

DFH_HB834_Favorable.pdf

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Position: FAV

DAVID FRASER-HIDALGO
Legislative District 15
Montgomery County

Economic Matters Committee
Chair
Property and Casualty Insurance
Subcommittee



The Maryland House of Delegates
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THE MARYLAND HOUSE OF DELEGATES
ANNAPOLIS, MARYLAND 21401

Senator Brian Feldman
Chair, Senate Education, Energy, and Environment Committee
2 West Miller Office Building
Annapolis, MD 21401

Mr. Chairman,

I am writing in support of HB 834, the Electric Vehicle Charging Reliability Act.

Entities utilizing taxpayer or ratepayer funds to install and operate electric vehicle (“EV”) charging infrastructure should be held to increased accountability and transparency requirements. HB 834 will hold utilities participating in the Public Service Commission’s (“PSC”) EV Pilot Program (“Pilot program”) to the same reporting requirements as private entities participating in the federal National Electric Vehicle Infrastructure (“NEVI”) program.

In 2019, the Public Service Commission (“PSC”) approved an EV Pilot Program (“Pilot program”), allowing BGE, Pepco, Potomac Edison and later SMECO (“utilities”) to install public charging equipment around the State.¹ The program was narrowly tailored to allow these utilities to install chargers on property leased, owned, or occupied by state, county, or municipal government.² The program also allows utilities to offer residential and non-residential rebates to incentivize individuals and commercial entities to install EV Chargers. To date, over 960 utility owned charging stations have been installed.³

Components of the Pilot program will expire at the end of 2025. Like our considerations regarding other PSC programs, the General Assembly will need to evaluate the results of the Pilot program and determine whether utilities are sufficiently capable of installing, operating, and maintaining EV charging stations. HB 834 requires utilities to provide more detailed information regarding their charging infrastructure, while also expanding the pilot program to account for market failures that continue to impact underserved communities.

Throughout the Pilot program, utilities have consistently lauded their ability to install and maintain reliable chargers. Some utilities have reported an uptime of 99% in their semi-annual progress reports, while others have stated that leaving utilities out of the EV charging infrastructure market

¹ PUB. SERV. COMM’N MD., *In the Matter of the Petition of the Electric Vehicle Work Group for Implementation of a Statewide Electric Vehicle Portfolio* (Jan. 14, 2019), <https://www.psc.state.md.us/search-results/?q=9478&x.x=12&x.y=14&search=all&search=case>.

² *Id.*

³ PUB. SERV. COMM’N MD., *EV Pilot Fact Sheet* (2023), <https://www.psc.state.md.us/wp-content/uploads/PC44-EV-Pilot-Fact-Sheet-4.pdf>

could lead to “electric system safety and reliability risks.”⁴ As the Pilot program has progressed, utilities have also sought expansions to allow them to further participate in the EV charging installation marketplace.

Electric companies will be vital partners in the effort to increase electrification. The size and scope of their participation must be carefully determined by lawmakers in the coming years. HB 834 seeks to increase and specify the data provided by the utilities to the PSC regarding the reliability of their chargers, so lawmakers can make informed decisions regarding the future role of utilities in installing EV chargers. First, the bill establishes a uniform definition of uptime and sets a uniform goal of 97% uptime for all utility owned chargers. This definition and goal match the final regulations regarding the National Electric Vehicle Infrastructure (“NEVI”) program administered by the Federal Highway Administration (“FHWA”).⁵ Additionally, the bill mandates quarterly reporting requirements that mirror the NEVI program requirements, requiring utilities to report the following data:

- The location of the EV charging station, and for each charging station:
 - Charging station start and end times and rates of successful completion;
 - The total amount of electricity dispensed into an electric vehicle for each charging session;
 - The peak amount of electricity dispensed for each charging station;
 - Uptime each of the previous three months;
 - The cost of electricity needed to operate each station for the previous three months;
 - Maintenance and repair costs for each of the previous three months;
 - The cost of acquiring real property for use as an EV charging station;
 - The cost of acquiring and installing the charging equipment;
 - The cost of acquiring and installing distributed energy resources;
 - The cost of connecting to the electric grid and any applicable connection upgrades; and
 - The capacity of each distributed energy resource used by an EV charging station.

With this information, the PSC and lawmakers will be able to gain an accurate depiction of the utilities ability to install and maintain reliable EV charging infrastructure.

This bill also addresses concerns regarding the repair of broken charging stations. Consumer experiences have demonstrated that broken chargers often have multiple repair tickets filed and remain broken for several weeks.⁶ Since third party entities employed by the utilities often do not provide staff to repair chargers once they are installed, it is up to the utilities to repair broken chargers.⁷ HB 834 mandates that utilities participating in the Pilot program maintain an adequate

⁴ See BALT. GAS & ELEC. ET. AL., *Comments of the Signatory Parties (1) in Response to the Maryland Office of People’s Counsel’s Letter Recommending an Evidentiary Process and (2) In Further Support of the Petition for Implementation of a Statewide Electric Vehicle Portfolio* (Mar. 27, 2018), (<https://www.psc.state.md.us/search-results/?q=9478&x.x=12&x.y=14&search=all&search=case>).

⁵ See 23 C.F.R. § 680.

⁶ See Lanny Hartmann, *Public Comments* (Sept. 12, 2022), <https://www.psc.state.md.us/search-results/?q=9478&x.x=12&x.y=14&search=all&search=case>; See also

⁷ See ChargePoint, *Comments of ChargePoint on Semi-Annual Progress Report of Baltimore Gas and Electric Company, Delmarva Power & Light Company, and Potomac Electric Power Company Regarding the*

number of staff to monitor, assess, and repair their EV charging stations. This reform was also cited in a recent PSC report regarding EV charger reliability, stating that several parties engaged in the NEVI rulemaking process “stressed the importance of allowing all properly trained technicians to service Electric vehicle supply equipment for customer experience and reliability purposes.”⁸

Finally, this bill expands the Pilot program to determine whether utilities are capable of correcting market failures that have impacted underserved communities. Currently, there is a demonstrative lack of EV charging infrastructure in underserved communities, with significant gaps in neighborhoods in Prince George’s County, Cumberland, and on the Eastern Shore.⁹ Recognizing the failure of private industry to place EV charging stations in underserved communities, the PSC has authorized narrowly tailored rebate and installation programs to reduce this disparity. So far, the installation program has had considerably more success than the rebate program for multi-unit dwellings with nearly 200 multifamily chargers either rebated or installed through June 30, 2022.

HB 834 seeks to close the gap created by private industry by expressly expanding the Pilot program to allow utilities to install EV charging stations in multifamily dwellings in underserved communities through December 31, 2025. Utilities would be required to report the same detailed information for these chargers as all other previously installed utility owned chargers.

HB 834 will ensure all entities that use public funds to install EV chargers are held to a uniform standard to improve consumer experience and incentivize more drivers to switch to EVs. HB 834 will also allow lawmakers to make more informed decisions regarding the role of utilities in promoting EVs moving forward.

Thank you for your consideration, and I urge a favorable report on HB 834.

Respectfully,



Delegate David Fraser-Hidalgo

Implementation of Approved Electric Vehicle Charging Program Offerings (Oct. 6, 2021), <https://www.psc.state.md.us/search-results/?q=9478&x.x=12&x.y=14&search=all&search=case>.

⁸ See PUB. SERV. COMM’N MD., *Public Conference 44 Electric Vehicle Work Group Interim Reliability Summary Report* (Dec. 1, 2022).

⁹ See Jan-Michael Archer M.S. and Sacoby Wilson Ph.D., MD EJSCREEN v2.0, Maryland Department of the Environment (n.d.), <https://p1.cgis.umd.edu/ejscreen/>; See also Maryland Energy Administration, Electric Vehicle Supply Equipment (EVSE) Rebate Program Funding Opportunity Announcement (FOA) (n.d.), [FY23 EVSE Rebate Program FOA 11-23-22.docx \(maryland.gov\)](#)

OPC Testimony HB0834 in the Senate - Favorable.pdf

Uploaded by: David Lapp

Position: FAV

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BRANDI NIELAND
DIRECTOR, CONSUMER
ASSISTANCE UNIT

BILL NO.: House Bill 834
Electric Vehicle Charging Infrastructure - Requirements
(Electric Vehicle Charging Reliability Act)

COMMITTEE: Education, Energy, and the Environment

HEARING DATE: March 28, 2023

SPONSOR: Delegates Fraser-Hidalgo, Terrasa, Barve & Reznik

POSITION: Favorable

The Office of People's Counsel ("OPC") supports House Bill 834. By extending the EV Pilot Program to allow participating electric companies to install EV charging stations in multifamily dwellings in "underserved communities," HB 834 would help to expand EV charging infrastructure, especially for low- and moderate-income customers. The bill also requires an electric company operating an EV charging network to ensure those charging stations have an average annual "uptime"—defined in the bill as "the availability and consistency of an EV charging station"—of 97% or greater.

While we support State involvement in expanding investment in electric vehicle and charging stations, as a general rule those policies should be advanced by encouraging a robust competitive market as opposed to funding those investments and incentives through utility customer rates. Allowing monopoly utilities to take on EV infrastructure development raises issues such as the impacts on utility customers, the cost effectiveness of the program, and potential impediments to competition in the market for EV charging stations.

If, however, utility monopolies are allowed to participate in the competitive EV charging market—as they are under the existing EV Pilot Program—their involvement is least regressive if it is tailored to the installation of EV charging stations in low-income communities. Utility customers in low-income communities are not likely to be early adopters of EVs even though they bear the costs of utility programs. Further, HB 834

appropriately requires the utility charging stations to meet performance requirements—defined in HB 834 as “an average annual uptime of 97% or greater.”

OPC strongly supports amendments passed by the House, which (1) limit covered charging stations to Level 2 chargers; (2) subject any expansion of the pilot program to “reasonable cost limitations balanced with the public interest;” and (3) provide a sunset date of December 31, 2025, to the EV Pilot Program expansion provided in the bill. All three changes will help to contain the costs associated with this expansion of the EV pilot program and ultimately borne by ratepayers. Adding a sunset provision for the expansion is also consistent with the existing EV pilot program and establishes a firm deadline for re-evaluating the appropriate role for the utilities in the EV markets and the effect of ratepayer subsidized investments on competition and innovation.

