

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter, on the Commission’s own motion,)
to open a docket that will be used to collaboratively)
consider issues related to both the deployment of)
plug-in electric vehicle charging facilities and to)
examine issues germane to the use of compressed)
natural gas as a motor vehicle transportation fuel in)
Michigan)
_____)

Case No. U-18368

JOINT COMMENTS OF ADVANCED ENERGY ECONOMY, THE ALLIANCE FOR TRANSPORTATION ELECTRIFICATION, CHARGEPOINT, CLEAN FUELS MICHIGAN, CONSUMERS ENERGY COMPANY, DTE ELECTRIC COMPANY, THE ECOLOGY CENTER, EDISON ELECTRIC INSTITUTE, FORD MOTOR COMPANY, GENERAL MOTORS, GREENLOTS, MICHIGAN ELECTRIC AND GAS ASSOCIATION, MICHIGAN ENERGY INNOVATION BUSINESS COUNCIL, MICHIGAN ENVIRONMENTAL COUNCIL, MICHIGAN LEAGUE OF CONSERVATION VOTERS, NATURAL RESOURCES DEFENSE COUNCIL, PHOENIX CONTACT, AND SIEMENS CORPORATION ON THE ISSUES RELATED TO THE ADOPTION OF PLUG-IN ELECTRIC VEHICLES IN MICHIGAN AND THE DEPLOYMENT OF ASSOCIATED INFRASTRUCTURE AND TECHNOLOGY

I. Introduction

On October 25, 2017, the Michigan Public Service Commission (“Commission”) issued an Order requesting comments on whether electric companies should initiate a series of targeted pilot programs designed to further explore issues related to the deployment of Plug-in Electric Vehicle (“PEV”) charging stations and associated infrastructure and the focus of such pilots.

Advanced Energy Economy, The Alliance for Transportation Electrification, Chargepoint, Clean Fuels Michigan, Consumers Energy Company, DTE Electric Company, The Ecology Center, Edison Electric Institute, Ford Motor Company, General Motors, Greenlots. Michigan Electric and Gas Association, Michigan Energy Innovation Business Council, Michigan Environmental Council, Michigan League of Conservation Voters, Natural Resources Defense

Council, Phoenix Contact, and Siemens Corporation, collectively referred to as the Organizations (“Organizations”), welcome this opportunity to provide input to the Commission in this important matter and submit the following joint comments in response to the Commission’s Order regarding PEVs.

II. Guiding Principles

The Organizations all agree in the following high-level guiding principles as they relate to transportation electrification in Michigan:

Transportation electrification is in the public interest

- There is a clear policy case for transportation electrification, as it can offer operational savings to PEV drivers, support local industries in the state, reduce dependency on foreign oil, and provide significant environmental benefits to all Michigan residents through reduced emissions;
- There is also a clear regulatory case for transportation electrification, since increased PEV adoption puts downward pressure on rates. Currently, the vast majority of vehicle charging takes place overnight at home, effectively utilizing excess distribution and generation capacity. Furthermore, given that PEVs can over time become intelligent storage assets, the electrification of transportation can build a resource for grid services over time.

Transportation electrification in Michigan is lagging and barriers need to be addressed

- As the advancement of battery technology is bringing PEVs closer to price parity with internal combustion engine vehicles, auto manufacturers (“OEMs”) are bringing

additional PEVs to market, increasing consumer interest. However, consumer awareness and knowledge of PEVs, range anxiety, and charging infrastructure investment remain primary barriers to PEV adoption;

- Michigan can address range anxiety by supporting the accelerated deployment of residential, workplace, and public charging infrastructure that provides equitable, reliable, and consistent access to electric transportation for riders and drivers;
- It is in the public interest to ensure key consumer protection principles like transparent pricing for PEV charging services and the use of open standards for communications and payment to ensure universal access for PEV owners to publicly available charging stations;
- The private investment committed to deploy charging equipment and services in Michigan is not enough to close the infrastructure gap across the state (especially in underserved markets including multi-unit dwellings), so public and utility investments should be utilized to complement private funding sources to establish a foundational charging infrastructure in Michigan;
- Michigan can improve customer understanding by empowering stakeholders (e.g., OEMs, electric companies, and charging equipment manufacturers) to improve the customer journey - from initial consideration to ownership and operation – through education and outreach.

