

New Jersey Energy Coalition Energy Master Plan Comments 6/12/2024

NJ Board of Public Utilities 44 S Clinton Ave. Trenton, NJ 08625

Re: Docket Number: Q024020126

To: Secretary of the Board, Sherri Golden

On behalf of the New Jersey Energy Coalition (NJEC), we submit these comments related to the New Jersey Energy Master Plan (NJEMP). We first would like to thank the hard-working staff of the NJ Board of Public Utilities, its commissioners, and all state agencies involved in the process.

The NJEC is the only state-wide organization that represents the entire energy sector. Our membership is diverse and includes companies and organizations working in nuclear energy, offshore wind, natural gas, fuel cells, solar, energy efficiency, unionized labor, distributed energy resources, as well as law firms, right-of-way companies, women- and minority-owned businesses, and more. The NJEC sees a future requiring more energy rather than less, emphasizing the critical importance of energy efficiency. Accordingly, we must invest in all forms of energy and new innovative energy systems like advanced nuclear, renewable natural gas, hydrogen, wind, solar, energy storage, and fusion. NERC issued concerns about "future energy short falls" which New Jersey should consider in the Energy Master Plan.

A lot has changed since the last publication of the NJEMP. No one could have predicted how fast our world would transform because of COVID-19, the war in Europe, and advancements in technology. New factors must now be considered like artificial intelligence, massive data centers, energy impacts from remote work, increased energy usage at varying times, and the overall increased demand on our energy systems. The key issue we must address is where the additional energy we need will come from and what it will take to transmit it. The state will need to focus on programmatic solutions for the load growth in the energy. The solutions to this issue will require a multi-pronged approach including more transmission, raising the question of whether the transmission will be sourced from within the state or brought in from across the Delaware River into New Jersey?

Given the EMP's breakdown of areas, there must be a focus on innovation that allows companies and groups to invest where needed with prudency and support from the NJBPU or other state agencies involved.

1. Innovation in energy:



- a. Investments in pilot programs for fuel cells, batteries, long-duration storage would encourage additional investments and allow innovation to take place. These pilot programs can be considered a target for New Jersey's future along with the other aspects of the NJEMP. The U.S. Department of Energy has issued \$505 million in funding for long-duration energy storage demonstrations. The U.S. DOE defines it as "storage systems capable of delivering electricity for 10 or more hours in a duration."
- b. New Jesey must consider how and where advanced nuclear energy technology fits into the energy portfolio. Advanced nuclear energy technology would directly support the clean energy initiatives in New Jersey, support the energy load growth in New Jersey, and create additional careers in energy.
- c. Hydrogen energy is used currently in other parts of the country like Hawaii, which has been using hydrogen as an energy source for nearly half a century.ⁱⁱⁱ
 - i. Using hydrogen in the transportation sector can significantly reduce emissions. The U.S. DOE has reported that "[e]missions from gasoline and diesel vehicles—such as nitrogen oxides, hydrocarbons, and particulate matter—are a major source of this pollution. Hydrogen-powered fuel cell electric vehicles emit none of these harmful substances—only water (H₂O) and warm air."
 - ii. FuelCell Energy has a "Tri-Gen" operating in California that uses biogas to produce hydrogen for the cars and trucks, and electricity for the port.
 - iii. Southern New Jersey is part of the MaCH2 Hub^{vi}, which was awarded \$750 million in funding from the U.S. Department of Energy through its hydrogen hub program.
 - iv. Renewable Natural Gas (RNG)/biogas is a home-grown energy source that can be tapped into today to use wastewater systems, landfills, and food-to-waste facilities. Using RNG/biogas would make New Jersey less dependent on other states, create careers here in New Jersey, and help reduce wasted emissions where some facilities burn the biogas.

2. Incentives:

- a. New Jersey's incentives need to align with the federal tax incentives in the Inflation Reduction Act (IRA) to make New Jersey more competitive.
 - i. Aligning our state incentives with federal tax credit and incentive programs may help decarbonize the transportation and building sectors. It would also drive more investments.
- b. New Jersey incentives should make it easier for companies to deploy distributed energy resources (DER). DER like fuel cells, batteries, solar, and other forms, can contribute to our energy needs. Some fuel



- cells can provide power to the grid, needed energy for gas systems, and capture carbon.
- c. New Jersey's incentives should also reward innovative ideas, like the solar array that was built in Bayville, NJ^{vii}, thereby expanding the clean energy innovation economy.

3. Investing in what we have:

- a. Members of the NJEC want to be able to invest in New Jersey. Allowing investments in the energy sector will unleash the economic engines New Jersey needs now and in the future.
- b. New Jersey needs to invest more into workforce development for the energy sector. Competition among regions throughout the nation is giving the workforce great opportunities, which means New Jersey must be competitive for those careers.
- c. Grid modernization is important, not just for the energy transition, but also for reliability. A modern grid that can move energy as needed will provide society with an overall more reliable system. The focus on the distribution systems needs to ensure that the electric distribution companies (EDC) are made whole and allow DER to connect at an easier and more cost-effective manner.

In conclusion, the NJEC thanks the NJ Board of Public Utilities, its President, commissioners, staff, and other state agencies involved for the opportunity to provide comments on the NJEMP. Energy is the backbone of our economy and society. Because of energy, the individual's ability to innovate unleash their potential has never been greater than it is today.

Thank you,

Erick Ford President, NJEC

ⁱ EIA, NERC reports some U.S. regions at risk for energy shortfalls in extreme summer conditions, https://www.eia.gov/todayinenergy/detail.php?id=62243#:~:text=Parts%20of%20the%20United%20States%20could%20be%20at,Electric%20Reliability%20Corporation%E2%80%99s%20%28NERC%29%202024%20Summer%20Reliability%20Assessment (last accessed 6/11/24).

ii U.S. Department of Energy, Long-Duration Energy Storage Demonstrations, https://www.energy.gov/oced/long-duration-energy-storage-demonstrations-0#:~:text=DOE%20defines%20LDES%20as%20storage,or%20more%20hours%20in%20duration (last accessed 4/26/24).

iii Hydrogen, Hawaii gas, https://www.hawaiigas.com/sustainability/hydrogen (last accessed 5/1/24).



iv U.S. Department of Energy, Alternative Fuels Data Center, accessed 6/1/24).

v FuelCell Energy and Toyota Motor North America Celebrate Launch of World's first "Tri-Gen" Production System at the Port of Long Beach, https://pressroom.toyota.com/fuelcell-energy-and-toyota-motor-north-america-celebrate-launch-of-worlds-first-tri-gen-production-system-at-the-port-of-long-beach/ (last accessed 5/2/24).

vi MaCH2 Hub, https://mach-2.com/about-mach2 (last accessed 5/3/24).

vii Governor Murphy's Comments on Bayville, NJ Solar Array, https://www.facebook.com/governorphilmurphy/videos/governor-murphy-to-make-solar-energy-announcement-in-bayville-watch-live/964600611715544/ (last accessed 5/25/24).