100 Cambridge Street, 2nd Floor, Conference Rooms C and D, Boston, MA

MINUTES

Members named by title present: Ned Bartlett, Chair and Undersecretary of EEA; Ron Gerwatowski, Assistant Secretary of EEA, Energy; Beth Card (Designee of Commissioner Suuberg), MassDEP; Rob Garrity, Secretary of Transportation Designee; Judith Judson, Commissioner of Energy Resources; Charles Carroll, Deputy Director of the Division of Standards.

Members appointed or nominated for appointment present: Jennifer Rushlow, Conservation Law Foundation; Mark LeBel, Acadia Center; Gina Coplon-Newfield, Sierra Club; Jeff Hyman, EMD Serono; Jong Wai Tommee, Mass Convention Center Authority; Watson Collins, Eversource Energy; Fouad Dagher, National Grid; Scott Dube, Dube Hyundai; Robert Boch, Expressway Toyota (by phone); Kim Boas, Massachusetts Municipal Wholesale Electric Company; Colleen Quinn, ChargePoint; Dan Shanahan, EVSE LLC (by phone); Gus Block, Nuvera Fuel Cells, LLC; Kevin Kinnaw, Toyota; Alex Keros, General Motors.

Others present: Michelle Broussard, Linda Benevides, Christine Kirby, Sejal Shah, Laura Burns, Luke Tonachel, John Bartley, Josh Pudnos, Charlie Myers, Elizabeth Mahoney, Alex Early, Joe Bush, Michelle Broussard, Kathleen Connors, John Slocum, Eleanor Fort, Ken Tenure, Peter Brennan, Ken Tenure, Jack Gregg, Zach Stanley, Prabhu Rao, James Chen, Kevin O'Brian, Josh Goldman, Ed Craddock, Thomas Ashley, Nicholas Hutchings, Bronwyn Cooke, Paul Young, Jameelah Muhammed, Patricia Lynch, Dustin Rhue, Nicole Appenzeller, Colin Santulli (by phone), Eric McCarthy and Stephen O'Neal.

Q	A	D	R	Bold
Question	Answer	Discussion	Request for action/Result	Vote taken

1. Open Meeting - Chair Bartlett called the meeting to order at 10:10 a.m.

Commission Member Introduction and Staff/Participant introductions.

2. Old Business

a) Approval of First Meeting Minutes was requested

One Comment: Incorrect spelling of name, corrected.

Vote: Unanimous approval.

b) Final Discussion of Recommendations for changes to MOR-EV

Commissioner Judson gave an update of MOR-EV rebate program.

Q: Will further funding come from RGGI?

A: Yes

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Q: Do we have a formal proposal?

A: We discussed at last meeting. \$60,000 MSRP cap with ability to exempt innovative new ZEV models.

Q: Will an MSRP cap help secure funding?

A: It will help public funding go further.

D: Mark LeBel supports cap due to the numbers in the documentation sent to the Commission (about 25% of funding goes to Tesla and about 40% of Tesla owners take the rebate) - may want clarification of exceptions. Jenny Rushlow – supports cap, brings low income perspective. MA is not doing anything to help put lower income residents in ZEVs and they are most at risk of exposure to tailpipe emissions and health effects.

Q: Any discussion of an income cap instead?

A: Yes, early on it was discussed as an option but would be more complicated and involve getting personal, confidential information. Want simplicity for consumers and dealers; trade off on efficiency if we can't use a simple tool like MSRP.

D: Colleen Quinn points out that an income cap was chosen for the CA program and it is a program that has run for a longer time (since 2010) and is funded at \$200M+. MA long term data would help decision making. Gina Coplon-Newfield supports cap, with \$66K median income in MA, state needs to look at who should receive incentives to make the decision for a ZEV, notes limited public funding and trying to make EVs more accessible to all. Understands need for simplicity and to reduce burden on consumer and state, if harder may have a negative effect. Scott Dube says that income based will be very difficult at retail level, don't make it too complex at this juvenile market stage, a customer comes in to a dealership and the first question a salesperson asks is "How much money do you make?" Probably will not be acceptable. Reviewed MOR-EV data package.