Electric companies are uniquely suited to help

- As demonstrated across the country, electric companies are uniquely suited to integrate PEV infrastructure in a manner that mediates system capabilities, costs, and future growth while maximizing system benefits for all customers;

- PEV load has unique characteristics, and electric companies - particularly those with Advanced Metering Infrastructure (“AMI”) - are well positioned to manage this flexible load with time-based rates, smart charging / demand response programs, and other innovative applications;
- To accelerate the deployment of infrastructure to enable adoption of electric transportation, it is critical to appropriately leverage multiple funding sources – including electric company investment seeking reasonable cost recovery - in a manner that complements a robust PEV charging market;
- Electric companies can leverage established customer relationships to develop an informed market and grow customer confidence in PEV technology;
- Electric companies should proactively engage their regulators, consumers, and all stakeholders in developing rate designs and education and outreach programs that benefit all customers.

III. Potential Near-term Actions and Pilots

The Organizations believe the following near-term actions and potential pilots could further explore issues related to the deployment of PEV charging infrastructure and be beneficial to PEV adoption in Michigan, and the Organizations will continue to define possible actions and pilots that merit consideration after these joint comments are submitted:

Economic Rationale for Transportation Electrification and Electric Companies’ Role

- Compilation of existing relevant national and regional studies that provide economic rationale for transportation electrification and electric companies’ role in it;

- Studies to gain a deeper understanding of the value available from the potential use of PEVs as storage assets;
- Development of a broader view of costs/benefits as it relates to defining assumptions, methods, and models for evaluating the appropriateness of any proposed electric company investment.

Smart Charging and Rate Design

- Investigation of available technologies which allow electric companies to get necessary information to bill on a PEV rate without installing a second meter, inclusive of the evaluation of smart chargers with sub-metering capabilities;
- Collaborative effort to determine a potential “phase-in” strategy for alternative rate designs, commercial time-of-use rates, and / or dynamic pricing programs that balance interests of electric company customers and commercial PEV infrastructure owners;
- Investigation into refinement of existing PEV time-of-use rate structures;
- Integration of PEV charging infrastructure with new technologies like battery storage, distributed energy resources, etc.;
- Programs on innovative “smart charging” implementation (e.g., with energy management circuit breakers, direct load control via PEV charging equipment, cloud-to-cloud control architectures, etc.);
- Pilots to understand grid impact from high power fast charging technology.

Customer Awareness and Education

- Consumer education and outreach on basic understanding of PEV ownership and operation as well as the lifetime economic and environmental benefits of a PEV;
- Collaboration with auto manufacturers, dealerships, and other interest groups for targeted education and outreach campaigns;
- Interactive website tools to educate and inform customers on available PEVs, charging equipment, and rates.

PEV Infrastructure Deployment

- Public-private collaboration to support the deployment of public, workplace, and residential charging (both Level 2 or fast chargers) where business and other societal objectives are supported, leveraging multiple sources of funding and resources (such as Michigan’s allocation of the Environmental Mitigation Trust from Appendix D of the Volkswagen Settlement) in addition to electric company participation;
- Collaboration with cities for PEV strategy development and infrastructure deployment (including potential “showcase” sites);
- Collaboration with employers, developers, property managers, and retail locations to increase infrastructure deployment and PEV awareness;
- Residential incentives for enrollment in a PEV time-of-use rate.

As a concluding note, the Organizations recognize that the PEV market is in its early stages of development and may vary in regions across the state. To help the public at large realize the aforementioned benefits of transportation electrification, policy decisions and regulatory

developments should maintain flexibility to enable electric companies and other stakeholders to quickly respond to PEV market developments.

Respectfully submitted,

ADVANCED ENERGY ECONOMY,
THE ALLIANCE FOR TRANSPORTATION ELECTRIFICATION,
CHARGEPOINT,
CLEAN FUELS MICHIGAN,
CONSUMERS ENERGY COMPANY,
DTE ELECTRIC COMPANY,
THE ECOLOGY CENTER,
EDISON ELECTRIC INSTITUTE,
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MICHIGAN LEAGUE OF CONSERVATION VOTERS,
NATURAL RESOURCES DEFENSE COUNCIL,
PHOENIX CONTACT, and
SIEMENS CORPORATION

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