

PHIL MURPHY Governor

SHEILA OLIVER Lt. Governor STEFANIE A. BRAND Director

July 24, 2020

VIA ELECTRONIC MAIL ONLY

Aida Camacho-Welch, Secretary New Jersey Board of Public Utilities 44 South Clinton Avenue, 9th Floor P.O. Box 350 Trenton, New Jersey 08625-0350

RE: I/M/O Clean Energy Programs and Budget For the Extension of Fiscal Year

2020 - BPU#QO20060402

Dear Ms. Camacho-Welch:

Please accept this Comments filed on behalf of the New Jersey Division of Rate Counsel in response to the Request for Comments on the NJCEP Fiscal 2020 Budget Extension issued by the Division of Clean Energy in the public notice issued on July 15, 2020. Due to the New Jersey Board of Public Utilities' waiver of filing requirements due to the COVID -19 pandemic, these Comments are being filed in electronic format only. Kindly acknowledge receipt of this correspondence.

COMMENTS

The New Jersey Division of Rate Counsel ("Rate Counsel") appreciates the opportunity to comment on the Proposed NJCEP Fiscal Year 2020 Extension and Third Budget Revision ("Revised Budget") publicly noticed on July 15, 2020. As outlined in the Division of Clean Energy's ("DCE") stakeholder webinar held on July 20, 2020, the proposed revision primarily

involves an extension of existing NJCEP programs through the end of the extended current fiscal

year which is September 30, 2020, and does not impose any incremental impact on ratepayer

bills. Given this limited scope, and the limited window of opportunity for review and comment,

Rate Counsel reserves its right to provide further comments if additional information is made

available.

The only change to benefits proposed by DCE and its program administrator, TRC, is to

expand the incentive for low-flow showerheads such that it will be available to all customers

through the NJCEP Energy Efficient Products program, and not just to Comfort Partners

participants. Rate Counsel supports this expanded availability of incentives for this useful and

cost-effective energy and water-saving technology. However, the materials provided did not

indicate the specific technology offered. For example, whether the showerheads provided will

include thermal shutoff valves, which effectively prevents wasting hot water once a shower has

reached the desired temperature but before the user enters the shower. This is an effective water

and energy saving technology that should be included in this offering. Without the benefit of

further information on the specific showerhead(s) offered by the program, Rate Counsel

considers the maximum benefit of \$9 per item proposed by TRC to seem reasonable given the

cost of fixtures and the significant savings available.

DCE also proposed to hire a statewide evaluator to integrate with independent utility

evaluators, to "check the checker" for EE program evaluation and to work with the Evaluation,

Measurement & Verification ("EM&V") working group as described during the July 20th

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stakeholder meeting. Rate Counsel generally supports increased coordination and consistency in

EM&V practices and approaches. However, we are concerned that there now appear to be

several mechanisms for coordination – including the EM&V Working Group, the Statewide

Coordinator proposed by the Utilities to coordinate EM&V among their programs, and now the

DCE's statewide evaluator. The Board and the Division should work with the utilities to ensure

that the roles and responsibilities of these entities are themselves well-coordinated and not

overlapping or in conflict with each other, and to ensure that ratepayer funds are not wasted on

redundant or inefficient levels of organization.

Finally, Rate Counsel would like to reiterate the comment made by Doug O'Malley of

Environment New Jersey that to the greatest extent possible, ratepayer funding should be used

for ratepayer benefit. There are ample cost-effective opportunities available to reduce energy

usage and improve safety and comfort while saving customers money, and ratepayer funds

collected for this purpose should be used for those efforts. While we understand that current

times are extraordinary, we urge continued progress toward reducing the amount that is diverted

to other priorities.

CONCLUSION

For all the forgoing reasons, Rate Counsel does not oppose the limited revisions or the

NJCEP FY20 budget extension proposal by the DCE. However, Rate Counsel requests that the

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Aida Camacho-Welch, Secretary July 24, 2020 Page 4

Board and DCE carefully scrutinize the additional layers of administrative oversight proposed for program evaluation and the resultant costs to ratepayers.

Very truly yours, Stefanie A. Brand, Director NJ Division of Rate Counsel

By: /s/
Felicia Thomas-Friel, Esq.
Deputy Rate Counsel

FTF/ld

cc: publiccomment@njcleanenergy.com

Kelly Mooij, BPU-DCE Sherri Jones, BPU-DCE Abe Silverman, Esq.-BPU Pamela Owen, SDAG July 24, 2020

New Jersey Board of Public Utilities 44 South Clinton Avenue, 9th Floor Post Office Box 350 Trenton, NJ 08625-0350

Submitted via email: publiccomments@njcleanenergy.com

Re: In Response to Comments – Proposed NJCEP Fiscal Year 2020 Extension and Third Budget Revision.

To Whom It May Concern:

The signed-on organizations, Environment New Jersey, Work Environment Council of New Jersey, Jersey Renews, Isles Inc., Energy Efficiency Alliance of New Jersey and the NJ Public Interest Research Group (NJPIRG), ("Commenters") are pleased to submit these comments in response to the request for comments for the Proposed NJCEP Fiscal Year 2020 Extension and Third Budget Revision, which was released last Wednesday, July 15. The NJBPU OCE held a brief stakeholder meeting this Monday, July 20, to review the budget revision and please excuse these comments being brief as the short turn-around time with the comment deadline of today, Friday, July 25, at 5 p.m. These comments previously reflect concerns raised by the Energy Efficiency Alliance of New Jersey, Isles Inc. and Environment New Jersey directly to the NJ Board of Public Utilities, as well as previous joint submitted comments.

Per the NJBPU's Request For Comments: "Staff has conducted a thorough review of all NJCEP programs and initiatives and proposes the funding changes below to ensure appropriate levels of funding and continuity of program delivery through September 30, 2020. Additionally, Staff proposes to allocate \$16,239,074 to the general fund to provide financial assistance during the current health crisis."

