



September 16, 2019

Ms. Aida Camacho- Welch, Secretary
New Jersey Board of Public Utilitys
44 South Clinton Avenue, 3rd Floor
Suite 314
PO Box 314
Trenton, NJ 08625-0350

Re: 2019 Draft NJ Energy Master Plan – Comments
BPU Docket No. Undocketed

Dear Secretary Camacho-Welch:

On behalf of Mack-Cali Realty Corporation and owner operator of over 11 million square feet of commercial real estate, we appreciate the opportunity to submit comments on New Jersey's 2019 Draft Energy Master Plan (EMP). Given that the commercial real estate industry (and the economic activity it generates) would be dramatically and adversely impacted by this plan, it is imperative that the final plan that is adopted be economically feasible, achievable, scientifically sound, and one that ensures the delivery of sustainable and reliable energy.

While we acknowledge the reality and effects of climate change, and we commend the NJ Board of Public Utilities and Governor Murphy for their efforts to protect and minimize damage to our environment, we are concerned that the aspirational vs. realistic nature and dramatic reach of these goals will cause many to reject the EMP outright as irrational and irresponsible, given our current level of technology and limited resources, and the anticipated costs of implementation.

The EMP's call for the full conversion to clean energy by 2050 comes with a price tag at present estimated to be in the hundreds of billions of dollars, plus the billions in stranded cost payments to NJ's natural gas utilities for asset retirements, not counting the billions it would cost to retrofit existing NJ commercial and residential buildings, and the higher energy costs to ratepayers that will result from the elimination of natural gas as an energy source. NJ is already one of the most expensive states in which to live and do business. These new costs would be devastating to our economy and would drive people and jobs from the Garden State. Yet, the EMP contains no analyses of the costs of conversion to 100% clean energy by 2050, the costs and effects of banning of gasoline-powered vehicles, the costs and logistics of repowering electrical generation and transmission systems, or the costs and impacts to ratepayers. **The EMP should not be adopted until a thorough analysis of costs, stranded cost liability, heat pump technological sufficiency and ratepayer impacts is conducted and made available for public review and comment.**

Following are some additional concerns with the EMP as drafted:

- **Commercial real estate conceptual efficiency improvement of 2% annually for ten years and grid resiliency compliance.** We estimate this cost at \$12 to \$15 per SF

subject to owner improvements that might have already been addressed. The Northern and Central NJ commercial office market amounts to about 156.9 million sf, so implementation of this requirement will need private capital application on the order of \$1.9 - \$2.4 billion and we question the sourcing of this immense amount of capital and if internally sourced, how such an immense expense might impact shareholder market value.

- **Conversion of electric resistance and fossil fueled heat to heat pump technology.** Commercial office building heating loads are immense, and it is not apparent if existing electric resistance and fossil fueled heating systems can effectively be converted to heat pumps. For example, fossil fueled heating systems require 180' F and higher water temperatures while heat pumps are capable of producing approximately only 120'F water temperature. Lowering heating water supply temperature requires immense increases in heat exchange surfaces in office space pedestal convective radiation (that will potentially consume available rentable floor areas) and water coils for fan-air systems. Converting electric resistance heat have the same challenges as fossil to heat pump conversion, and in addition require complete retrofitting of electric systems with water piping and large surface fan-air coils. Both conversions are very disruptive and expensive undertakings, especially for occupied office buildings.
- **Reliability and resiliency of the grid and power supply are critical**, but the EMP does not address how to maintain reliability in a system that is seeking to accommodate 100% clean energy and to rely almost entirely on distributed energy resources. Distributive generation (micro grids) is key to enhancing resilience to massive disruptions (e.g. Superstorm Sandy). If we delete natural gas from the equation, how do we back up the system until battery storage technology advances sufficiently?
- **EMP Policies should not be implemented unless they are practical, scientifically proven effective, achievable in the near term, and affordable to businesses and residents.** We recognize that future technological innovations will be necessary (e.g., battery storage, electrification of buildings, zero-emission vehicles, and transmission & distribution systems) to achieve the goals of the EMP, so it would be unwise to lock ourselves into policy choices that are not yet implementable or cost effective.
- **The BPU must provide credit to property owners that have already invested substantial costs to incorporate energy efficient measures in their buildings.** New Jersey has already taken major steps to ensure a cleaner energy future. In response to the Global Warming Response Act (GWRA), we met our 2020 goal back in 2015 by incentivizing solar, developing state-of-the-art combined cycle natural gas electricity generation, and closing old coal plants. New Jersey can continue along this path through greater solar generation, offshore wind production, electric and other zero-emission vehicle incentives, and improved energy efficiency.
- **EMP policies must not put NJ at a competitive disadvantage** for business retention and attraction, as well as for the retention and attraction of residents (taxpayers) due to quality of life and affordability issues. While individual policy choices may have limited impact on businesses, the economy, and affordability, the cumulative impact of these proposed EMP policies and initiatives would have a crippling effect on commerce.
- **Investment in our transportation infrastructure must continue** as we reduce our reliance on gasoline by encouraging greater use of electric vehicles. NJ must ensure

that users of such vehicles share in the costs to maintain and upgrade our roads and transportation systems, as well as the costs of providing charging stations.

- **The BPU should set up advisory bodies**, including Mack-Cali designees, to guide them in their implementation of the EMP, once completed.

A key component of the development of the EMP is the Integrated Energy Plan (IEP) process, a modeling exercise looking at alternative strategies for accomplishing the EMP's goals in a "least-cost scenario". Although the results of the IEP are critical to the EMP development and review process, the IEP process is not due to be finalized until after the EMP public comment period ends. Without the modeling and cost analysis, it is not possible to fully understand and provide informed comments on the EMP. Therefore, Mack-Cali respectfully requests that the EMP comment period be extended until the final results of the IEP have been made public and sufficient time has been given for review.

New Jersey can take pride in the fact that it already has one of the nation's cleanest electricity generation sectors with a diversified reliance on clean natural gas, nuclear power and renewables (we have long been a leader in solar generation, due in large part to solar installations by industrial building owners). We are confident that we can build on our successes, and Mack-Cali looks forward to working with the BPU and the Murphy Administration to develop a realistic and balanced plan (containing near-term and aspirational goals relying on a mix of energy solutions) for a practical and affordable clean energy future.

Very Truly Yours,

A handwritten signature in blue ink, appearing to read 'Jeffrey E. Grant', with a stylized flourish extending to the right.

Jeffrey E. Grant, Sr. Director Corporate Energy

C: EMP.Comments@bpu.nj.gov