



March 1, 2018

Electrify America, LLC
Volkswagen Group of America, Inc.
Attn: ZEV Investment Commitment Planning & Operations
2200 Ferdinand Porsche Dr.
Herndon, VA 20171

RE: Pennsylvania's ZEV Investment Cycle II Comments

Dear Electrify America Planning Staff:

The Commonwealth of Pennsylvania appreciates the opportunity to submit its Zero Emission Vehicle ("ZEV") infrastructure project recommendations to Electrify America, LLC, for the second ZEV Investment Commitment funding cycle pursuant to the schedule set forth in Appendix C of the Partial Consent Decree in the case entitled, *In re: Volkswagen "Clean Diesel" Marketing, Sales Practices, and Products Liability Litigation*, Case No: MDL No. 2672 CRB (JSC). As described in the Pennsylvania EV Investment Cycle I Project Endorsements submitted on January 23, 2017, the Commonwealth believes that it is uniquely positioned to take advantage of the opportunities under this funding cycle and looks forward to working with Electrify America, LLC and stakeholders. Additionally, the Commonwealth acknowledges and appreciates the investment decisions made in Cycle I that included Pennsylvania locations mainly centered around the Philadelphia Metropolitan Area.

RECENT PROGRESS

EV Planning Efforts

The Pennsylvania Department of Environmental Protection's ("PADEP") State Energy Office continues to lead a statewide Electric Vehicle ("EV") planning and road mapping effort that began in 2016, collaborating with various stakeholders in a process intended to increase the acceptance and adoption of electric vehicles. In 2017, the planning group became known as the Drive Electric PA Coalition. The Drive Electric PA Coalition includes state and municipal government officials, U.S. Department of Energy (DOE) Clean Cities Coalitions, EV businesses and consultants, transportation organizations, electric utilities, environmental groups, auto companies, and other interested stakeholders.

The Drive Electric PA Coalition is working with an expert transportation consultant (supported by DOE State Energy Program funds) to create a plan called the "Pennsylvania Electric Vehicle Roadmap." The plan will inform policymakers that are interested in supporting EV growth in Pennsylvania and be used as a guide for coalition members going forward. A draft roadmap will be presented to the Drive Electric PA Coalition in March 2018, with a final plan due to PADEP by June 2018.

Secretary

With the assistance of Electrify America, VW Mitigation Trust Funding, the Pennsylvania Electric Vehicle Roadmap and the Drive Electric PA Coalition, we intend to:

1. Demonstrate that Pennsylvania is open for business in full support of an EV economy;
2. Increase Pennsylvanians' awareness and understanding of EV purchasing options and charging equipment;
3. Educate Pennsylvanians on how EVs will be a significant part of a cleaner transportation network and energy independence;
4. Work with cities and towns across Pennsylvania to help mainstream the environmental benefits and quality of life improvements gained through vehicle electrification;
5. Transform the vehicle purchase marketplace in Pennsylvania, through new policies and incentives to support electric transportation;
6. Leverage public-private investments to the greatest degree possible in high value EV charging infrastructure;
7. Connect Pennsylvania to our neighboring northeast and mid-Atlantic states who are leading the way on electric vehicle adoption and charging station investments;
8. Have our state agencies lead by example, through goal setting and electric vehicle use policies that both encourage and demonstrate our commitment to electric fleet adoption and its benefits to Pennsylvania.

In addition to Pennsylvania's EV plan, several other Regional EV Planning efforts are underway.

