

Massachusetts Electric Vehicle Infrastructure Coordinating Council

Meeting 2: data

Thursday, June 1, 2023 | 12:30–3 p.m.
via Zoom

EVICC members:

- **Mike Judge**, Undersecretary, Executive Office of Energy and Environmental Affairs (chair)
- **Audrey Horst** for State Senator Mike Barrett, Chair, Joint Committee on Telecommunications, Energy, and Utilities /
- **Eric Bourassa**, Director, Transportation Division, Metropolitan Area Planning Council
- **Brian Ferrarese**, Assistant Commissioner of Operations and Environmental Compliance, Department of Environmental Protection
- **Laura Gilmore**, Director of Strategic Transit Planning, Massachusetts Bay Transit Authority
- **Cobi Frongillo** for State Representative Jeff Roy, Chair, Joint Committee on Telecommunications, Energy, and Utilities
- **Staci Rubin**, Commissioner, Department of Public Utilities

Commented [WS(1)]: Brian could not attend, so Sharon Weber covered the first 2 hours, and Christine Kirby covered the last half hour

Additional stakeholders

- **Sharon Weber**, Deputy Division Director, Air and Climate Programs, MassDEP
- **Christine Kirby**, Assistant Commissioner, Bureau of Air and Waste, MassDEP
- **Sean Donaghy**, MBTA, Manager of Energy Programs
- **Rishi Sondhi**, National Grid
- **Daniel Gatti**, Director of Clean Transportation Policy, Executive Office of Energy and Environmental Affairs
- **Hayes Morrison**, Assistant Secretary, Policy and Strategy, Transportation and Infrastructure Division, Massachusetts Department of Transportation
- **Mark Rabinsky**, Deputy Director, Green Communities Division, Department of Energy Resources
- **Scott Seigal**, Hearing Officer, Department of Public Utilities
- **Megan Wu**, Assistant Director / Electric Utility Regulator, Department of Public Utilities
- **Jennifer Haugh**, Vice President of Planning and Customer Engagement, GreenerU
- **Daniela Miranda**, Project Coordinator, GreenerU
- **Kevin Boughan**, Eversource

Meeting resources

- [EVICC website](#)
- [EVICC contact information](#)
- [EVICC data needs](#)
- Summary of state and federal EV charging station programs

Meeting goals

- To review existing and needed baseline data, including public input
 - To give people a strong foundation in the utilities programs
 - To offer stakeholders an opportunity to provide input and feedback
- To review and get feedback on an outline for upcoming meetings

Meeting agenda

1. Call to order:

- a. Judge called the meeting to order at 12:38 p.m.

2. Review of meeting agenda / attendance

- a. Judge went over the meeting agenda and took roll call.

3. Review and approve meeting minutes of May 15, 2023

- a. Rubin motioned to approve the minutes of May 15, 2023. Rabinsky seconded.
 - i. DPU: yes
 - ii. DOER: yes
 - iii. [MassDEP](#): yes
 - iv. MBTA: yes
 - v. Roy: yes
 - vi. Barrett: yes
 - vii. MassDOT: yes

4. Presentation: MBTA

- a. Gilmore and Donaghy introduced themselves. MBTA provides rapid transit bus and train services to the greater Boston area. They are the largest user of electricity in the commonwealth.
- b. In terms of EV charging, the MBTA received a grant in 2009 from DOER to install 9 different Level 1 chargers. In 2018, they issued an RFI to gather more information from the EV industry and potential partners and were unable to find a partnership opportunity.
- c. Challenges in installing public-facing EV charging stations:
 - i. Long-term maintenance
 - ii. Limited capacity of internal electricians
 - iii. Business model with customers—people are charged for long-term parking; there is an unwillingness to pay a premium over charging at home.
 - iv. Partnerships—there is a lack of EVSE companies willing to work within MBTA's business constraints.
 - v. Parking lots are managed by a third-party contractor, and there are limitations on what they can provide in terms of advertising.
- d. MBTA is continuing to explore opportunities. They have done a great deal of work on electrifying their fleet and are continuing to explore funding opportunities.
- e. Judge clarified that the parking garages are owned by a third party. He asked whether people charged a flat rate for parking and charging.