The euphemism used in the document for this reallocation of this more than \$16 million continues to be a hold-over from the Christie-era, State Energy Initiative. The State Energy Initiative funding line items in the NJBPU Office of Clean Energy budget continues to be a budget raid from funds that are dedicated from EDECA's passage by the New Jersey Legislature in 1999. We are deeply appreciative of the work of the Murphy Administration and the NJBPU to work to end these clean energy raids as seen through the successive increase in the budget for the Office of Clean Energy in the New Jersey FY19, FY20 and the initial proposed FY21 budgets. That being said, in this moment of economic crisis, it is imperative that we continue to make investments in our clean energy economy, and not expand these raids to the Clean Energy Program.

The Commenters, who are all members of the Jersey Renews clean energy and climate coalition, provided A Roadmap Towards a Just and Green Economic Recovery to the Governor's Advisory Council on Recovery and Restart on June 25, 2020, which was shared with the NJBPU as well as the Council's Co-Chairs. We will list out some of the key recommendations below in the document. We were especially heartened to see the recommendations were already incorporated in the 2020 Energy Efficiency Transition Program, which were outlined by NJBPU Office of Clean Energy Director Kelly Mooij during the July 14, 2020 NJBPU Energy Efficiency virtual stakeholder meeting during the question and answer period.

It's with that in mind that we raise serious concerns with the Clean Energy Program budget extension and its reliance on a transfer of more than \$16 million to the State Energy Initiatives when the core programs

of the Clean Energy Program are stuck with flat funding, and effectively suffer a budget reduction because of the extended budget period, pace of inflation and the increased need of these programs to truly reflect the vision laid out in the NJBPU Energy Efficiency Transition document released in June 2020.

Specifically, we strongly encourage for the State Energy Initiatives to be re-allocated to the budget lines items in the NJCEP budget, which are \$45.5 million for the Comfort Partners program and \$2.5 million for the Workforce Development programs

The need for these programs is great, as we will outline below and the ability to expand Comfort Partners and Workforce Development programs in line with their need is critical right now as we work to both achieve air and carbon pollution emissions reductions, create more livable communities and housing and expand public health. We directly cite the statement from Ben Haygood, Environmental Health Policy Director, Isles upon the <u>release</u> of Jersey Renews' *Roadmap To A Just and Green Economy*.

"The best recovery for both the budget and for people's bank accounts is in fact a healthy, green recovery. ROI tells us where to put our money in an economically responsible manner – we get \$221 back for every dollar we spend on lead mitigation alone. Acting responsibly is investing in green, healthy infrastructure like community solar and electrification, achieving real client project success by streamlining similar home-based programs under a whole house energy efficiency clearinghouse, and making it all happen with the right local workforce development. Green and toxic-free communities are the only real, human answer for folks sheltering in place right now at home – a place that for some may not be safe at all," said.

The recommendations outlined in the A Roadmap Towards a Just and Green Economic Recovery that are most relevant for expanded funding for Comfort Partners, Workforce Development or other line items in the Clean Energy Program, in partnership with other programs at the NJBPU, as well as other initiatives of state agencies including but not limited to DCA and DOL, include:

Renew Green and Efficient Buildings: As many families have become unable to afford their utility bills over the last three months, the imperative to invest in weatherization and energy efficiency is even stronger. Energy efficiency and other green building improvements are also critical to meeting emissions reduction goals and can create many local, accessible, family-sustaining jobs. New Jersey should:

- **Invest in job training programs,** including union apprenticeship programs, entrepreneurship training, and community-based training centers. Improved access for women and people of color to career pathways within the green economy should be a major policy goal.
- Revive the state incentive program to fund hiring of green job training graduates.
- **Cross-train professional home visitors** on energy efficiency and environmental health issues such as mold and lead contamination.

Renew Green and Efficient Buildings: As many families have become unable to afford their utility bills over the last three months, the imperative to invest in weatherization and energy efficiency is even stronger. Energy efficiency and other green building improvements are also critical to meeting emissions reduction goals and can create many local, accessible, family-sustaining jobs. New Jersey should:

- End the annual state budgetary practice of raiding the Clean Energy Fund to balance state budgets so that the fund can be instead invested in its intended purposes.
- **Dedicate funding to fixing homes with health, safety, or structural issues** so that all residents can participate in State Energy Programs (Comfort Partners or Weatherization Assistance Program).

- Create a clearinghouse of state department and agency representatives using the "whole house" concept to oversee and coordinate state all health, safety, and energy programs to more effectively improve housing conditions.
- Work with labor unions and industry stakeholders to ensure the transition of New Jersey's buildings creates good family sustaining jobs.

Restore Healthy and Green Homes and Schools for All New Jerseyans: While many of us are privileged to be able to shelter in place during this quarantine, staying indoors isn't necessarily safe for everyone. Sickness, layoffs and hours reductions have also put many families in jeopardy of utility shutoffs, or of losing their homes altogether. To protect the hundreds of thousands of New Jersey families currently sheltering-in-place in toxic living conditions, and to ensure that every New Jerseyan can maintain access to basic needs like secure shelter, healthy food, running water and electricity, the state should:

• Mitigate the lead paint hazards in all homes with comprehensive lead hazard control.

The NJBPU Energy Efficiency Transition has an objective to both "decrease energy burdens for all ratepayers with a specific focus on increasing affordability for lower income customers and those living in environmental justice communities"; and "ensure that low-and moderate-income communities share the same level of access to the benefits associated with EE investments as wealthier communities." To truly address equity concerns, the NJBPU needs to take steps that show a commitment to a whole home approach with communities that centers communities that are most centered.

New Jersey's answer to this pandemic must include a response to the glaring environmental justice issues that have been exacerbated by the public health crisis and economic downturn. Health problems in so many communities stem from housing that is inefficient, has been poorly maintained by building owners, or is located in unhealthy industrial environments. These conditions affect health outcomes and economic ability for large swaths of the population. New Jersey cannot ever truly recover if it continues to leave communities behind.

Committing to a community-based whole-home approach invests in communities, spurs economic growth, and brings the entire state to a new level of economic and environmental wellbeing. Programs that remove administrative barriers and integrate programs that prioritize healthy and energy efficiency homes (lead removal, WAP, ect.) will make it easier for residents to participate. Additionally, sourcing, hiring, and training a local workforce can create trust along with economic stability.

