

DRAFT
Massachusetts Electric Vehicle Infrastructure Coordinating Council
Wednesday, June 5, 2024 | 1–3:30 p.m.
Via Zoom

EVICC members

- Undersecretary Michael Judge, Executive Office of Energy and Environmental Affairs, EVICC Chairperson
- State Senator Mike Barrett, Chair, Joint Committee on Telecommunications, Energy, and Utilities
- Eric Bourassa, Director, Transportation Division, Metropolitan Area Planning Council
- Aurora Edington, Department of Energy Resources
- Brian Ferrarese, Department of Environmental Protection
- Kat Eshel for Laura Gilmore, Director of Strategic Transit Planning, Massachusetts Bay Transit Authority
- Mark Merante, Deputy Commissioner, Division of Standards, Office of Consumer Affairs and Business Regulation, Executive Office of Economic Development
- Conor Simao, Assistant Budget Director, Executive Office for Administration and Finance
- Commissioner Staci Rubin, Department of Public Utilities

Additional attendees and presenters

- Rachel Ackerman, Director, Massachusetts Clean Energy Center
- Eric Friedman, Executive Director, Leading by Example, Department of Energy Resources
- Katie Gronendyke, Clean Energy Policy Advisor, Energy and Environmental Affairs
- Jennifer Haugh, Vice President of Planning and Customer Engagement, GreenerU
- Asa Hopkins, Ph.D., Vice President, Synapse
- Hayden Latimer-Ireland, Executive Assistant, Executive Office of Energy and Environmental Affairs
- Joshua Ryor, Assistant Secretary, Executive Office of Energy and Environmental Affairs
- Sharon Weber, Deputy Division Director, Air & Climate Programs, Massachusetts Department of Environmental Protection
- Audrey Horst, Research Director, Office of Senator Mike Barrett

Agenda and minutes

1) Call to order

Judge called the meeting to order at 1:04 p.m. Judge announced that this was his last meeting as chair, and that Assistant Secretary Josh Ryor will be taking over as chair of EVICC on behalf of the Secretary going forward. Ryor introduced himself.

2) Approval of meeting minutes

Rubin reiterated her request for a change to the February 7 meeting minutes on page 6, where Scott Seigal references DPU dockets 21-29; the correct number should be 21-92.

Rubin moved to approve the minutes of February 7, 2024. Bourassa seconded. The motion carried with Merante and Eshel abstaining.

3) Updates

Sen. Mike Barrett: Thanks to everyone in this group and with the CEISP; I hope there will be a significant amount of consensus with siting and permitting as well as EV charging. I want to mention one concern

percolating in the Senate directly dealing with the purview of this group. Compared to other states, e.g., California (the California Energy Commission, or CEC), so far in Massachusetts we don't have a captain of the ship—someone who is really driving the deployment of EVSE throughout Massachusetts. We have this important EVICC, but no staff. We have DOER, but it has reconsidered its role. We have MassDOT, which has very important responsibilities under NEVI funding, but otherwise doesn't seem particularly eager to be involved in EV charging deployment. We have DOS, a new player, but has made it clear it wants its role to be circumscribed. We lack someone responsible for deployment. The Senate wants to address this. I want all of you, because it's so interesting, to take a look at the draft regulations the CEC promulgated in April; this is easily found on the internet, both a slide presentation and draft regulations themselves. This is just to draw a contrast between the approach in Massachusetts and California, where California doesn't feel the need for any on-site inspections of chargers. The subtext is that that physical on-site inspections are 20th century solutions for 21st century problems. Many EVSE can be evaluated and repaired remotely. Current inspection proposals are out of step. We're getting significant input from academicians that we have the wrong regulatory approach. We don't need a DOS to physically go out and inspect an EV charger as though it were a 1950s-era gas pump; this is not the solution and doesn't give us the real-time information we need. Offline chargers are a problem we already have. This is all by way of saying we need a lead agency. I will add the concept is a term of art, used in environmental law. EVICC would like to play a role, but it's unclear what that role is. We currently have no equipment, no capabilities of wireless testing, nobody set up to take incoming information, judge it, etc. We have a serious issue and I look forward to any enlightenment from anyone as to whether we can resolve this.