Recommendation: OPC requests a favorable Committee report on HB 834 as amended by the House.

HB 834 - MoCo_Fitzgerald_FAV_Senate (GA 23).pdf

Uploaded by: Garrett Fitzgerald

Position: FAV



Montgomery County

Office of Intergovernmental Relations

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HB 834

DATE: March 28, 2023

SPONSOR: Delegate Fraser-Hidalgo, et al.

ASSIGNED TO: Education, Energy, and the Environment Committee

CONTACT PERSON: Garrett Fitzgerald (garrett.fitzgerald@montgomerycountymd.gov)

POSITION: Support (Department of Environmental Protection)

Electric Vehicle Charging Infrastructure – Requirements (Electric Vehicle Charging Reliability Act)

Electric vehicles (EVs) powered by a clean, renewable energy grid will play a critical role in achieving our State climate goals. Unreliability of EV charging infrastructure is a significant problem that risks slowing EV adoption or worse, causing current EV drivers to return to internal combustion vehicles. According to J.D. Power, over 20% of attempted charging sessions fail, and this problem has gotten worse since 2021.

This bill will help ensure that charging infrastructure installed through the utility pilot programs, which makes up a large proportion of the infrastructure located at public facilities and parks, remains reliable.

In addition, allowing utilities to install charging infrastructure in new and existing multifamily buildings in underserved communities will provide an additional pathway to help ensure EV adoption is a more viable option for these residents.

We respectfully request that the Committee issue a favorable report on House Bill 834.

HB0834 Breiner Written Testimony to the MD Senate

Uploaded by: Joyce Breiner

Position: FAV

Testimony to the Senate Education, Energy, and Environment Committee
HB 834 Electric Vehicle Charging Reliability Act
Position: Favorable

March 27, 2023

Senator Brian Feldman
Chair, Senate Education, Energy, and Environment Committee
2 West Miller Office Building
Annapolis, MD 21401

Honorable Chair Feldman and Members of the Committee,

As many associated with Poolesville Green, Inc. where we aim to ‘walk the talk’, I and my family have been an Electric Vehicle (EV)/Plug-in Hybrid EV (PHEV) family since December 2011 and this year we will complete our transition to being an EV only household as many across the nation already have. The vast majority of charging is done at home but in 2022 we have spread our wings to do more roadtrips giving the easing of Covid concerns.

On the occasions I use EV public charging, I need to be able to count on it being up and running just as a fossil fueled car owner expects the pump to work. Why should Maryland’s current and future EV owning citizens and those visiting our state expect anything less?

Just prior to the Covid shutdown, I attended a national gathering of EV enthusiasts where I met Kyle Conner, an earnest, positive messaging YouTuber (over 151,000 subscribers on his main channel Out Of Spec Motoring) who first got my attention for his instructional videos about roadtripping in electric vehicles. Over the years, he has crisscrossed the country too many times to count in all kinds of EVs under all kind of conditions.

This past December 2022 holiday season Kyle posted commentary on the state of public EV Charging expressing grave concern about reliability issues in his video titled, [“Unwrapping the Christmas Week From Hell for EV Drivers using CCS”](#) (94,000 views). The whole video is informative, especially for non-EV drivers/owners, and does a deep dive into the state of charging right now in the US. Key though is the wrap-up at the end which especially instructive: “...there was not one person we met, probably 50 different people charging at public Chargers this trip (Colorado to Florida) and there was not one person that enjoyed their experience charging that we met...”.

Reliability cannot be established without data collection and accountability cannot be required without plans to improve under established metrics. HB 834 accomplishes this.

Thank you for your consideration, and I urge a favorable report on HB 834.

Respectfully,

Joyce Breiner, CC-P®
Executive Director, Poolesville Green, Inc.
Poolesville, MD

HB834-2023-LannyHartmann.pdf

Uploaded by: Lanny Hartmann

Position: FAV

HB 834 — Electric Vehicle Charging Reliability Act
Position: **Favorable**

March 28, 2023

Senator Brian J. Feldman
Chair, Senate Education, Energy and the Environment Committee
2 West Miller Senate Office Building
Annapolis, MD 21401

Dear Chairman Feldman and Members of the Committee:

As an electric vehicle driver and ratepayer, I am writing to express my support for HB 834, a bill that requires utilities to report charging station uptime on EV charging stations installed with ratepayer funds. In 2019, the Maryland Public Service Commission approved an EV Pilot Program with assurances from utilities that their public charging stations would have high reliability and quick response to outages and issues. However, four years into the pilot, the promised reliability has not materialized.

Last August and September, I tested all the fast chargers in the BGE-owned and operated EV charging network and found that only 71% of them worked properly. The rest had issues, including being completely dead, error messages on the screen, physical damage to the connectors, and greatly reduced power output. In November, I repeated the testing and found that the percentage of fully functional chargers had declined from 71% to 65%, with many of the same issues I had encountered two months earlier. I documented the issues and sent a detailed report to BGE. It is the responsibility of the utilities to ensure that their charging stations are functioning properly and to identify and repair issues, not the EV drivers.

Furthermore, utilities are losing significant amounts of money on the charging stations, possibly due to low utilization that may be the result of these reliability issues. For Maryland to achieve its goal of 300,000 electric vehicles registered in the state by 2025, the EV charging infrastructure must be affordable, convenient, and reliable. I strongly support HB 834, which mandates utilities to report detailed charging station reliability data to ensure accountability and reliability for ratepayers and EV drivers alike.

I urge a **favorable report** on House Bill 834.

Sincerely,



Lanny Hartmann
Columbia, Maryland

September 12, 2022

Andrew S. Johnston
Executive Secretary
Public Service Commission of Maryland
6 Saint Paul Street, 16th Floor
Baltimore, Maryland 21202

Re: Case No. 9478 - Baltimore Gas and Electric Company (BGE) Semi-Annual EV Pilot Program Progress Report for January 1, 2022 through June 30, 2022.

Dear Mr. Johnston,

I respectfully submit the following comments regarding the Baltimore Gas and Electric Company EV program semi-annual report in Case No. 9478 that was filed on August 1, 2022.

Introduction

In their semi-annual EV pilot program progress reports to the Commission, the utilities claim to have accomplished a very high degree of public charging station "uptime." In general, EV drivers have become skeptical of uptime claims on CCS and CHAdeMO public charging stations. There seems to be a disconnect between the impossibly high percentages of uptime presented to regulators and media vs the frequency that EV drivers encounter broken chargers in the real world.

Included in these comments is a summary of a survey of the operational status of all 69 BGE-owned public DC fast chargers in the pilot. Each fast charger was evaluated by driving to the charger, plugging in and, taking note of whether the payment system, screen, connectors, communication signal and charging equipment functioned as expected.

Background

The Public Service Commission of Maryland approved a suite of utility-administered EV charging pilot programs in Order No. 88997 issued on January 14, 2019. The 2019 EV Order included a public charging component for the Investor-Owned Utilities including BGE.

BGE assured the Commission that their public EV charging stations would be highly reliable and that they would respond quickly to resolve outages and issues.

The BGE semi-annual report states that their public charging network had 95% uptime. BGE defines uptime as “the percent of time a station is in cellular communication and able to dispense a charge or is actively dispensing a charge.” If “unknown” time is treated as uptime, then BGE says that their reliability would rise to 99%

BGE is not alone among charging providers in claiming a high level of reliability. EVgo, a national EV charging service provider, claims to have 98% uptime across their network.

Despite these cheerful statistics, EV drivers continue to be plagued by broken charging stations. The issue of broken chargers has gotten some high-profile press attention in recent weeks:

“Owners of battery-powered cars sometimes struggle to refuel on longer trips because public chargers don’t work.” New York Times - Aug. 16, 2022¹

“EV owners continue to be faced with charging station equipment that is inoperable.”
Detroit Free Press - Aug. 17, 2022²

“Charging stations in Washington, D.C., are often unavailable, broken or have cut cords”
NBC News 4 Washington - Sept. 7, 2022³

Automotive journalist Jonathan Gitlin recently suggested that if drivers continue to have these horrible experiences with EV charging, it could stall the adoption of electric vehicles.⁴

We must acknowledge and come to grips with these issues as a first step to solving them.

BGE Territory-Wide Charger Evaluation

-Rationale

I have been a proponent of electric vehicles for more than a decade. Eight years ago, we took the first of many long trips across the US in an electric car using what was, at the time, a new network of strategically placed Tesla Superchargers. Since that 2014 coast-to-coast electric road trip, my wife and I have driven to – and charged in – every state except Alaska and Hawaii. Along the way we have visited more than 900 Tesla Supercharger locations.⁵

Tesla Superchargers are extraordinarily dependable. We almost never have an issue with them. We also use other fast charging stations with a Tesla-to-CHAdeMO adapter. The non-Tesla fast chargers can be extremely frustrating. Until recently, nobody has quantified just how many of these chargers are operational and how many are not.

In April, Professor David Rempel of the University of California, Berkeley published a study⁶ on the reliability of the public (non-Tesla) electric vehicle fast chargers in the San Francisco Bay Area. The results showed that more than a quarter of the chargers in that area were not functioning or had a design failure. The non-functioning stations suffered from non-responsive displays, payment system failures, initiation failures, network failures, or damaged connectors.

The study utilized a group of volunteer EV drivers who visited the chargers and tested each one by plugging into their EV and attempting to charge for two minutes. The methods used in the Berkeley study inspired the procedure that I used to test the fast chargers in Maryland.

-Procedure

69 BGE-owned fast chargers were tested between August 28 and September 6, 2022. I put the names and locations of all the BGE public charging stations into a spreadsheet. I then filtered the list to include only the DC fast chargers that have been built under the Maryland PSC EV pilot program. I then created a map of those locations and divided them into manageable groups that I could visit and evaluate over a number of days.