Q: Is there a mandate for Commission to consider equity?

A: Not in the legislation but could be part of the action plan, we feel there does need to be equity and ZEVs for all.

D: Rob Garrity suggests that 45% not taking rebate seems OK, basic goal is to get cars sold – look at the name "MOR-EV". Maybe leave Tesla in for its battery range and eliminate luxury brands. Does not support an MSRP cap for amount dollars left in current MOR-EV funding. Jeff Hyman repeated that the goal is to lower emissions, doesn't support changes to program. We are hearing about progress in next three years with battery prices going down and adding range which will help us achieve goals. We do not want to send a negative message that reverberates around the country. Rebates naturally left on the table since nearly ½ buyers don't take it. Fund program to 2017/18 to keep positive message. Commission should not spend time on this – focus on additional incentives to get cars on road, parking, reduced tolls etc more important. Mark LeBel argues rebate is not driving Tesla sales, change in next round of funding. Kevin Kinnaw – supports point made by others that we move on to another topic but suggests talking to dealers and using their input to make rebate better. What do we need to do to sell cars, dealers know

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what sells. 2016 Toyota products may not be available to dealerships due to model change transition leads to lack of availability as existing stock sold down (model change usually every 5-6 years).

Open to floor. Charlie Meyers wants the program continued without any changes to current approach. Suggests dealer incentive component similar to CT rebate program. James Chen discussed elements of the Tesla letter re the cars go the furthest all-electric miles, concern if limit rebate that runs counter to goal of getting ZEVs on road. CA rejected MSRP cap. Customers are stretching themselves to purchase, 70% owners never purchased a car over \$60K and more lower-middle income purchasing Teslas. Tesla is reducing its prices as it goes; don't hurt momentum to meet the ZEV goal. Realizes state has a fiscal responsibility and willing to work with administration to tie rebate to E-miles or electric range. Laura Burns is a Tesla driver and advocate. She said that her Tesla is 2.5x what she has ever spent on a vehicle; it replaced a Toyota Camry hybrid. It is not unusual for new technology to cost more and for early adopters to be willing to spend more, Tesla only car that answers need for long range and full substitute for ICE (drives to South Carolina). She would be eligible under CA program. Her car gets attention and when she speaks to others about her experience and her vehicle she sees "a light go on." She is a firm believer in climate justice but not if it makes it harder to buy a full electric car that directly substitutes for a traditional gasoline engine car. Spend time on charging in multidwelling buildings. Watson Collins believes incentives are critically important to mimic what is being done in other countries; it is the #1 issue.

Vote: Jenny Rushlow called for a vote, second by Gina Coplon-Newfield.

In favor of no rebate for cars over \$60K: Jenny Rushlow, Gina Coplon-Newfield, Mark LeBel, Ned Bartlett, Beth Card, Judith Judson, Ron Gerwatowski (7)

Opposed: Fouad Dagher, Watson Collins, Jeff Hyman, Jong Wei Tommee, Kim Boas, Gus Block, Dan Shanahan, Colleen Quinn, Kevin Kinnaw, Charles Carrol, Rob Garrity (10)

3. New Business

- a) Updates on MassEVIP, MASS Drive Clean
- b) <u>Presentation: Plug-In Vehicles from the Utility, Ratepayer and Grid Perspective, Dr.</u> Nancy Ryan, Energy and Environmental Economics
- Q: What is the nature of smart infrastructure?
- A: A separate revenue meter required in most cases to take advantage of EV rates or time of use rates in general
- Q: Did you look at battery storage?
- A: Still just used projections BMW pilot to respond to load in one area. Not a lot.
- Q: Would it be possible to look at a profile in MA to determine benefit?
- A: Yes, would need utilities to put their best data on the table re distribution system, smart meters. EPRI analysis is nationwide.

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Q: Have you done separate research regarding heavy duty vehicles like buses?

