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Michigan Public Service Commission
7109 West Saginaw Highway
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**RE: Auto Innovators comments on Consumers Energy 2027-2031 Transportation Electrification Plan,
MPSC Case No. U-21538**

The Alliance for Automotive Innovation (Auto Innovators) represents the full auto industry value chain, including the manufacturers producing most vehicles sold in the U.S., equipment suppliers, battery producers, semiconductor makers, technology companies, and autonomous vehicle developers. Our mission is to work with policymakers to realize a cleaner, safer, and smarter transportation future and to ensure a healthy and competitive auto industry that supports U.S. economic and national security. Representing over 5 percent of the country's GDP, responsible for supporting nearly 11 million jobs, and driving \$1.5 trillion in annual economic activity, the automotive industry is the nation's largest manufacturing sector.¹

I. Optimized Charging Design Recommendations

Require Consumers Energy to develop an optimized charging program. Optimized charging can provide substantial value when designed to address localized distribution constraints, defer or avoid infrastructure upgrades, improve hosting capacity for electrification, and operate the distribution system more efficiently. Secondary transformers are the first distribution asset impacted by residential EV charging. It only takes a few EVs charging to overload a 25-50 kVA transformer.² Location-specific benefits will become more important as EV adoption grows and localized grid constraints emerge. Several studies indicate enormous potential for optimized charging to keep electricity rates more affordable *for all ratepayers* via distribution system benefits:

- AES Indiana found that optimized charging deferred 30 percent of feeder upgrades an average of 4.3 years and 24 percent of service transformer upgrades an average of 9.1 years, totaling \$75 million in annual deferred investments.³
- The Brattle Group and Ev.energy found that optimized charging can avoid up to \$575 in ratepayer costs annually per EV.⁴
- Pacific Gas & Electric's initial 2023 pilot shifted .81 kW more per EV to off-peak hours as compared to passive managed charging, saving customers \$25/year on utility bills.⁵
- Pacific Gas & Electric's 2024-26 pilot, which had 6,500 participants, showed that optimized charging lowered peak load across 89% of transformers at risk of exceeding 100% capacity, and reduced average peak load to .56 kW per vehicle as compared to only 1.28 kW per vehicle via TOU rates.⁶

¹ Alliance for Automotive Innovation. (n.d.). *Resources and insights*. <https://www.autosinnovate.org/resources/insights>

² DTE Energy. Electric Vehicle Grid Impact Study Summary Report. May 2020. <<https://mi-psc.my.site.com/sfc/servlet.shepherd/version/download/068t000000CFdYoAAL>>

³ AES & Camus. *Getting ahead of the EV tipping point*. October 2024. Pages 2-3.

⁴ Goldsmith, W. et al. *The Utility Playbook: Turning EV Grid Risk into a \$30 Billion Opportunity*. ev.energy. Page 11.

⁵ Pacific Gas & Electric. *Advice 7822-E: PG&E's 2026 Low Carbon Fuel Standard Implementation Plan*. January 2026. Page 17.

⁶ *Id.* Pages 18-19.

- Baltimore Gas & Electric's Smart Charge Management Program reduced coincident peak demand by 72% (1,090 kW to 310 kW) and non-coincident peak demand by 29 percent (1,160 kW to 830 kW) and scored 1.58 on cost-effectiveness using Maryland's jurisdiction specific test.⁷
- The Brattle Group and Energy Hub found that optimized charging could avoid \$245 to \$400 in costs per EV annually and delay distribution system upgrades by ten years.⁸
- Argonne National Lab and Smart Electric Power Alliance estimated roughly \$300/year per EV in deferred transformer and feeder upgrades.⁹

Programs should use time-varying signals that reflect real-time and expected grid conditions to support customer savings, renewables integration, and bidirectional charging market development. Time-varying signals can maximize driver cost savings. For example, Consumers Energy can encourage charging when the local grid is the least constrained or when there is an abundance of renewable energy (e.g., solar energy midday). Furthermore, dynamic signals can similarly reflect the "true" value of bidirectional EV charging systems providing energy to the grid, which increases the incentive to deploy these technologies and for drivers to participate in these programs (discussed more below). It can also ensure ratepayers are not overpaying for bidirectional EV charging energy and grid services, further mitigating potential cost impacts.