I drove to each site and worked through a checklist of tasks to test each fast charger. First I took a series of photos of the chargers. Then I recorded the Station ID, model and serial number of each unit. I visually inspected the equipment including the display, cables and connectors for damage. I documented the online status of the charger in the Shell Recharge mobile app. Then I attempted to initiate a charge via the app. If the unit began charging, I let it run for two minutes. Meanwhile I took note of the charging speed and made sure that the charger was operating as expected. After two minutes, I'd stop the charge and then attempt to initiate a charge using the RFID card reader. If a charging session failed, I'd report it to Shell Recharge customer service via the app or I'd call if the issue seemed as if it was possible to fix remotely.

-Results

A charger was classified as fully functional if it authorized via the Shell Recharge app (or started free), initiated a charge, and maintained the expected charging speed for two minutes.

71% (49) of the BGE fast chargers were fully functional as defined above.

14.5% (10) of the chargers were completely inoperable.

2.9% (2) consistently displayed error codes and would not charge.

4.4% (3) were offline and did not respond via the app. However, these did initiate via a tap of a Shell Recharge RFID card. Most drivers however do not carry a Shell Recharge card.

7.2% (5) initiated a charge but delivered very low power, around 15 kW. That is a fraction of the 50 kW rated power for those stations.

-Payment Methods

The payment methods tested were the Shell Recharge mobile app and the Shell Recharge RFID card. The BGE chargers do not have functioning credit card readers. The RFID card requires a \$5.00 payment and is delivered by mail. Due to the advance arrangements required to acquire an RFID card, I focused mainly on the mobile app to determine payment authentication success.

-Charger Models

The chargers used in the BGE public charging pilot to date come from three different manufacturers and consist of four models. The table below shows the number of chargers of each model tested and how many were classified as fully functional.

Manufacturer	Model	Tested	Functional
BTCPower	EVDSP-350-5-120-0-2-C-4-0	11	8
BTCPower	L3S-50-480-01-001	9	8
Efacec	EFAPOWER EV QC 45	19	9
Tritium	TRI93-50-01-US	30	24
Total		69	49

-Charging Speed

The nominal charging speed on most of the chargers tested was 50 kW. There are 10 chargers by BWI Airport and one in Crownsville that are rated at 150 kW. I was unable to confirm the full power delivery performance of those chargers due to the specifications of my vehicle.

-Physical Access

There were two instances during the evaluation where my access to a charging station was obstructed. The first was a gasoline car that had parked in front of one of the two fast chargers in Chesapeake Beach. The signage at that space read, ELECTRIC VEHICLE PARKING ONLY. A new Maryland law that goes into effect on October 1st would prohibit vehicles from blocking EV charging stations. An important proviso of the statute is that a sign designating that charging space must conform to federal and state standards for parking signs and include the amount of the penalty for violations (\$100 fine). The legislature has left it up to the property owner to decide if they wish to post the particular signs that will allow enforcement.⁷

The Whitmore Garage in Annapolis is undergoing renovations that have temporarily routed vehicles through the parking spaces in front of the charging stations. I was able to park close enough to the chargers in both instances to perform a complete evaluation including two minutes of continuous charging. I treated both of these chargers as if they were fully available for the purposes of this evaluation. Both were classified as fully functional.

-Follow Up Testing

I revisited 13 chargers that were classified as less than fully functional. I checked if their condition had changed in the days and weeks following the initial visits and reporting of the issues. In every instance, the chargers were still broken.

In order to achieve a minimum of 97% uptime on an annual basis, a charger must not be down for more than 11 days. Eight of the revisited chargers have already fallen below the 97% uptime threshold since I began this charger evaluation.

-Conclusions

High reliability of public EV charging stations is vital for a positive EV driver experience and to support electric vehicle adoption in Maryland. The Commission's 2019 EV Order requires that the utilities "be responsible for ensuring that public charging stations are working and

maintained in good working order.” It is clear from my perspective as an EV driver that there is much room for improvement.

-Suggestions

I do not have any simple answers to solve these problems. I do sense that they need to be acknowledged and addressed without delay if the EV pilot is going to succeed.

The Commission might consider the following section of the MOU between the City of Baltimore and BGE as a template for a consumer complaint driven accountability process.⁸

10) In the event that any user of an EV Station lodges a complaint with the City, BGE shall be notified by the City and BGE shall respond to the user, with a copy to the City, within three (3) days after receipt of the complaint. If BGE receives a complaint directly from a user, it shall reply within three (3) days after receipt of the complaint and provide a copy of the complaint and response to the City.

Another action to consider is to compensate ratepayers for the diminished value of the public charging network when the system falls below a certain uptime. See the “Service Level Failure” section in the Virginia DEQ agreement with EVgo for their statewide charging network.⁹

Contractor’s failure to achieve the required average 95% Uptime Percentage for the Applicable EV Charging Station Network in a given reporting year shall equate to a “Service Level Failure.” For each Service Level Failure, Contractor shall issue a Service Level Credit to DEQ on Contractor’s next invoice.

At some point, the Maryland General Assembly may want to consider legislation to amend the COMAR regulations to include specific reliability requirements for electric vehicle charging infrastructure that is installed using public funding. The California State Legislature passed a bill two weeks ago that addresses this issue. AB-2061 would require the California Energy Commission, in consultation with the Public Utilities Commission, to develop uptime reporting standards for EV charging stations by January 1, 2024.¹⁰

I hope these comments and the accompanying charger evaluation data are helpful to the Commission. Thank you for allowing me to contribute – as an EV driver and ratepayer – to the conversation on public charging station reliability.

Sincerely,

/s/ Lanny Hartmann

Lanny Hartmann
Columbia, Maryland

Notes:

¹ ["A Frustrating Hassle Holding Electric Cars Back: Broken Chargers"](#) New York Times, Aug. 16, 2022

² ["EV drivers aren't happy with public chargers, new survey says."](#) Detroit Free Press, Aug. 17, 2022

³ ["Electric Vehicle Owner Describes 'Charging Anxiety' in DC"](#) NBC News 4 Washington, Sept. 7, 2022

⁴ ["Electric cars are doomed if fast charger reliability doesn't get better"](#) Arstechnica, July 13, 2022

⁵ ["Die-Hard Tesla Owners Are in a Heated Race—With No End in Sight"](#) Wall Street Journal, May 26, 2022

⁶ [Reliability of Open Public Electric Vehicle Direct Current Fast Chargers](#) - Rempel, April 7, 2022

⁷ [Maryland § 21-1003.2. Vehicle Laws – Plug-In Electric Drive Vehicles – Reserved Parking Spaces](#)

⁸ [Baltimore City DOT MOU- BGE -- Installation of Electric Vehicle Charging Stations](#), Sept. 16, 2020

⁹ [Virginia DEQ, EVgo Contract No. 18-01-CP, Modification 3](#), Aug. 30, 2021

¹⁰ [California AB-2061 Transportation electrification: electric vehicle charging infrastructure.](#)

Appendix A

Station Name	Station ID	Date Tested	Functional	App Status	Issue Description	Reported to SRS Customer Service - Details
Carroll Co. Commissioners	43336	11/12/2022	No	OFFLINE	Offline. Neither card nor app worked. App: "Start Charge Unsuccessful. Unable to use the EVSE, it is in an unknown state." A Leaf driver here told me he couldn't get the DCFC to work and was charging on Level 2 to get home.	Reported via app: Unable to charge, Network Problems - Unable to initiate charging. Tried both the app and RFID card. Charger didn't respond to either.
Howard Co Library - Miller	43335	11/12/2022	No	OFFLINE	No power. Screen is dark	Reported via app: No Power to Station - Station is offline, the screen is dark. See attached photo.
Ripken Stadium - R	43359	11/13/2022	No	OFFLINE	Offline. Neither card nor app worked. Broken latch on CCS connector. App: "Start Charge Unsuccessful. Unable to use the EVSE, it is in an unknown state."	Reported via app: Visible Damage - Station is offline and the latch on the CCS connector is broken off. See attached photo.
Finksburg Library	153033	11/12/2022	No	*Not Listed	Offline. Neither card nor app worked. App: "Get EVSE Stations Unsuccessful. Charge station not found."	Reported via email to SRS: Fast charger does not initiate. Tried both scanning the QR code and a Shell Recharge RFID card. Neither worked.
BCPL Cockeysville - L	153488	11/13/2022	No	*Not Listed	No power. Unit is dark and wrapped with caution tape.	Did not report, presumed that it is a known issue since the station ID is not listed in the app.
HCLS Glenwood - L	153018	11/12/2022	No	*Not Listed	Offline. Neither card nor app worked. App: "Get EVSE Stations Unsuccessful. Charge station not found." Another EV driver told me that she couldn't charge on this station.	Phoned CS. They said there was a note that this unit is due to be replaced. She said that she will put in a note that the power should be turned off to help other drivers know that this is not operable.
HDG City Hall	53381A	11/13/2022	No	AVAILABLE	Error code: Proximity Error1 (on 3 attempts)	Phoned CS. On hold for over 25 minutes. I had already left the station when CS finally answered. CS confirmed that there was already an open case on this station and he said he would update it with my report.
S Carroll Sr CC - R	43395	11/12/2022	No	AVAILABLE	Red indicator ring on vehicle. Charger Error: "Charger did not detect vehicle. Check the connector or the ignition!"	Reported via app: Unable to charge, Other - Got the following message: Charger did not detect the vehicle. Check the connector or ignition!
Howard Comm Coll - R	43371	11/12/2022	No	AVAILABLE	Did not initiate via app or card. App: Start Charge Unsuccessful. Unable to process your request please try again later.	Phoned CS. They could not communicate with the station, said it had network issues and that they would create a case.
BWI Cell Lot - #1	54161	11/12/2022	No	AVAILABLE	Error code: TIMEOUT_INSULATION_TEST	Reported via app: Unable to charge, Other - Could not charge on Nov 12. Error code: TIMEOUT_INSULATION_TEST
BWI Cell Lot - #4	54153	11/12/2022	No	AVAILABLE	Error code: Communication_Failed	Reported via app: Unable to charge, Other - Could not charge on Nov 12. Error code: Communication_Failed
Arbutus - R	153019	11/12/2022	No	AVAILABLE	Start button didn't respond to pressing when blinking	Phoned CS. He restarted the station but the start button wouldn't react. He said he'd put in a report.
Arbutus - L	153034	11/12/2022	No	AVAILABLE	Error code: Err 22. When the start button is pressed it immediately says to return the connector to the holster.	Phoned CS. He restarted the station but it still didn't initiate. CS said there was already an open ticket on this station.
BWI Rideshare Lot - #3	54147	11/12/2022	No	*Not Listed	No power. Screen blank.	Reported via app: (continuation with 54163) Also, station ID 54147 at the same location has no power. Screen is dark.
BWI Rideshare Lot - #6	54163	11/12/2022	No	AVAILABLE	Error code: Proximity Error1, Damaged CCS	Reported via app: Unable to charge, Other - CCS connector is broken. CHAdeMO session does not initiate. Error code: Proximity Error1
MDA HQ Annapolis - R	53378A	11/6/2022	No	AVAILABLE	Error code: Communication_Failed	Reported via app: Unable to charge, Network Problems - Charging failed. Error code: Communication_Failed
S Carroll Sr CC - L	43396	11/12/2022	Low Pwr	AVAILABLE	Low power, 16 kW	Reported via app: Other - Very low charging power. 15.6 kW
HCC A Lot - L	43394	11/13/2022	Low Pwr	AVAILABLE	Low power, 15 kW	Reported via app: Other - Station ID 43394 and 43398 have lower power than is normal. Both charge at only 15 kW. Normal is around 40 kW. See attached screenshots from Shell Recharge app.
HCC A Lot - R	43398	11/13/2022	Low Pwr	AVAILABLE	Low power, 15 kW	Reported via app: Other - Station ID 43394 and 43398 have lower power than is normal. Both charge at only 15 kW. Normal is around 40 kW. See attached screenshots from Shell Recharge app.
2660 Riva Rd - R	43373	11/6/2022	Low Pwr	AVAILABLE	Low power, 15 kW	Phoned CS. Rebooted, but only charged at 15 kW. Created a ticket for low power.
Chesapeake Beach - R	43356	11/11/2022	Low Pwr	AVAILABLE	Low power, 15 kW	Reported via app: Other - Only charging at 15.4 kW.