A program that incorporates a whole-home approach with dedicated funding to fix homes with health, safety, or structural issues will allow all New Jersey residents to participate in energy efficiency and clean energy programs. Residents with low incomes face heightened barriers to participate in energy efficiency and other state-offered programs when necessary home improvements are financially out of reach. Structurally-deficient homes not only prevent participation in current program offerings, but also use disproportionality more energy. The resulting system forces people who have the least resources to pay the most for their energy bills, with no avenue of redress.

Beyond bearing financial and health ramifications for New Jersey residents, these issues undercut clean energy workforce development efforts. With a goal of creating job opportunities and encouraging economic growth within low-income communities, Isles, Inc. has trained over 570 workers under the Building Performance Institute Certification. Yet poor housing conditions often force these workers to

walk away from jobs. Their investment to gain new skillsets and improve their socioeconomic position is undermined.

Studies done as part of the Energy Master Plan Process show that a whole-home energy efficiency approach provides benefits beyond reduced energy bills. Homes lacking proper weatherization features create health problems for inhabitants during extreme heat or cold. Structural upgrades and reductions in energy consumption can undo these harms and create safe homes, better indoor air quality, and improvements to physical and mental health.²

The NJBPU can swiftly manifest these benefits by launching a pilot energy efficiency program built around whole-home approach with dedicated funding to fix health, safety, and structural issues. This program should look to unite energy efficiency, clean energy, and other programs targets to repair homes in low-income communities, including lead remediation and other home improvement programs currently implemented by community organizations such as Isles, Inc.

The Commenters will not fully address the concerns of the re-allocation of the \$16 million that was dedicated to Electric Vehicle (EV) rebates in the current NJCEP fiscal year budget extension, but we are supportive of the concerns submitted by the ChargEVC coalition, excerpted below. We will also note that it is imperative not to reallocate funding from critical clean energy programs, whether they be for EVs, or for whole home weatherization programs.

"Prior to the Charge Up New Jersey program funding mandated by P.L. 2019, c. 362 (signed by Governor Murphy on January 17, 2020), there was a budget allocation of \$30 million to establish a rebate program for light-duty electric vehicles (EVs) and charging infrastructure. Once enacted, the EV law mandated \$30 million a year for ten years specifically for light-duty electric vehicle rebates to fund the Charge Up New Jersey program. While this allocation crossed the current fiscal year, there should potentially be up to \$60 million available for these rebates in the current fiscal year. While it understandably took time to get the program up and running, especially given complications due to COVID-19, we are concerned about a precedent that removes any money for the intended purpose of light-duty vehicle EV rebates."

We appreciate the opportunity to provide comments on these critical issues. Please feel free to reach out with any questions.

Sincerely,

Doug O'Malley Director Environment New Jersey

¹ Improvements can also significantly reduce medical costs for low-income home owners by mitigating issues within the home that can impact individuals with respiratory and other chronic health conditions. Vermont Department of Health, Health and Climate Change Co-Benefits of Home Weatherization in Vermont. December 2018. Available at https://www.healthvermont.gov/environment/reports; Sara Hayes, Cassandra Kubes and Christine Gerbode, Making Health Count, May 2020, American Council for an Energy-Efficient Economy. Available at https://www.aceee.org/research-report/h2001.

² Karen W. Lowrie and Leigh Ann Von Hagen, The New Jersey Draft Energy Master Plan: Opportunities to Integrate Health and Health Equity, Bloustein School of Planning and Public Research, September 16, 2019, available at http://eac.rutgers.edu/wp-content/uploads/EMP-HIA-1.pdf.

Deb Coyle McFadden Director Work Environment Council

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July 24, 2020

<u>VIA ELECTRONIC MAIL</u> (<u>publiccomments@njcleanenergy.com</u>)

Aida Camacho-Welch, Secretary New Jersey Board of Public Utilities 44 So. Clinton Ave., 9th Floor P.O. Box 350 Trenton, NJ 08625-0350

> Re: <u>IN THE MATTER OF THE CLEAN ENERGY PROGRAMS AND BUDGET</u> FOR THE EXTENSION OF FISCAL YEAR 2020 – Docket No. QO20060402

Dear Secretary Camacho-Welch:

Please accept this correspondence on behalf of Public Service Electric and Gas Company ("PSE&G" or the "Company") regarding the issues and topics discussed during the July 20, 2020 public hearing in the above-referenced matter.

The Company appreciates the Board and Staff's efforts and continuing commitment to clean energy initiatives, especially during such tenuous times. The country is in the wake of a health crisis that has triggered unprecedented job losses and has caused a significant downturn in the economy. PSE&G is aligned with the State in its efforts to assist New Jersey residents in the face of the current health crisis.

States throughout the country have had the unenviable task of reassessing budgets and reallocating funds as best as possible to address the current crisis, while attempting to balance existing goals and programs. This means that funds originally earmarked for particular programs and initiatives are now funneled into other areas of the State and state agency budgets.

In the public hearing on the New Jersey's Clean Energy Program's ("NJCEP") Fiscal Year 2020 Extension and Third Budget Revisions proposal, Staff provided stakeholders with a summary of the increases and decreases in funding they recommend for this fiscal year. Staff suggests an

increase in funding for "State Energy Initiatives," due to the current health crisis, in the amount of \$16M, as well as an increase in funding for commercial and industrial buildings programs by \$14M. To offset this cost, Staff recommends several reductions in large initiatives such as the electric vehicles program be cut to the tune of \$16M. Further, it proposes cuts of \$3-4M from each of the following programs: Multi-Family, Combined Heat & Power/Fuel Cells, Community Solar – Low Income Program, R&D Energy Tech Hub, and Curriculum.

