STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of **DTE ELECTRIC COMPANY** for approval of interconnection procedures and waivers from Interconnection and Distributed Generation Standards R 460.901a et seq.

Case No. U-21482

REPLY COMMENTS OF THE VEHICLE-GRID INTEGRATION COUNCIL ON INTERCONNECTION PROCEDURES AND DISTRIBUTED GENERATION STANDARDS

I. <u>INTRODUCTION</u>.

The Vehicle-Grid Integration Council ("VGIC") is a 501(c)(6) nonprofit member-based association focused on accelerating the role of smart electric vehicle ("EV") charging and discharging (i.e., vehicle-grid integration or "VGI") through policy development, education, outreach, and research. Scaling VGI is an essential component of transportation electrification and will help accomplish the following key policy goals:

 Benefit drivers and fleet owners by reducing the total cost of ownership and providing additional value streams like backup power.

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¹ VGIC member companies and supporters include American Honda Motor Co., Inc., BorgWarner, Enel X North America, Inc., Fermata Energy, Ford Motor Company, General Motors, Nissan Group of North America, Nuvve Holding Corporation, Stellantis N.V., Toyota Motor North America, Blue Grid, BP Pulse, Customized Energy Solutions, dcbel, Emporia, EnergyHub, Enphase, EV.Energy, FlexCharging, FLO EV Charging, FreeWire Technologies, Inc., Gridwiz, Hoosier Energy, Innovation Core SEI, IoTecha, Kaluza, Kitu Systems, Landis+Gyr, NineDot Energy, Peak Power, QCells, Sacramento Municipal Utility District, Sunrun, Synop, The Mobility House, Inc., Utilidata, Veloce Energy, Inc., Wallbox USA Inc., and WeaveGrid. The views expressed in these comments are those of VGIC, and do not necessarily reflect the views of all individual VGIC member companies or supporters. (https://www.vgicouncil.org/).

- **Decarbonize the transportation sector** by accelerating EV adoption through unlocking additional benefits to EV drivers and fleet owners.
- Support the evolving electric grid by providing essential grid services as intermittent energy generation and distributed energy resource penetration increases.
- **Increase affordability** by placing downward pressure on rates, in turn reducing electricity bills for all customers.
- Improve community resiliency and security during planned and unplanned grid outages.
- Foster economic activity through innovation, competition, and market transformation.

With the proper utility policy and regulatory support and coordination, these goals can be achieved, and EV drivers and fleets in Michigan can play a critical role in accelerating both transportation electrification and grid transition. **Our vision for VGI encompasses the following key elements:**

- Ensure customer mobility needs are satisfied: Drivers and fleets can support the grid without compromising their mobility needs.
- Managed charging will benefit EV drivers and fleet operators: Drivers and fleets in Michigan will be provided a menu of opportunities to align charging with the times of day when electricity prices are low, reducing EV and fleet operating costs by as much as 50% compared to unmanaged charging. Lowering the total cost of EV ownership will accelerate overall EV adoption by drivers and fleets in Michigan.
- EVs provide reliable emergency power during blackouts: During extreme weather blackouts or other power outages, EV drivers and fleets can utilize bidirectional charging

capabilities to send energy to a home, building, or microgrid, serving as a generator and providing safe backup power for households and communities.

- Charging infrastructure deployment accelerates: Smarter management of EV charging can help accelerate the deployment of EV charging infrastructure, encouraging wider access to EV charging.
- VGI enables EVs to provide valuable services to the grid and generate revenue:

 V1G managed charging (unidirectional charging) and V2X (vehicle-to-everything bidirectional charging) will enable electric vehicles to both receive and feed power back to the grid, providing grid services such as demand response, peak shaving, frequency regulation, and more. A number of utilities across the US have implemented programs that provide compensation for these valuable grid services.

VGIC appreciates the opportunity to provide the following recommendations on Michigan's draft interconnection procedures ("MIXDG Procedures").

II. <u>VGIC RECOMMENDS THE COMMISSION CONSIDER THE V2X</u> <u>BIDIRECTIONAL CHARGING SYSTEMS BEST PRACTICES FOR SERVICE</u> <u>CONNECTION OR INTERCONNECTION FOUND IN ATTACHMENT A</u> <u>BELOW.</u>

Since its founding 2020, VGIC has worked with its members, in coordination with policymakers, utilities, and other stakeholders, to develop best practices for VGI market development. In 2022, VGIC commenced a special initiative to socialize best practices for the utility service connection/energization (load) or interconnection (generation) of vehicle-to-everything ("V2X") bidirectional charging systems. As part of this effort, VGIC consulted with dozens of utility distribution engineers and interconnection teams, specialists in interconnection (e.g., Interstate Renewable Energy Council or "IREC"), and solution providers to "ground-truth"

a series of best practices and recommendations. The resulting findings can be found below in

Attachment A, V2X Bidirectional Charging Systems Best Practices for Service Connection or

Interconnection. VGIC respectfully requests that the Commission and its regulated utilities

consider incorporating these best practices into the MIXDG and any subsequent efforts related to

service connection or interconnection for EV chargers or energy storage systems.

III. **CONCLUSION**

VGIC appreciates the opportunity to submit these reply comments on the Interconnection

Procedures and Distributed Generation Standards. We look forward to further collaboration with

the Commission and stakeholders on this initiative.

Respectfully submitted,

/s/ Zach Woogen

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Appendix A

V2X Bidirectional Charging Systems Best Practices for Service Connection or Interconnection

Vehicle Grid Integration Council (VGIC)

August 2022

Available at: https://www.vgicouncil.org/s/VGIC-Special-Initiative-2022.pdf