

June 11, 2024

To: New Jersey Board of Public Utilities **From:** Eric Blomgren, Chief Administrator & Director of Government Affairs New Jersey Gasoline, Convenience Store, Automotive, Association (NJGCA)

Re: Docket No. QO24020126, Energy Master Plan (EMP) Review

NJGCA represents a large portion of the approximately 2,300 motor fuel retailers in this state. Our chief concern in the Energy Master Plan, and in any potential updates, relates to the decarbonization of transportation. We continue to believe that there is a cornerstone role to be played by existing motor fuel retailers in the installation of both EV fast chargers and hydrogen refueling, in addition to continuing to provide motorists with access to liquid fuels. However, we must oppose any attempt to directly or indirectly mandate a switchover.

EV Fast Chargers

As I have followed this issue over the years, I have seen commentators from time to time say that if the country's passenger vehicles were all battery electric vehicles (BEV), it means no one would ever have to go to a gas station again. Contrary to these claims, I do fervently believe that there is a place for a business similar to the traditional gas station, even in a hypothetical world of only battery-electric vehicles. It may not be as big a market as it is now, but it will be there.

The fact is, a large portion of the population will be not able to or will not want to recharge their cars overnight in their garage (even if the grid could fully handle that). What would happen to a household with more than one BEV? Would someone have to wake up at 3am to switch the cars being charged overnight in order for both of them to be ready to go for the morning commute? What happens when that two-car household adds a third car when a child reaches driving age? What about motorists who have to park at least one car in the street, are we envisioning a world where every residential street is lined with EV chargers the way some city streets are lined with parking meters? Who will maintain those stations, and how well will they maintain them? Are homeowners going to run wiring all the way to the street for an extra charger, and if so how will they prevent someone else from parking in front of their house and blocking their extra charging station?

What about people who live in apartments? Sometimes they are provided a dedicated parking spot, but can we expect the apartment building owner to install dozens or hundreds of charging stations for each unit? Will city streets be lined with Level I or II charging to meet the needs of local

residents, and if so will those just looking for a spot to park be allowed to park in front of a charger they aren't using?

Corporate office buildings may start to offer EV charging more frequently than they do now, but how many can we realistically expect them to install and maintain? Certainly not enough for every single car parked there, for both employees and those visiting for meetings. How many stations can we reasonably expect any given hotel to install and maintain, even though their client base will be people driving long distances and sleeping over or attending a conference and then traveling a long distance? Go look at the crowded parking lot on a Saturday afternoon at a mall or grocery store or Walmart or movie theater and imagine if just *twenty* percent of those cars were BEVs, much less all of them. It's easy to imagine these locations installing a few chargers to meet a very small need, but not enough to cover dozens or hundreds of cars connecting at the same time, not to mention the cost to properly maintain them. The fact is these businesses have no more desire to install and maintain that many charging stations than they do to install an underground storage tank and offer gasoline for their customers.

There is, therefore, a market that will exist for an easily accessible location where a motorist can pull their BEV into a space, plug it in, wait a few minutes, pay a reasonable fee, and be on their way. Instead of the five minutes it currently takes to fill a car up with gasoline, it may take twenty minutes. Future stations offering this service would likely work to accommodate the motorist with more options to comfortably spend the extra time they are waiting; perhaps with amenities like free Wi-Fi, or a nice seating area inside their expanded and cleaned up convenience store where they offer for sale fresh coffee and other goods. These in-store sales would likely be where the owner makes his profits, as is the case currently.

<u>Market forces have already determined where the best locations are for the transportation refueling</u> <u>infrastructure; it's the location fuel retailers already are</u> and have survived at for decades now. Dedicated stations are not solely going to be needed as an emergency stop in the course of the rare 200+ mile trip; for some motorists it will be the most convenient, most plausible, or perhaps only way for them to recharge their BEV. I am confident the market will provide for it—if it is allowed to that is.

So why haven't more stations gone out and made the investment? The immediate capital cost is probably the biggest reason. For the business model I've discussed, fast charging is a must. That requires an immediate upfront cost of tens of thousands of dollars per charging station, likely over \$100,000. Traditionally, a big startup investment like this is spread out and amortized over months or years.

This is an area where subsidies can play a big role in getting chargers to break through. Targeting them at small businesses not only ensures that the money will only go to those who have a real need for them, but also keeps down the cost to the State.

