Grid Modernization Advisory Council (GMAC)

MEETING MINUTES

Thursday, August 28, 2025, 1:00 p.m.– 3:00 p.m.

Hybrid meeting

Councilors Present:	Deputy Commissioner Joanna Troy (Chair), Sarah Bresolin Silver (virtual), Marybeth Campbell (virtual), Larry Chretien (virtual), Sarah Cullinan (virtual), Julie Curti (virtual), Amy McGuire (virtual), Chris Modlish, Kyle Murray (virtual), Levi Reilly, Andy Sun (virtual), Jonathan Stout (virtual), Kate Tohme (virtual), Alex Worsley (virtual), Kathryn Wright
Councilors Absent:	None
Non-voting Councilors:	Digaunto Chatterjee (Eversource; virtual), Andrew Schneller (National Grid) (virtual), Kevin Sprague (Unitil; virtual)
DOER Staff Present:	Colin Carroll (virtual), Marian Harkavy (virtual), Julia Fox, Aurora Edington, Yaritza Peña, Austin Dawson, Paul Holloway (virtual)
Consultants Present:	Aidan Glaser Schoff (virtual), Kyle Schultz
Others Present:	Sarah Alexander (Executive Office of Energy and Environmental Affairs; virtual), Deanna Moran (Office of Coastal Zone Management; virtual), Corine Moss (MassCEC; virtual), Allison Wannop (Rhizome; virtual), Dan Mareau, National Grid

1. Call to Order

Deputy Commissioner Joanna Troy, Massachusetts Department of Energy Resources (DOER), GMAC Chairperson called the meeting to order at 1:02 p.m.

2. Welcome, Roll Call, Agenda

Deputy Commissioner Joanna Troy welcomed all participants to the GMAC meeting and took roll call for voting and non-voting members.

3. Public Comment

There were no public comments.

4. Meeting Minutes Review and Voting

Deputy Commissioner Joanna Troy asked if there were any proposed amendments to the July 31, 2025, GMAC meeting or the August 14, 2025, Executive Committee meeting minutes. None were offered. Deputy Commissioner Troy approved the minutes.

5. Review of Strategic Planning Timeline

Deputy Commissioner Joanna Troy provided a status update of the strategic planning process. She highlighted that the September GMAC meeting will discuss the draft strategic plan. The strategic plan will be voted on during the October GMAC meeting.

Councilor Jonathon Stout, PowerOptions, Representing large commercial and industrial end-use customers*:* Is there a timeframe for review of the strategic plan prior to the 18th?

Julia Fox, DOER: We will provide it at least one week in advance.

6. Equity Working Group Membership

Deputy Commissioner Joanna Troy described that the EWG terms expire in September. She described the requirements for appointment and reappointment of the EWG members. She highlighted that the GMAC will vote to appoint EWG membership and an EWG chair in the September GMAC meeting. She offered that if anyone knows of any candidates, to let the GMAC know. She discussed that the EDCs can also evaluate if they would like to change their representative.

7. GMAC Second Stakeholder Session Proposal

Deputy Commissioner Joanna Troy discussed the upcoming stakeholder event in December. She discussed potential details for the upcoming event. She recommended the UMass Amherst space be used to host the event. She discussed proposed changes for the upcoming event relative to the recently completed prior event.

Councilor Kathryn Wright, Barr Foundation, Representing the environmental justice community: Are we trying to reach out to a planning commission on the western side of the state?

Julia Fox, DOER: We are planning to use DOER's Green Communities Division as well as a Berkshire county-based planning organization.

Councilor Jonathon Stout: I think that the stakeholders should serve the entirety of the western side of the state, rather than a singular focus on rural issues.

Councilor Chris Modlish, Massachusetts Office of the Attorney General, Representing the Attorney General: I agree it would help get a diverse perspective on municipalities with regards to needs in the community.

Deputy Commissioner Troy: Should the meeting be Thursday or Friday?

Julia Fox: I found out that the IEP listening session is December 11th, which may be a conflict.

Deputy Commissioner Troy: If people could look at their calendars, and if Julia could send out a poll to choose a date. Also, December 11th and 12th is around finals period, so if we are going to a college campus, we should make sure not interrupt anything, for example a test.

8. Updates on ESMP Activities

Councilors provided updates on ESMP Activities.

IEP Working Group

Councilor Kyle Murray, Acadia Center, Representing the environmental advocacy community: No bombshells from the prior session.

Councilor Wright: I think that the last session was before the last GMAC meeting. I attended one of the listening sessions. There was quite a lot of confusion about how all the regulatory processes fit together.

LTSPP (DPU 25-20)

Councilor Kate Tohme, New Leaf Energy, Representing the distributed generation renewable energy industry: There was a Hearing Officer memorandum seeking comments on joint procedural recommendations for phased investigation and if the proposal should be a statewide program. My expectation is that we will next hear from the DPU on procedural guidance.

