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BILL NO.:	House Bill 0210 Maryland Building Performance Standards – Fossil Fuel Use and Electric–Ready Standards
COMMITTEE:	Environment & Transportation Committee
HEARING DATE:	February 14, 2023
SPONSOR:	Delegate Acevero
POSITION:	Defer consideration and consider in conjunction with HB 1279
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The Office of People's Counsel ("OPC") supports the substance of House Bill 210. However, OPC recommends that the Committee defer consideration of HB 210 so that it can be considered at the same time as House Bill 1279, the "Better Buildings Act."

HB 210 requires most new buildings in Maryland to meet all energy demands without fossil fuels (i.e., to be fully electric) and requires new construction that cannot feasibly be built without fossil systems and appliances to meet a separate "electric-ready standard." OPC supports the substance of HB 210 because fully electrifying new buildings is in the economic interest of Maryland residential utility customers, as well as a critical step for Maryland's achievement of its greenhouse gas ("GHG") reduction goals.

Direct fossil fuel use in buildings for space heating, water heating, and cooking accounts for approximately 14 percent of Maryland's GHG emissions. For Maryland to achieve net zero emissions by 2045 in accordance with the Climate Solutions Now Act ("CSNA"), both new and existing buildings must generally electrify these energy loads. This makes economic sense as well as climate sense, because as a 2021 building decarbonization analysis for the Maryland Commission on Climate Change found, all-

electric new residential and small commercial buildings are more economical in Maryland than mixed-fuel new construction.¹

In light of this conclusion, in 2021, the Maryland Commission on Climate Change recommended that the General Assembly "require the Maryland Building Code Administration to adopt a code that ensures that new buildings meet all water and space heating demand without the use of fossil fuels," along with a process whereby buildings that cannot electrify cost-effectively may obtain variances if they meet electric-ready standards.² These requirements were included in the initial drafts of the CSNA but removed from the bill before it was passed, in part due to the concern that Maryland's electricity grid would be unable to handle the increased demand from a highly electrified building sector. Instead, the CSNA stated that the State's intent was to move toward electrification of the building sector and directed the Public Service Commission ("PSC") to conduct a study "assessing the capacity of each company's gas and electric distribution systems to successfully serve customers under a managed transition to a highly electrified building sector."

The PSC submitted its analysis to the General Assembly on December 29, 2023.³ It concludes that across three "high electrification" scenarios modeled to reduce statewide GHG emissions 60 percent by 2030—including a scenario where buildings electrify mainly by using less efficient heat pumps with electric resistance backup—electricity load growth would range from 0.6 percent to 2.1 percent through 2030.⁴ Moreover, each scenario assumed minimal levels of "demand-side management" strategies like energy efficiency and load flexibility (e.g., time-varying rates that shift electricity consumption to times of non-peak demand).⁵ The study found that load growth could be reduced by 0.2 to 1.2% per year with additional demand-side management programs.⁶

¹ Energy + Environmental Economics ("E3"), *Maryland Building Decarbonization Study: Final Report*," (Oct. 20, 2021) at 37. More recently, RMI's 2022 report, *The Economics of Electrifying Buildings*, found that in nine U.S. cities representing a range of climate zones, all-electric single-family new construction is more economical to build and operate than a home with gas appliances and has lower lifetime emissions. *Available at* <u>https://rmi.org/economics-of-electrifying-buildings/.</u>

² Maryland Commission on Climate Change, *Building Energy Transition Report: a Roadmap for Decarbonizing the Residential and Commercial Sectors in Maryland* (November, 2021), at 5, *available at* <u>https://mde.maryland.gov/programs/air/ClimateChange/MCCC/Documents/2021%20Annual%20Report</u> %20FINAL%20(2).pdf.

³ Serigici, Ramakrishnan, et al., *An Assessment of Electrification Impacts on the Maryland Electric Grid*, prepared by the Brattle Group for the Maryland Public Service Commission with support from Applied Energy Group and Mondre Energy (Dec. 19, 2023), *available at* <u>https://www.psc.state.md.us/wp-content/uploads/MD-PSC-Electrification-Study-Report.pdf</u>.