Judge: Thank you. I'm happy to talk to you more about this.

Deputy Commissioner Mark Merante, DOS: In response, one, weights and measures inspections are done at a county level in California; they do not envision physical inspections at the state level, but the counties do. The other point to raise is that, as I'll discuss in a moment, the DOS has acquired two EV testing modules and look forward to using them.

Sen. Mike Barrett: I have a policy bias; we don't want you to be going out to do this, as we think this is a poor use of state money and 50 years behind the technology. We want to help you do your job remotely. We're amenable to compromise. We don't want you schlepping out to each site, but to use personnel efficiently. All chargers have IP addresses. The California mandate is that IP addresses are shared with third-party platforms so they can populate screens in an EV available to drivers in real time. That's the vision of the Harvard/MIT folks we're working with; this would empower DOS, not take them out of the equation, but would change DOS and put them into a 21st-century mode. At the moment, the Senate will not support transferring authority to DOS—we need a longer conversation about whether we can get off the physical, personal, on-site inspection thing and perhaps transition to a hybrid or electronic solution instead. We look forward to working with you on this. I want to go back to my main point on this as well, which is there is no one in charge of EV charger deployment in Massachusetts. DOS has made it clear that they view their role as extremely limited; similar to weights and measures inspections of gas pumps. The DOS doesn't want to be responsible for encouraging or facilitating wireless communications, or for assembling a roster of EV chargers and making the roster available to other state agencies via API to third-party platforms about their availability very broadly. So DOS wants to go with the narrowest possible definition of its role, and DOER wants to be free of any responsibilities at all. MassDOT and DEP are remaining on the sidelines. I'm at a loss for figuring out who's in charge.

Judge: I'm happy to engage in a conversation on this going forward.

a) Task 2: Long-distance travel charging needs (Synapse / Hopkins)

- i) Asa Hopkins, Synapse, presented a slide deck.
- ii) Slide 13 discussion

- (1) **Judge:** The assessment of the legislature said we'd need probably 10,000 DCFCs, so you're saying that based on further analysis, that might be a little higher than necessary, but given the pace of development, you're saying it could be more in the 7,000–10,000 range?
- (2) **Hopkins:** Yes, 7,000 that are reflective of today's technology of speed, but there may be upgrades that chargers are distinctly better, and you can get by with fewer chargers. Basically, our assessment is that we had previously said 10,000; NREL said 3,000. We don't really trust NREL; we figure it's halfway between. The extent that one overbuilds in a given location and demand catches up is pretty high.
- (3) **Judge:** That's helpful to understand. We've used that number in several places to benchmark targets; it's helpful to characterize this as a range dependent upon a number of factors.
- (4) **Hopkins:** In practice, we know that California has about one million EVs and 10,000 chargers. This assumes all chargers are economical. The 20% is what makes business sense to have a charger. My guess is in California, they're not all utilized, but they're serving other purposes sometimes and they can make a lot more sense for building in a new location to overbuild it, get your interconnections straight, even if you only need four—because the cost of coming back is very high. You end up overbuilding in a ramp-up period where you're ahead of the demand, but then the demand comes, and you have this sort of 7,000-10,000 range. Seven thousand is conservative in the sense that it doesn't take these market dynamics into account, but high in the sense that it's pessimistic on the pace of tech development in car charging and charger speeds. It's a reasonable takeaway. If you are going to try to put these chargers out, first you have some amount of chargers where the main business case is there are a lot of people around without anywhere else to charge; people who have no access to driveway or charging in apartment or house and have to use chargers at gas stations. Those we figured would be allocated closely relative to multifamily housing density.

iii) **Slide 20 discussion**

- (1) **Judge:** instead of showing as percentiles here, is there a way to show this in terms of the kW or MW impact? I'd be much more interested to see where you actually cross that MW threshold; might be more interesting visually. This is an unsurprising result in some respects, but it would be nice to see a little more granularity where you're going to see multi-MW impacts.
- (2) **Hopkins:** I agree. There's a spot in the middle near Boston where you're putting 100 DCFCs in a small area, and that's a major impact on the grid. This map is about 24 hours old.
- (3) **Judge:** Maybe focus on the 80th percentile and on where the really large step increases in peak load are occurring?
- (4) **Horst:** Would you be able to overlay the load over what load is already available to better figure out planning for the electric grid?
- (5) **Hopkins:** That's in the next section of the presentation.

