Townsend, Erle

From: Steve I < sjiemail@yahoo.com>

Sent: Sunday, December 24, 2023 11:08 AM

To: DEP Rule Comments

Cc: nrcm@nrcm.org; letters@bangordailynews.com; Congressman Jared Golden

Subject: Advanced Clean Cars II Program

EXTERNAL: This email originated from outside of the State of Maine Mail System. Do not click links or open attachments unless you recognize the sender and know the content is safe.

To the Maine Department of Environmental Protection regarding the Advanced Clean Cars II Program rulemaking proposal;

What a hot mess this creates. Where to begin: <u>Maine forced to delay vote on EV mandate amid widespread power</u> outages (foxnews.com)

- 1. Let's start with December 18, 2023. More than 400,000 Maine households and businesses without power. One of the largest restoration efforts in CMP's history. Day 6 and still 4,400 without power. Pick your headline. Imagine if this mandate were already in place and 82% of our vehicles required large amounts of electricity to charge them. People stranded because they are unable to charge their vehicle, in some cases for up to a week now. And for those fortunate enough to have an ICE operated generator, in many cases that generator is not going to have enough capacity to charge an EV and power the homes necessities at the same time. VIDEO MESSAGE: CMP Provides Update on Storm Restoration Efforts CMP (cmpco.com)
- 2. **Grid**. As the December 18 storm has shown, the electric grid in Maine is extremely vulnerable. Putting aside catastrophic events such as that storm, Maine is forecasting to almost double the amount of the electric load capacity it will need by 2050. Yet today the State is still trying to sort how that will be met. Issues to consider are where will this added generation capacity come from, in what form will that capacity be, what additional transmission capacity is needed/where will that go and how do we address the needs of the distribution system (the lines to our homes and businesses) to service all of this added load. Together with all of this is studying the impacts of the December 18 like storms on our grid and determine how to harden/make more resilient our grid for future December 18 like storms. Also, unique to Maine is that Maine has the dubious distinction of having the worst frequency and longest duration power outages in the country. Is it responsible for the State to be requiring the public to be placing so much reliance on our grid until at least these reliability issues are addressed? Maine Energy Plan: Pathway to 2040 | Governor's Energy Office, Brattle Report Title (maine.gov), Maine Works to Resolve the Worst Power Outages in the Nation (governing.com)
- 3. Source of energy to charge EV's. As we know the State is working hard to develop a plan for our future renewable electric generation needs. Yet we are still many years away from seeing much of this generation capacity being built, if it ever will be built. Projects such as the Aroostook Renewable Gateway have been rejected, offshore wind generation projects along the northeast coast have been pulled by developers, all leaving questions as to the real future of renewable energy in Maine. Today, and for the foreseeable future, the ISO New England grid that Maine depends on, continues to use natural gas for around 40% 50% of its generation capacity. Until such time as our electric generation sources truly become green, and not wishfully become green, we start to essentially swap emissions coming out of the tail pipe of a gas powered vehicle for more emissions coming out of a natural gas electric generation plant. What is the cost/benefit analysis to this? Perhaps still a net climate gain but at what cost?
- 4. **Public charging stations**. According to the State Climate Plan Progress dashboard there are 459 public charging stations located throughout Maine as of November 2023. I'll add that the majority of which are located in southern Maine. Has anyone done a study to determine how many public charging stations will be required if this mandate is implemented, what the cost to install them will be and how that will be paid for? Has anyone taken into consideration the geographic distribution of those stations throughout the State and how they are so heavily weighted to the southern part of the State (for obvious reasons as that is where the majority of the State lives) and where that leaves those who live in the central and northern part of the State in terms of ready access to a public charging station? Has anyone looked into how these stations would work, or not, when we have our next December 18 storm? Climate Plan Progress Map and Dashboard | 2023 | Maine Climate Plan, Alternative Fuels Data Center: Electric Vehicle Charging Station Locations (energy.gov)

