An electric-vehicle working group has handed Maryland's top utility regulator a wide-ranging series of proposals it says would guide the state toward the vast infrastructure expansion needed to meet its emissions goals.

The letter to the Maryland Public Service Commission (PSC) contains input from the state’s four main utilities on how they could invest in a five-year effort to build more than 24,000 new charging stations covering an estimated 80 percent of the state. It's part of a larger push launched by the PSC in 2016 to modernize the state’s electricity distribution system (Energywire, Dec. 8, 2016).

In Maryland, this conversation is happening as utilities across the country ponder ways they can get ahead of a mass transition to electric vehicles.

"I think it's safe to say that if approved, the proposal would constitute one of the largest EV-charging infrastructure buildouts in the nation, obviously lagging behind California," said Marissa Paslick Gillett, a senior adviser to the state PSC chairman and a leader on what's called the PC44 Electric Vehicle Work Group.

"It's the most ambitious [effort] that I'm aware of on the East Coast," she said.

Maryland is trying to hit at least two climate-related targets: an 80 percent reduction of greenhouse gas emissions by 2050, and the nearer-term one of getting 300,000 zero-emissions vehicles on the road by 2025.

Like other states that signed on to adopt California's mandates, Maryland is far behind the curve on the latter goal, with 9,400 cars as of last June. And money already appropriated for EV chargers through programs like the Volkswagen settlement fund won't come close to doing the trick, the work group said.

Much of the state's EV infrastructure built since 2011 is on special corridors approved by the federal Department of Transportation or at facilities owned or leased by the state. The proposed portfolio would aim to deploy charging stations well beyond that, with incentives for workplaces, fleets, multi-unit residences and other locations across areas serviced by utilities Baltimore Gas & Electric Co. (BGE); Potomac Electric Power Co. (Pepco); Delmarva Power, a unit of Exelon Corp.; and Potomac Edison Co.

Those utilities joined several environmental, electric vehicle advocates and other groups to submit plans that would involve about $105 million in investments from mid-2018 to 2023. BGE and Pepco would lead the pack in sinking about $48 million and $32 million into projects, respectively.

Those investments would still amount to less than one-third of what would be needed to support the 2025 zero-emissions goal, according to the group’s projections.

"Members of the PC44 EV Work Group acknowledged from the beginning that it is not the responsibility of ratepayers to foot the bill for the entirety of the remaining charging infrastructure needed to fill the gap," said working group’s letter to the PSC.

The group wrote, however, that a case can be made that a "targeted ratepayer investment" made by utilities alongside private-sector investments "will seed the burgeoning Maryland EV landscape."

Residential customers could expect a peak monthly rate impact ranging from 25 cents for Potomac Edison to 42 cents for Delmarva to recover the infrastructure costs.

Gillett contrasted that favorably with the state’s up to $2 surcharge approved in 2011 to improve natural gas pipeline systems.

"In the long term, I believe all ratepayer classes will see a decrease in costs because of the increase in sales that the utilities are projecting associated with the proliferation of EVs," she said.

An advisory council would also be created to assess the portfolios proposed by the utilities as they develop, including price-tracking at utility-owned and third-party stations.

The PSC is being asked to issue a final decision by May 18, with the utilities’ portfolios launching on July 1.