iv) **Slides 23–24 discussion**

- (1) **Aurora Edington:** Could you describe more of what you're assuming when it comes to managed charging with these two graphs?
- (2) **Hopkins:** At this point because we haven't done the next task—which is to determine exactly what is capable on a managed charging front—these are proxies. The graphic on slide 23 is if you charge when you get home; DCFCs are highly utilized and assuming that we can't control the load shape, or at least the utility builds the grid as though it is drawing maximum power. The graphic on slide 24 is designed to produce the flattest overall EV load; not trying to avoid peak periods, but not creating a pileup on top of peak periods. There's another case assuming all charging happens in the middle of the night off of peak, and there's only one or two feeders' difference in terms of this one and that one. Those are the kinds of rough

- scenarios that we have to work with until we do the rest of the work. There are different perceptions of how people are able to push their load around.
- (3) **Edington:** Maybe to summarize, management is shifting charging a little later than when trips end.
 - (4) **Hopkins:** It's shifting some amount of load from 4–8 p.m. window into the 10 p.m. to 5 a.m. window when the grid is relatively underutilized.
 - (5) **Sen. Barrett:** Pictorial representations are so powerful; they make such a visceral impression on viewers like me that I would want to make the obvious point that on Route 128, the inner circle there, that once we fill in with Eversource information, this map is going to become much denser and change our intuitive understanding of where we're going to build out. If you aren't careful, you assume there is a large unblemished area where there is no information. Is that correct?
 - (6) **Hopkins:** There are a lot fewer red lines in one map vs. another, but DCFC is driving a lot more of the overloads in this case (slide 24) and tends to follow the highways. Feeders near highways stand out a little more in the graph on slide 24 vs. slide 23, but we would like to see the whole state before drawing conclusions.
 - (7) **Barrett:** What are your top two counterintuitive or surprising takeaways? It might be intuitive that there is greater density in greater Boston. What do you think would have been less predictable and is a surprising result?
 - (8) **Hopkins:** Actually, your example of something that might be intuitive has challenged my intuition, which is I'm a little surprised, being a Boston-area EV driver who never needs a DCFC in Boston, that the map in slide 9 requires as much fast charging as it does. I had to back myself into the intuition that a lot of people in Boston really do need to charge. The other is the extent—and I haven't fully backed this up yet—to which winter/summer matters is bigger than I expected. A lot is driven by winter relative to summer; probably down to the fact that EV ranges are lower in the winter. That maybe explains the Boston bit vs. further out. I wasn't expecting to have winter be a bigger factor.
 - (9) **Judge:** There are a couple questions from chat. These are all light-duty vehicles. Is there any estimate for when medium- and heavy-duty vehicles are factored in, or is it too soon?
 - (10) **Hopkins:** Part of that is a question of timing by 2030; there will be more medium- than heavy-duty fleets, more traffic around local delivery, which will have a somewhat different effect than when we do long-haul trucking. Understanding where those fleet depots from a grid standpoint and where they are and where they fall on the grid for medium-duty that drive 250 miles a day and come back and charge, what does that look like? And then separately, on the heavy-duty front, is that primarily that the interstates have a different need for dealing with that long distance. I've been meaning to find out where those fleet depots are and what the long-distance trucking heavy freight paradigm looks like.
 - (11) **Judge:** We are gathering those pieces of information. Brian, do you know when that stuff comes in (timing)? When data becomes available, maybe that's something we can provide and give some sense of where bigger fleets are today, and maybe that'll help model how they would fit in. A lot of those fleets will rely on charging during the day, but a lot of them are going to be fleets...
 - (12) **Sharon Weber:** Reports were due March 1, but are still coming in. Still want to get more information. But we're trying to look at the reports; we've done some outreach to entities we thought would or should have reported, but haven't. We're still in the middle of that. I'm hoping we'll be able to beat the timeline.
 - (13) **Judge:** I'm sure it's a lot of data to sort through, but that will be interesting to lay out. Just want to clarify, there is no difference between feeders in the different scenarios, right? Is there a difference in the number of feeders that are overloaded? How many feeders and what's the difference between each that are maxed at over 80%?
 - (14) **Hopkins:** All the feeders are on these maps; it's just a question of the net effect of a few hundred feeder overloads—something like 200 feeders overloaded (slide 23) and 300 in the other (slide 24). They're going to require some level of investment. The ballpark number I