9. Resilience Presentations

a. Coordinated Climate Adaptation and Resilience in Massachusetts

Sarah Alexander, Director of Resilience and Finance at Executive Office of Energy and Environmental Affairs (EEA), presented on coordinated resilience planning in Massachusetts, prioritizing statewide impacts in the climate assessment such as electricity infrastructure. She summarized the ResilientMass plan, metrics, and key actions underway, how resilience planning at the local level integrates with state-level planning, and how resiliency planning is updated over time.

Deanna Moran, Chief Costal Officer of the Office of Coastal Zone Management, presented on ResilientCoasts. She discussed the 50-year framework at district and regional scale, that 98 communities are considered coastal communities within the initiative, and how coastal resilience districts were determined. She discussed that the analysis included how coastal flood risk interacts with people, housing, and infrastructure. She discussed that they created coastal typologies to help communities plan for measures which are largely driven by the type of coast. She discussed that the focus of ResilientCoasts is to organize state-wide strategies and that the final plan should be released in about two months.

Corinn Moss, Program Manager at Massachusetts Clean Energy Center (MassCEC), discussed Grants for Enhancing Massachusetts Grid Resilience and Reliability Program. She discussed the federal context for the program, details of the program, the current status of allocations of funding, and benefits from anticipated projects.

b. DOER Presentation

Yaritza Peña, Energy Program Coordinator at DOER presented on Advancing Grid Climate Resilience. She discussed definitions of climate resilience, resilience spending in the ESMP and adjustments in the Phase I and II DPU orders, Climate Vulnerability Assessments (CVAs) and their incorporation into ESMP plans and future filings, Climate Vulnerability and Resilience Plans (CVRPs) which apply to the second term ESMP filings in 2029, a comparison of CVAs to CVRPs, and DPU Order 24-53 which covers resiliency performance metrics.

Julia Fox, Grid Modernization Program Coordinator at DOER discussed potential GMAC actions considering resilience including monitoring the CVAs and CVRPs in the biannual reports, providing stakeholder education on resilience planning, establishing a GMAC resilience subcommittee, and establishing a GMAC workstream on CVA and CVRP implementation.

A break began at 2:07 p.m. The meeting resumed at 2:12 p.m.

c. Rhizome Data

Allison Wannop, Regulatory Attorney at Rhizome, presented on Planning for a More Resilient and Equitable Future. She discussed resilience planning requirements within the United States, components of a resilience plan, how resilience was integrated into system planning in New York's ConEdison including metrics and valuation adjustments, and how Rhizome software can improve resiliency planning.

10. Facilitated Discussion

Councilor Chris Modlish: As a bit of background, I participated in the DPU 24-53 docket on resiliency standards and metrics as well as the ESMP team which focused on resilience. As the ratepayer advocate, I'd like to include a discussion on resiliency costs weighing against resiliency benefits.

Councilor Amy McGuire, Highland Electric Fleets, Representing the electric vehicle industry: Also as background, I formerly worked at DOER, and one project I worked on while there was the community clean energy and resiliency initiative. I'll open it for discussion.

Councilor Sarah Cullinan, Massachusetts Clean Energy Center, Representing the Massachusetts Clean Energy Center: Related to the first question here on slide 43, the EDCs have ARRs which have requirements for disclosing climate change and climate risk. Also, there is a service quality program which will be updated with resiliency metrics. Given that, how will the CVAs and CVRPs be incremental to what is already filed?

Dan Mareau, National Grid: The CVAs are an input into choosing where targeted investment would occur. Resiliency investments would include normally exclude major events. Penalty-metric wise, it's SAIDI and SAIFI. The impact of CVA as informing resiliency planning, for example coastal flooding, you would look at those events as well as blue-sky SAIDI.

Councilor Andrew Schneller, Representing National Grid: I'm not super clear on what is in the ARR vs. what is in the CVRP. The CVA is higher level and looks at which assets are impacted on climate change trends. The CVRPs look at leveraging that information for specific projects. The ARRs are more focused on historical performance. For example, looking at poor performance in the past year. Reliability is easier to measure compared to resilience. There's no way to baseline resilience. You have to instead look at the total number of storms there are. FLISR is a resilience type investment because it's not stopping a tree from falling, but it helps with getting back service more quickly.

Councilor Sarah Cullinan: Do the CVAs and CVRPs feel like they are pushing for incremental work?

Councilor Andrew Schneller: I haven't seen the CVRP since it's not done, so it remains to be seen. We are always looking to improve reliability in resiliency. We are looking at microgrids and AI tools. We're using AI for our forestry program to be more targeted. All of that is a resilience since we are trying to prevent outages from happening.

Councilor Kevin Sprague, Representing Unitil: All of these are different and additional tools in the toolbox. Historically, we've focused on strict reliability and worst-performing circuits and eliminating continuous outages. With resilience and CVA and CVRPs, we will look into areas that we may not have been focused on before because we were focused on the bottom-line SAIDI and SAIFI number. We'll use as many tools as we can have in the toolbox.

Councilor Kathryn Wright: Something that struck me in the Coastal Resiliency presentation, moving from city planning to regional planning, the EDCs are themselves regional. I'm curious how the EDCs and the state are reconciling the disparate efforts at the different scales.