Appendix A

Station Name	Station ID	Date Tested	Functional	App Status	Issue Description	Reported to SRS Customer Service - Details
Kenhill Center - R	153020	11/11/2022	Card Only	OFFLINE	Offline - Card only. App: "Start Charge Unsuccessful. Unable to use the EVSE, it is in an unknown state."	Reported via app: Unable to charge, Network Problems - Station offline Nov 11. Unable to initiate charge via app.
Aquatic Center - L	43358	11/12/2022	Card Only	OFFLINE	Offline - Card only.	Reported via app: Unable to charge, Network Problems - Station is offline.
Eastport - R	53197	11/6/2022	Card Only	*Not Listed	Offline - Card only. App: "Start Charge Unsuccessful. Unable to use the EVSE, it is in an unknown state."	Reported via app: Unable to charge, Network Problems - Offline. Station does not initiate via app. Does initiate with RFID card though.
Glen Burnie Garage	153016	11/12/2022	Closed	FAULTED	Faulted since August Temporarily inaccessible. Section of garage is closed. (exempt)	Station has been Faulted since August. Reported via email to BGE that the floor of the garage with the charging stations is closed due to construction.
Whitmore Garage	153025	11/6/2022	Closed	*Not Listed	Station is not listed on app. Temporarily inaccessible. Section of garage is closed. (exempt)	Temporarily closed. All stations at this location have been removed from being listed on app.
Harford County Govt - R	53386A	11/13/2022	See Note	AVAILABLE	Note: Sign covering screen: "CHARGER UNDER REPAIR" However, the charger seemed to function as normal.	Reported via app: Other - Sign says "charger under repair" but it works OK.

HB0834_Electric Vehicle Charging Reliability Act_E

Uploaded by: Laurie McGilvray

Position: FAV



Committee: Education, Energy, and the Environment
Testimony on: HB0834 - Electric Vehicle Charging Infrastructure - Requirements (Electric Vehicle Charging Reliability Act)
Organization: Climate Justice Wing of the Maryland Legislative Coalition
Submitting: Laurie McGilvray, Co-Chair
Position: Favorable
Hearing Date: March 28, 2023

Dear Chair and Committee Members:

Thank you for allowing our testimony today in support of HB834. The Maryland Legislative Coalition Climate Justice Wing, a statewide coalition of over 50 grassroots and professional organizations, urges you to vote favorably on HB834.

Transportation is Maryland's number one source of greenhouse gas emissions. The State's 2020 Greenhouse Gas Emissions Inventory shows that gasoline and diesel powered on-road and offroad vehicles account for nearly 46 percent of the State's greenhouse gas (GHG) emissions. Transitioning from gas-powered vehicles to electric vehicles (EVs) is a key strategy for the State to reduce GHG emissions and meet its climate goals. Ensuring that all communities have access to convenient and reliable EV charging is essential to this transition.

This bill requires the Public Service Commission (PSC) to expand the Electric Vehicle Pilot Program to allow participating electric companies to install EV charging stations in new and existing multifamily dwellings in underserved communities. Underserved communities are defined as those communities in census tracts with a higher number of low-income residents who are also nonwhite and have limited English-proficiency. The Climate Justice Wing supports policies that benefit underserved communities, and agrees that these communities cannot be left behind in the EV transition. We applaud the bill's sponsor for placing a greater focus on the installation of EV charging in underserved communities.

EV charging reliability is another key ingredient to the successful electrification of the transportation sector. HB834 directs the PSC to require a participating electric company to maintain an adequate number of staff to monitor, assess, and when necessary, repair the EV charging stations operated by the company. The bill also establishes operational and reporting requirements for utility-operated EV charging networks.

HB834 will improve EV charging in underserved communities and strengthen EV charging reliability for all Marylanders. We support HB834 and urge a **FAVORABLE** report.

HB 834 Testimony Senate Lynn Parsons.pdf

Uploaded by: Lynn Parsons

Position: FAV

Testimony to the Senate Education, Energy, and Environment Committee
HB 834 Electric Vehicle Charging Reliability Act
Position: Favorable

March 28, 2023

Senator Brian Feldman
Chair, Senate Education, Energy, and Environment Committee
2 West Miller Office Building
Annapolis, MD 21401

Honorable Chair Feldman and Members of the Committee,

As the driver of a 2015 Nissan Leaf that passed the 100,000 mile mark this past week, I feel especially qualified to comment on the implications of this bill. My Leaf at purchase was occasionally capable of 100-mile range in the beginning but now on a good day I can count on about 60-70. This means I rely HEAVILY on the availability of public charging.

As the EV adoption curve accelerates upward, more and more individuals that I encounter at the charging station are relying on public charging as their sole source to recharge their battery. Contention for chargers is increasing and it is no longer unusual to have to wait for access to a charger. In my experience the chargers are increasingly not being maintained in operable condition and this increases contention for the remaining operable chargers.

What are the implications of poor maintenance to the EV driver? Lost time calling the service provider to find out if they can initiate a charge, lost time searching for the next nearest charger and depending on how far this is, lost time requesting a tow if battery capacity fails to reach that destination. It could mean missed doctors' appointments, job interviews, soccer games etc. It can have a very detrimental impact on the life of the driver and friends and family. I have experienced these losses and they are painful. I have seen how some drivers take their frustration out on the equipment and this exacerbates the problem adding to the expense of the repair.

This bill not only will hold a potentially large supporter of the EV community to account for the reliable service of their chargers, it will also provide you with useful data that can be used for wise planning and legislation. Because EVs are a relatively new mode of transportation planners have lacked the real-life experience. There were misconceptions and misguided projections about how EV charging would be utilized. There are installations which could have been done much better had there been experience as a guide. The needs will change over time with increased adoption and evolving technology. With this bill, you, and Maryland residents gain valuable information about usage, cost, quality of equipment and trends.

Thank you for your consideration, and I urge a favorable vote on HB 834.

Respectfully,

Lynn Parsons
Kensington, MD

hb834_czajka_032723_FAV.pdf

Uploaded by: Mark Czajka

Position: FAV

Subject: HB 834 – SUPPORT

March 27, 2023

Senator Brian Feldman
Chair, Senate Education, Energy, and Environment Committee
2 West Miller Office Building
Annapolis, MD 21401

Dear Chairman Feldman and Members of the Committee:

My name is Mark Czajka and I'm a resident of Charles County and the Director of MD Volt Inc., a Maryland EV club. I **SUPPORT** House Bill 834 (Electric Vehicle Charging Reliability Act). These are my personal views.

EV charging station reliability has been so bad nationwide that it has spawned a reporting account on Twitter (@RateYourCharge) which has over 7,500 followers since it was created in December of 2022. People post positive and negative reviews, but they are mostly negative.

If we can make reliability transparent and accountable, it will go a long way to improving uptime. We want to provide a positive experience to keep people buying all makes and models of EVs.

Codifying uptime is important. 3% downtime is 11 days per year, which seems reasonable to prevent if spare parts are maintained. Accountability could also allow utilities to evaluate the hardware/software decisions and purchases they made, and influence future expansion of their networks. For example, if hardware is constantly going down, the manufacturer or installers should be audited for performance. If downtime is related to vandalism on a reoccurring basis, then security should be considered.

If you have any questions, please feel free to contact me at 240-416-9001 or mark@mdvolt.org.

Sincerely,



Mark Czajka
Waldorf, MD 20603

March27_AG support.pdf

Uploaded by: Mathilde Coyle

Position: FAV



Testimony to the Senate Education, Energy, and Environment Committee
HB 0834 - Electric Vehicle Charging Reliability Act
Position: Favorable

March 27, 2023

Senator Brian Feldman
Chair, Senate Education, Energy, and Environment Committee
2 West Miller Office Building
Annapolis, MD 21401

Honorable Chair Feldman, Vice Chair Kagan, and Members of the Committee:

The local nonprofit Annapolis Green has been advocating for adoption of electric vehicles by Maryland Drivers for the past 12 years. With this much experience in the field, it is clear that the reliability of the charging experience for potential and current EV drivers is vital to reaching the state goal of 300,000 registered electric vehicles on the road in Maryland by 2025.