A: Yes, but much more technology needed and Seattle did look at electric buses and forklifts

Q: What information do our utilities have?

A: National Grid, offering Fast Chargers, employee incentives and Ride and Drives. Eversource, Plug My Ride, managed charging (out of 500 sessions monitored, only 12 on peak overrides), fast charger site data, garage orphan study. Appreciates that utilities have a role in addressing transportation sector but still evaluating internally what that should be. EPRI heat map study of where EVs are – looking at infrastructure needs for NESCAUM.

D: Kevin Kinnaw reminds the Commission to look at a ZEV goal, not just EVs but fuel cell electric. Hydrolysis takes energy and electricity rates make it more expensive. Gina Coplon-Newfield is encouraged by possibilities in other states. Alex has come to believe that EVs are an asset to the grid and makes the role of utilities apparent (CalETC documents benefits). Utilities touch every house and every commercial entity, the potential scope is enormous. Need this large scale effort to get increased deployment – 1000 EVs/month needed to meet goals, must accelerate activities. Fouad Dagher questions where the line with the private sector is, understands underserved market but needs more definition.

Q: Move that a vote be taken to include the coalition proposal on utility engagement be adopted as part of the EEA action plan.

A: Not comfortable taking any vote on this today.

c) Scott Dube introduced dealership recognition ideas (handout) – making it clear that he was requested to make the presentation but does not want to sound self-serving. Ned Bartlett duly noted. Scott gave high points – small working group met on 11/4.

Q: If the EVs aren't on the lot, then will the salesforce push it?

A: If cars come from the manufacturers, dealers will take the stock and sell them. Primary focus at end of month. Have to set objectives, targets – that is what dealers do monthly. Need people to walk into dealership on the demand side and ask for EVs. Making sure MOR-EV funding available was mentioned by GM and Scott. Need demand curve to shift to EVs.

Q: Do tax incentives/rebates affect car stock now?

A: Yes, inventory decisions are being made now, and financial investments by dealers are affected by the rebate. With less than \$500K left in rebate funds, dealers will stop ordering cars when the rebate goes down.

D: Peer pressure works best – set local competition. Retail competition between dealerships and between salespeople. Alex – Recognize dealers outside of sales; examples include bringing vehicles to events, supporting charging infrastructure, etc. In CT, large dealers were more involved in the CHEAPR program design, causing the small dealers to have to catch up quickly after launch. Larger dealers helped create market so have to recognize them but don't forget the

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smaller dealers too. Scott Dube mentioned that there are 420 dealers in MA, 20 "big" and 400 small. Focus on the majority (small dealers).

d) Charging Up: presenting by Jen Rushlow, Mark Lebel and Gina Coplon- Newfield. Recognition to Emily Norton, MA Sierra Club.

D: Acknowledge MA achievements but a number of things can be done to direct more action to priority activities. Suggestion to formalize public comment period and solidify MA Action plan by January. EEA will discuss internally and respond.

e) Quarterly meeting discussion: desired. Request LEV/ZEV rule presentation at next. Global Auto manufacturers would add some items but pointed out difference in vehicle markets in the cold NE compared to CA. Discussion that difference in markets is a direct result of CA regulations on zero emission vehicles.

Meeting Adjourned: Ned Bartlett adjourned meeting at 1:46 p.m.

List of Documents Used by the Commission at the Meeting:

- 1. Agenda
- 2. Draft Minutes from Meeting 1
- 3. MOR-EV Survey data, Email from ZEV Commissioner Jeff Hyman, Tesla letter and information, public electronic mail received prior to meeting
- 4. MOR-EV Statistics (last updated November 17)
- 5. ZEV Coalition Proposal for Utility Policy
- 6. Dealer Recognition Proposal
- 7. Charging Up: The Role of States, Utilities and the Auto Industry in Dramatically Accelerating Electric Vehicle Adoption in the Northeast and Mid-Atlantic states.
- 8. MASS DRIVE CLEAN card
- 9. UCS Executive Summary "Cleaner Cars from Cradle to Grave"

Approved: July 28, 2016, 2016