The Company understands that to allocate additional funding to certain areas of the agency's budget, there must be a comparable reduction to other areas to preserve these finite resources. This approach allows SBC collections to remain steady and avoids any incremental impact on New Jersey customers during these difficult economic times. Yet, New Jersey's clean energy goals remain clear and unchanged. Just as New Jersey faces significant health and economic impacts from COVID-19, the State also continues to face significant threats from climate change. The State has implemented aggressive energy reduction requirements by way of the Clean Energy Act, and the Board has taken great steps toward implementing a framework that is designed to facilitate clean energy strategies.

Programs such as the electric vehicles program are a critical component of the plan to meet the State's clean energy goal and it is imperative that these types of programs are maximized. The State's targets for rapid deployment of EVs, EV infrastructure and equipment, like the State's targets for Energy Efficiency, are ambitious; utility investments in these areas are essential to meeting these objectives.

While the NJCEP's ability to establish and sustain clean energy programs continues to be hampered by reductions in funding, utility-managed clean energy programs have the funding certainty that can lead New Jersey into a clean energy future, as they are not subject to the annual budget process that deters the private energy efficiency market from investing in New Jersey. Utility-led program funds can only be used for the clean energy purposes for which they are earmarked. This is precisely the reason why programs such as those proposed in PSE&G's Clean Energy Future ("CEF") filings — CEF-Energy Efficiency, CEF-Electric Vehicles/Energy Storage, CEF-Energy Cloud (currently pending at the Board) — are so integral to bringing about a cleaner New Jersey.

PSE&G is committed to implementing these clean energy programs to reduce energy consumption and deliver real savings to customers on their energy bills, and to improve the environment. The Company has proposed each of these three clean energy filings with great emphasis on addressing the needs New Jersey's vulnerable and under-served communities. These clean energy programs will not only put New Jersey on a firm path to meeting its clean energy goals but they will also provide a much needed economic stimulus to New Jersey's economy while minimizing the ratepayer impact. The Company's Clean Energy Future filings will generate much needed economic opportunities for unemployed, under-employed, and low/middle-income New Jersey residents, who have been hit particularly hard during the pandemic. In the current circumstances, with the economic hardship and unprecedented job losses caused by the COVID-19 pandemic, the Company's filings will help grow the "green economy" in New Jersey immediately.

Approving PSE&G's Clean Energy Future filings as expeditiously as possible will help New Jersey meet its environmental objectives and deliver the much-needed economic stimulus to New Jersey's communities. PSE&G looks forward to partnering with the state to achieve these important objectives.

Very truly yours,

Joseph F. Accardo Jr.

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Bloomenergy°

July 24, 2020

VIA ELECTRONIC MAIL

Aida Camacho-Welch, Secretary
New Jersey Board of Public Utilities
44 South Clinton Avenue, 9th Floor
Post Office Box 350
Trenton, New Jersey 08625-0350
publiccomments@nicleanenergy.com

Re: Request for Comments - Proposed NJCEP Fiscal Year 2020 Extension and Third Budget Revision

Dear Secretary Camacho-Welch:

Please accept the following comments of Bloom Energy on the proposed New Jersey Clean Energy Program and Budget for the Extension of Fiscal Year 2020 in accordance with the Notice issued by the Board on July 15, 2020.

In the FY 2020 fifth quarter budget straw proposal, Board Staff recommends decreasing the budget for the CHP/fuel cell program by over \$3.3 million, citing "decreased participation compared to forecasts." Bloom Energy believes this reasoning is not valid. The NJCEP program design, rather than the market or COVID-19, most significantly limits the number of fuel cell projects that are applying for NJCEP incentives. Bloom has noted to the Board that there are multiple customers who would have applied for fuel cell project incentives this year if not for the Board's Manufacturer Diversity cap, smaller budget, and lower per project limits for fuel cells as compared to combustion CHP. Each of those customers are interested in installing fuel

cell powered micro-grids at facilities that are important from a community preparedness and/or healthcare perspective, including supermarkets, pharmaceutical research, and hospitals. The "decreased participation" in the fuel cell incentive program is principally the result of disparate treatment of clean, non-combustion energy systems rather than decreased customer interest.

For instance, the Board's proposed program and budget extension for FY 2020 would carry forward structural inequities in the treatment of non-combustion versus combustion forms of distributed generation in the CHP/Fuel Cell program that are contrary to both the New Jersey Energy Master Plan as well as the public interest in fostering cleaner air, especially in disadvantaged communities. One of the stated goals of New Jersey's 2019 Energy Master Plan ("EMP") is supporting local, clean power generation in low and moderate-income ("LMI") and environmental justice communities. As explained in the EMP, "Clean power generation has the potential to provide LMI and environmental justice communities with locally supplied energy. Local clean power generation also provides additional resiliency, which is particularly important in LMI and environmental justice communities that are disproportionately impacted by the effects of natural disasters. Further, fossil fuel power generators are often located in or near environmental justice communities, placing additional burdens on them in the form of disproportionally contaminated air."1

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¹ NJ 2019 Energy Master Plan at 202, available at: https://nj.gov/emp/docs/pdf/2020NJBPU EMP.pdf

Indeed, a wave of recent studies has shown that local combustion related pollutants like NOx, SO2, and Particulate Matter("PM") are far more harmful to human health than previously believed, including findings that:

- Combustion related air pollution may be as harmful to your lungs as smoking cigarettes;²
- The Covid-19 virus can be carried on combustion related particulate matter³
- Particulate matter is the largest environmental health risk factor in the nation, and the resulting health impacts are borne disproportionately by economically disadvantaged communities;⁴
- Combustion related air pollution increases preterm birth risks;⁵

In addition to the human health impacts of local combustion related pollutants, calculations of the economic and health benefits associated with reducing NOx and PM emissions have been found to exceed the economic

² Wang M, Aaron CP, Madrigano J, et al. Association Between Long-term Exposure to Ambient Air Pollution and Change in Quantitatively Assessed Emphysema and Lung Function. *JAMA*. 2019;322(6):546–556. doi:10.1001/jama.2019.10255 Aubrey, Allison. Air Pollution May Be As Harmful To Your Lungs As Smoking Cigarettes, Study Finds. NPR. 13 August 2019. https://www.npr.org/sections/health-shots/2019/08/13/750581235/air-pollution-may-be-as-harmful-to-your-lungs-as-smoking-cigarettes-study-finds

³ Setti, et. al "Searching for SARS-COV-2 on Particulate Matter: A Possible Early Indicator of COVID-19 Epidemic Recurrence," International Journal of Environmental Research and Public Health April 2020.

