The State of New Hampshire
Department of Environmental Services

Robert R. Scott, Commissioner

February 26, 2021

The Honorable Regina Birdsell
Chair, Senate Transportation Committee
State House, Room 103
Concord, New Hampshire 03301

Re: SB 131 Part I, relative to electric vehicle supply equipment and infrastructure and relative to state motor vehicle fleet management

Dear Chair Birdsell and Members of the Committee:

Thank you for the opportunity to testify on SB 131, Part I. This bill utilizes the work and recommendations of the Electric Vehicle Charging Station Infrastructure Commission (EV Commission, SB 517, 2018) to make several policy recommendations relative to expanding the adoption of zero emission vehicles (ZEV). The New Hampshire Department of Environmental Services (NHDES) served on the EV Commission and supports the findings of this bill in Section 1. NHDES takes no position on the specific policies proposed in the bill, but offers the following general information relative to transportation emissions, the work of the EV Commission, and ZEV technology.

As noted in SB 131 findings, the transportation sector is the single largest source of greenhouse gas emissions that contribute to climate change and is the primary source of oxides of nitrogen which contribute to elevated ozone, a respiratory irritant, in the summer months. Strategies to reduce emissions from the transportation sector essentially fall into two categories: reducing the total miles traveled and reducing the emissions per mile traveled. Both strategies are necessary to significantly reduce emissions from this sector. SB 131 recommendations focus on the latter, reducing emissions from the vehicles themselves, many of which were discussed in length by the EV Commission.

EV Commission members were presented a significant amount of information regarding the operation of electric vehicles and model availability, the various types of EV charging infrastructure (known collectively as electric vehicle supply equipment, or EVSE), as well as information on the cost to install and availability of EVSE in New Hampshire and the region. New Hampshire is lagging behind other Northeast states and Canadian provinces in deployment of EVSE The final recommendations of the EV Commission, which were unanimously supported by Commission members, reflect this fact and are summarized as follows in the Commission's final report[1]:

[1] Final Report, Electric Vehicle Charging Stations Infrastructure Commission, November 1, 2020.
https://www.des.nh.gov/sites/g/files/ehbemt341/files/inline-documents/2020-12/20201030-final-report.pdf

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1. The state should commit to the development of Zero Emission Vehicle (ZEV) technology and infrastructure, including the state, private and rental residence, business, and municipal installation of EV charging stations to reduce air pollution emissions and stimulate the transformation to a lower carbon transportation system.

2. The state should move quickly to use the VW Settlement funds to deploy DC fast charging stations along major corridors and to deploy level 2 EVSE on other corridors and locations, including municipalities and businesses, with a portion of funds available in a rebate program, and should consider utilizing a third party to develop and administer programs.

3. New Hampshire should consider authorizing public utilities to include EVSE "make ready" programs and other EVSE initiatives as part of the systems benefit charge, and it should consider authorizing the use of tax credit programs for EVSE installation in residential and business locations.

4. The state should study and consider adopting a successful ZEV mandate or vehicle incentive program and joining regional, multi-state programs.

5. State Agencies should assess EVSE needs for employees, with stations also available for public use, and the state should adopt plans to move the state vehicle fleet towards ZEV.

6. The State of New Hampshire and agencies should develop Operating Budgets and Capital Budget funding proposals and goals for ESVE, and pursue funding from Federal sources.

7. The state should encourage and enable deployment of EVSE in residences and businesses, and make any needed changes in building codes, rules, and practices.

SB 131 proposes numerous statutory changes to implement these recommendations. One of the more significant proposals is to transition the state fleet to ZEV by 2042. While challenging in the short term, electrification of the state's fleet could save the state money for two reasons. First, EVs are less expensive to operate and maintain than a comparable gas or diesel vehicle, and second, the price of EVs are projected to fall significantly in the next several years.

The current State of New Hampshire 2021 Model Year Vehicle Index[2] demonstrates how EVs can save money due to operation and maintenance costs. The most recent state vehicle contract includes electric vehicles. In the Vehicle Index the Department of Administrative Services (DAS) included calculations of the total cost of ownership for each vehicle, inclusive of projected fuel and maintenance cost over ten years at 15,000 miles/year. Though the initial purchase price of the EVs are higher than their gasoline counterparts, in some cases the EVs have a lower total cost of ownership due to lower fuel cost and significantly reduced maintenance costs[3]. For example, in the 5-passenger sedan category the vehicle with the lowest sticker price is the Toyota Corolla at $19,040. This car has a fuel economy rating of 31/40

[2] http://das.nh.gov/purchasing/docs/Notices_of_Contract/2021%20VEHICLE%20INDEX.pdf
[3] Consumer Reports studies show an average savings of $4,600 in maintenance and repair costs over the life of the vehicle. See https://www.consumerreports.org/car-repair-maintenance/pay-less-for-vehicle-maintenance-with-an-ev/

miles per gallon (mpg) (city/highway) and a total cost of ownership of $45,721. The Chevrolet Bolt, with a sticker price of $26,308 and a mpg-equivalent rating of 127/108 city/highway has a total cost of ownership of only $42,414.

The price of EVs are projected to fall significantly in the next several years according to BloombergNEF's Vehicle Outlook 2020[4]. By the mid-2020's EVs are projected to achieve purchase price parity with conventional vehicles due to rapidly falling battery prices (down 87 percent from 2010 to 2019). This will make the total cost of ownership for EVs far lower than their gas and diesel counterparts. Improved EV charging speeds and a rapidly expanding EV selection will also drive customer demand.

NHDES is pleased to provide any additional information we can to legislators to assist in their evaluation of the specifics of this bill.

Thank you again for the opportunity to comment on SB 131. If you have any questions or require further information, please contact either Rebecca Ohler, Administrator, Technical Services Bureau, Air Resources Division (Rebecca.Ohler@des.nh.gov, 271-6749, or Michael Fitzgerald, Deputy Director, Air Resources Division (Michael.Fitzgerald@des.nh.gov, 271-6390).

Sincerely,

Robert R. Scott
Commissioner

ec: Sponsor of SB 131: Senator David Watters

[4] https://about.bnef.com/electric-vehicle-outlook/