

June 12, 2024

New Jersey Board of Public Utilities
44 South Clinton Avenue
1st Floor
PO Box 350
Trenton, NJ 08625-0350

Submitted online to the docket via Post Comments module at <http://publicaccess.bpu.state.nj.us>

RE: Docket No. QO24020126 The 2024 New Jersey Energy Master Plan Request for Information

Dear Board Representatives,

We greatly appreciate the opportunity to participate as a stakeholder in the review and update of New Jersey's Energy Master Plan through this Request for Information process and future activities helping to plan and implement the state's energy transition.

We are in support of utilizing incentives to bring about the desired transition of a "low carbon" future in the residential, commercial, industrial, transportation, agricultural, and power generation sectors. However, expectations and targets of achieving the transition must be tempered with the realities of current technological abilities, fuel supply and intermittency, human capital and labor availability, materials scarcity, and land use opportunity costs, among other factors.

To minimize the potential risks of implementing the energy transition it is recommended to focus on programs to shift residential, commercial, industrial, transportation, and agricultural sectors from fossil fuel-based combustion activities as a source of energy and power to that of electricity, i.e. electrification. This shift should apply where it makes sense, shows and economic and environmental benefit, allows for technological choice, and does not cause a potential hardship for the user or sector. The intended consequence of this gradual shift to electrification is a decrease in air emissions, water discharges, and waste generation along with economic gain, quality of life improvements, and the general widespread benefits involved with human innovation.

These sectors will need a dependable source of electricity to successfully implement the shift to electrification. Forecasts estimate a 2x-3x increase in electricity demand over the next few decades to meet the electrification needs of these sectors. Currently, the only proven technology that can fulfill this demand in the most reliable, economic, and environmentally friendly manner is the deployment of natural gas fired combined cycle combustion turbine facilities. In addition to the significant new combined cycle capacity needed to meet this unprecedented demand is the need to deploy a mix of natural gas fired simple cycle combustion turbines, on/offshore wind, solar, and battery energy storage technologies as well. This creates a mosaic of power generation sources and storage for a grid operator to manage, ensuring the "lights are kept on" during any fuel supply event whether it be a curtailment of natural gas, lull in the wind, successive overcast days, or a depletion of energy storage.

The electrification will result in a net statewide emissions decrease taking into consideration an increase in power generation contributed emissions due to the increased deployment of natural gas fired combustion turbine technologies, including the displacement of the generation currently being imported from Pennsylvania, with the significant decrease in emissions resulting from the gradual electrification of the residential, commercial, industrial, transportation, and agricultural sectors.

Once a power generation technology has been proven to provide similar electric reliability characteristics with a decreased environmental impact as compared the natural gas fired combined cycle then that technology will be gradually deployed and replace the existing and future fleet of combined cycle facilities in the decades ahead. This future technological transition will be like-kind to the recent transition of coal/oil boiler power stations to the current combined cycle facilities. Nationally, this recent transition, to a predominately natural gas fired combined cycle combustion turbine power generation fleet, has decreased NOx, SO2, and CO2 emissions attributed to the fossil fueled power generation sector by approximately 87%, 94%, and 36% respectively over the last two decades¹. These decreases will become more significant as more coal/oil boiler power stations are slated to retire over the next few decades.

New Jersey has succeeded in the recent power generation energy transition, retiring its last coal boiler power generation facilities back in 2022. It is now positioned to become a net power generator utilizing a mix of efficient technologies primarily driven by the existing and future combined cycle combustion turbine fleet that will be complemented by simple cycle combustion turbines, on/offshore wind, and solar technologies utilizing battery energy storage.

To assist in the deployment of new clean power generation technologies we are actively reviewing and in development stages of various projects including implementing clean fuels such a hydrogen and bio/renewable natural gas and liquid fuels, battery energy storage, and solar in addition to enhancements and efficient improvements on our current fleet.

We look forward to working with the NJBPU and related stakeholders and becoming a key contributor to New Jersey's energy transition future.

Sincerely,



Matt Lydon
VP of Compliance

¹ Data Query: <https://campd.epa.gov/> (Emissions, Annual Emissions, National, 2000-2023)