Philadelphia EV Plan

The City of Philadelphia's Office of Transportation and Infrastructure Systems recently released the City's Electric Vehicle Policy Task Force draft report offering a multifaceted approach to supporting a transition to electric vehicles in Philadelphia. Information about the Electric Vehicle Task Force draft plan can be found here:

<http://www.phillyotis.com/portfolio-item/electric-vehicle-policy-task-force/>

PennEnvironment Study

On February 21, 2018, PennEnvironment released its new EV report "Plugging In." PennEnvironment's study will help cities address infrastructure and parking challenges based on the anticipated growth of electric vehicle use. The report calls on local officials to implement EV-friendly policies that include: residential access to on-street EV charging, access to public charging stations, support for private investment in publicly-accessible stations, and incentivized EV parking and charging. Information on this study can be found here:

<https://pennenvironment.org/news/pae/electric-cars-revolutionize-vehicle-market-new-study-helps-cities-address-infrastructure>

The Western PA EV Coalition

The Western PA EV Coalition is an informal group of stakeholders interested in accelerating the deployment of transportation electrification in the Western Region of Pennsylvania. Duquesne Light Company (“DLC”), the Investor Owned Utility servicing the region, originally convened this group when the VW Settlement plans were being developed to discuss project opportunities in the region. Since then, the Coalition has met quarterly and includes members such as: The City of Pittsburgh; the University of Pittsburgh; Carnegie Mellon University; the Pittsburgh Parking Authority; the Port Authority of Allegheny County; Pittsburgh Region Clean Cities; the Pittsburgh Community Reinvestment Group; Uber; the Richard King Mellon Foundation; The Heinz Endowments; and the Southwestern Pennsylvania Commission. DLC has put substantial effort into the coalition and intends to continue to lead its pursuit of EV projects.

Pennsylvania Legislation

PADEP is also tracking a legislative initiative, HB 1446, which would enable Electric Distribution Companies (EDCs) to develop and implement plans to build-out Electric Vehicle Charging Stations (“EVSE”) in priority regions in Pennsylvania. Priority regions are defined as Pennsylvania’s largest metropolitan areas, including at least 500,000 people. The legislation would require the Governor to establish EV adoption goals for the year 2030, and enable EDCs to fund EVSE development projects to meet those goals. If Pennsylvania enacts this legislation, it would be the first of its kind on the East Coast and create a long-term pathway for the continued support and growth of EVs. HB 1446 is anticipated to be reintroduced for consideration in March 2018. PADEP will provide Electrify America updates as this bill makes its way through the legislative process.

FAST Act Designations

Pennsylvania continues to be a prime candidate for ZEV Infrastructure project funding, because it is a centrally located transportation nexus for the Northeast, Midwest, and Southern portions of the United States. Pennsylvania has some of the longest stretches of heavily traveled interstate arteries in the United States, including I-76, I-80, I-95, and I-81. Three of these corridors were designated as FAST Act Corridors in 2017. In November 2017, Pennsylvania, citing evidence of existing and planned alternative fuel infrastructure, submitted a second application to the Federal Highway Administration to designate western PA interstates (I-376, I-79 and I-90) as FAST Act Corridors. Through this effort, PADEP is hoping to highlight western Pennsylvania as a significant target for Electrify America funding in Cycle 2. Additionally, Pennsylvania intends to pursue future highway designation opportunities to continue informing the car buying public and demonstrating that Pennsylvania has a growing network of alternative fuel ready corridors. We hope that Pennsylvanians and those visiting Pennsylvania are confident they can operate vehicles of all fuel types and drive throughout the Commonwealth without limitations.

State Incentive Programs

PADEP has invested millions of dollars in EV charging infrastructure through the Alternative Fuel Incentive Grant Program (AFIG). This resulted in approximately 325 EV stations with over 715 charging outlets in Pennsylvania that were directly related to the AFIG grant program and PADEP's close partnership with the Pittsburgh Region Clean Cities and the Greater Philadelphia Clean Cities coalitions.

PADEP has continued to help deploy EVs and EV infrastructure by creating a specific \$1 million solicitation to support alternative fuel vehicle infrastructure deployment along our FAST Act Corridors. This spring, we awarded a project along I-80 to further support that designation. Pennsylvania will continue to look to invest these funds to support private sector development of public stations along FAST Act Corridors. This solicitation was in addition to our annual \$5 million state-funded AFIG program.