⁴ Tessum et al. Inequity in consumption of goods and services adds to racial—ethnic disparities in air pollution exposure. *PNAS March 26*, 2019 116 (13) 6001-6006; first published March 11, 2019 https://doi.org/10.1073/pnas.1818859116

⁵Mendola, P. et al. "Air pollution and preterm birth: Do air pollution changes over time influence risk

in consecutive pregnancies among low-risk women?" International Journal of Environmental Research and Public Health, 2019. https://www.nih.gov/news-events/news-releases/nih-studysuggests-higher-air-pollution-exposure-during-second-pregnancy-may-increase-preterm-birth-risk

and health benefits of reducing GHG emissions on a per ton basis.⁶ In the same study, the New York University Institute for Policy Integrity determined that "DERs can be particularly valuable if they avoid local air pollution imposed on populations that are especially vulnerable to this pollution, such as low-income communities and communities of color."⁷

However, contrary to these findings, the current NJCEP program structure favors combustion technologies that emit local air pollution like NOx, SO2, and PM, and disfavors non-combustion technologies like fuel cells that do not emit local combustion related pollutants. For example:

- Non-combustion fuel cells are subject to a "Manufacturer Diversity" cap that limits the amount of funding any one non-combustion fuel cell system can access; however, no such cap applies to combustion technologies.
- A combustion CHP plant that emits NOx and PM can receive up to \$3M per project whereas a non-combustion all-electric fuel cell project of the same size at the same site that emits none of these pollutants can receive only \$1M.
- The FY 2020 CHP/Fuel Cell program funding level of \$20M was open to combustion CHP in its entirety, whereas non-combustion fuel cells were only allowed to compete for \$5M of that \$20M total funding.

⁶ Institute for Policy Integrity, New York University School of Law, "How States Can Value Pollution Reductions from Distributed Energy Resources" July 2018, available at: https://policyintegrity.org/files/publications/E Value Brief - v2.pdf
⁷ Id.

¹²⁹⁹ Orleans Drive, Sunnyvale CA 94089 T 408 543 1500 F 408 543 1501 www.bloomenergy.com

The Board should take the opportunity during this FY 2020 Program and Budget Extension to reform its programs so that cleaner technologies that do not emit local air pollution are favored over those combustion technologies that do. In light of these disparities and the new information and concern around the impacts of local air pollution, we recommend that the Board:

- (1) Reform its programs to eliminate the Manufacturer Diversity cap that currently limits only non-combustion fuel cells; and;
- (2) Revise the per project funding caps to apply equally to all eligible technologies;
- (3) Open the CHP/Fuel Cell funding pool to both fuel cells and CHP equally to establish a level playing field;
- (4) Adopt revisions to the program cost tests to consider the benefits of local air pollution emission reductions;
- (5) Institute a new 25% "adder" incentive for non-combustion projects in LMI neighborhoods.

To the extent that the lower efficiency requirement of 40% applicable to fuel cells is viewed as a justification for the current disparate treatment of fuel cells and combustion CHP, Bloom Energy supports an increase of the fuel cell efficiency requirement to 50%; however, the lack of local combustion related pollutants and significantly higher capacity factors for fuel cells more than compensates for the lower efficiency requirement. Simply put, when the Board pays incentives on a per kW/installed basis, lower than predicted capacity factors means that "the emissions and associated environmental benefits and higher efficiencies are not translated into reality", according to

a 2015 Rutgers University report on combustion CHP, which analyzed actual performance data.⁸

Instead, the Board could achieve immediate emission reductions and increased customer and community resiliency by simply eliminating the disparity in the incentive programs for non-combustion fuel cells and combustion CHP technologies to reflect the public health benefits of local air pollutant emission reductions. This is a particularly important issue at a time when the desire to increase resiliency and avoid transmission and distribution investments is driving more and more distributed generation into densely populated urban areas.

Finally, Bloom Energy suggests that the Board should consider the potential for the Fuel Cell Program to contribute to economic development at a critical moment in the State's fight against the Covid-19 pandemic and its impact on the economy. First, fuel cells provide clean and resilient power for key sectors of the state's economy, including the technology, food distribution, telecommunications, health care, large retail, manufacturing sectors. Second, fuel cell installations supported by the Board's CHP/FC program reduce customer energy costs and allow for avoided energy expenses to be redirected to other purposes like capital investments and human resources. Third, unlike combustion CHP, fuel cells and solar are supported by a federal investment tax credit (ITC) of 26%, meaning incentives awarded to fuel cell and solar projects funnel significantly more federal dollars into New Jersey than other technologies.

⁸ http://ceeep.rutgers.edu/wp-content/uploads/2016/02/WP2-Do-CHPs-Perform-Case-Study-of-NYSERDA-funded-Projects-11302015.pdf, at 6.

Bloom Energy appreciates the opportunity to provide these comments in response to the Notice filed on July 15, 2020. We look forward to working with the Board and Staff and stand ready to provide additional information wherever that information will be helpful to the process.

Very truly yours,

/S/

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Via electronic submission to publiccomments@njcleanenergy.com

July 24, 2020

TO: New Jersey Board of Public Utilities

FROM: Pamela G. Frank, on behalf of ChargEVC

RE: ChargEVC Comments in Response to: Request for Comments - Proposed NJCEP

Fiscal Year 2020 Extension and Third Budget Revision.

Prior to the Charge Up New Jersey program funding mandated by P.L. 2019, c. 362 (signed by the Governor on January 17, 2020), there was a budget allocation of \$30M to establish a rebate program for light-duty electric vehicles (EVs) and charging infrastructure. Once enacted, the EV law mandated \$30M a year for ten years specifically for light-duty electric vehicle rebates to fund the Charge Up New Jersey program. While this allocation crossed the current fiscal year, there should potentially be up to \$60M available for these rebates in the current fiscal year.

