

Massachusetts Electric Vehicle Infrastructure Coordinating Council

Public hearing

100 Cambridge Street, Boston

August 2, 2023 | 6–8 p.m.

Attendees:

- Undersecretary Mike Judge, Executive Office of Energy and Environmental Affairs
- Daniel Gatti, Director of Transportation Policy, Executive Office of Energy and Environmental Affairs
- Megan Wu, Assistant Director, Massachusetts Department of Public Utilities
- Jason Mathers, Environmental Defense Fund, Watertown
- Aaron Pressman, Reporter, Boston Globe
- Prajna Cauvery Kovera Pooviah, Rappaport Fellow, Executive Office of Energy and Environmental Affairs, Medford
- Jennifer Haugh, Vice President of Planning and Customer Engagement, GreenerU

1. Call to order

Judge called the meeting to order at 6:07 p.m.

2. Presentation

Judge went through a slide deck of introductory material.

3. Discussion

Mathers said he was particularly focused on heavy-duty vehicle electrification. Most of Judge's presentation seemed to focus on passenger-vehicle electrification. He is interested in looking at how the committee is looking at heavy duty and private charging needs for heavy-duty vehicles but had not read the draft initial assessment.

Judge said he thought the assessment probably did focus a lot on passenger vehicles. Medium- and heavy-duty fleets have been discussed a little in terms of their contribution to electricity demand, but there could be more pointed discussion about it.

Gatti said EVICC did have some discussion and public testimony about feeders and where we're going to see heavy-duty electrification. He believed some of the feeders are going to need to be upgraded. EVICC also heard from Mass Fleet Advisory Program; the people running that program reported back that major utility upgrades were holding up a lot of those projects. This is where we see a real bottle neck in terms of T&D challenge, and the initial assessment will recommend strategies to deal with this. EVICC is interested in hearing how to EDF et al. could help deal with this.

Judge said that regulations require fleet operators to report data on fleets. He believes there's an opportunity for that information to be provided to the utilities to be a factor in their ESMPs. There may be some timing issues on that, but EEA is trying to figure out where those fleets are located and to meet that demand.

Mathers said he 100% agrees with that. Should be a priority of having that kind of demand planning work. He wanted to add a couple of components: one, EDF has sponsored a study from Synapse to look at a couple of cases in New York about heavy-duty fleets and advanced new truck role. Rate-basing and make-ready upgrades have a downward pressure on rates, as

utilities can recoup their investment. He would be happy to share that study and would encourage the state to work with the DPU to explore those kinds of options.

Wu asked for clarification on Mathers' interpretation of the term "rate-based." Mathers indicated that he would be happy to forward the study; it was more of who was putting it through a rate case, presumably, and that would be recovered through a demand charge.

Wu said that that her understanding was if we base-rate it, the companies will do the upgrades first, and in a few years, they will recover costs. The difference is that the programs now get cost recovery right away; they have an overall recuperation of that. She said that by downward pressure, she was assuming he was talking about delayed cost recovery.

Judge said that if you have more load, with those programs, the rate will go down because of new loads. Gatti added that these assumptions are if you presume that these medium- to heavy-duty vehicles are doing overnight charging. Mathers said yes, fleet charging would be largely depot based. Gatti said the department did approve make-ready programs for fleet depots. Wu added that the majority is for light-duty fleet, but there is some funding for medium- and heavy-duty fleets.

Mathers had a final thought. Massachusetts has adopted an advanced truck role, so the programs the utility commission develop should be consistent with the scale of vehicle adoption. Having programs now is a good first step, but we haven't seen anything on the order that is needed. He would suggest looking at a North American Council for Freight Electrification study on truck electrification through 2030, which looked at an average of 1700 MW per day within the state of Massachusetts to meet electrification needs consistent with the ACT.

Judge said EVICC is trying to fine-tune anticipated demand; the Council got some data from their consultant, Synapse. When you look at the total amount of potential demand, that won't ever be realized. By the same token, when the utilities are interconnecting with the grid, they are planning to meet that demand on every single distribution feeder circuit. We want to think through that so we plan for the right amount of utility infrastructure to support it, but not overbuild.

Gatti expressed that the delta is in terms of if you're really being aggressive with some of your T&D alternatives, how can you reduce that, what the demand is without those technologies in place. Wu added that it's important to explore all the alternatives to building more substations, which are difficult to build in the first place. Managed charging is one of the options.

Mathers suggested that the Council look at the ICCT study. Judge said that a major focus of the administration is an interest in managing and optimizing the use of the infrastructure we have and not overbuild. One thing that will make this transition even more expensive than it ought to be is building. We're doing another exercise of how to get to clean generation; the more demand you have, the more generation you need, and it dramatically increases the challenge. We want to know that we have the numbers right, too; Synapse has done an analysis, and if you have X number of chargers out there, we can estimate within a decent range of what that demand looks like on an average basis and on a peak basis, and in terms of costs for additional generation you need to support that.

4. Adjourn

The meeting adjourned at 6:37 p.m.