Present:

Daniel Sieger – Assistant Secretary for Environment; Katie Theoharides – Assistant Secretary of Climate

Change; Patrick Woodcock – Assistant Secretary for Energy; Linda Benevides – EEA

Martin Suuberg – Commissioner MA Department of Environmental Protection

Christine Kirby – Assistant Commissioner, MA Department of Environmental Protection

Will Lauwers – MA Department of Energy Resources (Commissioner's designee); Steve Russell

Gus Block - Nuvera Fuel Cells

Robert Boch – Expressway Toyota, Boch Toyota, Dealer

Catherine Finneran – Eversource Energy

Max Forsythe - National Response Corporation

Gina Coplon-Newfield – Sierra Club

Fouad Dagher - National Grid

Britta Gross – General Motors (Phone)

Jeff Hyman – EMD Serono (Phone)

Robert Wimmer – Toyota USA (Phone)

Mark LeBel – Acadia Center

Colleen Quinn - ChargePoint

Absent: Scott Dube, Vineet Gupta, Kate Fichter, Ann Berwick, Tracy Woodard

Dan Sieger – Assistant Secretary for Environment EEA

- Call to Order, Opening Remark and Agenda
 - Agency updates
 - Listening Sessions
 - The Transportation Listening Sessions are opportunities to hear from the public and to capture ideas, identify challenges, and explore policy solutions to combat climate change and air pollution generated by the transportation sector while also supporting a resilient, equitable transportation network for the Commonwealth. EEA and MassDOT have held three listening sessions in Boston, Amherst and Worcester with another session in Brockton scheduled for Thursday.
 - We would like to engage this Commission in this process, particularly as we start working with the input generated at these sessions
 - In addition we have a web-portal where comments can be submitted:
 https://www.mass.gov/forms/transportation-listening-sessions-online-form
 - o Any other Commission members have any announcements? None

AGENCY UPDATES

Commissioner Martin Suuberg – MA Department of Environmental Protection

• Six new rules promulgated this past summer dealing with GHG reductions including state fleet, Clean Energy Standard, electric generation rule

- MassEVIP Fleets and Workplace Charging Program update
 - Fleets Total of \$2.6 million awarded, 86 separate public entities, 212 Full Battery Electric
 Vehicles, 55 Plug-In Hybrid Vehicles, 92 public Level 2 Dual port charging stations
 - o Workplace Charging Total of \$1.53 million awarded, 538 charging stations
- Volkswagen Settlement Update Approx. \$75 million coming to MA, of which up to 15% can be
 dedicated for EV infrastructure, Check in with VW webpage posted by MassDEP for more
 information. (NOTE: Subsequent to the meeting, MassDEP designated as Trust Beneficiary in MA)

Linda Benevides - EEA

In addition to the VW settlement mentioned by Commissioner Suuberg, there is a separate part of the settlement called Appendix C. Electrify America is tasked with implementing this. Statistical Metro Boston area has been chosen as part of the first cycle of funding to deploy EV infrastructure in charging hub (DCFC), workplace charging (L2), Multi-unit dwelling (L2) destination charging (L2), and corridor charging (DCFC) locations. There is a possible \$7 million to be spent within the first cycle by EA in Boston Metro.

(Question) Colleen Quinn – ChargePoint

How is MA transitioning to the fact that the CARB travel provision is going away? Will there be regulatory activity going forward to address this?

(Answer) Christine Kirby -- MA Department of Environmental Protection

No, there is no need for regulatory activity. The regulations are already in place.

(Question) Colleen Quinn – ChargePoint

Has MassDEP been named the beneficiary agency for VW settlement?

(Answer) Martin Suuberg – MA Department of Environmental Protection

The beneficiary has not yet been finalized. Governor will designate soon - ahead of the December deadline.

(Question) Colleen Quinn – ChargePoint

Does DEP/MA have to indicate formally that 15% of the VW settlement funding be designated for EV infrastructure.

(Answer) Martin Suuberg – MA Department of Environmental Protection Yes, part of the mitigation plan.

(Comments) Mark LeBel – Acadia Center & Gina Coplon-Newfield – Sierra Club

Glad to hear progress is being made on the VW settlement and are excited and supportive for 15% of settlement funding being designated to EV infrastructure. Interest in primarily using funds for electrification.

(Question) Barry Woods – ReVision Energy (Audience)

Is there any state level legal action against Volkswagen?

(Answer) Martin Suuberg – MA Department of Environmental Protection

Yes, MA had filed its own claim with other states and our portion of mitigation funds (about \$20M) went into the state general fund.

