BEVAN, MOSCA & GIUDITTA, P.C.
ATTORNEYS AT LAW

163 MADISON AVENUE, SUITE 220-8
MORRISTOWN, NJ 07960
(P) 908.753.8300
(F) 908.753.8301

WWW.BMG.LAW

MURRAY E. BEVAN
mbevan@bmg.law

June 6, 2025

VIA EMAIL
Sherri L. Golden, Secretary
Board of Public Utilities
44 South Clinton Avenue
Post Office Box 350
Trenton, NJ 08625-0350
board.secretary@bpu.nj.gov

Re: Bloom Energy comments - I/M/O THE CLEAN ENERGY PROGRAMS AND BUDGET FOR THE FISCAL YEAR 2026 (BPU Docket Nos. QO25040206, QO25040205)

Dear Secretary Golden:

On behalf of our client, Bloom Energy Corporation ("Bloom Energy"), we are filing the attached comments regarding the CHP-Fuel Cell incentive program in the proposed Fiscal Year 2026 New Jersey Clean Energy Programs (NJCEP) and Budget.

Very truly yours,

Murray E. Bevan

COMMENTS OF BLOOM ENERGY I/M/O THE CLEAN ENERGY PROGRAMS AND BUDGET FOR THE FISCAL YEAR 2026 (BPU Docket Nos. QO25040206, QO25040205)

Bloom Energy Corporation ("Bloom Energy") hereby respectfully submits the following comments in response to the Board of Public Utilities ("Board" or "BPU") Notice of Public Hearing regarding the Fiscal Year 2026 Clean Energy Programs and Budget. Bloom Energy appreciates the opportunity to provide written comments on the NJCEP Combined Heat and Power – Fuel Cell ("CHP-FC") Program as described in the TRC Compliance Filing in this docket.

About Bloom Energy

Bloom Energy is a manufacturer of solid oxide fuel cell technology that utilizes an electrochemical process to power non-combustion microgrids as well as advanced electrolyzer systems capable of converting renewable electricity into renewable hydrogen (also known as green hydrogen). Our solid oxide fuel cells and electrolyzers are designed in a modular fault-tolerant format that provides mission critical reliability with no downtime for maintenance. Bloom Energy has installed over 1,200 of its non-combustion solid oxide fuel cell systems for customers in thirteen U.S. states as well as in Japan, South Korea, India, and Taiwan. Bloom Energy has nearly two dozen systems deployed in New Jersey. Our systems have proven resilient through outages caused by hurricanes, winter storms, earthquakes, forest fires, and other extreme weather and natural disasters. Bloom fuel cells are fuel flexible and can run on a number of fuel sources including natural gas, biogas, and hydrogen. In addition to our core electric-only product, Bloom Energy has developed a combined heat and power (CHP) product on the same fuel cell platform, which can achieve system efficiency over 90% in some cases.

Participation History

Over the last ten years, Bloom Energy's fuel cells have been approved by the Board to receive incentives for 18 fuel cell applications in New Jersey through the NJCEP CHP-FC program. To date these projects represent 14.8 MW of onsite power and over 565 million kWh generated at an average efficiency of over 54% "LHV" without the harmful criteria air pollutants associated with fuel combustion. As such, these projects have significantly reduced CO_2, NO_x, and SO_x when compared to the PJM system mix that provides electricity to the New Jersey electric grid.

Avoided Emissions Compared to PJM - RFCE subregion	
Criteria Pollutant	**Amount**
CO_2	144,670 tons
NO_x	230.9 tons
SO_x	251.6 tons

The CO_2 reductions provided by Bloom's fuel cells operating in New Jersey are the equivalent of taking 30,613 gasoline-powered passenger vehicles driven for one year off the road.[1] Avoided health impacts of

[1] Environmental Protection Agency Greenhouse Gas Equivalencies Calculator, available at: https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results

the criteria air pollutants have decreased annual respiratory illness cases by over 750, eliminated 58 lost work days per year, and resulted in an annual monetary decrease in healthcare costs of $17,500,000.[2]

As of May 2024, Bloom Energy was also approved by the NJCEP as a Trade Ally under the Combined Heat & Power/Fuel Cells Business Type.[3] We are actively supporting several New Jersey customer projects in development which depend on the availability of this CHP-FC incentive to proceed. The proposed change to require projects to utilize only renewable fuels beginning in 2026 would ensure these projects do not move forward and the associated emissions reductions are not realized.

Recommendations

1. **Reconsider plan to stop accepting new applications mid-fiscal year:** Bloom Energy respectfully requests that the Board reconsider its recommendation to stop accepting new applications to the NJCEP CHP-FC incentive program at the end of 2025, as stated on Page 42 of the FY2026 Program Descriptions and Budget's Energy Efficiency and Renewable Energy Program Plan Filing by TRC dated May 22, 2025 ("TRC Compliance Filing").[4] While we fully support the need to decarbonize both CHP and fuel cell input streams, there are multiple compounding factors that make onsite generation using CHPs and fuel cells the most beneficial usage of non-renewable fuels. In the short- and medium-term, these systems will continue to offer emissions reductions in New Jersey even when powered by natural gas. Some benefits include:
    - On-site generation reduces load on the grid and eliminates line losses while producing energy at higher efficiency than traditional grid-side power plants.
    - Interconnections of large systems (>20 MW) of any type are being delayed multiple years due to the long interconnection queues in the PJM territory. Therefore, the electric grid is unable to meet the rapid load growth that is underway. On-site distributed generation like fuel cells and CHPs alleviates this pressure by generating power where it is needed without relying on grid upgrades.
    - Renewable fuels are not available in New Jersey at the scale needed to affordably be utilized in onsite generation. If renewable fuels are required for participation in the CHP-FC program after December 31st, 2025, one of two things will occur:
        i. CHP-FC projects will no longer be economically feasible for customers to consider due to the high cost of renewable fuels, despite growing energy costs and delays connecting large new loads to the grid. Projects will stop being proposed in New Jersey, and it is possible that customers needing reliable onsite generation will look to other states where support for this important resource is stronger.
        ii. The CHP-FC incentive will need to be increased considerably to continue incentivizing onsite generation projects and overcome the high cost premium demanded by renewable fuels such as renewable natural gas. This will in turn