⁴ *Id.* at 2-3.

⁵ *Id.* at 3.

⁶ Id.

As the PSC noted in transmitting the analysis to the General Assembly, these load growth rates are significantly lower than the rates that Maryland experienced in the 1980s (4.9 percent average annual growth) and comparable to those experienced from 1990 to 2010 (1.2 percent to 1.5 percent). Thus, the Commission concluded that "[t]hese results show that peak load growth through 2031 with high electrification of the building sector will be comparable to or less than the growth rate that the Maryland system has seen over the past 40 years."⁷ In other words, the PSC's analysis satisfies concerns about electricity load growth expressed during passage of the CSNA, especially if the General Assembly and the Commission require electric utilities to maximize energy efficiency savings and load flexibility.

Finally, OPC supports the electrification of new buildings because it will reduce the build-out of new gas infrastructure—and thereby insulate the owners and inhabitants of those buildings—and gas customers as a whole—from rising gas system costs. As OPC has explained,⁸ increasing electrification—which will happen even without HB 210, only to a lesser extent—will lead to fewer gas utility customers and sales. If sales decline faster than gas utilities' asset bases depreciate and faster than utilities can lower their operating and maintenance costs, the utilities will seek approval for higher gas rates to recover their costs over fewer unit sales. Higher rates will in turn spur more customers to electrify, and those left on the gas system will be required to pay even higher rates. This vicious cycle will have the greatest impact on low- and moderate-income households who lack access to the upfront capital needed to electrify or rent from building owners that lack incentive to electrify.

This trend, which has already begun, was the impetus for a petition that OPC filed with the Public Service Commission in February, 2023 to require long-term gas utility planning and certain immediate actions by the utilities.⁹

House Bill 1279, the "Better Buildings Act," includes similar requirements to fully electrify new buildings, but also: (1) applies those requirements to existing buildings when they are significantly improved, (2) establishes a solar-ready standard for new buildings that are less than 20 stories tall and have 20,000 square feet or more of continuous roof space; (3) establishes an electric-vehicle-ready standard for all new

⁷ Fredrick H. Hoover, Chair, cover letter to President Ferguson and Speaker Jones accompanying *An Assessment of Electrification Impacts* (Dec. 29, 2023), *available at* <u>https://www.psc.state.md.us/wp-content/uploads/MD-PSC-Electrification-Study-Report.pdf</u>.

⁸ Office of People's Counsel, *Maryland Gas Utility Spending: Projections and Analysis* (Oct., 2022), with 2023 update, *Maryland Gas Utility Spending: Updated Revenue Projections and Bill Impact Analysis* (Nov, 2023), *available at https://opc.maryland.gov/Publications*.

⁹ The Commission docketed OPC's petition to Case No. 9707 and issued a notice on June 14, 2023 requesting public comments through October 10, 2023.

buildings;¹⁰ and (4) establishes energy conservation standards for new buildings that have 25,000 square feet or more of floor space.

HB 210 and HB 1279 represent different approaches to building electrification essentially, "all new buildings should be electric" v. "all new buildings should be electric and also be built to maximize energy efficiency, the expansion of distributed solar, and the charging of electric vehicles." In the absence of HB1279, OPC would support a favorable report of HB 210. But OPC conceptually supports the "electrification plus" requirements in HB 1279 and so expects¹¹ to recommend a favorable report of that bill as well. Because of the overlap between the two bills, OPC recommends that the Committee defer consideration of HB 210 until it can be considered together with HB 1279.

Recommendation: OPC recommends that the Committee defer consideration of HB 210 and consider it in conjunction with HB 1279, the Better Buildings Act.

¹⁰ HB 830 of 2023, codified at Md. Code Ann. Pub. Safety 12-205, establishes an EV-readiness standard for new single-family detached houses; duplexes; and certain town houses, but does not establish an EV standard for multifamily residential buildings.

¹¹ OPC is currently reviewing HB 1279, which contains significantly more detail than HB 210.