

**FINAL Minutes of the MA ZEV Commission Meeting of September 27, 2018**  
**100 Cambridge Street, 2<sup>nd</sup> Floor, Boston, MA 02114**

**In Attendance**

Daniel Sieger – Assistant Secretary for Environment, Executive Office of Energy and Environmental Affairs (EEA)

Patrick Woodcock – Assistant Secretary for Energy EEA

Linda Benevides, Anne Canaday – EEA

Stephanie Cooper, Sejal Shah – MA Department of Environmental Protection

Judith Judson, Will Lauwers- MA Department of Energy Resources

Charles Carroll, Division of Standards

Susan Bunnell, Wilbraham

Gus Block, Nuvera

Robert Boch, Boch Toyota and Mass Auto Dealers Association

Gina Coplon-Newfield , Sierra Club

Fouad Dagher, Mark Siegal, National Grid

David Edwards, Air Liquide

Catherine Finneran, Kevin Boughan– Eversource Energy

Nicole Freedman, City of Newton

Mark LeBel, Acadia Center

Robert Wimmer Toyota USA

**On Phone**

Colleen Quinn, ChargePoint

James Hall (for Britta Gross), General Motors

Absent: Vineet Gupta, City of Boston; Tracy Woodard, Nissan; Jason Viadero, MMWC; Dean Specht, EVSE LLC; Scott Dube, Hyundai, Max Forsythe, NRC; Jeff Hyman EMD Serono

**1. Patrick Woodcock, Call to Order**

- Welcome and call to Order at 10:34
- Dan Sieger will join later in the meeting
- Request to accept Draft Minutes from last meeting – Motion, Second and Vote
  - Minutes for June 26, 2018 approved
- Introductions around Commission, any updates/issues to raise by the Commission (none)
- Introductions from the audience
- Updates from Agencies will be next but any ZEV Commission updates? (none)
- Agenda first hear from Commissioner Judson, DOER about the MOR-EV rebate program
  - Must maximize public benefit with limited funding

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**2. Commissioner Judson , Will Lauwers, DOER–**

- Handout of August MOR-EV rebate report – available on the webpage – is publicly available information
- Issued the 10,000th rebate in August
- Have fully exhausted \$20 million committed to the program
- Have added another \$4 million to continue the program
- Currently at a spend of \$1.25 million per month which exceeds RGGI proceeds, the funding source
- Now need to make changes for it to be sustainable going forward
- Turn it over to Will Lauwers to discuss details of the suggestions received and analysis done to see the impact. If time is available we would like some feedback.

**Will Lauwers**

- 25% higher rebates issued per month since the last time the Commission met
- Received a joint comment letter from Acadia Center, Sierra Club and CLF
- Main comments have been:
  - Favor BEVs over PHEVs
  - If PHEVs look at e-mile range options such as removing short range.
  - Look at threshold price (MSRP) currently \$60K shift again to not have rebates above
  - Reduce all or some rebate values
- Have seen an increase in BEV rebates (short range had not much growth in adoption this year)
- Looking at a combination of cost cutting measures

Patrick Woodcock: Would like to:

- ensure predictability for consumers
- maximize the benefits of the dollars available
- give as much lead time for this as possible, implement soon but not before the end of the year
- Threshold - Under the resources that we have today how can we maximize \$ use. Open to floor.

**Questions:**

Fouad Dagher: Are there any other sources of funding for MOR-EV?

- Patrick: A – Do not see any other sources of funding coming forward and would like to focus on what funding we have today

Bob Wimmer: Seems like we may have the same discussion 6 months or a year from now as EVs continue to take off. Need to take the longer term view

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- Will – Also need to spend below the incoming dollars

David Edwards: Where does current funding come from?

- Patrick Woodcock - RGGI funds are used
- Will – 15% are dedicated for DOER use with 85% going to energy efficiency and communities with large power plant closures

Catherine Finneran: Do you have to wait till the end of 2018 to make changes? The sooner the changes are made the better/longer benefits.

- Patrick Woodcock - No, not tied to timeframe other than making a decision soon

Mark Lebel: The data in the handout is great. One quick stat is the Tesla Model 3 availability – waitlist for months. Is DOER thinking of putting forward a new plan, and or proposal today? What do you mean with the PHEV change? Remove completely?

