

# Grid Modernization Advisory Council (GMAC)

## MEETING MINUTES

Thursday, April 13, 2023

Virtual Zoom Meeting

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**Councilors Present:** Liz Anderson, Sarah Bresolin Silver, Marybeth Campbell, Larry Chretien, Kathryn Cox-Arslan, Jennifer Daloisio, Elizabeth Mahony, Amy McGuire, Kyle Murray, JS Rancourt, Ahmed Abusharkh (designee for Andy Sun, left at 2:33 pm), Kathryn Wright

**Non-Voting Councilors:** Digaunto Chatterjee, Carol Sedewitz, Kevin Sprague

**Councilors Absent:** Alex Worsley, Andy Sun (joined at 2:33 pm)

**DOER Staff Present:** Joanna Troy (3-5 pm), Aurora Edington, Anett Ludwig, Sarah McDaniel

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### 1. Call to Order

Commissioner Mahony, as Chair, called the meeting to order at 02:07 PM.

### 2. Welcome, Agenda, Roll call

***Commissioner Mahony – Commissioner Department of Energy Resources (DOER)***

Commissioner Mahony welcomed all participants and walked through the agenda (slide 2).

Commissioner Mahony took roll call for voting and non-voting members.

### 3. Review and vote on Meeting Minutes

Commissioner Mahony asked for any changes to the meeting minutes that were sent out.

***Council Discussion and Vote***

No changes requested. Kyle Murray moved to adopt; Kathryn Wright seconded. All present voted in favor, with none opposed or abstaining. The meeting meetings from 3/31/2023 were approved by the Council.

#### **4. Executive Committee member nominations and anticipated schedule**

Commissioner Mahony presented the nominees for the Executive Committee and opened the floor for the nominees to speak for a couple minutes about why they should be selected for the GMAC Executive Committee. Bresolin went first, Murray spoke second, Chatterjee went third, and Sedewitz fourth.

##### ***Council Discussion and Vote***

Commissioner Mahony thanked all nominees for volunteering for the Executive Committee and asked for questions or discussion. No questions.

The Council voted unanimously in favor of Bresolin and Murray as voting members. Sedewitz won the seat for the non-voting member with six votes in her favor, while Chatterjee received four votes. Cox-Arslan and Abusharkh abstained from the vote for the non-voting member.

##### ***Timeline***

Commissioner Mahony discussed the Executive Committee schedule (slide 6). The Executive Committee will be meeting once a month. The Executive Committee will facilitate, set up a future agenda, and decide when the GMAC will address future topics. The GMAC can suggest agenda topics for the Executive Committee to discuss. The first meeting is going to be scheduled around 2 weeks after this meeting.

#### **5. DOER recommendations on ESMPs**

##### ***Commissioner Mahony – Commissioner Department of Energy Resources (DOER)***

Commissioner Mahony introduced DOER's recommendations on the ESMPs (slide 7). The Council is expected to receive a draft from the Companies on September 1, 2023. Feedback from the GMAC will be provided to the utilities in November 2023. It is the first time this plan is required by the Companies.

##### ***Discussion:***

##### ***Kathryn Wright, Barr Foundation, Representing the environmental justice community***

Wright asked if there would be a complementary stakeholder process anticipated under topic #5.

Commissioner Mahony explained that there should be a focus on stakeholder engagement in the ESMPs. DOER wants to make sure that communities are involved. DOER is thinking about general public engagement.

***Kyle Murray, Acadia Center, Representing the environmental advocacy community***

Murray referred to topic #4 ‘Consolidating data into one database’ which was said to be a lot of work and money. He asked if the Council anticipates that being a similar issue here - data that’s reported as part of the ESMP. He explained there were requests in the Energy Efficiency Advisory Council to have data made available and it was rejected because it was very costly. Referring to topic #5, he asked if stakeholder engagement would include Environmental Justice communities. He recommended referencing it.

***Amy McGuire, Highland Electric Fleets, Representing the electric vehicle industry***

McGuire referred to topic #5 and suggested adding a definition on what ‘robust’ means to support Environmental Justice and inclusivity that would be important and to have broader community outreach.

On topic #1 she suggested exploring all technologies and industries represented on the council but also allow for future emerging technologies.