PADEP also continues to operate a cash rebate program for Pennsylvania residents who purchase a new alternative fuel vehicle. In 2017, the rebate program was augmented to also include both a cash rebate for used alternative fuel vehicles purchased and registered in the most populous portions of the state and for the provision of rebates for used vehicles to low-income qualified residents to register the vehicle anywhere within the state. Pennsylvania provides as the highest tier rebate, \$1,750 for both new and used vehicles. Since January 1, 2017, PADEP has awarded 800 rebates for new and used electric vehicles resulting in \$1.5 million of purchase incentives. PADEP intends to continue and possibly expand this program as vehicle makes and models increase. For more information on this program, visit:
<http://www.dep.pa.gov/Citizens/GrantsLoansRebates/Alternative-Fuels-Incentive-Grant/Pages/Alternative-Fuel-Vehicles.aspx>

EXAMPLES OF OPPORTUNITIES

Pennsylvania Department of Conservation and Natural Resources (DCNR)

DCNR continues to have a strong desire to provide EV charging stations throughout the state park system. Pennsylvania's 121 state parks host 40 million visitors annually, 23% of which come from out of state.

DCNR's Bureau of State Parks manages 300,000 acres for hiking, picnicking, camping, fishing, hunting, and boating. Pennsylvania's state parks do not charge an entrance fee. In addition, every Pennsylvanian lives within a 30-minute drive to a state park.

The parks are also viewed as important destination charging locations to connect Pennsylvania residents to their public parks and favorite recreational areas. These parks are fully staffed by both full-time and part-time employees who keep the parks safe and in excellent condition. The deployment of a destination charging EV network in Pennsylvania state parks has not yet begun. Pennsylvania would be very interested in discussing areas in or near state parks for EV charging infrastructure build out. For more information on DCNR's state parks visit:
<http://www.dcnr.pa.gov/StateParks/Pages/default.aspx>

Pennsylvania Turnpike Commission (PTC)

The PTC operates a 552-mile system of toll roads, used by an average of 500,000 vehicles per day. Of those 500,000 vehicles, 86 percent are passenger cars. To service these 500,000 vehicles, the Turnpike has 17 service plazas, spaced an average of 38 miles apart, that provide bathrooms, food and beverages, Wi-Fi, and other amenities 24 hours a day, 7 days a week, 365 days a year. The safety of the PTC's customers is their highest priority, so in addition to these customer amenities, the PTC has 27 State Farm safety patrol vehicles to assist stranded motorists with vehicle issues and their own dedicated Pennsylvania State Police (PSP) Troop. PSP Troop T has 118 state police vehicles, approximately 240 state troopers, and 9 barracks across the 552-mile Turnpike system available to assist motorists.

The PTC's goal is to partner with a vendor to install Level 2 or Level 3 chargers at all 17 service plazas for EV customers. The PTC believes that the 17 service plazas provide the amenities and services that EV customers want and need while they wait for a vehicle charge. For more information about the PTC visit: <https://www.paturnpike.com/>

Pennsylvania Department of Transportation (PennDOT)

In collaboration with the Georgetown Climate Center, PennDOT has access to a large set of roadway exit data including through-travel rates, local use rates, commercial facilities within one mile of the exit, average traffic volume and other data which can help to identify and rank locations in Pennsylvania. The tool uses a weighted criteria methodology to analyze the tradeoffs between these data points. This tool has been specially developed by M.J. Bradley to help the Northeastern region states develop a cohesive plan for all developers to support electrification efforts region-wide. Since there are multiple criteria by which the exits can be ranked, it will be vital to work directly with developers such as EA to create an optimal system of charging stations based on the local needs and statewide priorities. PennDOT, DEP, and other Pennsylvania agencies desire to maximize the benefits of properly located EVSE along PennDOT highways.