While it understandably took time to get the program up and running, especially given complications due to COVID-19, we are concerned about a precedent that removes any money for the intended purpose of light-duty vehicle EV rebates.

The Charge Up New Jersey Program was mandated in the law in part to help us reach the goals in P.L. 2019, C. 362m as follows:

- 330,000 light-duty, plug-in electric vehicles shall be registered in New Jersey by December 31, 2025 and at least 2 million electric vehicles shall be registered in New Jersey by December 31, 2035;
- At least 85% of all new light-duty vehicles sold or leased in New Jersey shall be plug-in electric vehicles by December 31, 2040;
- At least 25% of State-owned non-emergency light-duty vehicles shall be plugin electric vehicles by December 31, 2025;
- At least 400 DC fast chargers shall be available for public use at no fewer than 200 charging locations in the state by December 31, 2035;
- At least 1,000 Level 2 EV chargers shall be available for public use across the state by December 31, 2025; and



• The Department of Environmental Protection, in consultation with the Board, shall establish goals for vehicle electrification and infrastructure development for medium and heavy-duty vehicles by December 31, 2020.

These are ambitious goals and COVID-19 has certainly made these challenging goals ever more challenging. ChargEVC provided an estimate of how many light-duty EVs would be on our roads as a result of the \$300 million in rebates. That number was approximately 70-80,000 vehicles – a far cry from the 330,000 goal in the law.

This underscores the importance of ensuring the dollars allocated for this purpose do not get repurposed and that in any given year, those funds can roll over into the subsequent year as demand for these vehicles increase.

Further, it is difficult for us to assess the utility of re-allocating \$16M of funds intended for light-duty EV rebates when we have no insight on the demand for the rebate itself.

Stage One of the program was launched on May 27, 2020 and since that time, applicants have been able to apply for rebates post-purchase or post-lease directly to Center for Sustainable Energy, which is to process applicants on a first-come, first-served basis and issue rebates to eligible applicants in single payments via check. We have asked repeatedly for the preliminary data on the program which we have not yet received.

BPU Staff and the Commissioners understand the crucial role EVs play in meeting many of the State's goals including achieving those set forth in the State's Energy Master Plan. Funding for EV rebates is a highly strategic resource and should be treated as such – not reallocated and not raided.

We look forward to the timely release of Stage Two of the program, regarding incentives available at point-of-sale, which we are pleased to hear is anticipated to launch in the next few months. This will further simplify the process for applicants.

We appreciate, as always, the opportunity to provide comments. Please feel free to reach out with any questions.



July 24th 2020

Aida Camacho-Welch, Secretary of the Board Board of Public Utilities 44 South Clinton Avenue, 9th Floor Post Office Box 350 Trenton, New Jersey 08625-0350

Thank you for this opportunity to provide comments on the NJCEP FY20 Program Budget Extension Straw Proposal. EAM Associates is a high-performance building consulting firm working within the Residential New Construction Program since its inception in 2001. To date, we have certified over 20,000 single and multi-family homes to these standards.

We have reviewed the final corrected documents released on July 21st, and would like to offer a statement of support for the proposal. Over these past months of 2020 we have very much appreciated the collaboration afforded to us by our market manager partners at TRC and CLEAResult. It without doubt made it easier for EAM to carry on our work, keep our staff fully employed, and continue to support our builder/developer partners during this difficult period, one where residential new construction was and continues to be an important driver for the recovery of New Jersey's economy.

Likewise with this budget proposal we really value the efforts that we know the BPU and Board Staff have made in order to preserve and drive forward NJCEP's efficiency and sustainability agenda during this period where there are obviously immense pressures on the state budget process. These are challenging times, and of course adjustments needed to be made, but we support BPU and NJCEP in their efforts to keep these programs on track. They are too important to New Jersey's present economy and future well-being not to.

Please feel free to contact me if you have any questions. We look forward to continue working with the NJCEP in developing programs that help push the levels of efficiency and sustainability in New Jersey homes.

Sincerely,

Frank Swol Vice President EAM Associates 3350 Hwy 138 West, Building 2 Suite 223 Wall, NJ 07719

Phone: 732.556.9190 Fax: 732.556.9195 fswol@eamenergy.com www.eamenergy.com



Doosan Fuel Cell America, Inc.

195 Governor's Highway South Windsor, CT 06074 T - 860 727 2200

July 24, 2020

Aida Camacho-Welch Secretary Board of Public Utilities 44 South Clinton Avenue 3rd Floor Trenton, NJ 08625 publiccomments@njcleanenergy.com

Re: Request for Comments - Proposed NJCEP FY2020 Extension and Third Budget Revision

Dear Ms. Camacho-Welch:

Doosan Fuel Cell America, Inc. is a global leader in providing clean, continuous-duty, cost-competitive stationary fuel cell energy systems. Our PureCell® systems operate 24/7 with high efficiency and ultralow emissions, allowing our customers to generate their own electricity and heat onsite while reducing their utility expenses and environmental emissions. In addition to operating on natural gas and renewable natural gas, Doosan produces systems that operate directly on hydrogen which can be produced by renewables such as wind and solar and stored for base load generation when needed.

Doosan Fuel Cell America, Inc. was founded on the strength of the people and technology developed at United Technologies over the past fifty years. We are building on the value of the organization and aspire to be the technology and market leader in the fuel cell industry. Our headquarters are in Connecticut at the site of our world-class fuel cell R&D and manufacturing facilities.

The State of New Jersey is one of the most important markets for the emerging fuel cell sector, and fuel cells can contribute greatly to New Jersey's goals of reducing greenhouse gas (GHG) emissions, reducing peak load, providing resiliency and improving the reliability of the electric utility system. Doosan currently operates five units, supplying over 2 MW of clean and secure power to a major telecommunications company in the State, and there is significant possibility of installing additional systems to a variety of industries and customers. Worldwide, Doosan operates more than 600 units producing over 270 MW with many more coming on line in the next year.

