ZETA | ZERO EMISSION TRANSPORTATION ASSOCIATION

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Re: Docket No. SUBMITTED VIA ELECTRONIC MAIL TO: NEPA@USPS.gov

The Zero Emission Transportation Association (ZETA) is an industry-backed coalition of 60 member companies advocating for 100% electric vehicle (EV) sales by 2030. ZETA is committed to enacting policies that drive EV adoption, create hundreds of thousands of jobs, drastically improve public health, and significantly reduce carbon pollution. We thank the United States Postal Service (USPS) for the opportunity to comment on the Draft Environmental Impact Statement (DEIS): 2021-18302 for the purchase of Next Generation Delivery Vehicles (NGDVs). Given battery electric vehicles' (BEVs) vast cost savings and high potential for reducing greenhouse gas (GHG) emissions, ZETA looks forward to working with USPS to transition their NGDVs from internal combustion vehicles (ICEVs) to BEVs.

The USPS's DEIS report presents a Proposed Action to purchase and deploy a NGDV fleet of 90% ICEVs and 10% BEVs. The DEIS also provides three alternatives: to purchase and deploy a 100% commercial off-the-shelf (COTS) ICEV fleet (Alternative 1.1) and to purchase and deploy a 100% BEV fleet (Alternative 1.2) and the No Action Alternative. ZETA strongly opposes the Proposed Action and Alternative 1.1. USPS's clear preference for the Proposed Action is based on incorrect cost estimates, an insufficient dedication to emissions reduction, and imprecise projections about future infrastructure developments.

In order to substantially reduce GHG emissions in the transportation sector, the federal fleet—and particularly the USPS' NGDVs—must be electrified. Electrifying the transportation sector is among our greatest opportunities to combat climate change. Transportation is the largest carbon-emitting sector in the United States, and it is responsible for 29% of our total carbon emissions.[1] In 2019, the USPS fleet consumed 195 million gallons of

[1] https://www.epa.gov/transportation-air-pollution-and-climate-change/carbon-pollution-transportation

gasoline equivalent (GGE). Of that, 194.5 million gallons were gasoline and diesel—reflecting a 28% rise in the USPS's consumption of gasoline and diesel since 2005.[2] The DEIS bases its fuel efficiency estimate for ICEV NGDVs at 8.6 mpg (with air conditioning). The long life vehicle (LLV) fleet—the USPS's current fleet—is considered to have a fuel efficiency of 8.2 mpg. Accordingly, the Proposed Action is projected to be barely more efficient than the nearly 30-year-old LLV delivery fleet.

Furthermore, many USPS vehicles are medium-and heavy-duty vehicles (MHDVs), such as trucks and vans. MHDVs have a disproportionate impact on the climate and public health. In 2019, MHDVs accounted for 24% of all GHG emissions and 57% of deadly particulate matter (PM) emissions in the transportation sector—despite representing less than 10% of all vehicle miles traveled.[3] A recent Wood Mackenzie study found that a typical mid-size EV generates 67% fewer GHG emissions than an ICEV over the lifetime of the vehicle.[4] And, as the U.S. power sector continues to reduce its emissions, the lifecycle emissions of EVs will also drop—especially when compared to ICEVs, which have a set fossil fuel-based carbon footprint.[5]

The DEIS agrees that replacing COTS ICEVs with BEVs would "lower the Postal Services' total fuel purchases for its delivery fleet." Yet, while the DEIS acknowledges that Alternative 1.2 would generate 200% fewer direct and indirect GHG emissions than the Proposed Action, the DEIS nevertheless justifies its preference for the Proposed Action by asserting that it will have a better emissions profile than USPS's existing fleet, which includes vehicles that are nearly 30 years old. The DEIS does not consider that BEVs do not require fuel or emit tailpipe emissions.

The report claims that the 100% BEV scenario is too expensive given the current financial status of the USPS. The DEIS' conclusion about BEVs' financial impact neglects well-established market dynamics—even competitor decisions made by FedEx—and does not consider its own analysis about the social cost of carbon. The lifetime operating costs of charging and maintaining BEVs are as low as one-third of the comparable costs associated with ICEVs. The savings potential for USPS vehicles is even greater than that for other federal fleet vehicles because of USPS vehicles' frequent stops, idling, fixed routes, short driving range, and convenient parking hubs. The USPS calculated that the 100% BEV scenario could save three times as much in social costs compared to the 90% ICEVs and 10% BEV Proposed Action.

The cost calculation in the DEIS report inexplicably assumes that BEVs would employ nickel manganese, a type of nickel-metal hydride (NiMH) rechargeable battery, which are often more expensive—and less common and efficient—than EV industry-standard lithium-ion (Li-Ion) batteries. NiMn batteries are much heavier than Li-Ion batteries, so BEVs with NiMH batteries

[2]https://www.vox.com/energy-and-environment/2020/4/22/21229132/usps-coronavirus-electrify-postal-trucks
[3] https://www.ucsusa.org/sites/default/files/2019-12/ReadyforWorkFullReport.pdf
[4] https://www.woodmac.com/press-releases/evs-up-to-67-less-emissions-intensive-than-ice-cars/
[5] https://www.woodmac.com/press-releases/evs-up-to-67-less-emissions-intensive-than-ice-cars/

would require more electricity per mile traveled, and their greater weight would lead to greater wear and tear on vehicles' brakes and tire system.[6] Moreover, Li-Ion batteries can be charged more rapidly than NiMn batteries, and they retain their charging capacity better over time.[7]

In contrast, a study conducted by the nonpartisan research service Atlas Public Policy indicated that 97% of USPS vehicles can be replaced with EVs employing Li-Ion batteries at a lower total cost of ownership (TCO) than comparable gas and diesel vehicles. USPS could save $4.3 billion by electrifying its fleet.[8]The lifetime operating costs can be as low as one-third of those associated with ICEVs. The savings potential for USPS delivery vehicles may be even greater given their frequent stops, idling, fixed routes, short driving range, and convenient parking hubs.