Similarly, the many drivers living in multi-family dwellings, particularly in underserved communities, will be key to growing the number of EVs on the road.

Annapolis Green is in favor of this bill, since it would provide a mechanism for utilities to expand the existing pilot program to install charging infrastructure in multi-family dwellings, emphasizing meeting needs in underserved communities.

Additionally, the bill will require utilities to meet an annual “uptime” of at least 97 percent. While we realize the challenges this may present to the utilities given supply chain issues, vandalism and other matters, we are confident that 97 percent reliability can be achieved.

We urge a favorable report on HB 0834.

Respectfully,

Mathilde Coyle
Executive Director
Annapolis Green

HB834_IndivisibleHoCoMD_FAV_RichardDeutschmann.pdf

Uploaded by: Richard Deutschmann

Position: FAV



HB834 – Electric Vehicle Charging Infrastructure – Requirements 3 (Electric Vehicle Charging Reliability Act)

Testimony before

Senate Education, Energy, and the Environment Committee

March 28, 2023

Position: Favorable

Mr. Chair, Mdm. Vice Chair and members of the committee, my name is Richard Deutschmann, and I represent the 750+ members of Indivisible Howard County. We are providing written testimony today in **support of HB834**, which would expand the EV Pilot Program into underserved communities. Indivisible Howard County is an active member of the Maryland Legislative Coalition (with 30,000+ members). We appreciate the leadership of Delegate Fraser-Hidalgo in sponsoring this important legislation.

Maryland is currently in an accelerated transition to electric vehicles (EVs). The Inflation Reduction Act, as well as Maryland's Climate Solutions Now Act, ensure that this transition will continue strongly in the coming years. To support that, there is an existing program to allow the states' electric utilities to install and operate EV charging in multi-family (MF) neighborhoods. It is well known that adding electric vehicle charging to existing MF communities is one of the keys to mass adoption. However, frontline, underserved and overburdened communities are often EV charging deserts, with few nearby options for residents to charge their vehicles. This will become a critical issue in the coming years, especially as the late-model EV market continues to develop. These communities are often suffering the worst of the burdens from our transportation choices, while enjoying few of the benefits. HB834 simply expands this existing program to encourage utilities to provide this service in underserved communities. It also requires a high level of operational reliability, to ensure that this service is well maintained for residents' use.

For these reasons, we support HB834.

Thank you for your consideration of this important legislation.

We respectfully urge a favorable committee report.

Richard Deutschmann
Columbia, MD 21045

HB 834 Electric Vehicle Charging Reliability Act -

Uploaded by: Robert Borkowski

Position: FAV

Testimony to the Senate Education, Energy, and Environment Committee
HB 834 Electric Vehicle Charging Reliability Act
Position: Favorable

March 28, 2023

Senator Brian Feldman
Chair, Senate Education, Energy, and Environment Committee
2 West Miller Office Building
Annapolis, MD 21401

Mr. Chairman,

I am writing in support of HB 834, the Electric Vehicle Charging Reliability Act.

Entities receiving taxpayer or ratepayer funds to increased install and operate electric vehicle (“EV”) charging infrastructure should be held to accountability and transparency requirements.

HB 834 will hold utilities participating in the Public Service Commission’s (“PSC”) EV Pilot Program (“Pilot program”) to the same reporting requirements as private entities participating in the federal National Electric Vehicle Infrastructure (“NEVI”) program.

In 2019, the PSC approved an EV Pilot Program, allowing BGE, Pepco, Potomac Edison and later SMECO (“utilities”) to install and operate public charging equipment in Maryland. The program allow these utilities to install Level-2 (“AC Destination Chargers”) and Level-3 DCFC (“DC Fast Chargers”) chargers.

The program also allows utilities to offer residential and non-residential EVSE (“Electric Vehicle Supply Equipment”, aka “EV Charging Station”) rebates to incentivize individuals and commercial entities to install EV Chargers.

The General Assembly needs to evaluate the results of the Pilot program and determine whether utilities are sufficiently capable of installing, operating, and maintaining EV charging stations. HB 834 requires utilities to provide more detailed information regarding their charging infrastructure, while also expanding the pilot program to account for market failures. Despite realizing financial losses, utilities have consistently praised their ability to install and operate reliable chargers. In their February 2023 semi-annual progress report, utilities have reported financial losses of their 202 out of 217 sites, losing over \$400,000¹. Utilities operating EVSE sites at a lose are directly competing with private and Multifamily Dwellings by selling electricity (kWh) below open market prices.

During transition to EV adoption and low utilization of the EVSE, utilities have no financial incentive to provide acceptable uptime of minimum 97% especially when the sites loose money.

1 <https://webpsc.psc.state.md.us/DMS/case/9478>

Potomac Electric Power Company and Delmarva Power & Light Company - Case No. 9478 (ML 301131)
Baltimore Gas and Electric Company - Case No. 9478 (ML 301120)
Southern Maryland Electric Cooperative, Inc. - Case No. 9478 (ML 301119)
The Potomac Edison Company - Case No. 9478. (ML 301116)

Electric companies are vital partners in the effort to increase adoption of emobility. The size and scope of their participation must be carefully determined by lawmakers in the coming months. Utilities and PSC must focus on providing competitive electric tariffs for all EVSE site operators, especially Multifamily Dwellings in Maryland.

DCFC sites are designed for long distance travel, thus the EV Pilot subsidizes out of state travelers. PSC and utilities must focus on EVSE Tariff serving multifamily dwelling Level-2 installations directly serving Maryland residents. Increased penetration of Level-2 EVSEs at multifamily dwellings will indirectly reduce the need for subsidized DCFC sites.

One EV charging at 150 kW DCFC is equivalent to 20 EVs charging on Level-2 EVSE.

One EV charging at 250 kW DCFC is equivalent to 30 EVs charging on Level-2 EVSE.

HB 834 seeks to increase and specify the data provided by the utilities to the PSC regarding the reliability of their chargers, so lawmakers can make informed decisions regarding the future role of utilities installing EVSEs and the cost of electricity operators pay to the utilities.

Recognizing the failure of private industry to place EV charging stations in underserved communities, due to unpredictable and affordable cost of electricity during the transition period of low utilization. PSC's authorized rebate and installation programs to reduce this disparity has had some success compared to the rebate program for multi-unit dwellings. The program does not provide any post installation cost mediation to keep the cost of electricity predictable and affordable to the owners and operators thus subpar reliability results.

HB 834 seeks to close the gap created by private industry by expressly expanding the Pilot program to allow utilities to install EV charging stations in multifamily dwellings in underserved communities through 2025. Utilities would be required to report the same detailed information for these chargers as all other previously installed utility owned chargers.

HB 834 will ensure all entities that use public funds to install EV chargers are held to a uniform standard to improve consumer experience and incentivize more drivers to switch to EVs.

HB 834 will also allow lawmakers to make more informed decisions regarding the role of utilities in promoting EVs moving forward.

Thank you for your consideration, and I urge a favorable report on HB 834.

Respectfully,

Robert Borkowski

Erdman Senate HB 834 Favorable 2023.pdf

Uploaded by: Robert Erdman

Position: FAV

Testimony for the Senate Education, Energy, and Environment Committee

HB 834 Electric Vehicle Charging Reliability Act

Position: **Favorable**

March 28, 2023

Senator Brian Feldman
Chair, Senate Education, Energy, and Environment Committee
2 West Miller Office Building
Annapolis, MD 21401

Honorable Chairman Feldman and members of the Senate Education, Energy, and Environment Committee:

My name is Robert Erdman, and I am a resident of Montgomery County. I'm also the Treasurer of the Electric Vehicle Association of greater Washington DC (EVADC). I am writing to you in favor of House Bill 834 the Electric Vehicle Charging Reliability Act.

One of the most frustrating situations for an electric vehicle driver is to arrive at a charging station only to discover that the equipment is malfunctioning. In some cases, this may even require being towed to a functional charger, which is a worst-case scenario.

Building trust in the charging infrastructure is crucial to encourage more people to adopt electric vehicles. When individuals have negative charging experiences, they often share their experiences with friends and on social media, which can discourage others from making the switch. It is important to instill confidence in Maryland's citizens, particularly when chargers are financed by ratepayers.

To address this issue, this bill will mandate better reporting practices, which will ultimately lead to greater reliability of charging infrastructure funded by ratepayers.

For the foregoing reasons, I respectfully request a favorable Committee report on House Bill 834.

Sincerely,

Robert S. Erdman
Potomac, MD

Wilson HB 834 FAV.pdf

Uploaded by: Scott Wilson

Position: FAV

Testimony to the Senate Education, Energy, and Environment Committee
HB 834 Electric Vehicle Charging Reliability Act
Position: Favorable

28 March 2023

Senator Brian Feldman
Chair, Senate Education, Energy, and Environment Committee
2 West Miller Office Building
Annapolis, MD 21401

Honorable Chair Feldman and Members of the Committee:

With both a Nissan Leaf and Chevy Bolt, our family has had extensive experience using public Level 2 and DC fast charging, both privately owned, such as by Electrify America or EVgo, and utility-owned, such as by Pepco and BGE. For a successful charge, three things must happen. First, the charger needs to be activated, usually with an RFID card or from a phone app. Second, the charger must turn on, and lastly, it must charge at or near its advertised charge rate. If any one of those three elements fails, even de-rated charging, the session should be flagged and action is taken to address it.

The issue is not that chargers break or go offline. Gas pumps break and go offline as well. The issue is how problems are reported and fixed. The data reporting this bill requires will lead to better knowledge, practical action, and thus better reliability. Quarterly reporting should be a small burden that will lessen as reliability improves. Importantly, this bill clearly defines the meaning of "uptime" as successfully dispensing electricity as designed. This common-sense definition is the only one that matters, since it is the driver who is at the end of a chain of events that must all work, and the entire purpose of the system is to enable the driver to charge in a timely manner. If a driver is unable to charge, the station is not up.