Katie Theoharides – Assistant Secretary of Climate Change EEA

- Climate coordinators across the state have been put in place to help develop the state-wide hazard mitigation and climate adaptation plan by September 2018. More details to follow as they become available.
- In process of completing 2030 Clean Energy and Climate Plan for GWSA which is due by end of 2020.
 Develop a 2030 target and in depth look at transportation sector and activities to reduce GHG emissions. Project managed by Hahn Chu with advice from the GWSA Implementation Advisory Committee
- Transportation Climate Initiative (TCI) EEA, DEP, MassDOT representing MA to discuss and plan on a regional level for GHG reduction measures.
- US Climate Alliance MA signed on to commit to Paris GHG reduction targets
- Conference of New England Governors and Eastern Canadian Premiers MA has signed on Resolution 39-1 in 2015, which established a regional greenhouse gas reduction target of 35-45% below 1990 levels by 2030.

Patrick Woodcock – Assistant Secretary for Energy EEA

Quick update that DPU has the National Grid and Eversource plans on docket. May have more clarity at next ZEV Commission meeting

Will Lauwers – MA Department of Energy Resources

- MOR-EV Going strong with at least 200 rebates per month except for February in 2017
- State Fleet Electrification Study Coming soon
- Low-Income Pilot Rebates on BEV purchases (new or used) for low-income residents 2 CAP agencies have signed contracts
- Electric School Bus pilot three communities in MA have E-buses operating. Concord is researching at V2G and/or V2B configuration and a possible solar integration
- CMAQ -- \$5 million awarded
 - Natural Gas facilities
 - o Retrofit Fleet vehicles
 - DCFC projects private and Mass Pike DCFC installations (service plaza are now open)
 - VEH102 available to public sector groups
 - Leading By Example (LBE) Solar canopies at state facilities are now required to have EVSEs installed
 - Green Communities half of communities in the state are now Green Communities and EVs and charging stations are eligible for designation funds and competitive funds

(Comment and Question) Gina Coplon-Newfield, Sierra

Applaud DOER for undertaking the low-income pilot effort that it is a very small pilot to understand impacts prior to designing a more far-reaching program. Would like an update on pilot at next ZEV Commission meeting. Which CAP agencies received funding?

(Answer) Will Lauwers

Franklin and Worcester County CAP agencies

Dan Sieger – Assistant Secretary for Environment EEA

- Mass Drive Clean update 18 events this year, over 3,000 new persons in EVs. After drive survey indicated 70% more likely to buy an EV in the future with 12% of participants ultimately choosing to purchase or lease an EV
- Dealer training Linda Benevides and DOER are working to get two sales persons at volunteer dealerships to be trained on strategies to sell EVs
- Hydrogen Infrastructure Four retail sites in MA coming online in next year or so Metro Boston area. Presenting at the 2017 Fuel Cell Seminar and Expo in CA later this week.

(Question) Catherine Finneran – Eversource

Does MA support the TCI initiatives?

(Answer) We are participating and evaluating regional programs.

(Comment) Fouad Dagher - National Grid

National Grid is participating and so far is please with discussion and results

Transportation and Climate Listening Sessions and ZEV Commission Input

Discussion of listening sessions designed to look for feedback. Hopeful outcome: ideas for regional and state policies and strategies to:

- Reduce emissions from the transportation sector
- Increase ZEV adoption
- Build resiliency
- Deal with issues of equitability

Looking for full written statements via web portal by Jan 1 (asked Linda to send portal and email). Plan to reconvene the ZEV Commission post-sessions to further discuss, solicit feedback and to add to the ZEV Commission report. Next meeting early 2018 (January or February). Meeting moved to prepared questions, conversation and comments by Commission members first.

National Grid

Considered what should a utility do? How do we reach the normal, average utility customer? Refers to DPU 17-13, EV proposal

Ride and drives- sponsored 15 highly successful events

DCFC assistance

Key is education, marketing, outreach to increase awareness

Comments on its ability to work on this regionally given Company placement in multiple states

For its own stations, had to start a reservation system due to increased employee utilization

Company is working on solar canopy projects with stations at various locations

How to integrate the different elements of solar, storage, EVs etc. as a system to benefit customers and give end of life use for batteries

Suggests dealerships as a remaining impediment based on personal experience (no info on MOR-EV)

Eversource

Operates in 3 states – CT, NH and MA. Working regionally as well. A regional corridor important MA DPU EV proposal for locations with long dwell time included in grid mod. \$7M education campaign Looking into load management

Looking into new technologies

Looking into its own fleet opportunities

Both utilities emphasize the need for consistency

Chargepoint

Successful business model, are getting investment (\$300M) and growing for 10 years now.

Workplace EVSE has a "halo effect" and is key. More opportunities to discuss with cohorts to drive adoption

Rate cases are really important and not yet addressed

Must have Administration leadership from the top – it makes a difference. Significant funding needed to expand and improve availability of EV charging infrastructure

Need to account for impacts of AVs into roadmap for transportation electrification

Acadia

Market based cap and invest

Keep making progress - equity issues as important. Do no harm and improve/expand

There are legislative bills that should be looked at including dealer incentive, EV rates, and city-based initiatives

Building code important

Questions the legitimacy of ratepayer funded utility involvement, especially in the areas of education and outreach where others are already working. Car companies should sell their cars.