***Digaunto Chatterjee, Representing Eversource***

Referring to topic #1, Chatterjee explained that visualizing would be more than a 5 year perspective. Topic #2 needs a common template with underlying foundations of planning. Topic #4 is what comes out of Topic #1 and elaborating why the Companies have an investment bucket for different areas. Topic #5 includes soliciting stakeholder input.

***Larry Chretien, Green Energy Consumers Alliance, Representing low- and middle-income residential consumers***

Chretien noted that any extra work can be very costly and not as inclusive as we want. Topic #4 is of great interest and could result in higher quality information requests. He noted that the Department’s docket and discovery is very extensive. It requires a lot of staff time across the board and is not as inclusive as would be ideal. Also, a regulatory proceeding can't be joined by several parties and is very time intensive.

Commissioner Mahony recognized that the Department has a lot of work to do once the ESMPs are filed. DOER wants to make sure that the Council works with the Companies to have a robust filing. The intention is to have all data in the initial filing at the Department in January 2024. The Executive Committee will think about a data request process.

***Kathryn Cox-Arslan, New Leaf Energy, Representing the distributed generation renewable energy industry***

Cox-Arslan recommended adding a timing indication of investments to topic #1 – if investments were made or approved. She suggested adding a new bullet point about consistency and on forecasting Massachusetts’s data in the future, acknowledging geographic specificity.

***Liz Anderson, Massachusetts Office of the Attorney General***

Anderson suggested a mention of cost-effectiveness. The ESMPs must minimize or mitigate impacts on ratepayers. Anderson recommended looking at everything holistically - demand, load growth, AMI deployment. For ongoing metrics reporting, there are typically performance metrics in the dockets. It would be important that those metrics are delivering to ratepayers and into the system.

***Carol Sedewitz, Representing National Grid***

Sedewitz explained that all Companies have data portals. It would be a good opportunity to refresh what the Companies are providing to achieve the goals. Sedewitz also suggested consistency of forecasting. This will be the Council’s first cut at ESMP and then the Council has the opportunity to update and revise it over the years.

***Andy Sun, Massachusetts Institute of Technology, Representing engineering expertise in interconnecting clean energy***

Sun suggested an education session to learn what kind of information is already provided by the Companies, how internal studies impact ESMPs and if there would be any kind of technical modelling behind it (e.g. planning studies). Commissioner Mahony recommended the Executive Committee discuss this.

***Sarah Bresolin Silver, ENGIE North America, Representing the energy storage industry***

Bresolin acknowledged the work the Companies have done and noted it would be important to address holes in ESMPs under topic #1. It would be helpful to have information in topic #1 to inform what the Council wants to do with the plans.

***Digaunto Chatterjee, Representing Eversource***

Chatterjee explained that the aim is to solve goals of the CECP in the ESMPs. Topic #7 would be much more productive if we focus on things, we do not already do.

Commissioner Mahony noted that the slide is the DOER position. A future letter will compose all proceedings that DOER imagines should be included. DOER hoped to post the letter in 2 weeks and review additional details. It will be an ongoing iterative process.

***Digaunto Chatterjee, Representing Eversource***

Chatterjee emphasized that the goal would be to electrify (heat pumps and EV).

***Carol Sedewitz, Representing National Grid***

Sedewitz invited the Council to visit a substation and to organize a visit.

## **6. Presentation on distribution system planning**

Lisa Schwartz (Lawrence Berkeley National Lab) presented on distribution system planning.

### ***Discussion***

#### ***Kyle Murray, Acadia Center, Representing the environmental advocacy community***

Referring to slide 24 on hosting capacity analysis in California, Murray asked if Massachusetts is doing hosting capacity analysis. Schwartz noted only California includes EV charging integration analysis in their hosting capacity maps. Minnesota is looking at including load in the hosting capacity maps. She was interested to hear from the utilities in the future on what it would take to get to this kind of gold standard type of data we're referencing.

#### ***Digaunto Chatterjee, Representing Eversource***

Chatterjee noted that the utilities do hosting capacity maps just for solar but they are static right now. To comply for the CIP order (DPU Order 22-47), Eversource will make a more dynamic hosting capacity map. Eversource has informally committed to the City of Boston to also add/layer in EV hosting capacity. That is a much more immediate need, and Eversource is working toward it.

Schwartz recommended a broad approach.