- Patrick Woodcock - Yes, were presenting it today and looking for feedback
- Will - Largest benefit would be to remove all of the PHEVs from the program. The funding change could be as much as 35% by taking this action

Gina Coplon Newfield: CA reduced the overall amount of rebate from \$2500 to \$2000 but still included PHEVs. The PHEVs are a good way to get consumers into the EV market

- Patrick Woodcock- Not sure when that decision in CA was made but technology is different today and market has matured so it may not make as significant a difference today.

Robert Boch: Can the VW be used for MOR-EV? Why?

- Stephanie Cooper - No, cannot be put towards actual passenger EVs. The Settlement specifically does not allow it.

**Patrick Woodcock asked audience for comments.**

Barry Woods: How is the 300,000 ZEV MOU goal being assessed with the changes to MOR-EV? Do we front load to get to the goal and gain more traction.

- Patrick Woodcock- Don't want to pull back too quickly and cause a deceleration in EV adoption; want to have robust enough but not encourage free riders
- Will- We are seeing a non-linear trend so the more we can help even that trend the better.

Brett Muney: How long is the program supposed to last? The battery prices are going down and will be equivalent to ICE vehicle by 2022.

- Patrick Woodcock- We can't spend money we don't have. Need to keep an eye on sales and make sure they are increasing before stop the program.

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Mark Lebel : The PHEVs should be kept in, sometimes they are entry into this new technology and remember that the up to \$7500 tax incentive is still available.

Peter O'Conner: National numbers are TESLA is #1, All EV Non-tesla 15% of market. Need infrastructure to accelerate growing all electric.

- Patrick Woodcock- As public policy need to grow all BEVs

Anna Vanderspek: Have you considered an income cap?

- Patrick Woodcock - Yes, previous meeting we discussed the administrative burden and logistical challenges and looking at reducing sales price threshold as a proxy for that.

Moving along to additional agency updates

### **3. MassDEP - Stephanie Cooper:**

- VW Settlement - \$75 million coming to MA – 10 stakeholder meetings, Draft BMP issued with lots of comments received. First year plan allocates up to \$23.5M – 1.) \$11 million for electric transit buses; 2.) \$5 million for EV infrastructure; and 3.) \$7.5 million for open solicitation in all eligible areas. Expect to issue final BMP in early fall.
- MassEVIP Workplace Charging and Fleets – looking for more funding and will have more to report soon
- Christine Kirby is testifying at the California Air Resources Board hearing on September 28 – strong support for CA to retain the stringency of the CA GHG standards in light of the federal proposal and to retain the CA waiver to enforce standards under the federal Clean Air Act. Sharon Weber, another MassDEP employee, testified at the NHTSA/EPA hearing in Michigan on SAFER (Safer Affordable Fuel Efficient vehicle rules) with 150 other people testifying.

### **4. DPU - Elizabeth Lydon and Megan Wu:**

- Quick overview on National Grid order - \$19.7 million to develop 120 Level 2 and 20 DCFC sites. Plan is to use pre-qualified equipment and give rebates to site hosts for their 3 year program.
- Eversource – has built in make ready as part of their capital investment plan focus on contractors to install in a 5 year program.
- Stakeholder input on metrics to measure success

### **5. Division of Standards – Charles Carroll:**

- The NIST tentative code for EV Fueling systems has been accepted and has a trial status; tentative codes are adopted to provide adequate time for field testing prior to adoption as a Permanent Code (is not intended to be enforced).
- Consumer information in the tentative code require stating on the customer' receipt the total quantity of energy delivered, unit prices, and total price. Also includes technical and metrological

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requirements to protect consumers and facilitate the testing and sealing of the systems. DOS does not have the staff to conduct and inspection and enforcement program.