Require enrollment goals to achieve program scale. When enrollment is achieved at a meaningful scale, it can increase the program's benefit-cost ratio. Many utilities around the country have set ambitious enrollment milestones for their optimized charging programs, including:

- Baltimore Gas & Electric plans to enroll at least 30,000 customers over three years (up from 3,600).¹⁰
- Potomac Electric Power Company plans to enroll at least 27,000 customers over four years.¹¹
- Southern California Edison plans to enroll at least 25,000 customers over four years.¹²
- Pacific Gas & Electric plans to enroll tens of thousands of customers over two years (up from thousands).¹³
- Portland General Electric aimed to enroll 9,399 customers over three years.¹⁴
- Commonwealth Edison aims to enroll 30,000 customers over three years.¹⁵

⁷ PLMA. 2025 PLMA Award Winner: Baltimore Gas and Electric & WeaveGrid. May 7, 2025. <https://flexload.org/industry-awards-program/2025-plma-award-winner-bge-weavegrid/>.

⁸ Ramakrishnan, R. et al. *Demonstrating the Full Value of Managed Electric Vehicle Charging*. The Brattle Group. January 2026. Page 39. <https://www.brattle.com/wp-content/uploads/2026/01/Demonstrating-the-Full-Value-of-Managed-Electric-Vehicle-Charging-1.pdf>.

⁹ Dougherty, C. & Fitzgerald, G. *Exelon's Managed Charging Program*. Smart Energy Power Alliance. August 2023. <https://sepapower.org/resource/exelons-managed-charging-program/>

¹⁰ Baltimore Gas & Electric. *Case No. 9478 – BGE Smart Charge Management Proposal*. June 4, 2024. Page 11.

¹¹ Potomac Electric Power Company. *Case No. 9478 – Phase II. December 18, 2024*. Page 29.

¹² Southern California Edison. *Advice 5536-E. Southern California Edison's Request for Approval to Update Its Low Carbon Fuel Standard Holdback Revenue Return Implementation Plan to Include a New Vehicle Grid Integration Program*. April 2025. Page 2.

¹³ Pacific Gas & Electric. *Advice 7822-E: PG&E's 2026 Low Carbon Fuel Standard Implementation Plan*. January 2026. Page 88.

¹⁴ Portland General Electric. *2023 Transportation Electrification Plan Report*. August 2023. Page 176.

¹⁵ Commonwealth Edison Company. *Supplemental Direct Testimony of Cristina Botero*. Docket No. 26-0047. March 25, 2026. Page 8. <https://icc.illinois.gov/docket/P2026-0047/documents/378260/files/663232.pdf>.

- Con Edison enrolled over 30,000 customers by end of 2025, while the other four New York investor-owned utilities enrolled another 15,000 customers, representing 21% of registered EVs.¹⁶

Successful optimized charging programs require high enrollment rates, low drop-out rates, and maximizing the kilowatts displaced annually in alignment with distribution system needs. Maximizing enrollment helps Consumers Energy have a larger data set to evaluate to increase benefits to both drivers and the grid. **Furthermore, we encourage the Commission to prohibit Consumers Energy from capping enrollment, which risks consumer frustration and losing out on more program benefits.** Our members' customers have shown interest in optimized charging programs, only to be turned away by utilities due to enrollment caps. These situations create a bad consumer experience, risking customers losing interest. These 'best practice' activities can help Consumers Energy eventually scale to a mass market program, which is necessary to realize the full potential of EVs' grid benefits.

Require data reporting. We support reporting program performance, enrollment, and cost. While this data informs overall performance, more granular data reporting could help inform ongoing program development to improve enrollment, capture additional value streams, and increase cost-effectiveness. Therefore, we encourage the Commission to require Consumers Energy to also report the following data in a format that is intuitive:

(Year)	(Program Name)
Participation	
Customers Enrolled	
Customers Recruited from Passive Managed Programs	
Customers Opted Out	
Total Customers	
Budget	
Marketing	
Sign-Up Incentives	
Participation Incentives	
IT	
Admin	
Performance Outcomes	
Average customer acquisition cost per year ¹⁷	
Average customer length of participation per year	
Average amount of kW shifted per year	
Number of capacity constrained circuits targeted ¹⁸	
Average number of vehicles on constrained circuits	

¹⁶ The Joint Utilities of New York. *Comprehensive Residential Managed Charging Report*. March 16, 2026. Case 18-E-0138. Page 12.