I also must emphasize that while there is definitely a role for the State in providing some basic regulations in order to set up and maintain a competitive marketplace, it must avoid going too far in trying to oversee every aspect of how the market should work, or where charging sites should be located. There must remain enough freedom for the marketplace to react to consumer trends and behaviors as they start to become more apparent.

The State should also take care when designing the structure of its grant programs to allow maximum flexibility in the installation of these fast chargers, including for the type of charger and the amount of chargers a location must install. For example, one charger company we have been working with has a battery storage capability in its device, allowing it to pull more slowly from the grid but still pump energy to the car at a fast charger speed. Under some definitions, it does not qualify for a full grant under the Bipartisan Infrastructure Act.

As another example, the first phase of the federal program wants projects that are at least able to fast charge four vehicles simultaneously. Many of our members would not be interested in such an installation even if it were completely free. By our analysis, about 70% of current fuel retailers only have four gasoline dispensers or fewer—that is to say, they are small locations. Adding in enough fast chargers, and associated electrical breakers, takes up a significant amount of space on the property, and only to service less than ten percent of the marketplace. Providing grant money for a single charger would be more effective in getting 'a foot in the door', and if the demand proves to be there, more could be added later. But given the choice between installing several fast chargers and zero, most will choose zero.

The State also needs to ensure that once grants for projects are awarded, the money gets out the door as fast as possible. We have one member who was awarded a grant through the State's 'It Pays to Plug In' program. There was a significant delay in construction while the DEP was getting around to sending out the money. By the time the money was released, there were financial problems with the charging company, and now the project may not be completed at all, whereas if the money was quickly released (for a project DEP had already approved), the fast chargers could have been open for business already.

Businesses should have a good deal of freedom in pricing the charging services they are providing. They should be able to charge for the electricity that the motorist is consuming, and at a price that is determined by competitive market forces. Retail prices should be allowed to change frequently as the grid demands it. In the future we may see street signs advertising the current price for electricity, just as we currently drive by and see different prices for gasoline. Perhaps those prices may even change on the digital sign by the hour, in reaction to various strains on the grid and as ways to incentivize commuters to power up at times that are more affordable.

One factor that could severely limit a free and functioning EV charging market is the growing threat of utility companies moving in and suffocating everyone else who could ever be interested in this market, perhaps even with direct help from the government. The electric utilities, more than any other corporation, are able to look at the capital investments in public charging stations as a small cost that does not need to be extracted from the people using the charging stations, but from the millions of households and businesses who are ratepayers. No genuinely private company can ever compete with this state-sponsored market advantage, and it could easily lead to an unnecessary monopoly that will ultimately hurt motorists through the higher prices and poorer services that monopolies always lead to. It amounts to a massive wealth transfer away from independent small businesses and households and towards massive corporations. Not only that, but the increase in electric rates would be paid by all ratepayers, including those businesses who are being undercut because of that exact rate increase. Utility companies should only be allowed to generate the electricity and get it to a site location, other players in the market should then be responsible for the charging device and the sale of the charging to the motorist.

Hydrogen 199

While much of the buzz about alternative energy lately has been around battery electric cars, we cannot emphasize enough not to discount a major role for hydrogen fuel cell vehicles. The infrastructure model for hydrogen fueling is very similar to the one already widely used and accepted for transportation fuels. We cannot underestimate the role that consumer behavior and consumer desires influence purchasing decisions, especially for something as important as the everyday mode of transportation. Having to make a point of plugging in your car somewhere every day, and "refilling" twice as frequently because of the shorter range will prevent a lot of motorists from adopting an EV even if the car were the same price as a gasoline-powered one, and even if there were readily available chargers.

This is not just speculation, earlier this year Rutgers-Eagleton released a poll in which they asked New Jersey residents their thoughts on EVs.¹ 56% said they were not likely to buy an EV. The pollster then asked an open-ended question to those residents about why. The two concerns most widely discussed—cost and the lack of public infrastructure—were cited by only 39% of people. Those two concerns could be addressed by government spending. But just about all the rest cited reasons that suggest they fundamentally are not interested in these types of vehicles, even if they were the same price as gas cars and if chargers were all over the state. They ranged from the inconvenience of having to charge so frequently, to concerns that constructing the batteries is bad for the environment, to a simple preference for gas-powered cars.