**Patrick Woodcock turns to Dan Sieger (11:14):** Next on the agenda is talking about **Outreach**

### **6. EEA - Linda Benevides and Kirk Brown Recharge America:**

- Companies taking action to reduce their Carbon footprint and save money while doing it.
- We wanted to ensure that they think about transportation and EVs along with other carbon reduction strategies.
- The program is called **MassEVolves** designed as a recognition program to spotlight private company EV procurement and deployment actions.
- John Merck Fund provide seed money to Recharge America to help organize and develop the program Kirk Brown is on the phone to add his views to my summary
- Secretary Beaton has sent about a dozen letters to invite organizations to join the program by pledging to do EV outreach, infrastructure installment and/or other activities.
- Kirk Brown: <http://www.massevolves.org/> has more information. The webpage is available for folks to get information on how to participate and how to electrify. Process includes submitting pledge, follow with an action plan and share outcomes.
- Linda B.: Not looking for much outreach right now on the program, want to work with these companies as leaders in the field for the short term.

Colleen Quinn: May want to sync up with the Climate Group's EV100 program. They do similar work and companies are global so there maybe crossover between the two programs.

- Linda B – Great model, this is more of a local, state recognition program. And we have reached out to organizations like EV100 and have noticed that many companies that participate are global and big.

Dan Sieger – is Sacramento on the line (not yet, Discuss Advertising next)

### **7. Commission member Gina Coplion Newfield (Sierra Club) and Linda Benevides:**

- Linda: NESCAUM has been working on significant air quality issues with the states including transportation electrification. One issue has been raised by an automobile manufacturer association that states are not taking enough actions to deploy EVs. A letter was prepared by NESCAUM and the states (letter shared at meeting) refuting that position and showing that not enough auto maker and dealer dollars were being spent on advertising EVs.
- Gina: Found the data in the letter very interesting. 2015 & 2017 data for marketing/advertising for vehicles in general, EVs and other models by auto maker and Nationwide, Northeast and California. (Slides shown). Ads are important they get people excited about the cars
- GM Advertising on selected models – No \$ spent on Volt
- Toyota – 2017 \$84 million on RAV-4, \$4 million on Prius Prime Nationwide
- Nissan - \$48 million on Rogue, \$1 million on LEAF Nationwide

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- Sierra Club has written a blog article on this study. 2018 may see an increase in the number overall but likely similar in relation –NESCUM study might look at sedans vs sedans in future.

Bob Wimmer Toyota: Our approach is that education through dealers is working – look at sales of the Prius Prime the #1 bestselling PHEV nationally. He would like to see a comparison how many dollars spend on ads per vehicle sold (\$ based on units sold). That is a much better comparison (and also comparing for example the Corolla hatchback to the Prius prime). OEMS provide incentives to dealers to help them sell cars. There is a significant difference in consumer preferences between the US regions – sell more trucks in Texas than in California.

Mark LeBel: Physical inventory at dealers is just mentioned in the study/letter. The dealers and OEMs point fingers at each other but you have to get cars on the lot and salespersons will try to sell them.

Robert Boch, Toyota Dealer and MSADA: Dealers will stock what sells. If EVs are selling they will sell them. EVS aren't that popular yet so getting the market moving will require a lot of money to drive sales and demand. Toyota supports dealers with lower cost on cars and state/federal rebates.

Gina N: Couldn't you argue that the demand is not there because the inventory isn't there or the ads aren't there?

Robert Boch MSDA: The market is efficient; we're trying to create an artificial demand here.

Mark Lebel: Having 0 inventory on the lot does not help the situation.

Paul Young Juice Bar/NACCA –If the \$ is not coming from OEMs then the states or a different organization needs to take it up.

### **8. Dan Sieger: Moving on to the Shared Mobility portion**

**Speaker 1 - ENVOY --- Paul Hernandez ---** Community based car-sharing service --- focusing on building eco-systems based on EVs. (Slides provided)

- Deploying a turnkey solution for community – insurance, EVs, EVSEs, App, Roadside assistance – so seamless for residents.
- Community includes apartments, multi dwelling units, hotels. Quick process to install after service agreement signed, done in 2-3weeks. A great tool to entice or retain people
- Use is seamless too, download app, driver's license and drive.
- Range of EVs available including with luxury brands like tesla as well as e-scooters and e-motorcycles.
- Property owner rents the vehicles from Envoy and have a 50/50 revenue share on profits. General Model – cost recovery for property owners
- Where people live, work, and hotels are suitable sites for Envoy. Deploying in Sacramento, San Francisco Bay area and Los Angeles. Interested in national presence.