- i. Donaghy responded saying that at this time, there is a flat rate for parking plus the charging cost and that the MBTA is exploring the possibility of a flat fee that includes the kWh price of charging.
- f. Rabinsky asked about slide 3: Level 1 chargers were installed—why not Level 2 in those situations?
 - i. Donaghy stated that as of 2009, Level 2s were kind of becoming a thing and Level 3s didn't exist and that the MBTA thought maximizing the level of units at the locations was better than having a faster charge.
 - ii. Gilmore asked whether the newer installation chargers are level 2 or level 3?
 - 1. Donaghy responded that all newer stations are now Level 2.
- g. Judge asked about the load for buses: is it possible to use the buses as a grid resource, too? Do these buses demand a lot of energy?
 - i. Donaghy responded saying that the MBTA has some of its own electrical infrastructure, so some of the rates play into their capacity. Donaghy also mentioned that the MBTA had a feasibility study done by a MassCEC grant which confirmed that it's a challenge to keep buses charged and the grid can't handle that capacity.
- h. Anna Vanderspek from GECA asked whether the MBTA is using its own electricity infrastructure or the grid and if there are challenges with maintenance?
 - i. Donaghy responded that the 2009 EVSEs were connected directly to the grid through the MBTA electrical routes and that, due to lack of bandwidth, the buses would sit for months or years. Donaghy affirmed this is no longer the case.

5. Share/discuss outline of future meeting topics

- a. Gatti shared the future meeting topics document. Judge walked through this.
- b. Judge stated that today is about data, but going forward, the Council will be meeting every two weeks until August 10. Judge pointed out a typo: the public hearing on July 28 should be Wednesday, July 26. Judge stated that while the initial assessment is due August 11, the Council can expect to continue to meet.
- c. The June 15 topic is focused on driver experience.
- d. Discussion question: Are there ideas for things we should be adding?
 - i. Horst asked whether the priority is to get the initial assessment done by August 11 to help the grid modernization updates? Horst was concerned that there were some dates that overlapped with the GMAC meetings.
 - 1. Judge responded that it's possible to move and align some of the Council meetings so they don't conflict with GMAC meetings.
 - ii. Bourassa was interested in the July 13 meeting and people living in urban areas, what recommendations to help cities and towns advance infrastructure. Bourassa asked, are we thinking of inviting any municipalities to share their challenges and experiences?

Commented [WS(2)]: My notes are different, should check with MBTA: "MBTA will triple load, mostly overnight charging, so not peak. MBTA also a wholesale utility themselves. V2G feasibility study thru MassCEC grant, but already a struggle to meet route blocks, have had to shorten route blocks to equal battery capacity. Trying to stay away from V2G now because bus needs to be charging from the moment the bus parks to when it leaves. Maybe a small amount of V2G capacity would available in shoulder months, but that's not when it would help. The L1s went from MBTA's distribution system and MBTA's high voltage electrical room, but can't give the EVSE maintenance contract immediate access to cycling the system: take months or years to get on MBTA electrician's schedule to cycle system. So, better to connect to Eversource grid, not the MBTA grid."

1. Judge responded yes, and encouraged people to share any suggestions for speakers with himself, Gatti, and Haugh.
- iii. Judge stated that the Council intends to provide at least two weeks' notice for public hearings and to meet our internal EJ policy requirements, and hopes to do hybrid meetings.
- iv. Horst stated, looking at the proposed topics, he hopes to see more emphasis on overlap and consistency between the existing programs.
 1. Judge responded that at the next meeting the Council hopes to look at consistent driver experience. Judge stated that there is no particular authority invested in regulating that piece. He's looking specifically at DPU to see whether there are any guidelines to regulate user experience and consistency with charging experiences.
- v. Rubin recommends that we put out a couple questions that we'd like people to answer when they come to public hearings—what barriers are they facing, what information do they want, what is this council doing? Rubin also recommended we target in our engagement and consider having some of the public meetings in the 6-8 p.m. time frame.
 1. Judge responded that targeting can be done, particularly in the notice. Additionally, he suggested giving a 5-10 minute overview of the council during the public hearing.
- vi. Judge stated that the drafting of the initial assessment will happen by the consultants and EEA to at least fulfill our statutory requirements and that this won't be the final time the council speaks on this topic.
- vii. Gatti added that there is a team of consultants doing analysis, who will provide updates on the analysis and the hope is to have the analysis completed or close to that in a similar timeframe.
 1. Judge stated that the Council will receive updates from the consultants throughout—these topics are the main focus of each meeting so we can hit on all of the things we need to discuss pursuant to the law.