Better reliability benefits everyone: the occasional user, the frequent user, the LMI user, and the utility itself. It is in everyone's interest that the utility operation of charging is successful in situations where the private market is unwilling or unable to serve the need. The geography of Maryland guarantees that many drivers of many income levels will rely on public neighborhood charging, which is what the EV pilot program was designed to address. Now is the time to perfect the procedures needed to deliver performance that Maryland's current and future EV drivers can count on.

Thank you for your consideration, and I urge a favorable report on HB 834.

Respectfully,
Scott Wilson, Silver Spring, MD

HB834_Tyler Workman_FAV.pdf

Uploaded by: Tyler Workman

Position: FAV

Senator Brian Feldman
Chair, Senate Education, Energy, and Environment Committee
2 West Miller Office Building
Annapolis, MD 21401

Mr. Chairman,

I am writing in support of HB 834, the Electric Vehicle Charging Reliability Act.

As an EV driver in Maryland, I have dealt with many issues while charging or attempting to charge my vehicle. In most cases these issues are a result of a lack of or no maintenance altogether on charging units.

The issues I have faced as an EV driver have been at charging sites operated by both Private Charge Point Operators and the various Utility companies of Maryland. In my hometown of Westminster, MD there is one fast charger and it was offline for four months. There are a growing number of EVs in Westminster and none of these owners can efficiently charge their vehicles in public due to this charger being down. While there are Level 2 chargers available, the sites are out of the way of most EV drivers' daily commitments and stops. Additionally, Level 2 charges take much longer to charge EVs, making them not worth most EV drivers time to use.

What is most concerning about the Westminster EV Smart site is that it was down for four months, and the reported uptime does not reflect the actual uptime of the site. Thusly, BGE EV Smart has not been held accountable for their inability to manage this charging site.

While I typically charge at home, I do use the public sites when I need to charge fast or in emergency situations. Most recently, my garage door suffered a broken torsion spring. My family is a two EV and an EV only household. Due to this issue, we were unable to charge our vehicles at home and had no options to fall back on as it was too late at night to resolve this issue. This event caused a lot stress on my family and could have been mitigated if the Westminster EV Smart site was active and working.

Additionally, there was a recent scenario, prior to the charger finally being put back online, where a Pennsylvania driver needed to use the charger to get home and was unable to use it. Fortunately, they could plug in to the level 2 chargers that are also located at the site, but their trip home was derailed by 2-3 hours. This situation could have been avoided if there were enforceable uptime requirements.

During the four months I have contacted BGE, EV Smart, and Shell Recharge via PlugShare, Email, Phone, and even Twitter. I received response that they were actively working on resolving the issue. It wasn't until a few weeks ago that they finally took the old unit out of the ground and began to replace it. All the while, EV drivers in Westminster still had no reliable place to charge their vehicles quickly.

Without accountability, EV drivers will continue to be marginalized in the State of Maryland. While I can only speak regarding my issues with BGE operated charging stations, it is clear that

they are not taking EV charging infrastructure seriously. I watched a previous meeting where BGE spoke and referenced BTC units in storage waiting for deployment. Why did it take three months for any resolution to begin with the only charger in my town if they had units they could have deployed? Charging sites need to be able to be repaired or replaced in a timely manner to prevent inconveniencing EV drivers. The amount of time this charger has been offline is unacceptable. As a citizen of Maryland, I do not want my tax dollars going to companies that are incapable of the upkeep of charging infrastructure. If this program is to be extended there needs to be stricter guidelines that hold the utilities accountable for the equipment they put in the ground. That is exactly what HB 834 does, holds utilities accountable for charging stations that families, like mine, rely upon.

Thank you for your time and consideration, and I urge the committee to support HB 834 and stand up for EV drivers throughout Maryland.

Respectfully,

Tyler Workman

443-821-4410

tbworkman@me.com

2023-HB 834- FWA- PHI.pdf

Uploaded by: Anne Klase

Position: FWA



March 28, 2023

112 West Street
Annapolis, MD 21401

Favorable with Amendments- House Bill 834 – Electric Vehicle Charging Infrastructure – Requirements (Electric Vehicle Charging Reliability Act)

Potomac Electric Power Company (Pepco) and Delmarva Power & Light Company (Delmarva Power) support with amendments *House Bill 834 – Electric Vehicle Charging Infrastructure – Requirements (Electric Vehicle Charging Reliability Act)*. House Bill 834 requires the Public Service Commission (PSC) to expand the existing Electric Vehicle (EV) Pilot Program to allow participating companies to install EV charging stations in multifamily dwellings in underserved communities, establish reliability standards for the availability of EV chargers and require additional reporting requirements for those reliability standards.

Maryland has adopted a goal of 300,000 zero-emission vehicles on the road by 2025 to help in achieving state greenhouse gas reduction goals. Naturally, the expansion and reliability of the EV charging systems is necessary to support that zero-emission vehicle target.

This legislation requires a utility operating an EV charging network have stations with an average annual uptime of 97% of greater. The Maryland Public Service Commission's (PSC) Electric Vehicle Working Group has agreed to adopt the new National Electric Vehicle Infrastructure (NEVI) standards. Pepco and Delmarva Power feel the legislation should set performance standards that are aligned with federal NEVI standards and respectfully ask that this provision is amended. Amending this language would align Maryland's uptime standards with federal standards, provide flexibility to continue following the standards as they evolve, and grant the Commission the authority to make alterations that benefit Maryland.

Additionally, utilities are currently required by the PSC to report on its EVsmart program on a semi-annual basis. Increasing the frequency of this reporting would be burdensome and, in our opinion, provide no real value to the goal of electric charger reliability improvement. Pepco and Delmarva Power respectfully request to allow the semi-annual reporting to continue.

Further, as written, the legislation terminates existing EV program in 2025. Pepco and Delmarva Power have concerns that utilities with existing EV programs would only have two years to install chargers at multifamily properties. We ask that the language is amended to clarify that a utility with an existing program or approved program would be able to continue its current programs going forward.

Lastly, House Bill 834 requires that utility companies to submit a corrective action plan when a charging network station fails the uptime requirement. Pepco and Delmarva Power request that the legislation requires a utility to submit a report on the number of failed stations and the cause of the failure. A corrective action report would not provide the results intended because the charging station would likely have been repaired prior to the time the corrective action plan is filed. Also, the legislation would authorize we the Commission to impose a penalty on a utility when the network charging stations fell below the uptime requirement. Pepco and Delmarva Power recommend striking this language as there is existing statutory language that authorizes the PSC to impose a penalty on a utility.

Pepco and Delmarva Power welcome the opportunity to continue working with the sponsor on this legislation, and respectfully requests that the Committee issue a favorable vote with the following amendments:

Amendment No. 1.

On page 3, after line 20, insert:

(3) THE TERMINATION OF THE EV PILOT PROGRAM EXPANSION REQUIRED UNDER ITEM (1) SHALL NOT BE CONSTRUED TO:

(I) TERMINATE AN ELECTRIC COMPANY'S AUTHORITY TO OPERATE EV CHARGING STATIONS UNDER A PROGRAM APPROVED BY THE COMMISSION ON OR BEFORE MARCH 1, 2023;

(II) LIMIT AN ELECTRIC COMPANY'S EFFORTS TO OPERATE AND MAINTAIN EV CHARGING STATIONS INSTALLED UNDER THE EV PILOT PROGRAM; OR

(III) IMPACT THE COST RECOVERY BY AN INVESTOR-OWNED ELECTRIC COMPANY FOR THE LIFETIME OF AN EV CHARGING STATION INSTALLED UNDER THE EV PILOT PROGRAM.

Interlineated Amendment No. 1

(2) TERMINATE THE EV PILOT PROGRAM EXPANSION REQUIRED UNDER ITEM (1) OF THIS SECTION ON DECEMBER 31, 2025.

(3) THE TERMINATION OF THE EV PILOT PROGRAM EXPANSION REQUIRED UNDER ITEM (1) SHALL NOT BE CONSTRUED TO:

(I) TERMINATE AN ELECTRIC COMPANY'S AUTHORITY TO OPERATE EV CHARGING STATIONS UNDER A PROGRAM APPROVED BY THE COMMISSION ON OR BEFORE MARCH 1, 2023;

(II) LIMIT AN ELECTRIC COMPANY'S EFFORTS TO OPERATE AND MAINTAIN EV CHARGING STATIONS INSTALLED UNDER THE EV PILOT PROGRAM; OR

(III) IMPACT THE COST RECOVERY BY AN INVESTOR-OWNED ELECTRIC COMPANY FOR THE LIFETIME OF AN EV CHARGING STATION INSTALLED UNDER THE EV PILOT PROGRAM.

Rationale: As written, the bill would provide only two years for electric utilities to install chargers at multifamily properties. The proposed language clarifies that a utility with an existing program or program approved would be able to continue its current programs going forward.

Amendment No. 2

On Page 3, beginning with "shall" in line 24, down through "greater" in line 25, and substitute "**SHALL MAINTAIN UPTIME STANDARDS IN ACCORDANCE WITH FEDERAL NEVI STANDARDS OR ALTERNATIVE STANDARDS APPROVED BY THE COMMISSION**".

Interlineated Amendment No. 2

~~7-904.~~

(A) ~~(1) AN EXCEPT AS PROVIDED IN PARAGRAPH (2) OF THIS SUBSECTION, AN ELECTRIC COMPANY OPERATING AN EV CHARGING NETWORK SHALL ENSURE THAT EV CHARGING STATIONS IN THE EV CHARGING NETWORK HAVE AN AVERAGE ANNUAL UPTIME OF 97% OR GREATER.~~ **SHALL MAINTAIN UPTIME STANDARDS IN ACCORDANCE WITH FEDERAL NEVI STANDARDS OR STANDARDS APPROVED BY THE COMMISSION.**

Rationale: The proposed language would align Maryland's uptime standards with federal standards, provide flexibility to continue following the standards as they evolve, and grant the Commission the authority to make alterations that benefit Maryland.