- 5. Range anxiety. This ties in with the public charging station discussion. Are there going to be a sufficient number of charging stations, are they going to be available along my routes, are they going to be working (we've heard plenty of stories of a driver arriving to a charging station only to find it doesn't work), how long will it take me to charge my EV (think long lines and long charging times compared to what we're used to today). Add a footnote here that we're just now deciding as a country what kind of universal plug/play charger plug to use for EV's that still needs to be fully rolled out.
- 6. **Cold climate**. We all know that Maine has a very diverse set of climate zones and that it can get very cold here, particularly the further north you go (think the cold snap in February 2023). We also know that batteries behave (not in a good way) differently in the cold (and heat). The following article gives one example of a study conducted that indicates EV's can lose 30% (or more) of their range once the temperatures dip below freezing. That's like someone sucking 30% of the gas from your gas powered vehicle. That then adds to the range anxiety and operating cost of the EV for the lost power. <u>Electric vehicles lose up to 30% range when temperatures dip below freezing</u>, study finds | CBC News
- 7. **Cost**. Let's take a look at the 2024 Chevrolet Blazer as an example (which is having a horrendous launch and sales are now temporarily suspended). According to a Forbes article the gas powered AWD Chevy Blazer starts at \$39,495 and the EV AWD starts at \$60,215, a \$20,720 difference. One might then say what about the federal and state tax credits. So first is that Chevrolet has announced that this EV will not initially be eligible for the federal tax credit come 2024, but hopes it will be eligible sometime later in 2024. Second is that if someone is eligible for this federal credit (not everyone is) the maximum amount is \$7,500. As for the State tax credit, putting aside the low income version, which someone who is eligible for that is probably not in a position to purchase this expensive of an EV, then the moderate income state tax credit is \$3,500. Together this amounts to \$11,000 in possible tax credits, still leaving the Chevy Blazer EV costing \$9,720 more than the ICE. Well one can then argue about how much cheaper it "may" be to operate an EV vs an ICE. Perhaps, but first one needs to get over (and afford) this very large upfront cost difference. Car and Driver does an in depth study on this cost comparison subject that can be found here: EV vs. Gas: Which Cars Are Cheaper to Own? (caranddriver.com)
- 8. **Availability**. We can mandate our lives away on requiring zero emission vehicles but if the manufacturers aren't producing them then they aren't available for purchase. There have been several recent announcements by auto manufacturers of curtailing EV production. It's reasonable to argue that the manufacturers are taking a pause to evaluate the appetite of the mass consumer for an EV and if EV's are even the way to go in the future. Electric Vehicles Are Stuck In A Lull. What That Means For Tesla, Other EV Stocks And EV Battery Manufacturing. Investor's Business Daily (investors.com)
- 9. **Carbon deficit**. What thought has been given into the fact that an EV starts off creating a larger negative impact to the climate than a gas powered vehicle? That it takes somewhere between 28,000 68,000 miles (that's a wide range) of driving an EV before this carbon deficit is negated. That this mandate gives no thought to the impact it will have on this, as it makes no distinction between those who drive a significant number of miles per year and those who don't. This Harvard Gazette article speaks to this issue in greater detail. When buying an EV increases your carbon footprint Harvard Gazette
- 10. **Safety**. We've hopefully all read of situations where EV batteries have caught fire, sometimes spontaneously, and how difficult it is to put these fires out. This leads to the question of do we as yet have a full understanding of the risks associated with EV batteries, particularly as it relates to fires that could start while the vehicle is being stored (and charged) in a garage located within a dwelling? <u>Electric vehicle battery safety becomes a priority for US regulators (cnet.com)</u>
- 11. **Social equity**. When we talk about climate change and the impacts, the subject of social equity can come up. Let me ask, with the higher upfront cost of purchasing an EV even after tax credits, the limited number of public charging stations in more rural and often lower income communities, does this mandate put those who are amongst our most financially vulnerable at a greater disadvantage, as they often are the ones who can least afford to purchase an EV and not have the option of charging an EV at their place of residence. Social Implications of Electric Car Charging Access and Equity Concerns (energy5.com)
- 12. **EV batteries recycling law**. What is the DEP doing in terms of ensuring that the manufacturers of rechargeable batteries for EV's are adhering to, and the public is aware of, Maine law Title 38 Section 2165 a law related to the disposal of certain batteries, including rechargeable batteries? <u>Title 38, §2165: Regulation of certain dry cell batteries</u> (maine.gov)
- 13. Nonremovable Rechargeable batteries law. Title 38, Section 2166 is another Maine law which states that a person may not sell, distribute, or offer for sale in Maine any product powered by a rechargeable battery primarily used or purchased to be used for personal, family or household purposes, unless the battery may be easily removed by the consumer or is contained in a battery pack that is separate from the product and may easily be removed. The battery itself must be labeled in a manner that is clearly visible to the consumer indicating that the battery must be recycled or disposed of properly. As an EV battery is rechargeable and would not reasonable be considered something that may easily be removed by a consumer, it is clear that under this law the sale of an EV for personal, family or household purposes is a violation of this law. A violation of this section is a civil violation

for which a forfeiture of not more than \$100 per battery sold, distributed or offered for sale may be adjudged. Each day that a violation continues or exists constitutes a separate offense. <u>Title 38, §2166: Rechargeable consumer products (maine.gov)</u>

In summary, I'll say that Maine is not California and that we should not being trying to force on the Maine public, with the support of only 150 petitioners, something that may be good for California, without first taking a long hard look at the ramifications and if it is good for Maine. There should also be a robust discussion at the legislatures level about this. I am further concerned as to why the petitioners are approaching proposing this mandate in the method they are pursuing, and wonder if the petitioners are for some reason concerned about what the outcome of a robust public discussion within the legislature will result in. I am opposed to the Advanced Clean Cars II program as written.

Sincerely,

Steven Ingalls Stetson, Maine