don't have in front of me are that you might expect that over the course of eight years, if your typical utility asset has a 40-year life, something like 15% of the feeders would get some level of investment rebuilt in that timeframe. The rough difference of today's level of overloading and how many feeders are not overloaded today is another 10-15%, a rough doubling in the pace of feeders needing attention half due to growing load and half to age-out that it's in that ballpark from this visual analysis. Caveat: this is one utility—we don't know what Eversource's infrastructure looks like. We're roughly doubling pace of grid assets and distinctly less if incremental load is managed. This was requested of Eversource a year ago and they promised it in late 2023; still working on receiving this information.

- (15) **Sen. Barrett:** We just designated three recipients of major NEVI funds for the state, and they're interesting choices. To what degree do those award winners need access to data like this from both utilities in order to site their chargers with all this money they've been given? Seems to me that the need—we haven't built up the grid yet, but we have high hopes for siting and permitting within the next 45 days or so, but what are the practical implications for building and installing chargers in the near term? And will this data be available to global partners, for example, or I think it's Green Apple, two of the three winners of NEVI funds, both of whom own a lot of gas stations and 24-hour convenience marts and will now install chargers. To what degree are they going to need this to make siting decisions or is a lot of this intuitive?
- (16) **Hopkins:** A little depends on how much of "this" one means; first of all, all this work we're producing is provided to EEA if you'd like to pass this information along on which are the highest-reward spots—it might help them figure out which location to prioritize from a business standpoint. This data could be provided. The grid capacity piece is other portion; there the partial coverage of the state is a bit of a barrier. We could fill that in, but my general sense is from a customer standpoint, I have a location and a convenience store in this spot. This level of data is primarily good at that initial screen/business-decision level; you want to be on the phone with Eversource or Grid and talk about this feeder spot right here. What's practically doable is a conversation among engineers in terms of screening out which locations are better or worse from a grid standpoint.
- (17) **Chris Aiello:** This report is spectacular, so just I want to say this is great. I would love to have you come meet with the NEVI implementation team and perhaps with the service plaza procurement team as well; this is varying types of information that could be issued differently within those teams within MassDOT. To answer the Senator's question, we've been building out our own GIS map with very similar data points as here, so our primary focus is gap zones identified in NEVI procurement. And special kudos to the National Grid team—at least within National Grid territory, we're starting to create a map very similar to this. Along Route 2, you'd see that we've identified every piece of roadway within one mile of exits for NEVI purposes, and then we looked at land use and whether it's compatible with a NEVI charging. So if an area is 100% residential, it's maybe not compatible, but gas stations and other commercial enterprises are a better fit. We've identified feeder locations that can support a NEVI charging station. Each developer has supplied some pre-identified charging site and we're running these by National Grid as well, which is giving us feedback about they could do four, six, or eight chargers. Good intel there. Are some of these sites scalable in the short-term. This is incredibly helpful to the NEVI build out and will be even more helpful when we need to start building sites in between main sites. Seeing a map that goes beyond the gap zones is an area where this could be helpful.
- (18) **Commissioner Staci Rubin:** Thank you to Asa and Synapse; this is a great analysis and a really interesting conversation that we're having here, and all the more reason to continue using this space for these types of discussions. We'd want to understand how the analysis would change if trips into neighboring states would factor in, and how NEVI plans affect analysis with neighboring states.
- (19) **Hopkins:** First, slide 3 shows all travel in and out of Massachusetts from the New England and Northeast corridor and it does include interstate traffic. I don't know how much this will

change because we've taken that travel into account; not sure this is particularly sensitive to a neighboring state doing the same analysis—it ought to line up and be continuous across the border in the sense that if there were a whole lot of charging demand, that's already accounted for on the Massachusetts side of the border based on distances people have driven. These are also relatively robust as to what might be going on as long as the same development in other states are based on similar drivers, we should be relatively continuous. One thing that happened of with trips 100 miles over, you see a lot of activity around Springfield; but the reality is charging may be happening in Boston or in Albany.

