

# MPSC

## EV & Electric School Bus Update

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# AGENDA

1.

## MPSC

Regulates investor-owned utilities (IOU).

2.

## EV Preparedness

Collaboratives and MI Power Grid to consider expanded DG and EVs.

3.

## EV Pilots

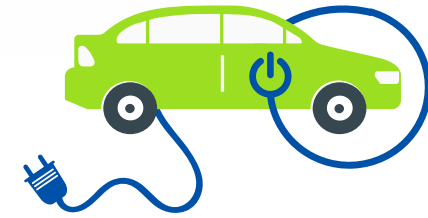
MPSC approved pilots for 5 of 7 regulated IOUs.

4.

## Priorities and Ongoing Work

Grid Integration study;  
Resilience  
Technical Conference;  
Permanent EV programs

# EV Preparedness Work to Date



## Michigan Plug-in Electric Vehicle Preparedness Task Force

Initiated by the MPSC in 2008 and transitioned to “[Plug-in Ready Michigan](#)”

## Time-of-Use Tariffs

Experimental EV tariffs first approved by the Commission in 2010 for DTE Electric, Consumers Energy and Indiana Michigan Power.

## MPSC Convened Technical Conferences on Plug-in Electric Vehicles

Technical conference held in 2017 and 2018 to seek input and discuss the MPSC’s role in the adoption of electric vehicles and deployment of associated infrastructure.

## MI Power Grid launched in 2019

[New Technologies and Business Models workgroup](#) assembled experts and discussed the impacts of electric vehicle deployment on the electric system.

Distribution Data Access Workgroup published a draft [Grid Integration Study](#) outlining the impact of expanded DG and EVs on the distribution grid.

Comments due May 19, 2023 and reply comments due June 2, 2023.



# Electric Utility EV Pilot Programs



## DTE Electric Charging Forward (U-20162, U-20836, U-20935)

**\$28.4 million approved to date**

### Rebates:

- Residential Level 2
- Commercial Level 2
- Commercial DCFC
- Fleet charging
- **Ebus** tariff with PAYS
  - 5 Ebuses total

### TOU:

- Off-peak rate

## Consumers Energy PowerMIDrive & PowerMIFleet (U-20134, U-20697, U-21224)

**\$30 million approved to date**

### Rebates:

- Residential Level 2
- Commercial Level 2
- Commercial DCFC
- Fleet charging (includes buses)

### TOU:

- Off-peak rate

## Indiana Michigan Power IM Plugged In (U-20359)

**\$675,000 approved to date**

### Rebates:

- Residential Level 2
- Commercial Level 2
- Commercial DCFC

### TOU:

- Off-peak rate

In 2022, the MPSC approved initial pilots for UPPCO (\$750,000) and Alpena Power Company (\$500,000) for DCFC charging that includes demand charge waivers.

# Electric School Buses in MI



## **DTE Electric Charging Forward [report](#):**

- DTE partnered with three school districts to deploy 12 electric school buses. The first six electric school buses in Ann Arbor and Roseville launched in January 2021. DTE reported that it expects to support several others with eFleets rebates if they apply for and are awarded Clean School Bus federal funding.
- May 2022: Launched eFleets awareness campaign with school districts in SEMI for Clean School Bus federal funding.
- Approval in U-20836 of an Ebus tariff with Pay as You Save financing for up to five Ebuses.

## **Consumers Energy PowerMIFleet [estimates](#):**

As part of its PowerMIFleet program, Consumers Energy estimates \$80,290 in total cost of ownership savings and 171 metric tons net of green house gas emissions reductions for each electric school bus.

## **Federal Clean School Bus Rebate Program:**

[25](#) Michigan rural school districts in both the Upper and Lower Peninsulas will get 138 new electric school buses and awards nationally will primarily assist low-income, rural, and tribal students.

# Distribution System Data Access



The [DSDA Workgroup](#) was launched by the MPSC as part of its MI Power Grid Initiative in 2022 to collaborate with stakeholder and utilities to create a grid integration study for the expansion of DG and EVs.

**“By 2030, Michigan aims for 50% light-duty vehicle sales, 30% medium and heavy-duty vehicle sales, and 100% of public transit and school bus sales to be electric.”**

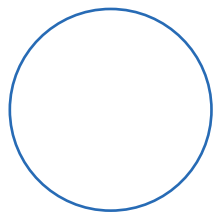
The [Grid Integration Study](#) will:

- Identify the impacts of increased distributed energy on the grid at both the grid-wide and location-specific levels, as well as the measurable effects of generation and electric vehicles on grid reliability in other states.
- Model and project the scale of expansion for DG systems and EVs in Michigan.
- Assess both the need for and impact of new technologies on both sides of the meter.
- Investigate the costs and benefits of the expansion of DG systems and EVs.
- Coordinate with utilities to analyze circuit-level distribution data and demonstrate hosting capacity throughout the state. The hosting capacity analyses will inform customers as well as DG/EV infrastructure developers and **encourage DG and EV adoption in a way that minimizes costs and enhances efficient utilization of the grid.**

# Resilience Solutions

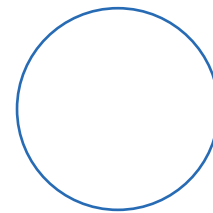


The MPSC announced in Case No. U-21388 that it will hold technical conferences on resilience on May 22, 2023, and May 26, 2023. The goals are to identify technologies that could improve resilience for customers, especially those customers and facilities who experience disproportionate financial and health impacts during an outage and explore avenues for regulatory changes and additional funding that could enable those technologies and support our most vulnerable customers. EVs could support by:



## Managed Charging, V2X, and V2G

Flexible charging, as well as utilizing the stored energy in the batteries could help support the grid.



## Resilience Hubs

EVs and Fleets which include school buses can participate in community resilience hubs which may also include generation or additional storage to keep communities online during extended outages.



Q & A