our current grid cannot support the rapid electricity growth needed to meet increasing demand and our climate goals. Traditional utility investments (substations, poles, and wires) are not enough. An expanded, modern grid will also need alternative clean energy technologies based in local homes and businesses. All these new resources need to be developed strategically, cost-effectively, and equitably.

Your Community's Involvement

Throughout the state, every town has a role to play in contributing to grid modernization discussions, promoting and installing new clean technologies, identifying the most cost-effective options for expanding the grid, and minimizing siting issues from new infrastructure installations.

How Are We Addressing This Challenge?

Massachusetts' 2022 Climate Law requires utility companies to create short- and long-term plans for modernizing the grid that:

- promote an equitable clean energy future that includes renewable energy and energy storage
- improve grid reliability and climate resiliency
- enable electrified transportation and buildings
- maximize net benefits to customers.

What Is the GMAC?

A new stakeholder group established by the Climate Law, the Grid Modernization Advisory Council (GMAC) provides advice and recommendations on best practices for utilities' grid-enhancing Electric-Sector Modernization Plans (ESMPs). The Grid Modernization Advisory Council (GMAC) represents many interests and organizations, including low-income consumers, municipal planners, and the renewable energy industry.

How Can I Represent My Community?

- Attend a public meeting, share your thoughts, and sign up for the GMAC newsletter at mass.gov/gmac.
- Send us questions or public comments at MA-GMAC@mass.gov.

Timeline

- Plan to **release factsheets in October.**
- Push communications through distribution channels:
  - State-level email distribution lists (GMAC listserv, EEA's EJ Office)
  - GMAC member organizations and distribution lists
  - EDC communications → aligning messaging on ESMPs/GMAC

GMAC Logo Options

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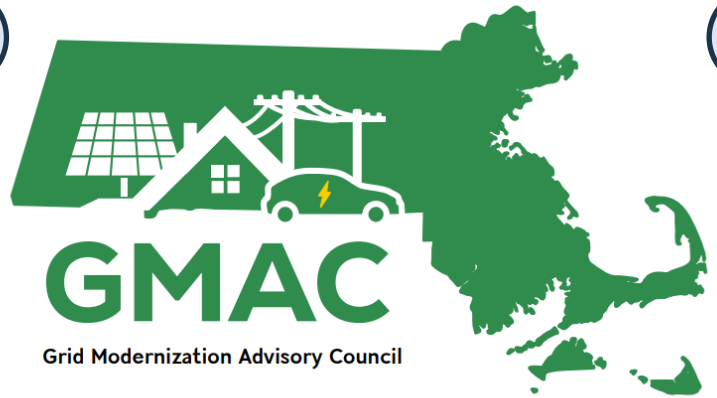

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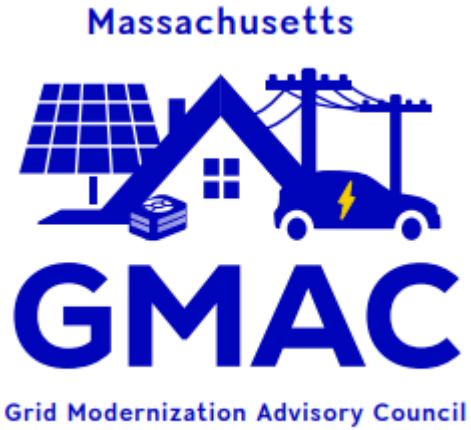

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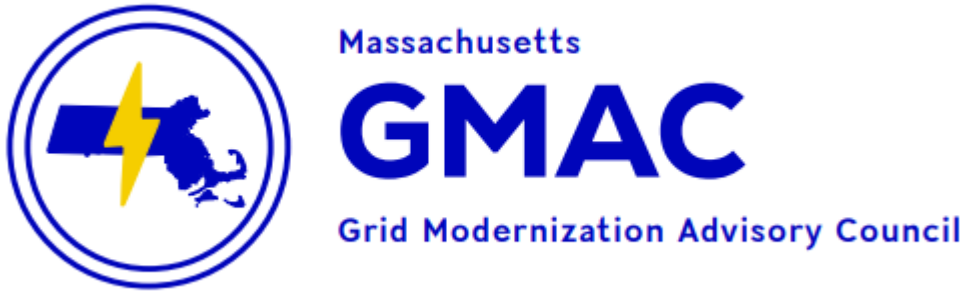

What do you think of these logo designs?

2024 ESMP/GMAC Schedule

GMAC activities
ESMP activities from Order
Holidays

SEPTEMBER

M	T	W	TH	F
2 Labor Day	3	4	5	6
9	10	11	12	13 ★ GMAC Meeting
16	17	18	19	20
23	24	25	26	27 EWG Meeting + ExCom Meeting
30 NGrid Rate Case Order				

OCTOBER

M	T	W	TH	F
	1 LTSPP Initiated by EDCs	2	3	4
7	8	9	10 GMAC Meeting	11
14 Indigenous People's Day	15	16	17	18 2025 GMAC Budget Due
21	22	23	24	25
28	29	30	31	

NOVEMBER

M	T	W	TH	F
				1
4	5	6	7	8
11 Veteran's Day	12	13	14	15
18 New CIP Proposals filed	19	20	21 Thanksgiving	22
25	26	27	28	29

DECEMBER

M	T	W	TH	F
2	3	4	5	6
9	10	11	12	13
16	17 GMAC Meeting	18	19	20
23	24	25 Christmas Day	26	27
30	31			

Questions?

Close and Next Steps

- **Next EWG Meeting:** **new date* – September 27, 2024, 10 – 11 AM
- **Next ExCom Meeting:** September 27, 2024, 11 AM – 12:30 PM
- **Next GMAC Meeting:** October 10, 2024, from 9:30 AM – 12:30 PM.