(20) **Edington:** What are the next steps with Synapse?

(21) **Judge:** We'll get back to that in a discussion toward the end of this meeting.

b) NEVI (MassDOT / Aiello)

i) Aiello provided a brief update. Three vendors have been identified to sign contracts to install DCFCs along NEVI corridors. Pre-development work will start imminently; our team is ready to hit the ground running on Day One. We've been having conversations with those three awarded DCFC providers, even though work can't begin yet; maybe as soon as next week we can have kickoff meetings and make some quick progress. On some of these pre-identified sites, the development process should go relatively quickly, so we should see some progress on this soon. Special thank-you to National Grid; they are really going out of their way to help us identify sites that can go live as quickly as possible.

(1) **Sen. Barrett:** Congratulations on making those awards in a timely way. A lot of states awarded Tesla and had to deal with the Tesla fallout of layoffs, so the timing worked out. That said, in the national press, a distinction has been drawn between MassDOT's approach vs. those states that did move early. What was the difference? Refresh our understanding; what is our distinctive approach of holding back at the outset with the expectation that we can move forward with more volume now? Do I have that right? And in general, what's been distinctive about the Massachusetts approach?

(2) **Aiello:** I wouldn't say we held back; I would use different words to describe our process. The process with Tesla continues in the Commonwealth; they may become fourth developer for us. Our contracting process took a bit longer than the initial processes of other states, but what we did was rather than individual rounds of procurements for specific sites, we decided to sign master contracts with a group of developers for pre-development work for a five-year period where all we have to do to get them moving on a particular site and work with a task force. It was one long process, but we won't need to repeat it. It wukk be slower out of the gate to break ground on the first site, but we'll have a much more efficient system if everything we believe is true over the next five years to break ground and build additional sites. Counsel said to build out system with efficiency.

(3) **Sen. Barrett:** Any discussion on Tesla and Elon Musk's decisions and how that affected us?

(4) **Aiello:** it slowed the process down; the whole team was laid off. Our contract was rehired, so we're in contract negotiations, but Musk's actions slowed things down for sure. The people we work with seem to be reappearing.

c) Curbside charging and vehicle-for-hire programs (MassCEC / Ackerman)

i) Rachel Ackerman, MassCEC, presented slides on EVICC programs administered by MassCEC.

(1) **Judge:** any anticipated next steps on timing?

(2) **Ackerman:** RFPs will be issued late June/early July; vehicle-to-everything not likely posting until August timeframe.

d) Climate pollution reduction grants and state fleet charging (DOER LBE / Friedman)

i) Eric Friedman provided updates on charging station deployment with DCAMM. As folks may remember, there were two funding amounts provided to two different agencies: about \$9.5 to DCAMM and \$1.5 million to Leading by Example at DOER and the division of labor was DCAMM was intending to focus on larger more heavily traveled sites within the executive branch and use

a procurement method to go out to each of those to put at least four ports at each site, if not more. They're well on their way of doing that; they're looking at several dozen sites around the state and are in the process of hiring contractors and awarding funds to start doing installations relatively soon. For our part, we took sort of a different tack and used the funding to deploy stations for different sets of state fleets to help build out the EVSE infrastructure. We're focusing on smaller fleets and on lease sites and smaller sites.