Sierra Club

NDEW – MA had the second highest participation (CA was #1) in 2017.

EV Charging - Robust utility role encouraged. Building code key. Boston work on home rule petition to allow installation of EVSE at MDU – move it statewide.

Emphasize public transit busses (LA all electric by 2030)

Fight against federal tax cut proposal which ends the tax credit and is writing a letter and requesting signatures from ZEV Commissioners if interested. Asked what MA is willing to do on issue

Nuvera Fuel Cells

Focus needs to be on Hydrogen infrastructure

Need to facilitate permitting (resources to local officials) and vehicle travelling through tunnel issues Be creative – helping off-road helps all uses since infrastructure can be shared; use of VW funds for on and off road vehicles

GM

Need to have a long term vision/plan that is strategic in placement of EV charging stations. Wants to look at siting for level 2 and DCFC so as not to squander upcoming funds

Move DPU decision as fast as possible

Building codes to provide for dedicated circuits

DCFC for car sharing and driverless cars, may be solution to limited public EV charging infrastructure but don't want to max out or start waits because DCFC is maxed out

Utilities should jump into residential charging to reduce installation costs

NESCAUM campaign should find local ways to capture available marketing materials and expand them The importance of streamlining the message so people get repetition

Toyota

CA recognizes need for a portfolio of vehicle technologies, and MA should follow suit Support infrastructure and vehicles equally to allow consumer to make choices based on their need (discussion later about volume of vehicles, Bob does not advocate equal funding support but equitable amount)

Air Liquide (Roy Brandt, audience)

Hydrogen fueling in Mansfield final, Braintree soon and Lexington/Newton later in 2018. FCEV is a viable option now.

Sagewell (audience; Pasi Miettinen)

Adoption driven by promotion/education not EVSE contrary to assumptions (have ROI data)
Aggregates customers and trying to use experience with marketing and outreach to introduce EVs
Expressway Toyota (Robert Boch, ZEV Commission member)

In an email dated 11/9; Mr. Boch suggests that the Sagewell program (residents are given a \$650 incentive to install a level two charger in their home after the purchase of an E.V. plus they receive and \$8 credit on their electric bill each month for charging) should be expanded as a pilot to another city. He mentions duplicating it a "Boston Drives Electric" program to increase the purchases of EVs in Boston. Boston has the highest population and EVs make the most sense in the City. The state should encourage communities within municipal light departments to pursue. It would be beneficial if Eversource and National Grid could also participate in this type of program.

UCS (audience; Daniel Gatti)

California has dedicated resources - \$695M spend, equivalent amount of spending in MA would be \$120M. Projects include: EJ communities - \$110K off buses; Increased rebate for low income and Home chargers \$1000 off

Lyft (audience; Corey Ershow)

Should decrease ICE VMT by supporting EV ride sharing and Lyft is committed to electrification CA pilot with over 100 GM Bolts – very high volume rides to introduced new people to EVs, high e-miles driven in communities

DCFC is critical to this effort. Driver bonus to encourage new drivers to take "risk" of EVs

MassEnergy (audience; Eugenia Gibbons)

Dealer training and MOR-EV awareness can convert people only so far

Drive Green has promoted lower dealer prices and facilitated over 200 lease/purchase

Need more high density DCFC and replicate Boston

Low income efforts are good but suggests modeling on some CA programs for ride and car-sharing (not everyone owns vehicles)

Should add a used EV program

Improve ease of home charging installations

Spend VW money on electric busses

TOU/TVR rate case needed as incentive for EVs, cannot look at EV charging in isolation from electric grid mod

Revision Energy (audience; Barry Woods)

NDEW – MA went from 8 events and about 500 attendees last year to 18 events with 10,000 participants

DCFC has regional impacts due to our NE sharing of tourism so it is in our interests to have coordinated planning efforts. Drive Electric ME/NH/VT

Engage Tesla more on cooperative sites – highly visible, good sites (enough power at sites), partnership and cost-sharing

Interoperability Q & A. DOER mentioned legislation requires state to have standards if no federal standard adopted within a year

Colleen Quinn, Chargepoint

The industry is working on it through ROVE and NEMA –back end costs would be moved onto consumers Scott Fisher, Greenlots

The industry is too new to deal with interoperability – there is IP concerns. Private agreements between companies are a better way to address it; check into open standards like Europe. Should have a system that all EVSE accept any card

Next meeting: Results of Listening Session; ZEV Commission role and recommendations. Note subsequent to the meeting – Please share your ideas of the most effective initiatives and

recommendations to reduce GHG at https://www.mass.gov/forms/transportation-listening-sessions-online-form or emailed to gwsa@massmail.state.ma.us

Adjourn