6. Presentation and discussion: data needs

- a. Looking at an updated version of the data needs summary. The highlighted sections represent the data that Synapse is responsible for. The Council is looking for guidance on the rest of the data.
 - i. Gatti and Judge asked to go through the data.
 - ii. Judge stated that any information gaps in the initial assessment would be useful so that we can try to gather that data in the future.
 - iii. Weber questioned, "why are we limiting ourselves to public chargers?" and that MassDEP posts reports online of public and non-public chargers funded through MassDEP's MassEVIP. Chargers that are not funded by ~~the~~ MassDEP or through utilities (non-public) would be difficult to determine.

- iv. Rabinsky indicated that he wonders whether the municipality has information on chargers being pulled for residential purposes and if not, that would be helpful to track.
 - v. Wu stated that it would be helpful for the consultants to clarify the purpose of each of these data points. Wu asked: What is the purpose of collecting this data? What is the intended outcome? What are we trying to understand?
 - vi. Gatti responded that we really only have a good lens on public charging and he welcomed feedback from council members and stakeholders to understand what aspects are most important.
 - vii. Judge suggested that council members with specific feedback communicate directly with the EEA and GreenerU to ensure we are in compliance with open meeting law.
- b. What data do we have?
- i. Weber reminded that she provided ~~Section~~ links, ~~including to and that there are a bunch of things,~~ light~~ke~~-duty vehicle regulations, that have been adopted that require certain technology (e.g., a charging cord).
 - ii. Gold added that National Grid is conducting a number of studies that are relevant to a number of the data categories, especially in section D, such as the number of highway studies looking at medium and heavy-duty vehicle needs.
- c. What data do we need?
- i. Judge suggested that the data needs to provide information to the utilities and to the council about the charging infrastructure: where it is likely to proliferate and where installation is needed.
 - ii. Judge reminded the group of the focus of the Council: the current state of charging, the needs, the barriers.
 - iii. Horst added that the needs of EV infrastructure are going to be so intertwined with heat pumps systems and large-scale electrification.
 - iv. Rishi Sondhi shared that National Grid provided information on the capacity of EV charging.
 - v. Haugh added that they see the data needs in two ways: One is that the data will ultimately be helpful in helping the council make decisions and the second is presenting the information in a way that is accessible to the public so that they can understand the rationale behind the decision.
 - vi. Gatti added a third way: public policy steps the DPU can put in place to get the data that is needed.
 - vii. Horst suggested the group look into how zoning impacts or restricts policy/EV charger implementation.
- d. How can we acquire any additional important data?
- i. Judge emphasized that there are and will be gaps in the data and that is fine.

- ii. Gatti encouraged that anyone with thoughts or suggestions on generating or better using data, email those.

7. Presentation and discussion: utility programs (National Grid, Eversource)

a. Introductions:

- i. Kevin Boughan, Eversource
- ii. Julia Gold, National Grid
- iii. Rishi Sondhi, National Grid
- iv. Tom Palma, Unitil

b. Lessons learned from round one of the program

- i. A consistent theme throughout evaluations and customer feedback: would not have moved forward with installing charging stations had the funding not been available.
 - 1. The business model, because it is still early on, challenges adoption from an operator's perspective. It is costly to support the chargers.
 - a. National Grid supplied this ROI: 50 charging sessions/week, 52 weeks/year on a premium cost to pay off the capital cost of a single port.
- ii. Did not deploy many DC fast chargers in the first phase because we were not able to offer incentives for the ports themselves which was a bit of a hurdle for customers to overcome.
 - 1. Now we are able to rebates for EVSE
- iii. The EV market is still nascent and education awareness and marketing is needed. The market is always evolving as is the technology of these chargers. We are continuing to adapt marketing approaches, outreach strategies – hard to reach customer segments and channels.
 - 1. Customers do not need that outside support and funding so that they can deploy publicly available and workplace chargers.
 - 2. Limited charging is consistently the largest barrier to individual adoption. So much of EV charging occurs at the home so it is critical to be able support homeowners in installing infrastructure at home.
- iv. Judge asked about the interaction that the utility has with the customer installing an EVSE at their home.
 - 1. Sondhi responded that customers only need to contact their utility provider if they need additional capacity load. Sondhi also added that National Grid is providing rebates to homeowners to upgrade their homes.
- v. Judge asked about how National Grid dispatches someone in the managed charging program.