Doosan Fuel Cell American, Inc. wholeheartedly supports the written comments of the National Fuel Cell Research Center (NFCRC) regarding New Jersey's Clean Energy Programs and budget extension for Fiscal Year 2020. Doosan agrees with the NFCRC's two major points that **A) the 30% manufacturer's cap should be equitably reduced for clean, non-combustion fuel cells or apply to all technology categories to ensure that the program designs favor the cleanest options, per the goals of the NJCEP; and B) the budget for fuel cells should appropriately address the demand reflected in pending fuel cell program applications, as well as the potential to immediately address local air quality and stated goals of the Energy Master Plan.**



Doosan Fuel Cell America, Inc.

195 Governor's Highway South Windsor, CT 06074 T - 860 727 2200

Therefore, Doosan Fuel America, Inc. fully supports the comments of the NFCRC in its entirety and look forward to continuing to work with State of New Jersey on this and other important issues.

Respectfully submitted:

By: /s/ David Giordano

David Giordano
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NATIONAL FUEL CELL RESEARCH CENTER



July 24, 2020

VIA ELECTRONIC FILING

Aida Camacho-Welch, Secretary of the Board Board of Public Utilities 44 South Clinton Avenue, 3rd Floor Suite 314, CN 350 Trenton, New Jersey 08625-0350 Email: publiccomments@njcleanenergy.com

Re: Request for Comments - Proposed NJCEP Fiscal Year 2020 Extension and Third Budget Revision

Dear Secretary Camacho-Welch:

Please accept these comments on behalf of the National Fuel Cell Research Center, in response to the July 16, 2020 New Jersey Board of Public Utilities Request for Comments on the Proposed New Jersey Clean Energy Program Fiscal Year 2020 Extension and Third Budget Revision.

Respectfully Submitted,

/s/ Jack Brouwer

Dr. Jack Brouwer
Director, National Fuel Cell Research Center
University of California Irvine

Irvine, CA 92697-3550 Email: <u>jb@nfcrc.uci.edu</u>

Phone: 949-824-1999 Ext. 11221

NEW JERSEY BOARD OF PUBLIC UTILITIES OFFICE OF CLEAN ENERGY

COMMENTS OF THE NATIONAL FUEL CELL RESEARCH CENTER ON THE PROPOSED NEW JERSEY CLEAN ENERGY PROGRAM FISCAL YEAR 2020 EXTENSION AND THIRD BUDGET REVISION

I. Introduction and Background

The National Fuel Cell Research Center ("NFCRC") appreciates the opportunity to submit comments on the New Jersey Board of Public Utilities ("BPU") on the New Jersey Clean Energy Programs ("NJCEP") and Budget for the Extension of Fiscal Year 2020.

The NFCRC facilitates and accelerates the development and deployment of fuel cell technology and systems; promotes strategic alliances to address the market challenges associated with the installation and integration of fuel cell systems; and educates and develops resources for the power and energy storage sectors. The NFCRC was established in 1998 at the University of California, Irvine by the U.S. Department of Energy and the California Energy Commission in order to develop advanced sources of power generation, transportation and fuels and has overseen and reviewed thousands of commercial fuel cell applications.

In these comments, the NFCRC respectfully recommends that the BPU ensure that program designs favor the cleanest energy options, per the goals of the NJCEP:

- A. The 30% manufacturer's cap should be equitably reduced for clean, non-combustion fuel cells to ensure that program designs favor the cleanest options, per the goals of the NJCEP.
- B. The budget for fuel cells should appropriately address the demand reflected in pending fuel cell program applications, as well as the potential to immediately address local air quality and stated goals of the Energy Master Plan.

II. Comments on the FY20 Extension and Third Budget Revision

The thoughtful fifth quarter extension of the FY20 program is a practical way for the BPU to match the statewide extension of FY20 through September 30, 2020, and to additionally address the very important issue of disproportionate impacts of COVID-19 on underserved communities. The NFCRC appreciates the BPU inclusion of non-combustion fuel cell projects both with and without heat recovery in the NJCEP as an ideal way to address this issue at the community level.

For years, there has been a growing body of evidence that local air pollution is more harmful to human health than was previously understood. Local air pollution health effects are amplified in the era of COVID-19. Harvard University and the University of Siena researchers have separately found in ongoing studies that a persistent increase in small-particle air pollution of 1 microgram per cubic meter of small particles can raise the risk of dying from COVID-19 by up to 12%. And because air pollution impairs the first line of defense of the upper respiratory

¹ COVID 19 PM 2.5: A national study on long-term exposure to air pollution and COVID-19 mortality in the United States. Available at: https://projects.iq.harvard.edu/covid-pm.

² Can atmospheric pollution be considered a co-factor in extremely high level of SARS-CoV-2 lethality in Northern Italy? Environmental Science, Volume 261, June 2020 114465. Available at: https://www.sciencedirect.com/science/article/pii/S0269749120320601.

tract, it is not surprising that those who live in areas with higher air pollution have worse outcomes from the virus.

Use of fuel cell systems for power generation without combustion eliminates criteria pollutant and air toxics emissions. Fuel cells also reduce greenhouse gas emissions and can achieve zero-carbon emissions when fueled by biogas or renewable hydrogen. These features are squarely aligned with the energy, environmental and social justice goals of the New Jersey Energy Master Plan.³ Today, fuel cell systems are providing clean and resilient power to medical facilities, microgrids, communications infrastructure, data centers, multi-unit residential complexes, campuses and traffic and railroad crossing signals, in communities across the U.S.

As New Jersey seeks options to provide resilient local power generation sources that can also ride through emergencies and grid outages without adding to the local air pollution burden, fuel cells stand out as superior options to conventional solutions like diesel generators or even conventional combined heat and power ("CHP"). The NFCRC therefore requests that the BPU consider the following changes to the FY20 NJCEP extension and third budget revision.