¹ <u>https://eagletonpoll.rutgers.edu/wp-content/uploads/2024/02/Rutgers-Eagleton-Poll-Electric-Vehicles-02.16.24-</u> <u>FINAL-EMBARGOED-PDF.pdf</u>

With hydrogen fueling this problem evaporates, it takes as long to refill a car with hydrogen as it does to fill it with gasoline, the car can travel almost as far on one tank, and the cost equivalent is not too much higher. The Biden Administration's recent announcement of a major hydrogen hub in eastern Pennsylvania also allows New Jersey to be at the forefront of the expansion of this fueling method.

Hydrogen looks particularly promising for heavy duty trucking, which needs to carry cargo great distances without stopping. Adding more batteries to provide greater range weighs down trucks, which then need more batteries to travel further, in a vicious cycle. It also would mean truck stops would need to install much more powerful chargers to provide all that electricity when it's needed, which at scale may not be logistically possible. Hydrogen provides a great solution to this problem, and once hydrogen refueling has been installed to service trucks, it will then be available for passenger vehicles as well.

I also suspect that if someone were to calculate the investment it would take to fully electrify the state's transportation infrastructure, compared to the cost to meet all demand with hydrogen, it may very well be more economical to go with hydrogen since while one station is far more expensive than one EV charger, you also only need a fraction as many of them as you do EV chargers. All of the state's current passenger vehicles are already fully serviced by just over 2,300 gas stations.

While it's true that much of the hydrogen in industrial use now comes from natural gas, so does most of the electricity that will be going into a BEV from any charging device. Just as that natural gas can eventually be replaced with a cleaner source, so too can clean power be used to create hydrogen fuel. There are other concerns with BEVs that fuel cells do not have, such as what happens to the batteries when they can no longer be effectively used, or where the rare-earth minerals like cobalt and lithium needed to power these batteries will come from. So far many are concentrated in places like the war-torn Democratic Republic of Congo, and some mines there have been found to use child labor.

Mandates

While we are not opposed to incentives for other types of transportation fueling, we must oppose the imposition of mandates and bans like the California Advanced Clean Cars II rule. Any transition to more EVs or to exclusively EVs should be made through the conscious choice of the motoring public, and all involvement by the state should be through offering positive incentives. If EVs are always better in every circumstance for every motorist, then simply let the market do its work without a ban. If some are not choosing EVs over gas vehicles, then instead address the specific concerns they have. Much of the justification for that rule is to address the genuine problem of climate change, which is being affected by the addition of carbon dioxide to the atmosphere by human activities. The DEP rule proposal estimated that in 2050, this policy (if actually followed) would lower carbon emissions by 16.2 million metric tons per year. But climate change is a strictly global problem, and our emissions have as much impact on our coastline as they do on the coastline in China, and vice versa. According to the IEA, in 2022 worldwide emissions were 36.8 billion metric tons. This means that if the policy works exactly as planned, after twenty-five years and all the economic costs and disruptions, the policy will only lower emissions by 0.04%. Does a 0.04% decline, in a quarter century, have any discernible impact in mitigating climate change's impact on our state?

We are also highly skeptical of building electrification mandates, whether for existing structures or renovations. If electrification ever offers better service for a lower price, then small businesses will adopt it without need for a mandate. If electrification of small commercial spaces is more expensive, then these small businesses cannot afford yet higher costs.

Finally, small businesses need electricity to operate, and they are forced to pay whatever bill the utility company sends. We urge that the BPU not allow overall rates to be increased by a meaningful amount to pay for any of the goals in this EMP overall. Electric bills are regressive, and as necessary to pay as taxes are. Small businesses are always eternally struggling to keep their doors open in the face of competition from big corporations, and we should be focusing on making their utility costs lower, not higher.

Conclusion New JERSEY GASOLINE > C-STORE > AUTOMOTIVE ASSOCIATION

The last point to emphasize, because it seems to get lost in some of these debates, is that no one should imagine the fuel retailer of the future as only selling one type of fuel, with the only debate being whether it will be only electric charging, hydrogen, or still gasoline. Just because our current transportation infrastructure is effectively entirely one type of fuel, does not mean it has to function only that way. Just like how consumers are comfortable picking different cell phone models, with different operating systems, and different data carriers; the fueling station of the future may have a few BEV fast chargers, next to a few hydrogen pumps, next to one or two gasoline dispensers, next to a dispenser for highly efficient super-octane gas.

As the Board continues to work on the Energy Master Plan, and on implementing it, I ask that you continue to involve this association. We are happy to work constructively to ensure the best fueling infrastructure possible. Our association's motto is that we serve the businesses that serve the motorist, and we look forward to continuing to serve them for a long time to come.