Pennsylvania Department of Community and Economic Development (DCED)

Pennsylvania towns and destinations are also ripe with opportunities for the development of an EV network. As one of the top ten most visited states in the country, Pennsylvania welcomes nearly 197 million domestic and international travelers annually. Pennsylvania's travelers drive our highways and byways to visit our many bucket-list worthy destinations and attractions. With nearly 40 percent of the U.S. population and 60 percent of the Canadian population within a day's drive, Pennsylvania offers visitors and residents alike easy access to award-winning museums, like the Andy Warhol Museum in Pittsburgh and the world-famous Philadelphia Museum of Art, over 200 wineries, and at least 250 breweries. In addition, the Kalahari Resort in the Poconos Mountains is the largest indoor water park in North America.

Some of the more well-known and visited attractions and events include:

- Reading Terminal Market in Philadelphia, seven million people annually
- Independence National Historical Park in Philadelphia, five million visitors
- Gettysburg National Military Park in Gettysburg, 1.2 million visitors
- Hershey Park in Hershey, 3.2 million visitors
- Presque Isle in Erie, 4 million visitors
- Kennywood Amusement Park in West Mifflin, 1.2 million visitors
- Frank Lloyd Wright's Falling water in Mill Run, over 181,000 visitors
- Little League World Series in Williamsport, nearly 300,000 spectators
- Autumn Leaf Festival in Clarion, over 500,000 visitors
- Pennsylvania Farm Show in Harrisburg, over 500,000 visitors

Pennsylvania also has a "Work Smart. Live Happy. Declaration." We encourage Electrify America to review the Why PA? stats located at: <https://dced.pa.gov/wslh/>

SUMMARY

We believe that Pennsylvania's expertise and history of promoting alternative fuel projects provides an excellent opportunity to both collaborate and leverage VW ZEV opportunities in Pennsylvania. Pennsylvania is the 5th largest populated state, with Philadelphia as the 5th largest urban center. The Philadelphia metro area is centrally located within the Northeast Transportation Corridor. In western Pennsylvania, the City of Pittsburgh and its metro area serve as a "Gateway to the Midwest" and provide immediate access to the Ohio River Valley and Great Lakes region. The York-Harrisburg-Lancaster corridor serves as a centralized transportation connector hub between Pittsburgh and Philadelphia where several major highways such as I-76, I-81, and I-83 connect commercial markets to the east, west, north, and south.

The Commonwealth of Pennsylvania, through PADEP and other state agencies including PennDOT and the Department of General Services, has already built strong partnerships that will assist VW in building an Electrify America ZEV plan that leverages immediate support, maximizes efficiency in permitting and local approvals, and identifies additional project financing. Pennsylvania may be able to assist Electrify America, LLC by promoting service level opportunities to the state's skilled trades workforce, which is necessary to complete these ZEV Infrastructure projects throughout the Commonwealth.

We believe our goals for EV deployment in Pennsylvania will match your goals for a successful deployment of Electrify America infrastructure assets. Our goals are to:

- Provide opportunities to tap into disadvantaged communities and provide opportunities for disadvantaged businesses
- Coordinate funding opportunities between VW and PADEP so that financial resources can be optimized for the greatest benefit to Pennsylvanians
- Collaborate on education & outreach, fleet procurement, and EVSE development with our diverse group of Drive Electric PA members
- Establish an interoperable charging system that is accessible, affordable, and consumer friendly
- Provide opportunities to support or enhance education and consumer marketing in Pennsylvania
- Provide opportunities to tap into disadvantaged communities and provide opportunities for disadvantaged businesses

CONCLUSION

We thank you for your consideration of Pennsylvania's ZEV Investment project ideas and recommendations. Should you have any questions or wish to discuss any Pennsylvania opportunities please contact: David Althoff Jr., Program Manager, Office of Pollution Prevention and Energy Assistance, Pennsylvania Department of Environmental Protection by e-mail at dalthoff@pa.gov or by telephone at 717.783.8411.

We look forward to continuing to work with Electrify America, LLC and associated stakeholders.

Sincerely,



Patrick McDonnell
Secretary