USPS claims that the Proposed Action is preferable to Alternative 1.2 because BEVs are incapable of handling the distance, weather conditions, or charging requirements for up to 12,500 of the USPS' 232,000 routes. The 12,500 routes in question represent less than 5.4% of the USPS's total routes. First, the "hypothetical BEV" in the DEIS has a range of just 70 miles, which is far lower than the range of off-the-shelf options. While electric MHDVs do vary in range, the Generation 2 vehicle produced by ZETA member Arrival has a 150-mile range,[9] and a model year 2020 light-duty EV has a median range of 250 miles.[10] According to an analysis by Ford, most USPS delivery routes are fewer than 74 miles.[11] The DEIS does not state the average USPS route length or how many routes are longer than 70 miles. According to the Information Technology and Innovation Foundation, the average USPS route is less than 22 miles per day and 84% of routes are under 32 miles per day.[12] Therefore, a 70-mile range BEVs would be sufficient for most USPS routes. Yet, the USPS discounts vehicles with a 70-mile range; even though this was the range explicitly required by the USPS's Request for Proposal (RFP).

The DEIS also claims that cold weather has dramatic impacts on EV battery life that it fails to substantiate. The DEIS does not provide evidence to support their assertion about the operational effect of cold temperatures on battery life, and their concerns are likely overstated.[13]

Additionally, the USPS DEIS expresses concerns about the limited availability and cost of EV supply equipment (EVSE), but it fails to consider President Biden's plan to build hundreds of thousands of EV chargers in the United States, especially in rural and hard-to-reach areas. The *Infrastructure Investment and Jobs Act* includes $7.5 billion for EVSE. This funding is sufficient

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[6]https://agronomy.emu.ee/wp-content/uploads/2017/04/Vol15SP1_Berjoza.pdf
[7]https://pubmed.ncbi.nlm.nih.gov/23584142/
[8]https://atlaspolicy.com/wp-content/uploads/2021/08/Federal_Fleet_Electrification_Assessment.pdf
[9] https://arrival.com/us/en/news/ups-invests-in-arrival-and-orders-10000-generation-2-electric-vehicles
[10]https://www.energy.gov/eere/vehicles/articles/fotw-1167-january-4-2021-median-driving-range-all-electric-vehicles-tops-250
[11] https://www.ford.com/commercial-trucks/e-transit/2022/
[12]https://itif.org/publications/2021/02/10/postal-services-6-billion-procurement-its-next-generation-mail-truck-what
[13] https://www.geotab.com/blog/ev-range/

to build hundreds of thousands of chargers. Even without this anticipated federal investment, the prevalence of public EV charging infrastructure will undoubtedly grow. The NGDV procurement plan will unfold over the span of a decade; yet, it does not factor in forecast improvements in BEV battery efficiency, price declines, or charging infrastructure deployment. And while the DEIS also cites the cost of charging infrastructure as a barrier to the 100% BEV scenario, it does not list the assumptions or calculations used to draw that conclusion.

In fact, the USPS presents the best use-case for federal fleet electrification in part due to its ease of charging and predictable routes. Most USPS vehicles drive relatively few miles each day, and they park in controlled, dedicated lots every evening. They can also charge during off-peak hours, which would reduce electricity costs. Furthermore, because most USPS fleet vehicles will charge during off-peak hours, the DEIS notes that "Alternative 1.2 would have a minor impact on the electrical grid." Charging is not a legitimate barrier to USPS fleet electrification.

Although BEVs may not be well suited to a relatively small number of routes, it is important to keep in mind that USPS is not replacing 100% of its existing fleet. Instead it is planning to replace 22.9% to 75.6% of its fleet over the next ten years. The fleet's remaining ICEVs could cover any routes that are not well-suited for electrification, though we are skeptical that such impediments truly exist. If needed, USPS could procure a small percentage of ICEV NGDVs to cover these routes. The USPS' decision to assess only a limited number of scenarios in their analysis leads to questionable results. A more tailored mix, such as 90% BEVs and 10% ICEV, could yield a more optimal outcome. Given all of these factors, USPS' decision to acquire a 90% ICEV NGDV fleet is unjustified and will set USPS at a disadvantage for years to come. The challenges created by 5.4% of USPS routes should not dictate 90+% of USPS procurement.

ZETA instead strongly encourages the USPS to choose BEVs for its upcoming purchase of NGDVs. The procurement of BEVs would save USPS on fuel expenditures, reduce its carbon footprint, and provide dramatic public health and total cost of ownership benefits. Doing so would also align with President Biden's executive order calling for the electrification of the federal fleet. With that in mind, ZETA recommends that the USPS restart the scoping process for the DEIS to properly evaluate any future Proposed Actions or Alternative Scenarios in a way that reflects defensible vehicle, charging, and cost estimates not met in the current DEIS.

Sincerely,

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