

SUBJECT: HB 830, MEA Study of EVSEs in New and Pre-existing Multifamily Residential buildings (MUDs)

DATE: October 30, 2023

HCCA represents residents of Howard County on a variety of issues and testifies on proposed laws under consideration by the County Council. Our web site provides the range of issues and testimony, www.howardcountyhcca.org

In 2018, HCCA testified in favor of CB76-2018 for Howard County. This law was passed by the County Council and required one EVSE for every 25 dwelling units in new construction, apartments, condos, townhouses, etc. This legislation was the first of its type in the United States. Since then thousands of new units have been built in Howard County incorporating EVSEs into parking lots and parking structures. (Note that the requirement is for every 25 units and NOT for every 25 parking spaces since parking requirements for new construction vary). A key result of this infrastructure has Howard County with the highest per capita ownership of electric vehicles in Maryland.

We have not seen developers opposed to these EVSE requirements and there have been discussions with the county to increase the number of EVSEs in new MUD parking lots from 1/25 units to either 1/20 units or 1/10 units. The cost to developers is minor and is expensed and absorbed either in rental or for sale units. We do not view EVSE requirements as a negative since it is a positive in marketing both rental and for sale MUD units. It is much easier to incorporate EVSEs when they are being built rather than attempting to retrofit. Cost when building new MUDs is a function of adding electrical underground conduit, additional energy which may require an upgraded electrical transformer, and the EVSE itself. In all cases L2 EVSEs and not DCFC EVSEs have been added to MUDs through CB76-2018. DCFC EVSEs can range up to \$100,000 installed. (See the Joint Utilities EVSE Pilot Semi-annual reports filed with the Maryland Public Service Commission since June, 2019 regarding costs for Public Chargers).

Retrofitting existing MUDs are harder to do, but not impossible. We have about 19,000 MUD developments in Maryland. Paul Verchinski, a HCCA board member, and also was appointed by former Governor Hogan to the Maryland Zero Emissions Electric Vehicle Infrastructure Council (ZEEVIC) to represent the public. He has focused on how MUDs might be retrofitted for L2 EVSEs since about 40% of Maryland residents live in MUDs and EV drivers want to charge at home. Several case studies can be found on the ZEEVIC web site at https://marylandev.org/local_ev_resources/# This is also an equity issue since most Low and Moderate Income Households (LMIH) are in MUDs.

Transportation electrification is a key component of the Maryland Climate Solutions Now Act of 2022 with 40% of Green House Gas Emissions attributed to cars and light duty trucks. Most LMIH residents will buy used vehicles and convenient EVSEs in their MUDs are key to their buying EVSEs. 90% of EV drivers want to charge at home.

In some areas such as Baltimore, LMIH residents need to park on the street since they do not have parking lots for their developments. In those circumstances, parking meters should be replaced by EVSEs. This has been done in Bergen, Norway.

Currently under construction in Columbia is a LMIH development called Rosslyn Rise. This new development will have 1 EVSE for every 25 units in its parking area. New construction accommodates easily EVSEs while the major issue is retrofitting existing MUDs.

Howard County is located in the BGE utility area. In 2019 the Public Service Commission (PSC) established a Pilot for EVSE deployment in single family residences, MUDs, and Public fast chargers. The MUD approval was for 700 EVSE ports in the BGE service territory. After four years only about 250 plugs have been installed even with rebates and some BGE installed EVSEs at no cost to a Homeowners Association (HOA), called turn key (TK) installations. The 5 electrical utilities are required to provide Semi-Annual Reports (SAR) with details on installation cost and deployment. The latest SAR for BGE was filed on August 1, 2023 under Case No. 9478, Mail Log 304384. Page 18 of the SAR provides an incentive cost of \$16,602.37 per MUD property which may have more than 1 EVSE and multiple ports. Also on page 18 is a cost per EVSE Port of \$9.662. These are all retrofits for existing properties. To date, rebates and TK have not been successful. A different approach is needed. We suggest the following comprehensive approach through legislation that would be rate based:

1. Require the utilities to install and maintain one double port L2 EVSE for each HOA development and apartment complex in Maryland,
2. Require utilities to survey and include any infrastructure upgrades needed to support the initial L2 EVSEs,
3. Require utilities to provide the PSC with a grid impact assessment and cost estimate for any new/upgraded distribution lines and/or transformers to accommodate future L2 EVSEs at MUD locations by January 1, 2025, and
4. Require the PSC to instruct the utilities to incorporate this information and costs as part of their Distribution System Planning Process in order to implement transportation electrification under the Climate Solutions Now Act by 2031

While the above provides information on EVSE capital costs at MUDs, there are also ongoing maintenance and operational costs. Operational costs are a big problem for L2EVSEs at MUDs. If there are a number of L2 EVSEs co-located, then the cost of electricity becomes an unknown figure. What price should be charged per kilowatt hour? This occurs due to the imposition of demand charges at these locations. Electricity bills include charges for the total amount of electricity (kilowatt hours) consumed in the monthly billing cycle, but also impose an additional charge, a “demand charge” keyed to the maximum amount of electricity used in any given 15 minute (or one hour) period during a billing cycle. Typically, today, an EVSE may sit idle for a good

part of the day, only to draw significant power for short periods of time while electric vehicles are recharged. Demand charges are not assessed for EVSEs located in residences under a residential tariff. Just because one lives at a MUD, they should not be charged for KWH differently from other residences like single family homes. EVSEs are a new class of electrical devices and are key to transportation electrification in Maryland. Maryland is currently one of the top 10 states for electric vehicle adoption but mass adoption is a function of the build out of EVSEs under a viable private sector business plan for both DCFC and Level 2 EVSEs. Demand charges in the past have been aimed predominantly at commercial and industrial facilities where electrical useage can be easily known MUDs are generally included in commercial tariffs. (Tariffs charged for commercial buildings are less when demand charges are in place). . This is not the case for EVSEs. A reasonable tariff should be considered for EVSEs with out any demand charges or there should be a demand charge holiday for the next 5 years as EVSE are installed at MUDS.

Authorized by the HCCA Board,
Stu Kohn, President