#### ***Sarah Bresolin Silver, ENGIE North America, Representing the energy storage industry***

Referring to slide 22 on proactive distribution system planning, Bresolin asked for examples. Schwartz recommended advanced incentives in Minnesota where the state is looking at two communities to reduce upgrades. The Center for Energy Efficiency in Minnesota partnered with Xcel Energy to create retail programs. Example 2 is in New York with its net metering successor tariff. New York has zones where they are providing load relief in certain parts of service territory. Things will be going in a temporal and location-based direction.

#### ***Amy McGuire, Highland Electric Fleets, Representing the electric vehicle industry***

Referring to the hosting capacity maps, McGuire asked about any location where they are looking at EVs as not just a load but also as storage. He noted that Highland Electric Fleets does Vehicle-to-Grid (V2G) with school buses in Massachusetts. Highland Electric Fleet thinks about fleets as load but also as mobile energy storage. Schwartz noted that in terms of what's in place now, only California could be recommended. She noted to consider bringing in someone from the California Public Utilities Commission (CPUC) to talk about their hosting capacity and utilities. There are many distribution plans with pilots of time-varying rates (TVR), and want to include that idea in distribution system planning.

Chatterjee responded that he would be happy to come back to the GMAC and walk through the hosting capacity analysis. Chatterjee noted that most areas are experiencing capacity deficiencies, driven by electric vehicles with peak curves.

***Larry Chretien, Green Energy Consumers Alliance, Representing low- and middle-income residential consumers***

Chretien noted that the Department had dockets open on transportation electrification. GECA supported TVR of EVs, but the Companies were not supportive. Chretien hoped to proceed on that topic with the GMAC. He asked how do tariffs work and if the Department delegates to distribution companies to change rate structure based upon location. He explained that not every change can be redirected to the Department over time affecting locations around a territory. Schwartz noted that this is a complex issue and referred to Chatterjee.

Chatterjee noted that there are many ways to incentivize but the cost must be associated with the investment. He noted combining all distribution investment into one bucket will not work. Schwartz noted that this could be a compliance filing but is a legal question/regulatory question.

Commissioner Mahony thanked the Council for its discussion.

Break from 4:10 pm to 4:20 PM.

**7. Discussion on structure and agendas for upcoming GMAC meetings**

Commissioner Mahony introduced the Summer GMAC Meeting Structure (slides 10 and 11). DOER wants to optimize the usefulness of the four meetings until the ESMPs are filed with the GMAC (slide 9). The aim is to maximize time, given the volume of work, and try to address two topics at every meeting, wrapping up comments and discussion from the meeting prior to comments. DOER needs to meet with the Executive Committee to identify when to do what.

***Discussion***

***Carol Sedewitz, Representing National Grid***

Sedewitz asked about the future of meetings and wanted to confirm to follow up. The Executive Committee helps to determine the topics for each meeting.

***Digaunto Chatterjee, Representing Eversource***

Chatterjee wished to wrap up existing topics first and to add today's discussion to slide 10. He also recommended discussing planning 101, foundational planning procedures and processes, distribution planning process, DER planning guide, and the forecasting framework. Chatterjee recommended having a day with existing planning procedures and forecasting methodologies.

***Kyle Murray, Acadia Center, Representing the environmental advocacy community***

Murray liked all suggested topics on slide 10. He asked if DOER sees the Council as the right platform to discuss regional transmission issues. Mahony referred to the separate Clean Energy Transmission Working Group (CETWG). The Council will partially touch upon transmission issues.

***Kathryn Cox-Arslan, New Leaf Energy, Representing the distributed generation renewable energy industry***

Cox-Arslan noted that advancing topics as early as possible would be helpful and recommended having a conversation about the types of data you need. Cox-Arslan strongly supported pulling in foundational topics as soon as possible to the GMAC Meeting Structure. As a Distribution Generation stakeholder, her company has participated through other dockets with voluminous amount of material. Some topics could function as prereads and not take up time. Referring to bullet 1 on slide 10 for example, the Executive Committee should consider what pre-reading the Council can assign to maximize the meeting time.

***Kathryn Wright, Barr Foundation, Representing the environmental justice community***

Wright seconded Cox-Arslan's comment and connected to Chretien's earlier comment in putting overviews of the status of projects first. Wright recommended having conversations around what kind of data we need and requests to utilities as soon as possible. Wright also noted the need to have advance notice of meetings so constituents and community groups can be appropriately noticed.