- ii) Friedman presented a deck on the Climate Pollution Reduction Grant (CPRG) grant application to the EPA on the Comprehensive Fleet Electrification Initiative (CFEI).
 - (1) **Sen. Barrett:** Your presentation suggests that I should return to my opening statement: there are proposals floating around right now that would abolish the sole provision of state law that involves DOER with EV charging deployment, and on the other hand there is a provision of state law that would talk about EVICC and creates it, in fact, but its role going forward at the moment is only to produce a report similar to the one you produced before two years from now. So if EVICC's only obligation is to produce a report every two years and DOER is out of the business of managing EVSE throughout Massachusetts, I'm still worried about who is driving EV charging throughout the state. It's impressive that different agencies are owning parts of the puzzle, but with EVICC's mandate being more or less outdated at this point, I think we need some language that goes well beyond the physical inspection of the individual EV charger that fixes overall strategy for the state and want to invite input into the legislature and the Senate and everyone here should submit ideas. The Governor's Executive Order states to designate a lead agency, because currently there isn't one responsible for deploying EVSE throughout Massachusetts. This could be the mandate of the climate chief, but we don't know. Could be MassDOT, but again it's up in the air. Could be DOER, but they may not be interested. EVICC has no staff. DOS wants a narrow responsibility. The legislature is left groping, and we would love some help in terms of thinking this through within the next ten working days because a bill is going to move immediately.
 - (2) **Judge:** Thanks. Again, I will reiterate that we're happy to discuss this further with you and will reach out to our legislative folks and others for a separate conversation.
 - (3) **Audrey Horst:** There is MOR-EV data for personal EVs available on the program's specific website; is anything similar available for trucks?
 - (4) **Friedman:** I believe a trucks database has gone live on the MOR-EV website. I can't recall how far back the data goes, but there is an online portal with some data there. Feel free to reach out if that doesn't answer your questions.

e) **Standards for EVSEs** (DOS / Merante)

- i) Mark Merante shared slides regarding the components of creating an EVSE testing program in Massachusetts.
 - (1) **Sen. Barrett:** So, you have 11 staff members in which division?
 - (2) **Merante:** Compliance officers.
 - (3) **Sen. Barrett:** What are their other responsibilities? I just want to get a sense of what other devices?
 - (4) **Merante:** Any weighing device used in commerce: anything that's a scale (gas pumps, grocery store scales).
 - (5) **Sen. Barrett:** Are the machines physically on site in Massachusetts today?
 - (6) **Merante:** Yes; they're in the office next to me at the moment.
 - (7) **Sen. Barrett:** So, you've got 11 staff to cover all manner of weights and measures and two machines; we envision hundreds of chargers, but the current draft legislation doesn't show any of them inspected online. Is that right? You have to physically show up and seal each charger?
 - (8) **Merante:** Yes, that is the federal government's requirement.
 - (9) **Sen. Barrett:** Not exactly; they're interested in testing, but you'll have to forward to me the language that a physical site visit is required. I can't find that language myself. Does the DOS model envision the possibility of remote testing using IP-equipped smart chargers? And do

you have a gameplan you've communicated to the legislature that might permit the very occasional physical visit buttressed by electronic reporting or do you plan on doing full-time remote testing at any point?

- (10) **Merante:** We are looking to start actually testing so that we can get data to know how quickly EVSEs accuracy degrades. Like any physical device, it's made up of a lot of bits and parts of metal and plastic that degrade with use over time, damaged by customers, etc., so the meter readings on an EVSE according to other colleagues in other states do degrade over time just like other weighing or measuring devices. It's important to get out in the field to start doing those tests: testing is going to be necessary to know whether devices degrade in months vs. years to give us a sense of what to expect in this space. And then we'll have a better sense of what we need.
- (11) **Sen. Barrett:** My constituents are constantly complaining because chargers are down. If we follow this current model, it will require DOS to physically get to each site to seal them. Isn't it possible to have owners certify they're sealed? Wouldn't we probably want to operate first and give you time to eventually make your rounds without holding things up?
- (12) **Merante:** I'm happy to speak with you further about it, Senator.

