Subject: Public Hearing Comments

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To: HearingComments, DNREC (MailBox Resources), geneva.rathbone@gmail.com

Comments on 2022-R-A-0011: Low Emission Vehicle Program

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Comments:

I'm not in agreement with electric vehicles, yet. -High electricity prices — combined with softer gas prices — made EVs more expensive to fuel than gas-powered cars at the end of 2022, according to a report published in January by the Anderson Economic Group. -In vehicles powered by internal-combustion engines, many fires start under the hood and burn the vehicle from front to back. In EVs, the lithium-ion batteries are stored beneath the floorboards of a car. Fire erupts when the chemical reaction inside a battery causes a catastrophic increase in heat and pressure that produces a "thermal runaway." The resulting fire spreads between the individual battery cells. Water helps to cool down the chemical reaction, but a fire will continue as long as there is consumable energy in the batteries. Another strain on the volunteer fire departments and property damage beyond the electric vehicle. You may have seen the YouTube videos and news outlets of electric cars catching fire. The dramatic scenes are playing out all around the country. Potential danger posed by electric cars comes from the batteries that power the vehicles. Lithiumion batteries are used to power the motors and internal electronics of many electric vehicles. If exposed to any amount of water, including moisture in the air, the lithium begins to react and get hot. At a hot enough temperature, the lithium will ignite and burn. Imagine the potential dangers of children walking around parking lots within their school landscape. -Lack of infrastructure - While a gas/diesel are fueled within minutes, it takes 6-8 hours to charge an electric vehicle at home and we have 2 vehicles. Even with fast charges and bigger batteries it takes between 35 to 60 minutes to get an 80 percent charge. -Not suitable for outstation travel since a single charge provides a driving range of 200-400 km. With the shortage of charging stations means electric vehicles are good for intra-city drive, not longer vehicle trips. Finding a charging station - EV charging stations are fewer and further between than gas stations. Imagine the enormous economic impact of less people traveling to Delaware for vacation post COVID and the rise of Delaware taxes. -Lately, buying a new vehicle is expensive no matter what the power source. February 2023 saw high average transaction prices for new vehicles of over \$48,700, according to KBB. But the average price for an EV is still higher than a gas-powered option. The KBB estimate for an EV is over \$60,000 — which aligns with an average luxury vehicle price tag. -Higher insurance cost - As electric are expensive due to cutting-edge technology and high-capacity batteries, it raises the IDV. Also, while electric have fewer parts, these are more expensive, as are the batteries, which are very costly to repair and replace. While third party insurance rates have been fixed rates up to 15% discount, comprehensive policy rates are much higher and do not offset the discount. Homeowner's insurance - The big question is will charging an electric vehicle at home and the use of a large lithium-ion battery pose fire risks in the garage. First of all, most insurers don't look at electricity use when calculating prices to insure your home. Secondly, in order to have a home charging station, your electrical system should be upgraded. This upgrade could actually result in a decrease in your homeowners' rate. If the wiring isn't upgraded, then an insurer could penalize the homeowner with higher rates. The average cost to insure a conventional internal combustion engine vehicle in the U.S. is \$193 a month, according to insurance comparison website Insurify. It cost \$230 a month on average to insure a hybrid and \$317 for an all-electric vehicle. That's an increase of up to 64% more for coverage for an electric vehicle. -Electric vehicles have less range in freezing temperatures than mild weather because it consumes more energy to heat the battery and the vehicle interior. Charging a battery that sat overnight in frigid weather might take twice as long to fully charge. EV batteries don't perform well in extremely hot or cold temperatures. North American winters, for example, can significantly affect EV driving range and charging times. According to a 2022 study by Green Car Reports, EV drivers noticed a 30% reduction in driving range during winter. -Inflation is hitting us hard. Prices for food, gas and basic necessities are out of control. Shortages of baby formula are forcing parents to travel, sometimes out of

state, in order to feed their children. Meanwhile, billionaires like Elon Musk get richer even as our economy teeters towards a recession. Amid a barrage of headlines about layoffs and turmoil for banks, fears about an upcoming recession are mounting. The threat of a U.S. recession remains alive in 2023. The consensus estimate on the probability of a meaningful downturn in the American economy in the next 12 months is at 65%, according to Goldman Sachs Research. A majority of economists forecast a recession for the U.S. in 2023 – 58 percent, according to a survey from the National Association for Business Economics (NABE) released earlier this week on March 27. From NABE's release, shows that only 5% of surveyed economists think the U.S. is currently in a recession – and that share is down from 19% when last surveyed in August 2022. The most likely start of a recession is Q3 of this year, when 24% of NABE panelists expect a recession to begin. -Switching from the maintenance and repair of combustionpowered cars to EVs could create a stronger blow to the worker shortage in the auto industry. -Power outages have increased, up 64% this decade compared to the previous decade, according to the report. Age, weather, and the generating resource mix are undermining the U.S. power systems faster than the infrastructure can be replaced, reinforced, and possibly re-envisioned. "Electric vehicle adoption could prove to be the greatest grid disruptor", per John Locke Foundation 2023 report. -Usually, a pedestrian or cyclist can hear a car or truck coming before crossing the street. However, unlike most cars, electric vehicles make little to no sound when driving. Silence may be desirable for drivers and passengers, but the lack of sound can be dangerous for pedestrians who do not sense the vehicle approaching. These surprises may end in serious personal property damage, injuries, or even death, especially if the driver of the electric car is distracted. Seniors, children, and people with disabilities face even greater risks from these accidents. The most dangerous times for pedestrians are when an electric car is stopping, slowing, starting in traffic, backing up, or leaving a driveway or parking spots - including in public/private schools. The risk of a collision in these scenarios is double that of the normal rate.