[2] Environmental Protection Agency CO-Benefits Risk Assessment Health Impacts Screening and Mapping Tool (COBRA), available at: https://cobra.app.cloud.gov/

[3] https://njcleanenergy.com/commercial-industrial/programs/nj-smartstart-buildings/tools-and-resources/tradeally/approved_vendorsearch/?id=120&lid=120&sret=&srem=&start=1

[4] https://njcepfiles.s3.us-east-1.amazonaws.com/FY26+TRC+COMPLIANCE+FILING+draft+for+comment.pdf

drive up the cost to deliver the program that is subsidized across all ratepayers while supporting on-site generation for just a handful of customers.

- Because on-site generation offsets marginal generators on the electric grid which are most often the dirtiest and least efficient fossil fuel peaker plants, emissions will actually increase if less fuel cells and CHPs are installed. According to the Environmental Protection Agency's most recent eGRID data set, in the RFC-East subregion (which includes NJ) the CO_2 equivalent non-baseload output emission rate is 1,180 lbs/MWh. [5]Bloom's solid oxide fuel cell generates power at 818 lbs/MWh. By no longer supporting cleaner on-site generation, more customers will be forced to depend on the dirtier power provided by the electric grid.
- The June 8, 2023, the New Jersey Fuel Cell Task Force report found that: "Diesel generators have a disproportionate impact in non-attainment zones and overburdened communities. Replacing diesel emergency generators with fuel cells will result in avoided CO_2 emissions and reduced criteria pollutants (PM, NO_x and VOC). The revenue that fuel cells receive for their value to the grid could be used as an incentive to promote their use as a replacement for diesel-powered emergency generators. Areas with high electric demand and electric distribution system congestion can result in less efficient, higher emitting and costly electric generating sources being called upon to meet local demand. The less efficient peak load serving units create what is known as locational marginal emissions during peak load events; fuel cells directly offset these marginal emissions. Fuel cells could be deployed as a demand response resource and potentially lessen the need for peaking dispatch. If fuel cells meet some of the peaking load demand, that load would not need to be served from high emitting and high-cost marginal peaking units".[6]
- The Fuel Cell Task Force Report further states: "Fuel cells are a non-combustion approach that can complement future carbon neutral combustion turbines for large-scale power generation. Resilient behind-the-meter fuel cell systems operate as DERs and can offset the demand on the electric grid, thereby increasing grid reliability through possible resource aggregation and coordination (FERC Order No. 2222)."[7]

2. **Lift the manufacturer diversity cap:** The NJCEP CHP-FC incentive program continues to include a "manufacturer diversity cap" on fuel cells that prevents one non-combustion fuel cell technology vendor from undertaking multiple projects but does not apply the same requirement to combustion CHP projects. This requirement clearly disfavors non-combustion fuel cells without a rational basis for doing so. The manufacturer diversity cap encourages customers to pursue CHP projects that produce local air pollution instead of non-combustion fuel cell projects. Any manufacturer diversity cap should apply on equal terms to all technologies or, preferably, to none.

---

[5] https://www.epa.gov/egrid

[6] New Jersey Fuel Cell Task Force, Hydrogen and Fuel Cell Technology Toward Clean Energy Goals: Recommendations for the State of New Jersey (June 8, 2023) at page viii, available at: https://www.nj.gov/bpu/pdf/reports/Fuel%20Cell%20Task%20Force-FInal.pdf

[7] *Id*. at page ix.

With the cap in place, New Jersey customers are forced to change manufacturers or technology types to participate in the program in a given year or file a petition with the Board to seek a waiver of this cap, which may not even be granted.

3. **Increase the incentive for fuel cells to $3 million to be the same as for CHPs:** Recommendation 2.13 in the Fuel Cell Task Force Report states the following: "In support of the goals of the EMP and the 80 x 2050 target, the BPU Clean Energy Program budget should increase the incentive for non-combustion generation, like fuel cell systems, that emit no air pollutants. The program currently allocates an incentive that could be three times greater for the installation of a combustion CHP system that increases air pollutants."[8] Rather than following this recommendation in the FY2026 NJCEP CHP-FC program, the Board is once again carrying forward an incentive structure that encourages customers to pursue CHP projects that produce local air pollution instead of non-combustion fuel cell projects. For instance, the proposal will provide a $3 million incentive to a hospital located in an urban neighborhood already overburdened with air pollution if it chooses a combustion CHP technology that is at least sixty (60) percent efficient. In the event the same hospital in the same neighborhood were to instead select a non-combustion fuel cell that is fifty (50) percent efficient and decreases smog forming air pollution by over 99% it would be eligible for a maximum incentive of only $1 million. Again, the project that produces virtually no local air pollution is eligible for $1 million and the project that produces more local air pollution is eligible for three times more. It is critically important to understand that these incentive structures impact the market, and that is especially true when the levels of support for various technologies are so dramatically different. The hypothetical set forth above is illustrative of not only how out of step the proposal before the Board is with current trends in energy and environmental policy, but also of the incongruous results that come from the use of a simplistic bright line "40% or 60% efficiency" approach.

Thank you for your consideration of these comments and for supporting the robust stakeholder process that is underway. Please do not hesitate to reach out if we can provide additional information.

[8] *Id*. at page 44.