1. Sondhi stated the National Grid has an off peak charging program, where customers can select the hours for the amount of time that they can charge in the overnight hours.
2. Boughan responded from the Eversource side that Eversource hopes to implement a similar program in Massachusetts.
- vi. Residential EV charging programs
 1. Offer customers the ability to upgrade their home chargers, offering various incentives and rebates for different customer segments (EJC, low-income, and all others)
- vii. Commercial EV charging program
- viii. Fleet:
 1. Sondhi stated the National Grid is excited to offer comprehensive offerings for fleet customers and is looking to address light, medium and heavy duty vehicle electrification.
 2. Sondhi added that National grid also has a fleet advisory service to support fleets throughout their electrification journeys.

c. Challenges and opportunities

- i. Horst asked whether applicants can receive funds from state programs like MassEVIP and also utility funds. They also asked whether this has impacted applicant behavior in terms of what they apply for or what they're trying to install.
 1. Gold responded that National Grid is tracking these behavior changes and wants to hear how this impacts customers.
- ii. Alignment with third party funding:
 1. Gold stated that they ~~are~~ need to subtract third-party funding from the make ready funding. ~~In the past~~ Now applicants ~~we~~ are required to apply for MassEVIP.
 2. Judge asked whether applicants' ~~costs~~ would receive more than their costs be over \$97,000 if they got MassEVIP.
 - a. Weber responded that this would not happen because MassDEP receives invoices and does not fund more than the actual costs.
 - a-b. Gold added that the utility and MassEVIP teams coordinate, so as not to pay more than the total cost.
 - b-c. Sondhi stated that National Grid would love to be able to fund the entire cost of the project with no out-of-pocket costs for the municipalities and that unfortunately, due to this new policy, National Grid is required to subtract the MassEVIP grant before giving out a utility-side grant.
 - e-d. Gold also stated that all utility MassEVIP applicants are required to apply to MassEVIP first and that if applicants choose not to move forward as a MassEVIP eligible applicant, National Grid

would still subtract what the [MassEVIP](#) funding would have been from the [utility](#) grant funding.

3. Bourassa stated that alignment with third-party funding complicates execution for cities and towns interested in advancing EVSE. He also asked whether the municipality funding for EVSE would be subtracted from third-party funding.
 - a. Gold responded that the understanding is that municipality budgets are not grant funding and would not be deducted from the utility funding as a third-party grant.
 - b. Bourassa brought up another concern of municipalities: whether funding is going to get backed out and if they should go after additional federal dollars.
 - c. Gold emphasized that eligible National Grid customers would be funded 100% and that they would still have to apply to [MassEVIP](#) and subtract that funding, but they would have been eligible for up to 100%.

- d. Key unresolved questions (e.g., third-party funding)

8. Discussion: public comment

- a. Anna Vanderspek, from Green Energy Consumers Alliance (GECA), emphasized that people keep the 2030 GHG reduction goal at the center, especially in the data needs, to tie back to that 50% emission reduction requirement. Vanderspek seconded comments about the third-party funding piece explaining that funding is a real barrier to charging and public stations. She also proposed a topic for a future meeting: the process for deciding incentives that the state doesn't necessarily have direct control over. Lastly, Vanderspek proposed a question to the council: How can we shift leadership or direction over to these bodies?
 - i. Seigal recommended everyone review the department's December 13, 2022 order, pages 126 and 127, on the directives on third-party funding. Seigal also encouraged people to reach out with additional questions.

9. Next steps

- a. Revise meeting dates based on feedback received
- b. Keep people informed about the status of the public hearings with adjusted times
- c. Act on feedback received about the data
- d. Make sure chat is available to all participants

10. Adjourn

- a. **Judge moved and Rubin seconded to adjourn the meeting at 2:47 p.m.**
 - i. DPU: yes
 - ii. MBTA: yes

- iii. [Mass](#)DEP: yes
- iv. DOER yes
- v. MassDOT: yes
- vi. Frongelli for Roy: yes
- vii. Horst for Barrett: yes