

# My opinion: New Jersey's New Energy Master Plan Requires Balance

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## My opinion: New Jersey's New Energy Master Plan Requires Balance Between Clean Energy Pursuit and Reliability and Affordability Submitted to NJ Board of Public Utilities June 9, 2024

Governor Murphy's objectives contained in the 2019 New Jersey Energy Master Plan met the public's sentiments about moving to cleaner energy, but meeting those objectives has become challenging. Fossil fuel fired generation in 2024 remains well over 50% of the region's energy mix, while renewable energy, while increasing somewhat since 2019, remains below 10%. And without new investment in the state's nuclear generation units, the fossil fuel-fired electricity dominance will grow.

A major issue with the new energy master plan now being considered is nowhere in the announcement for public comment on the 2024 New Jersey Energy Master Plan (EMP) is there mention of the importance of affordability and reliability. The state BPU states the review of the state energy master plan will include assessment of the (7) strategies enumerated in the 2019 EMP, as well as provide an overview of the State's progress toward achieving 100% clean energy by 2035, and an 80% reduction in greenhouse gas ("GHG") emissions, by 2050. While I am sure the BPU didn't intend to downplay the importance, it could have stated the objectives have to be met with affordability and reliability in mind.

Maintaining affordability and reliability are absent as main objectives and should be stated as critically important. New Jersey already ranks high in the US on electricity prices customers now pay and, while much has been done to protect customers from storms, assuring reliability during the transition of the industry is critical. In the past I have advocated that the state BPU not be the lead agency in the development of clean energy but be the advocate for affordability and reliability. That historically has been its role.

The competitive power markets prove the point how difficult it will be to meet the higher cleaner energy standards. The PJM is the regional transmission system operator operates the PJM region's (Pennsylvania, New Jersey and Maryland) energy and capacity markets. Despite the many efforts to introduce renewables, still they make up a small fraction of the region's energy mix. Fossil fuel dominance remains because a major factor in its dominance is their continued strong economic price in the regional marketplace. A carbon tax could mitigate the uncompetitiveness of the all-in cost of renewables, but that will only increase the price customers will pay.

Add to this the expectation of reliability challenges as electricity sector demand will expand as it will soon take on the electrification of the state's transportation and building sectors. When commuter's cars don't start in the morning because of a power outage, more of the economy will be impacted. Picture being on the Garden State Parkway stuck in a traffic jam at Route 280 exit due to electric cars stalling due to the power outage caused by a master plan based on renewable energy system unproven at such large scale to be reliable.

The master plan consideration provides a pause now to think harder about how to ensure future reliable and affordable clean energy on the east coast. There is no question that offshore wind electricity production is needed to further diversify the energy mix. But the question not addressed is that as long as the energy marketplace is run by economic bids that do not adequately factor carbon into the price, fossil fuel fired generation will continue to have a useful life past the period of state government policies and create issues for renewable project investment.

My view for the state to consider includes:

(1) New nuclear needs to be in the mix of the future New Jersey energy supply. While cost per new MW constructed is expensive, clean energy from a facility that runs 90% of the time for the next 60 years makes the case more compelling. Nuclear energy generation has been the bedrock of the reliability of the New Jersey electric utility industry for several decades.

A proposal to relicense the existing three operating nuclear units for 20-years should be considered. Additionally, siting of small modular nuclear reactors (SMR) units should be considered onsite or at another site. In March 2024, the US Department of Energy announced a \$1.56 billion conditional loan commitment to restart the 800 MW Palisades nuclear plant in Michigan. Alongside the existing plant, 2 SMR units are planned. This

would be the first nuclear plant to be recommissioned in the US. The Inflation Reduction Act (IRA) could be a source of lower-cost financing for the New Jersey's nuclear expansion. Such round-the-clock energy is needed to manage the introduction of renewables and their intermittent energy production.

(2) The state's energy efficiency programs should be managed by the state's local governments in the same fashion done by municipal Community Choice Aggregators in California. Local control would help to eliminate the natural corporate objection of investor-owned utilities to demand reduction which cuts profits in implementation of a more aggressive state efficiency program. As a former Mayor of Cranford, New Jersey I observed that municipal governments took on the responsibility of recycling and the record has been a positive record. A new enhanced local requirement of ensuring certain standards are met through building codes, incentive programs, and other strategies could yield enough energy saved to reduce pressure on the need to build new power resources.

(3) A full-scale evaluation of the current offshore wind plans needs to be done. After Orsted left New Jersey with a \$5 billion loss due to the uneconomic plan put forward by the state's Board of Public Utilities, without a full public assessment, new bids were advertised and accepted to continue the effort. There remain many unanswered questions such as :

\*Will the PJM market accept the above market offshore wind capacity and energy and displace the existing fossil fuel generation?

\*Since wind has a below 40% capacity factor and has minute to minute intermittency, how will the region's transmission network handle this without \$billions of transmission investment or new natural gas fired capacity built in the already crowded New Jersey mainland?

\*Would a more diverse power resource mix of nuclear, renewable including some level of off-shore wind; increased energy efficiency, residential solar and batteries meet the reliability and resiliency needs of the state better than a massive industrialization of the shore?

(4) Reform of the New Jersey Board of Public Utilities. Rather than fulfilling the role of regulator and consumer advocate, the BPU has become a full public advocate for the political objective of offshore wind energy, regardless of its cost or other questions raised. The question is is this the role that the state regulator should play? PSE&G for example departed its role in the offshore wind development well before Orsted the wind developer left the state. Yet the BPU continued to advocate for the uneconomic project. I still don't get this.

(5) If PSE&G is not willing to step-up to guide the state to a cleaner energy future with less green house gas emissions, then a new state agency should be formed called the New Jersey State Power Authority, with an independent board made up of energy

industry professionals with clear accountability guidelines. Such an agency modeled after the New York State Power Authority, could be a powerful force to negotiate with PJM, New York, and other neighboring states. With its use of lower cost tax-exempt debt, IRA funding access, no corporate earnings or profit motive, and a public process for input. And the state BPU could revert back to its regulator role and not advocacy role.

Absent such a change, BPU needs to refocus and make reliability and affordability, main objectives in the transition to cleaner energy.

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