***JS Rancourt, DXS - Direct Expansion Solutions***

Rancourt recommended adding building integration into electrification, the connection of air-source heat pumps and the grid. He suggested asking utilities what kind of information they need from the building electrification world. He asked how the GMAC could go to respective industries to provide the information needed. Commissioner Mahony suggested thinking about DER, transportation, and building electrification as prereads to catch up. Maybe forecasting would be its own topic.

***Amy McGuire, Highland Electric Fleets, Representing the electric vehicle industry***

McGuire noted an overlap of all of these topics, e.g. building electrification. Transportation electrification is another example of a sector that is very interrelated. McGuire noted that forecasting would be needed across all these topics. She recommended asking the utilities for opportunities to share different industry perspectives on what they should be considering.

***Carol Sedewitz, Representing National Grid***

Sedewitz thanked Rancourt and McGuire for their suggestions. The Companies can get pre-reads out for planning and forecasting ahead of time.

***Digaunto Chatterjee, Representing Eversource***

Chatterjee noted that more important than forecasts will be the forecasting framework and stakeholder process. Chatterjee asked what the process for buildings is to provide input to utilities, what a utility request would look like, what an annual process would look like both for electrification customers (EV, buildings, solar, etc.) and how to provide input regularly and incorporate into processes.

Cox-Arslan noted that the methodology part would be important and asked what criteria the GMAC is planning for.

Chatterjee referred to forecasting and electric demand assessment. Forecasting would be what Companies do historically and electric demand assessment is forward looking. Methodology would be a pre-read and the Companies can post it. The GMAC needs to advise on the methodology used and then focus on the process where DER developers are telling the Companies where to prioritize DERs. Chatterjee noted he would be worried for the Council to get too granular, for example looking at the city of Somerville's electric vehicle demand. Murray acknowledged the discussion point overall, but suggested that there might be times where the Council wants to look at a specific location for something to be explained. The Council does not intend to go town by town.

Commissioner Mahony suggested to think about a framework of the whole state of Massachusetts and consider how National Grid and Eversource have urban and rural settings which will require different forecasting and planning methodologies.

***Andy Sun, Massachusetts Institute of Technology, Representing engineering expertise in interconnecting clean energy***

From an optimization perspective, Sun asked about the objectives and the final decisions the Council wants to make in terms of feasibility, cost-effectiveness, and resource planning.

Sedewitz asked for clarification on Sun's question in trying to make sure that what GMAC is working on meeting the goals.

Chatterjee referred to a stack chart of all investment plans for 5 years including reliability, CIPs, EV infrastructure, etc.

***Larry Chretien, Green Energy Consumers Alliance, Representing low- and middle-income residential consumers***

Chretien noted that forecasts become less useful as you look further out because of a variety of factors including changing customer preferences, changing costs, and changing infrastructure availability. We likely have a good idea of where things are going for the next 3-5 years but even within that near term window, some things are uncertain, like EV cars eligible for the Federal tax credit as an example. Generally making the comment that forecasting is important but there is a lot of variability.



Chatterjee commented he would like to propose a nomenclature change. The Companies say that a forecast is informed by the past historical 10 years and can trigger infrastructure upgrades. An electric demand assessment is forward looking and informs the sizing of the upgrades. According to the goal of the Commonwealth, electric demand assessment will be for 30 years. When the Companies start forecasts, they trigger upgrades, but when they design capacity of full solution, they look at electric demand assessment.

## **8. Close & Next Steps**

Commissioner Mahony explained the next steps (slide 11). The GMAC reconvenes on May 11, 2023 in hybrid mode. The Executive Committee will pick the topics. Commissioner Mahony noted that DOER wants to make sure the Council has a process in place for appropriate requesting of data. The Executive Committee will take a stab at coming up with processes to bring to the Council for May 11<sup>th</sup>. Commissioner Mahony emphasizes the importance of an orderly process.

Commissioner Mahony thanked the Council and closed the GMAC meeting at 5:01 PM.

### **Meeting Materials:**

- Meeting agenda
- Meeting presentation slides
- Draft meeting minutes from the first GMAC meeting
- Executive Committee nominee statements
- Presentation on Distribution System Planning from Lisa Schwartz, Lawrence Berkeley National Laboratory