Amendment No. 3

On page 4, strike “**QUARTERLY**” and substitute “**SEMI-ANNUAL**”.

Interlineated Amendment No. 3

(2) AN ELECTRIC COMPANY THAT OPERATES AN EV CHARGING NETWORK OR EV CHARGING STATION SHALL SUBMIT THE FOLLOWING EV CHARGING STATION DATA TO THE COMMISSION ON A **SEMI-ANNUAL BASIS** ~~QUARTERLY BASIS~~:

Rationale: Utilities currently report to the PSC on a semi-annual basis. The proposed language makes this reporting requirement consistent with current reporting requirements.

Amendment No. 4

On page 4, strike beginning with “**AND**” in line 15, down through “**COMPLETION**” in line 16.

Interlineated Amendment No. 4

(II) FOR EACH EV CHARGING STATION:

1. CHARGING SESSION START AND END TIMES ~~AND RATE OF SUCCESSFUL COMPLETION~~;

Rationale: The language, as drafted, is unclear as to what constitutes a successful completion. Currently, the utility receives information related to when the charge session starts, ends, and the percent of charge.

Amendment No. 5

On page 5, strike beginning with “**A**” in line 24, down through “**OCCURRED**” and substitute, “**, IN A REPORT REQUIRED UNDER §7-904(B) OF THIS SUBTITLE, THE NUMBER OF EV CHARGING STATIONS THAT FAILED TO MEET THE UPTIME REQUIREMENTS AND THE REASON THE EV CHARGING STATIONS FAILED TO MEET THE UPTIME REQUIREMENTS**”.

Interlineated Amendment No. 5

~~(2)~~ AN ELECTRIC COMPANY PARTICIPATING IN THE EV PILOT PROGRAM THAT, ACCORDING TO THE DATA SUBMITTED BY THE ELECTRIC COMPANY TO THE COMMISSION UNDER § 7–904 OF THIS SUBTITLE, FAILS TO SATISFY THE UPTIME REQUIREMENTS UNDER § 7–904 OF THIS SUBTITLE SHALL FILE WITH THE COMMISSION, **A CORRECTIVE ACTION PLAN IN A REPORT REQUIRED UNDER §7-904(B), THE NUMBER OF EV CHARGING STATIONS THAT FAILED TO MEET THE UPTIME REQUIREMENTS AND THE REASON THE EV CHARGING STATIONS FAILED TO MEET THE UPTIME REQUIREMENTS. FEBRUARY 1 OF THE CALENDAR YEAR IMMEDIATELY FOLLOWING THE YEAR IN WHICH THE FAILURE OCCURRED.**

Rationale: The suggestion of a corrective action plan will not provide the results intended because the charging station would like have been repaired prior to the time the corrective action plan is filed. The new language proposes that the utility submit a report on the number of failed stations and the cause of the failure. This would give the Commission the necessary information to determine if there are properly functioning EV stations available.

Amendment No. 6

On page 5, strike “AS APPROPRIATE” in line 28, and substitute “**SUBJECT TO §13-201 OF THE PUBLIC UTILITIES ARTICLE**”

Interlineated Amendment No. 6

(C) NOTWITHSTANDING SUBSECTION (B) OF THIS SECTION, THE COMMISSION MAY; **SUBJECT TO §13-201 OF THE PUBLIC UTILITIES ARTICLE**, ~~AS APPROPRIATE~~, IMPOSE A PENALTY ON OR TAKE ADDITIONAL REMEDIAL ACTION AGAINST AN ELECTRIC COMPANY THAT FAILS TO SATISFY THE UPTIME REQUIREMENTS UNDER § 7–904 OF THIS SUBTITLE.

Rationale: This language incorporates the existing statutory language that authorizes the PSC to impose a penalty on a utility.

Pepco and Delmarva Power understand that House Bill 834 is well-intentioned and if the Committee is inclined to pursue this legislation, we respectfully ask to continue conversations with the bill sponsor. Pepco and Delmarva Power respectfully request a favorable report on House Bill 834, if amendments are included to address the reliability and reporting requirements.

Contact:

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BGE-FWA_EEE_HB 834 – Electric Vehicle Charging Inf

Uploaded by: John Quinn

Position: FWA



AN EXELON COMPANY

Position Statement

SUPPORT WITH AMENDMENTS

Education, Energy, and the
Environment

3/27/2023

HB 834 – Electric Vehicle Charging Infrastructure – Requirements (Electric Vehicle Charging Reliability Act)

Baltimore Gas and Electric Company (BGE) supports with amendments *House Bill 834 – Electric Vehicle Charging Infrastructure – Requirements (Electric Vehicle Charging Reliability Act)*. House Bill 834 would expand the existing Electric Vehicle (EV) Pilot Program. The bill also would establish reliability standards for the availability of EV chargers.

Maryland has adopted a goal of 300,000 zero-emission vehicles on the road by 2025 to help in achieving state greenhouse gas reduction goals. Naturally, the expansion and reliability of the EV charging system is necessary to support that zero-emission vehicle target. In fact, BGE is an active partner in this effort.

BGE launched its EVsmart Program and is helping to propel progress on Maryland's Air Quality and Chesapeake Bay goals. Under EVsmart, BGE plans to install 500 public access charging stations throughout its service territory. There are six (6) changes to the bill, however, BGE finds reasonable and aligns the legislation with current practice.

First, the bill requires a utility operating an EV charging network have stations with an average annual uptime of 97% or greater. The new federal National Electric Vehicle Infrastructure (NEVI) standards have been issued, which the Maryland Public Service Commission (Commission) intends to adopt these new standards. We believe that this legislation should set performance standards that are aligned with federal NEVI standards and respectfully ask that this provision is amended. Amending this language would align Maryland's uptime standards with federal standards, provide flexibility to continue following the standards as they evolve, and grant the Commission the authority to make alterations that benefit Maryland.

Also, BGE is required by the Commission to report on its EVsmart program on a semi-annual basis. House Bill 834 establishes a new reporting requirement where utilities must provide information on the start, end, and successful completion rate for its network charging stations. We respectfully ask that the language involving the "successful completion rate" requirement is removed because a utility does not have access to that information. We also recommend changing the language to align the reporting period from a quarterly basis to semi-annually. Semi-annual reporting requirements are already established by the Commission.

Further, as written, the bill would terminate the existing EV program in 2025. BGE has concerns that those utilities with existing EV programs would only have two years to install chargers at multifamily properties. We ask that the language is amended to clarify that a utility with an

BGE, headquartered in Baltimore, is Maryland's largest gas and electric utility, delivering power to more than 1.2 million electric customers and more than 655,000 natural gas customers in central Maryland. The company's approximately 3,400 employees are committed to the safe and reliable delivery of gas and electricity, as well as enhanced energy management, conservation, environmental stewardship and community assistance. BGE is a subsidiary of Exelon Corporation (NYSE: EXC).

existing program or approved program would be able to continue its current programs going forward.

Lastly, House Bill 834 requires utility companies to submit a corrective action plan for when a charging network station fails to meet the uptime requirement. BGE requests that the legislation requires a utility to submit a report on the number of failed stations and the cause of the failure. A corrective action report would not provide the results intended because the charging station would likely have been repaired prior to the time the corrective action plan is filed. Also, the legislation would authorize we the Commission to impose a penalty on a utility when the network charging stations fell below the uptime requirement. We BGE recommends striking this language as there is existing statutory language that authorizing the PSC to impose a penalty on a utility.

BGE welcomes the opportunity to continue working with the sponsor on this legislation, and respectfully requests that the Committee issue a favorable vote with the following amendments:

AMENDMENT TO HOUSE BILL 834, AS AMENDED

PROPOSED AMENDMENTS

Date: 3.27.2023

Amendment No. 1.

On page 3, after line 20, insert:

(3) THE TERMINATION OF THE EV PILOT PROGRAM EXPANSION REQUIRED UNDER ITEM (1) SHALL NOT BE CONSTRUED TO:

(I) TERMINATE AN ELECTRIC COMPANY’S AUTHORITY TO OPERATE EV CHARGING STATIONS UNDER A PROGRAM APPROVED BY THE COMMISSION ON OR BEFORE MARCH 1, 2023;

(II) LIMIT AN ELECTRIC COMPANY’S EFFORTS TO OPERATE AND MAINTAIN EV CHARGING STATIONS INSTALLED UNDER THE EV PILOT PROGRAM; OR

(III) IMPACT THE COST RECOVERY BY AN INVESTOR-OWNED ELECTRIC COMPANY FOR THE LIFETIME OF AN EV CHARGING STATION INSTALLED UNDER THE EV PILOT PROGRAM.

Interlineated Amendment No. 1

(2) TERMINATE THE EV PILOT PROGRAM EXPANSION REQUIRED UNDER ITEM (1) OF THIS SECTION ON DECEMBER 31, 2025.

(3) THE TERMINATION OF THE EV PILOT PROGRAM EXPANSION REQUIRED UNDER ITEM (1) SHALL NOT BE CONSTRUED TO:

BGE, headquartered in Baltimore, is Maryland’s largest gas and electric utility, delivering power to more than 1.2 million electric customers and more than 655,000 natural gas customers in central Maryland. The company’s approximately 3,400 employees are committed to the safe and reliable delivery of gas and electricity, as well as enhanced energy management, conservation, environmental stewardship and community assistance. BGE is a subsidiary of Exelon Corporation (NYSE: EXC).

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(II) LIMIT AN ELECTRIC COMPANY’S EFFORTS TO OPERATE AND MAINTAIN EV CHARGING STATIONS INSTALLED UNDER THE EV PILOT PROGRAM; OR

(III) IMPACT THE COST RECOVERY BY AN INVESTOR-OWNED ELECTRIC COMPANY FOR THE LIFETIME OF AN EV CHARGING STATION INSTALLED UNDER THE EV PILOT PROGRAM.