f) **Update on utility EV programs (DPU / Rubin)**

- i) Rubin shared information about four open dockets on the EDCs' EV programs in the DPU file room:
 - (1) D.P.U. 24-42, Eversource EV Program Factors and Report
 - (a) The Eversource Phase II EV Program Year 1 Evaluation Report is available at: <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/19071132>.
 - (b) The Eversource Annual Report is available at: <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/19071130>.
 - (c) Comments are due on June 12 at 5:00 p.m.: <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/19097039>.
 - (2) D.P.U. 24-64, National Grid EV Program Factors and Report
 - (a) The National Grid Phases II and III Program Year 1 Annual Report is available at: <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/19070892>.
 - (b) The National Grid EV Program Year 5 Evaluation Report is available at: <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/19070882>.
 - (c) Comments are due on June 12 at 5:00 p.m.: <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/19101033>.
 - (3) D.P.U. 24-54, Unital Grid Modernization Factor, including EV Program Factors
 - (a) The Unital Electric Vehicle Program 2023 Annual Report is available at: <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/19085170>.
 - (b) Comments on Unital's Electric Vehicle Program 2023 Annual Report and its Electric Vehicle Program calendar year 2023 cost recovery filing are due on June 24, 2024 at 5:00 p.m., <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/19157898>.
 - (4) D.P.U. 24-67, Unital Supplemental Budget to Develop and Implement an Evaluation Plan for EV Program
 - (a) The Unital supplemental budget request is available at: <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/19085170>.
 - (b) Comments on Unital's supplemental budget request are due on June 17 at 5:00 p.m.: <https://fileservice.eea.comacloud.net/FileService.Api/file/FileRoom/19116199>.

g) **Question for discussion: what further analysis should we seek?**

- i) Judge cued up the discussion and mentioned there's approximately \$250,000 of unencumbered funding that needs to be under contract by the end of the year.
- ii) **Katie Gronendyke:** We've been in discussion with Synapse about what might be the most valuable to look at next to build on the analysis they've done already. The next focus will be on load management and EV charging. The analysis would use the daily demand and load in 2030

of different kinds of charging stations to project the EV daily charging profile in 2030 in certain geographical areas across Massachusetts to help us better understand the potential impacts of EV charging on the grid. They'll also look at the load reduction and economic opportunity of load management for EV charging, and assess potential revenue and business models for EV load management in Massachusetts. The analysis will likely be complete by the end of the year. Please reach out with ideas for further analysis that we can discuss in our August EVICC meeting.

- iii) **Judge:** Anyone have any questions or immediate suggestions for further analysis? If you do think of anything that you would like to see performed related to EV charging, I think we're all ears right now and will be developing potential scope for a subsequent RFP for consulting services for that \$250,000. Another assessment is due next August, so we're coming up on the next assessment year and we can think forward on what we want to take on.
- iv) **Sen. Barrett:** Thanks for extending the invitation and would like to make a formal request to create an analysis for how we should strengthen the strategic direction of EV deployment by state government. EVICC was a start and was a creation of the legislature; did not come from executive branch but came from Senate. I think the language is outdated and what we did not do because we were less familiar than we are today to fix our responsibility in the executive branch for overall guidance for this buildout of infrastructure. I would like to see some input on how all these fascinating strands of different agencies are brought together and managed strategically.
- v) **Josh Ryor:** There is a question in the Q&A about further analysis on medium- and heavy-duty fleets.

4) Public comments

- a) **Anna Vanderspek:** I'm curious to see how the work Synapse has done compares to assumptions the utilities made in their electric sector modernization plans (ESMPs). Are they similar or are there notable differences? Managed charging makes a notable difference between now and 2030; the utilities did not project that. I'm curious if any analysis has been done to compare those.
- b) **Judge:** Not to date—some of this is relatively new. But that's certainly something we can think about in terms of how those things overlay and intersect with one another. Unfortunately, Aurora Edington left the call. This is certainly something to consider and think about moving forward.
- c) **Seth Gadbois:** I wanted to offer this comment to fully realize the greenhouse gas emission reduction benefits of widespread EV adoption. We need to be fully supplementing a robust incentive structure scrapping combustion vehicle from the roads. To fully realize these benefits, we need to be taking a greater number of combustion vehicles off the road. Recognizing that we have a trade-in benefit, we need some additional coordinated funding. I appreciate Sen. Barrett's funding about not knowing where things will sit with agency ownership and EVICC's prior mandate vs. where we are now, but to fully realize benefits and climate mandates, I wanted to state this as the need and request that EVICC consider using some of its funds to take combustion vehicles off the road as we add EVs.

5) Adjourn

Rubin moved and Sen. Barrett seconded a motion to adjourn. The motion carried unanimously. The meeting adjourned at 3:17 p.m.

Respectfully submitted,
Jennifer A. Haugh
GreenerU, Inc.