Deputy Commissioner Joanna Troy: On the state side, the ResilientMass plan is split into zones. DOER's recommendation in docket 24-53 was to create resilient metrics that correspond to those zones. In our energy security work, we looked at climate vulnerability work for the same zones.

Councilor Kathryn Wright: Maybe it's more reconciled than I realized.

Deputy Commissioner Joanna Troy: We have to intentionally reconcile this. It would be good to hear from the EDCs on coordination with the state.

Councilor Andrew Schneller: We are using the reports you have published as inputs. We don't do a city-by-city analysis, but instead a hazard-by-hazard analysis. When looking at flooding vulnerability and what assets are affected, we looked at what is the criticality of those assets and can we afford to let them fail once in a while and fix later, or will there be a drastic impact? Substation equipment is the most critical, so we looked at lifting those out of the flood plain or relocating. We are not trying to do it once and then come back and do it again. Our most vulnerable equipment for heat is transformers and wires. We're looking at it holistically as a system rather than job-by-job or city-by-city.

Councilor Amy McGuire: Is there a possibility moving forward, how are looking at outside state and federal funding? Can you share anything on this topic?

Councilor Andrew Schneller: I believe there is something we are using for an AI-tool, but I'd have to dig in to get an answer to that.

Deputy Commissioner Joanna Troy: Moreso, if a community were to build a culvert and it could be placed to co-benefit the utility, how much looking into the co-benefits is going on?

Councilor Andrew Schneller: It may be that I don't see the day-to-day, but it could be that the community coordinators are doing something like this.

Deputy Commissioner Joanna Troy: Since the MVPs don't control the utility infrastructure, they don't have as much visibility.

Councilor Levi Reilly, Marcus Partners, Representing the building electrification industry: Do we have the funding we need to complete the natural disaster program analysis.

Deputy Commissioner Joanna Troy: We never have enough money. It is still an issue so that we can find co-benefits to spend. And there is funding in the capital budget.

Councilor Levi Reilly: Is it something like $2 billion in funding but $50 billion needed in funding?

Deputy Commissioner Joanna Troy: I think it's something like that.

Councilor Levi Reilly: How do we compare on resiliency relative to other states?

Dan Mareau: I do think we are resilient, but there are ways to get more resilient. Major events are few and far between and each are different. We're not getting category 5 hurricanes, but also the south is not getting blizzards while we can function after blizzards. Most of our outages are driven by trees, and it's not reasonable to underground everything. We have excellent emergency response points in the three utilities, which is also a big component of it.

Councilor Andrew Schneller: For reliability, you can filter out events and baseline it. Resiliency is different because every utility faces unique challenges. So, you get resilient to what you face. You end up just comparing the weather and what makes it so hard. That is why we filter that out for reliability.

Councilor Sarah Cullinan: Regarding the Rhizome project and software. I know that National Grid used it for wildfires. Was it about where the electric system was a cause of the wildfire, or instead where the utility is at risk?

Councilor Andrew Schneller: It is my understanding that it is about risk of wildfire rather than early detection.

Councilor Sarah Cullinan: The whole point of tools like Rhizome is to try to look at forecasted risk at a granular risk and look at potential future costs and subsequent cost-benefit analysis. Turning to new resiliency software is an attempt to quantify resiliency.

Councilor Andrew Schneller: We did evaluate it for that purpose but elected to build our own tool. But I agree that the AI tools have lots of potential for that.

Councilor Digaunto Chatterjee, Representing Eversource: The issue is that some tools can be data hogs. For example, GIS, storm projections, and then you have to wonder should third parties have that data? Also, grounding everyone on SAIDI/SAIFI, IEEE has a benchmark for all utilities. We came up with an all-in SAIDI and SAIFI metric. But the problem with that is very stochastic. Our numbers this year are very close, but in 2020 it was in thousands of minutes due to storms.

We look at 10-year and 5-year circuit zone and look at the impact of CMI per circuit-zone and prioritize by dollar per all-in SAIDI. Then we layered in the CBA.

Bottom line, we come up with $100M capital plan. If the DPU then says instead of $100M you get $50M. But the benefits are not linear. We look at customer system costs and benefits due to

those changes. There is a lot of work that has gone into resilience. Every storm that we get now is 2.9x the intensity of older storms. If the funding isn't there, as the Deputy Commissioner alluded to, then it is a framework and tools rather than a solution.

Deputy Commissioner Joanna Troy: Resilience is one of my favorite topics. I want to point out that there is a resiliency technical session. And sometimes an investment that never gets used is the best investment.

11. Close

Deputy Commissioner Joanna Troy discussed the upcoming events that will close the year.

Deputy Commissioner Joanna Troy adjourned the meeting at 2:59 p.m.

Respectfully submitted,

Aidan Glaser Schoff
Synapse Energy Economics

Meeting Attachments

- Meeting Agenda
- Meeting Slide Deck
- Draft July 31, 2025 GMAC Meeting Minutes
- Draft August 14, 2025 Executive Committee meeting minutes
- Resilience Topic Brief
- August Activity Tracker