Rationale: As written, the bill would provide only two years for electric utilities to install chargers at multifamily properties. The proposed language clarifies that a utility with an existing program or program approved would be able to continue its current programs going forward.

Amendment No. 2

On Page 3, beginning with “shall” in line 24, down through “greater” in line 25, and substitute “**SHALL MAINTAIN UPTIME STANDARDS IN ACCORDANCE WITH FEDERAL NEVI STANDARDS OR ALTERNATIVE STANDARDS APPROVED BY THE COMMISSION**”.

Interlineated Amendment No. 2

~~7-904.~~

(A) ~~(1) AN EXCEPT AS PROVIDED IN PARAGRAPH (2) OF THIS SUBSECTION, AN ELECTRIC COMPANY OPERATING AN EV CHARGING NETWORK SHALL ENSURE THAT EV CHARGING STATIONS IN THE EV CHARGING NETWORK HAVE AN AVERAGE ANNUAL UPTIME OF 97% OR GREATER.~~ **SHALL MAINTAIN UPTIME STANDARDS IN ACCORDANCE WITH FEDERAL NEVI STANDARDS OR STANDARDS APPROVED BY THE COMMISSION.**

Rationale: The proposed language would align Maryland’s uptime standards with federal standards, provide flexibility to continue following the standards as they evolve, and grant the Commission the authority to make alterations that benefit Maryland.

Amendment No. 3

On page 4, strike “**QUARTERLY**” and substitute “**SEMI-ANNUAL**”.

Interlineated Amendment No. 3

(2) AN ELECTRIC COMPANY THAT OPERATES AN EV CHARGING NETWORK OR EV CHARGING STATION SHALL SUBMIT THE FOLLOWING EV CHARGING STATION DATA TO THE COMMISSION ON A **SEMI-ANNUAL BASIS** ~~QUARTERLY BASIS:~~

Rationale: Utilities currently report to the PSC on a semi-annual basis. The proposed language makes this reporting requirement consistent with current reporting requirements.

Amendment No. 4

On page 4, strike beginning with “**AND**” in line 15, down through “**COMPLETION**” in line 16.

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Interlineated Amendment No. 4

(II) FOR EACH EV CHARGING STATION:

1. CHARGING SESSION START AND END TIMES AND ~~RATE OF SUCCESSFUL COMPLETION;~~

Rationale: The language, as drafted, is unclear as to what constitutes a successful completion. Currently, the utility receives information related to when the charge session starts, ends, and the percent of charge.

Amendment No. 5

On page 5, strike beginning with “A” in line 24, down through “OCCURRED” and substitute, “**IN A REPORT REQUIRED UNDER §7-904(B) OF THIS SUBTITLE, THE NUMBER OF EV CHARGING STATIONS THAT FAILED TO MEET THE UPTIME REQUIREMENTS AND THE REASON THE EV CHARGING STATIONS FAILED TO MEET THE UPTIME REQUIREMENTS**”.

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Rationale: The suggestion of a corrective action plan will not provide the results intended because the charging station would have been repaired prior to the time the corrective action plan is filed. The new language proposes that the utility submit a report on the number of failed stations and the cause of the failure. This would give the Commission the necessary information to determine if there are properly functioning EV stations available throughout the utility’s service territory.

Amendment No. 6

On page 5, strike “AS APPROPRIATE” in line 28, and substitute “**SUBJECT TO §13-201 OF THE PUBLIC UTILITIES ARTICLE**”

Interlineated Amendment No. 6

(C) NOTWITHSTANDING SUBSECTION (B) OF THIS SECTION, THE COMMISSION MAY, **SUBJECT TO §13-201 OF THE PUBLIC UTILITIES ARTICLE**, ~~AS APPROPRIATE~~, IMPOSE A PENALTY ON OR TAKE ADDITIONAL REMEDIAL ACTION AGAINST AN ELECTRIC COMPANY THAT FAILS TO SATISFY THE UPTIME REQUIREMENTS UNDER § 7-904 OF THIS SUBTITLE.

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Rationale: This language incorporates the existing statutory language that authorizes the PSC to impose a penalty on a utility.

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HB 834 _EEE Information_ Stanek.pdf

Uploaded by: Jason Stanek

Position: INFO

STATE OF MARYLAND



OFFICE OF THE CHAIRMAN

JASON M. STANEK

PUBLIC SERVICE COMMISSION

March 27, 2023

Chair Brian Feldman
Education, Energy and Environment
2 West, Miller Senate Office Building
Annapolis, Maryland 21401

RE: HB 834 – INFORMATION – Electric Vehicle Charging Infrastructure – Requirements (Electric Vehicle Charging Reliability Act)

Dear Chair Feldman and Committee Members:

I write today to provide information regarding HB 834 – Electric Vehicle Charging Infrastructure – Requirements (Electric Vehicle Charging Reliability Act). HB 834 requires the Commission to expand the current EV Pilot¹ to permit participating electric companies to install EV charging stations in multifamily dwellings in underserved communities. Many of the utility pilot programs are currently scheduled to end in December 2023, although some programs will conclude in 2025. HB 834, as amended, allows for the deployment of additional utility-owned charging stations at multifamily dwellings, subject to reasonable cost limitations balanced with the public interest. This expansion is further limited to installing Level 2 EV charging stations and will terminate on December 31, 2025. These provisions align HB 834 with the existing EV Pilot Program and will help the utilities control their costs, consistent with the Commission’s statutory mandate to maintain just and reasonable rates. HB 834 will also increase utility costs for distribution system-related work and upgrades. These costs will be passed through to the ratepayers.

HB 834 also sets a reliability or average uptime requirement of 97 percent for all utility-owned and operated EV charging stations. On February 15, 2023, the U.S. Departments of Transportation and Energy finalized new EV charging reliability standards similarly requiring a 97 percent average annual uptime for publicly accessible charging stations funded under the National Electric Vehicle Infrastructure (“NEVI”) Formula Program. In anticipation of this federal rule, the Commission issued an order in January, directing the Commission’s EV work group to submit finalized reliability standards once the NEVI standards were released. HB 834’s uptime requirement will align utility EV charger reliability with federal and Commission

¹ PSC Case Docket No. 9478.

standards, which will ultimately lead to cost savings as the utilities procure EV charging equipment that meets national standards.

As amended, HB 834 requires the participating electric companies to maintain an adequate number of staff to maintain the 97 percent uptime requirement for their charging networks. If a utility fails in this regard, the utility will be required to submit a corrective action plan for achieving compliance with the law. The bill further authorizes the Commission to pursue additional remediation measures, including financial and/or operational remedies. This is consistent with the Commission's existing oversight authority to ensure that utilities deliver safe, reliable, and affordable services and programs that meet statutory standards and goals.

I appreciate the opportunity to provide information on HB 834. Please contact Lisa Smith, Director of Legislative Affairs, at (410) 336-6288 if you have any questions.

Sincerely,



Jason M. Stanek
Chairman

HB0834 - TSO - Electric Vehicle Reliability Act -

Uploaded by: Patricia Westervelt

Position: INFO

March 28, 2023

The Honorable Brian J. Feldman
Chair, Senate Education, Energy, and Environment Committee
2 West, Miller Senate Office Building
Annapolis MD 21401

RE: Letter of Information – House Bill 834 – Electric Vehicle Charging Infrastructure – Requirements (Electric Vehicle Charging Reliability Act)

Dear Chair Feldman and Committee Members:

The Maryland Department of Transportation (MDOT) takes no position on House Bill 834 but offers the following information for the Committee’s consideration.

House Bill 834 requires electric companies operating an Electric Vehicle (EV) charging network to ensure the EV charging stations capable of providing Level 2 Charging in that network have an average annual uptime of 97% or greater, as calculated with a methodology codified in the bill. Reporting requirements and other provisions of House Bill 834 apply to electric companies that install or maintain an EV charging station for public use whether they are participating in the EV Pilot Program established by the Public Service Commission (PSC) or utilizing federal funds.

House Bill 834 establishes a different reliability standard than the federal standards associated with federal funding for EV charger installations. On February 15, 2023, the Federal Highway Administration (FHWA) released National Electric Vehicle Infrastructure (NEVI) Standards and Requirements, which set minimum standards and requirements for any EV charging infrastructure project funded with federal funds. Almost \$60 million in NEVI funds will be invested in Maryland, as laid out in the State Plan for NEVI Formula Funding Deployment. An additional \$2.5 billion of discretionary grants will be available nation-wide through the federal Charging and Fueling Infrastructure Grant Programs (CFI), in which numerous Maryland communities have expressed interest. Diverging standards between federal and Utility-funded installations may inhibit efficient and effective deployment of a reliable EV charging network.

There are multiple differences between the requirements of House Bill 834 and federal standards. House Bill 834 defines uptime by charging “station”, measured as a percentage of both hours and days of a calendar year and calculated on a quarterly basis for the immediately preceding 12 months. The federal standard calculates uptime per charging “port”, in total minutes, and is calculated on a monthly basis for the previous 12 months. As amended, House Bill 834 would only apply to Level 2 charging stations operated by electric companies and not on DC Fast charging stations. The NEVI Standards and Requirements will apply to all DC Fast and Level 2 charging infrastructure funded with federal funds.

The Honorable Brian J. Feldman
Page Two

Additionally, federal standards address features not addressed in House Bill 834, including the interoperability of EV charging infrastructure; traffic control devices or on-premise signage acquired, installed, or operated in concert with EV charging infrastructure; data format and schedule for submission; network connectivity of EV charging infrastructure; and information on locations, pricing, real-time availability, and accessibility through mapping applications. Lastly, House Bill 834, as amended, exempts vandalism and force majeure, as defined by the PSC, from the reliability calculation. The federal standard exempts additional events from the reliability calculation, including scheduled maintenance and failure to charge due to the fault of the vehicle.

The Maryland Department of Transportation respectfully requests the Committee consider this information when deliberating House Bill 834.

Respectfully submitted,

Heather Murphy
Director of Planning and Capital Programming
Maryland Department of Transportation
410-865-1275

Pilar Helm
Director of Government Affairs
Maryland Department of Transportation
410-865-1090