Board of Public Utilities

ATTN: Sherri L. Golden, Secretary of the Board

44 South Clinton Avenue, 1st Floor P.O. Box 350

Trenton, New Jersey 08625-0350

- Re: Docket Number Q024020126 2024 EMP Update New Jersey Clean Energy Transition Program
- Ref: 3/13/2025 EMP Update: <u>https://www.nj.gov/bpu/pdf/publicnotice/2024%20New%20Jersey%</u> 20EMP%20Findings_13%20March%202025_updated.pdf.

May 1, 2025

Dear New Jersey Board of Public Utilities President, Commissioners and Energy Master Plan Leadership,

I would like to thank the NJBPU staff for their dedication and continued work in the Energy Master Plan. It is not an easy task and the fossil fuel companies, affiliates, "institutes" and other pro-fossil-fuel entities continue to market false information and illicit calls for "all of the above" sources. Most people are not aware of how much constant pollution, methane and carbon dioxide emissions occur along the oil and gas supply chains within the United States. Concentrations within New Jersey is rapidly increasing, not only from the emissions in New Jersey, but also from the neighboring states that have the wells, processing plans and facilities at every hundred miles of pipeline that each emit hundreds of tons of methane, carbon dioxide and many carcinogenic toxic pollutants. If we cut the demand down in New Jersey and transition away from fossil fuels, it reduces the entire supply chain emissions, thereby reducing emissions in neighboring states.

Transition Pathway – Local distributed clean energy grid

New Jersey needs to transition away from the monolithic energy supply model defined by fossil fuels. And hence, transition to a distributed infrastructure not dependent on concentrated energy locations, does not have to be built as a large monolithic energy supply chain and yet, is more resilient and local capable. It also enables to remove all transmissions of fossil fuels, leaving only electricity transmission not as the backbone, but as a supplement to independent energy infrastructure grids managed by each of the New Jersey Utility companies. Viewed in this manner, the transition can be done in a manner that reduces the constraints and controls of FERC and PJM on New Jersey's transition to clean energy.

To achieve this, New Jersey Utilities, NJBPU and New Jersey's other supporting agencies and governance, need to focus on investments in distributed energy storage plus solar and wind generation maximized behind the meter. Storage management becomes critical to be integrated within each Utility Grid. The only limitation is the Utility outdated grid components, but the storage and supply can be integrated within the grid behind the meters, essentially converting each grid into an independent microgrid. NJBPU can fast track this approach without any constraints from PJM.

If distributed storage (behind the meter) coupled with renewable generation is built out at as many homes and businesses that are willing, New Jersey effectively removes the demand on transmission electricity, natural gas and oil. Investment into renewables and storage is very different than investment into fossil fuels and nuclear. NJBPU has the ability to enable this investment to be equitably distributed to New Jersey residents directly and small businesses within based within New Jersey, instead of the large energy companies that control the fossil fuel supply chains. Unlike the natural gas companies that have a very small job footprint within New Jersey, this will actually generate more permanent jobs in New Jersey specifically for New Jersey energy.

With this future state perspective, reliability and affordability takes on a different perspective. The slower the transition, the more challenging the rate control. The faster the transition, the easier the rate control, but the initial capital investment increases. The rapid transition value proposition is that the distributed storage + generation deployment is that the investment can be amortized over 30 years and controlled and managed by New Jersey without dependencies to PJM or FERC, and that it becomes a true clean energy grid. New Jersey basically rebuilds its mixed energy infrastructure grid into a clean energy grid with only electricity used in distribution and transmission. Generation and storage are distributed locally.

The need for a Program Management EMP Team

On page 10 and 11 of the 3/13/2025 EMP Update, E3 Consulting does not mention that there have been comments pushing NJBPU to formalize a Program Management Team, nor the need for a EMP Quarterly Dashboard across all tracks of the program (the seven strategies and associated projects). This isn't just for the public, it also helps NJBPU better manage and drive the transition overall. There are many interrelated dependencies across strategies and projects that need to be constantly adapted as dynamics and progress change. I have never seen a project so large not have a functional program management team. I would also suggest it severely disables the progress of NJBPU staff and contributions. I would love to help enable such a program.

Climate Pathways Scenarios

We need to push for electrification as the end goal only energy used for transmission and distribution. Heat pumps can work for in cold weather, but it requires a better design than just mounting the external exhaust fan on the ground outside. If it is just mounted outside, then there will be days where the heat pump cannot effectively heat the house. Acknowledging that geothermal heat pumps are too expensive, then why not something in between? Such as a submerged exhaust fan with enough area under ground that enables enough air flow using the warming temperature below the ground? Just a suggestion.

Distributed Storage

New Jersey has deployed quite a bit of solar, but New Jersey should deploy more solar as much as possible with distributed storage. New Jersey should also be looking to enable Utilities to work with residents and businesses directly as storage facilities where the Utility provides the capital investment and controls the storage. It is the only way to break through the standoff with Utility companies and PJM.

Please continue with the utmost urgency. If I can be of assistance in helping to form the Program Management Office, I would eagerly assist in any way that is helpful for NJBPU.

Sincerely,

Kirk Frost

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