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Dan S: Save Questions for after all Shared Mobility presentations

**Speaker 2 – City of Sacramento-- Jennifer Venema— City propelled by Utility Investments**

- In 2017 through partnership with Electrify America Sacramento has been chosen as one of two “green cities” in CA to show EV deployment at mass scale.
- Also in 2017 created a roadmap to amplify the impact of EA’s investments. Have a target of 75,000 EVs in the city by 2025. Have 2000 now in the City. Get to 3200 chargers by 2025 have about 400 now. Gives the city something to measure success against.
- City is representative of the nation in terms of diversity including language diversity (over 50 languages spoken in the city limits); median income \$50K
- \$44 million EA investment in Sacramento:
  - EVSE deployment including 350 kWh DCFC
  - EV car sharing programs – Defines car share – dedicated charging space or free-floating permit for car share fleet to park in any legal space. 8 cars in 3 locations in the City. One is planned for residential setting, one regional job center– use GIG all electric; 300 EVs at 10 charging sites (3-8 ports). Has developed draft guidelines for curbside parking and charging.
  - 8-10 charging depots with 3-4 chargers each

Dan: Linda will send along slides to the group

**Speakers 3 - Catherine Finneran and Kevin Boughan -** In addition to Eversource’s Make Ready Program – looking more broadly at EV adoption and would like to connect more on partnerships and pilots.

- Kevin B: Speak quickly on shared mobility. Partnered with Envoy to conduct a pilot at MUDs in MA. DPU specifically prioritized multi dwelling units.
- Excellent opportunity to partner with apartment/multi-unit site hosts to increase EV adoption.
- Second pilot at low income EJ community at a CDC - community centers via an EV car-sharing platform. Must be free to join with no physical key needed.
- Start in Boston or Dorchester and then expand.

**Speaker 4 - Brett Muney – Greenspot – EV adoption without owning cars (slides)**

- Provide EV shared mobility solutions – at no cost to the site host. Uses site selection index to select sites that will work best looking at EJ areas in particular, provide last mile travel
- Greenspot manages and operates the EVSEs. Working with municipalities mainly.
- Projects in Jersey City, Asbury Park; working with multiple cities in MA

**Nicole Friedman – City of Newton Director of Transportation -** working on mobility issues in Newton – would like to work on shared mobility solutions for suburban towns that have lower population densities (4000 people/square mile). Approach has been to try everything to figure out the model that

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works best. Currently working on – 1.) Have a \$300K contract for taxi shared service for seniors and is going out for re-bid; contract will require PHEV/EV/alternative fuels and 2.) Putting out a bid for EV charging stations and EV car share to create a pilot for Newton. Looking at operator model to purchase and install equipment, get EVs, consumer interface. Could be a model for the state.

**Dan Sieger: Infrastructure part of the agenda**

- **Kevin Boughan Eversource Energy**
  - Make Ready – rec. 100 applications, 70 sites assessed, 22 sites have signed agreements. Good momentum and good progress. Geographically the applications are proportional to the service area – about 65% Boston 25% suburbs; rest southeast and Cape Cod.
  - 10% target for EJ communities, so far 20% are applications from EJ communities. Increase outreach for DCFC projects in 2019.
  - Still learning all the different vendors that provide services. Not many MUD applications and that is why they are looking at the pilot for EV car sharing.
  - Continuing shareholder outreach.
  
- **Fouad Dagher and Mark Siegal National Grid**---- Approved on 9/10/18. It is make-ready for charging stations.
  - Goal is 680 stations to be installed at 140 sites.
  - DPU prioritized sites where public is served at large. Second priority is WPC and MUD where parking is serving the public, third priority is WPC and MUD where parking is not easily served to public.
  - Looking forward to the Mass Evolves program as a resource for leads on their programs.

Dan Sieger: any questions? None.

- **Emily Weir: GreenLots** (slides)
  - Working with Electrify America.
  - In Boston 13 workplace charging sites (including Framingham University) and 2 at MUDs in greater Boston region
  - What they have noticed is the human element of walking site hosts through the EV world is a huge part of making the project successful.
  
- **Michael Tubman Electrify America**
  - 350 Kw ultra-fast chargers – in Chicopee (first in nation) and Plymouth

Dan Sieger: Adjourn at 12:34 – electrify America presentation on DCFC for next meeting