¹⁷ Customer acquisition cost equals (primarily marketing budget plus sign-up incentives but could also include a portion of admin costs if applicable) divided by the number of customers enrolled that year.

¹⁸ Capacity constrained circuits to be chosen/defined by the utility.

Enable bidirectional charging participation. EVs and EVSE offering bidirectional charging features are available on the market now, with 18 light-duty vehicle models across nine OEM brands currently offering bidirectional charging features. Customers purchasing these systems should have opportunities to provide grid services rather than waiting for a future program cycle. Existing optimized charging programs already provide much of the necessary foundation, including customer enrollment, communications with vehicles and charging equipment, dispatch capabilities, incentive payments, and program evaluation.

An optimized charging program pathway can provide a more integrated and customer-accessible model for bidirectional EV charging customers to participate in. Utilities or their program partners could coordinate both charging and discharging while ensuring participating vehicles remain sufficiently charged to meet drivers' mobility needs. By aggregating the capabilities of many participating vehicles, utilities can create a larger, more reliable, and dispatchable combined resource capable of delivering meaningful grid services, even though individual vehicles may connect and disconnect throughout the day. Near-term offerings could initially target peak reduction, renewable energy integration, emergency support, and/or local distribution system needs. The Commission should therefore require Consumers Energy to propose a near-term bidirectional charging offering through its managed charging portfolio.

Require aggregators to use one or more automaker channels to maximize enrollment. Optimized charging programs must have high enrollment rates to maximize the value they provide to the grid. Automakers have several well-established and trusted channels to engage their customers, including mobile applications, email marketing, dealerships, and other first-use integration opportunities (e.g. purchasing an OEM home charger and using their preferred vendor to install it. These channels offer a cost-effective pathway to enroll many customers efficiently.

Automakers are well-positioned to accelerate enrollment in managed charging programs because of their deep relationships with their customers. A vehicle is typically the second largest purchase in a consumer's lifetime; they become integrated into their lifestyles through everyday use – commuting to work, visiting friends and family, taking road trips, and more. For many drivers, their vehicle becomes an extension of their identity. Therefore, when they receive communications from their vehicle brand – through a mobile app, email, or otherwise – they are more likely to pay attention. This dynamic presents an opportunity: these channels can significantly increase enrollment in managed charging programs. For example, Toyota, using both its Toyota and Lexus apps, achieved a 20 percent customer enrollment rate over three years in its Clean Assist program, which enables drivers to match their charging with renewable energy to minimize environmental impacts.¹⁹ Dealerships are also a critical venue to educate customers about managed charging programs and their benefits, and subsequently enroll them in programs. In this scenario, customers are already directly engaged with an automaker brand, presenting a low-hanging fruit opportunity to enroll them into a program. Given this, we encourage the Commission to require aggregators to use automaker channels as a condition of being chosen via the RFP process to implement an optimized charging program.

Require aggregators to help determine the counterfactuals needed to fully understand the value of optimized charging. Counterfactuals are critical to assess the overall effects of optimized charging. By requiring aggregators to develop a data framework necessary to analyze EV charging impacts between program participants and non-participants, Consumers Energy can better understand charging behaviors and the associated grid impacts. This analysis can help Consumers Energy refine the program over time to

¹⁹ Blair, B., & Fitzgerald, G. *The State of Managed Charging in 2024: The Next Iteration: Distribution-Level Optimization*. September 2024. Smart Electric Power Alliance.

increase its effectiveness. Conducting counterfactuals as early as possible in program implementation can save costs long-term by optimizing the program and help Consumers Energy chart a course toward a mass-market program as EV adoption increases.

We appreciate the opportunity to share these comments and look forward to collaborating with Consumers Energy, Commission staff, and other industry stakeholders to advance optimized and bidirectional charging programs in the state.

Respectfully submitted,

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