4. Appendix

Sections 92B and 92C
Of the Massachusetts 2022 Climate Act

Appendix: Section 92B(a)

(a) The department shall direct each electric company to develop an electric-sector modernization plan to proactively upgrade the distribution and, where applicable, transmission systems to:

(i) improve grid reliability, communications and resiliency;

(ii) enable increased, timely adoption of renewable energy and distributed energy resources;

(iii) promote energy storage and electrification technologies necessary to decarbonize the environment and economy;

(iv) prepare for future climate-driven impacts on the transmission and distribution systems;

(v) accommodate increased transportation electrification, increased building electrification and other potential future demands on distribution and, where applicable, transmission systems; and

(vi) minimize or mitigate impacts on the ratepayers of the commonwealth, thereby helping the commonwealth realize its statewide greenhouse gas emissions limits and sublimits under chapter 21N.

Appendix: Section 92B(b)

(b) An electric-sector modernization plan developed pursuant to subsection (a) shall describe in detail each of the following elements:

(i) improvements to the electric distribution system to increase reliability and strengthen system resiliency to address potential weather-related and disaster-related risks;

(ii) the availability and suitability of new technologies including, but not limited to, smart inverters, advanced metering and telemetry and energy storage technology for meeting forecasted reliability and resiliency needs, as applicable;

(iii) patterns and forecasts of distributed energy resource adoption in the company's territory and upgrades that might facilitate or inhibit increased adoption of such technologies;

(iv) improvements to the distribution system that will enable customers to express preferences for access to renewable energy resources;

(v) improvements to the distribution system that will facilitate transportation or building electrification;

(vi) improvements to the transmission or distribution system to facilitate achievement of the statewide greenhouse gas emissions limits under chapter 21N;

(vii) opportunities to deploy energy storage technologies to improve renewable energy utilization and avoid curtailment;

(viii) alternatives to proposed investments, including changes in rate design, load management and other methods for reducing demand, enabling flexible demand and supporting dispatchable demand response; and

(ix) alternative approaches to financing proposed investments, including, but not limited to, cost allocation arrangements between developers and ratepayers and, with respect to any proposed investments in transmission systems, cost allocation arrangements and methods that allow for the equitable allocation of costs to, and the equitable sharing of costs with, other states and populations and interests within other states that are likely to benefit from said investments. For all proposed investments and alternative approaches, each electric company shall identify customer benefits associated with the investments and alternatives including, but not limited to, safety, grid reliability and resiliency, facilitation of the electrification of buildings and transportation, integration of distributed energy resources, avoided renewable energy curtailment, reduced greenhouse gas emissions and air pollutants, avoided land use impacts and minimization or mitigation of impacts on the ratepayers of the commonwealth.

Appendix: Section 92B(c)

(c) In developing a plan pursuant to subsection (a), an electric company shall:

(i) prepare and use 3 planning horizons for electric demand, including a 5-year forecast, a 10-year forecast and a demand assessment through 2050 to account for future trends, including, but not limited to, future trends in the adoption of renewable energy, distributed energy resources and energy storage and electrification technologies necessary to achieve the statewide greenhouse gas emission limits and sublimits under chapter 21N;

(ii) consider and include a summary of all proposed and related investments, alternatives to these investments and alternative approaches to financing these investments that have been reviewed, are under consideration or have been approved by the department previously; and

(iii) solicit input, such as planning scenarios and modeling, from the Grid Modernization Advisory Council established in section 92C, respond to information and document requests from said council and conduct technical conferences and a minimum of 2 stakeholder meetings to inform the public, appropriate state and federal agencies and companies engaged in the development and installation of distributed generation, energy storage, vehicle electrification systems and building electrification systems.

Appendix: Section 92B(d)

(d) An electric company shall submit its first plan for review, input and recommendations to the Grid Modernization Advisory Council established in section 92C by September 1, 2023, and thereafter once every 5 years in accordance with a schedule determined by the department; provided, however, that the plan shall be submitted to the Grid Modernization Advisory Council not later than 150 days before the electric company files the plan with the department; and provided further, that the Grid Modernization Advisory Council shall return the plan to the company with recommendations not later than 70 days before the company files the plan with the department.

An electric company shall submit its electric-sector modernization plan, together with a demonstration of the Grid Modernization Advisory Council's review, input and recommendations, including, but not limited to, a list of each individual recommendation, the status of each recommendation and an explanation of whether and why each recommendation was adopted, adopted as modified or rejected, along with a statement of any unresolved issues, to the department in accordance with a schedule determined by the department. The electric company shall be permitted to include in base electric distribution rates all prudently incurred plant additions that are used and are useful. The department shall promptly consider the plan and shall provide an opportunity for interested parties to be heard in a public hearing. The department shall approve, approve with modifications or reject the plan within 7 months of submittal. In order to be approved, a plan shall provide net benefits for customers and meet the criteria enumerated in clauses (i) to (vi), inclusive, of subsection (a).

Appendix: Section 92B(e)

(e) An electric-sector modernization plan developed by an electric company pursuant to subsection (a) shall propose discrete, specific, enumerated investments to the distribution and, where applicable, transmission systems, alternatives to such investments and alternative approaches to financing such investments, that facilitate grid modernization, greater reliability, communications and resiliency, increased enablement of distributed energy resources, increased transportation electrification, increased building electrification and the minimization or mitigation of ratepayer impacts, in order to meet the statewide greenhouse gas emissions limits and sublimits under chapter 21N. An electric company shall submit 2 reports per year to the department 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.