A. Manufacturer Cap

In the Straw Proposal, the BPU continues to only apply the 30% Manufacturer Cap "to the \$5,000,000 NJCEP budget for Fuel Cells set on June 21, 2019," without further description or justification in the compliance filings. Caps should be applied across all BPU programs, if the goal of the BPU is to ensure that funding is not inequitably given to any one applicant or technology manufacturer. In addition, to truly

³ 2019 New Jersey Energy Master Plan, New Jersey Board of Public Utilities Pathway to 2050. Available at: https://nj.gov/emp/docs/pdf/2020 NJBPU EMP.pdf.

⁴ New Jersey Board of Public Utilities Request for Comments (Straw Proposal) NJCEP Proposed Fiscal Year 2020 Extension and Third Budget Revisions, Corrected Version, July 20, 2020 at 8.

benefit local air quality and reflect achievement of Energy Master Plan goals in actions, not just words, any manufacturer cap that would be included in the program should be substantially increased above 30% or eliminated for the reasons described below.

The application of the manufacturer cap to only one technology (fuel cells) is not appropriately justified in the compliance filings. While there are precedents for a manufacturer cap in other state energy programs, these caps are broadly applied in these other programs to all technologies in the program. The explanation given in the FY20 Summary of Program Changes is that "the foregoing is intended to promote clean, distributed energy generation in a cost-effective manner and to encourage participation by, and competition among, various manufacturers." The NJCEP should encourage such competition across distributed energy resources, especially in consideration of the new programs that have been implemented within the NJCEP, such as energy storage.

B. Budget for CHP and Fuel Cells

The NFCRC strongly opposes the reduction of the fuel cell budget to \$1.5 million. During the workshop, BPU staff noted that there are currently pending fuel cell applications. This would indicate demand for this funding, contrary to the statement about "decreased participation compared to forecasts." As with all clean energy projects, there have been delays with project development and fuel cell installations due to COVID-19 health requirements. Fuel cell projects are currently limited to \$5 million of the total \$20 million that is available to CHP systems in the Distributed Energy

⁵ New Jersey's Clean Energy Program Fiscal Year 2020 Summary of Proposed New Initiatives and Program Changes at 20.

⁶ New Jersey Board of Public Utilities Request for Comments (Straw Proposal) NJCEP Proposed Fiscal Year 2020 Extension and Third Budget Revisions, Corrected Version, July 20, 2020 at 3.

Resources budget. The NFCRC therefore requests that some of the funding currently allocated to combustion CHP projects be appropriately reallocated to non-combustion fuel cells systems. There are three manufacturers offering large fuel cell systems for primary power generation for sale in the United States. With a total proposed FY20 budget of \$1.5 million, a \$1 million project cap and a 30% manufacturer's cap, this means only one more large-scale fuel cell project could be fully funded during the fifth quarter—if there is sufficient funding already allocated from the previous budget for the aforementioned pending projects that are already in the program queue. With a smaller manufacturer cap and the appropriate amount of funding allocated to fuel cells, additional projects already in development can move forward and achieve direct and immediate local air quality benefits.

The NFCRC requests that the BPU consider the following recommendations: (1) fully funding the fuel cell program with \$5 million of the funding that is also available to CHP in the same category, especially in light of the need for cleaner alternatives to combustion generation; (2) change the program design in order to better reflect the fuel cell market; and (3) increase the manufacturer's cap to 50% of the program budget in order to better stimulate market competition, workforce development, and program uptake. These recommendations would also more strongly align the program with the New Jersey Energy Master Plan's Goal 6.2 to "support local, clean power generation in low- and moderate-income and environmental justice communities."

⁷ 2019 New Jersey Energy Master Plan, New Jersey Board of Public Utilities Pathway to 2050, at 202. Available at: https://nj.gov/emp/docs/pdf/2020_NJBPU_EMP.pdf.

III. Conclusion

The NFCRC appreciates the extension of the FY20 Clean Energy Programs and Budgets and requests a manufacturer cap and program budget that truly reflects the market demand—and the urgent community need for clean fuel cell distributed generation. We welcome the BPU consideration of these simple program design changes to minimize further disruptions to the fuel cell market in New Jersey to support maximum DER benefits and positive ratepayer impact, and to importantly address short-term and long-term air quality effects in communities already disproportionately affected by COVID-19.

STATE OF NEW JERSEY BOARD OF PUBLIC UTILITIES OFFICE OF CLEAN ENERGY

IN THE MATTER OF THE CLEAN : Docket No. QO20060402

ENERGY PROGRAMS AND BUDGET

FOR THE EXTENSION OF FISCAL

YEAR 2020 : July 24, 2020

FUELCELL ENERGY, INC.'S WRITTEN COMMENTS

FuelCell Energy, Inc. ("FCE") hereby submits its Written Comments to the New Jersey Board of Public Utilities ("NJBPU" " or "Board") in support of the Written Comments filed by the National Fuel Cell Research Center ("NFCRC") in the above-mentioned docket as follows:

I. Background

On July 16, 2020, the Board issued a Request for Comments on the New Jersey Clean Energy Programs and Budget for the Extension of Fiscal Year 2020.

II. FCE Background

FCE, a manufacturer and installer of carbonate fuel cell technology, is in its 50th year of operation and is headquartered in Danbury, Connecticut with its global manufacturing facility located in Torrington, Connecticut. FCE's fuel cell power plants are exported all over the world and currently has over 300 MW of stationary fuel cells installed, in backlog, or under award on three continents with many more projects under development. FCE's clean, efficient fuel cells have generated over 9 billion kWh of power.

III. FCE Supports and Adopts the NFCRC's Comments

FCE supports the entirety of NFCRC's Written Comments regarding New Jersey's Clean Energy Programs and budget for the extension of fiscal year 2020. FCE agrees with the NFCRC that (A) the state's 30% manufacturer's cap should be equitably reduced for clean, non-

combustion fuel cells or apply to all technology categories to ensure that program designs favor the cleanest options, per the goals of the NJCEP; and (B) the state's budget for fuel cells should appropriately address the demand reflected in pending fuel cell program applications, as well as the potential to immediately address local air quality and stated goals of the New Jersey Energy Master Plan. Therefore, FCE adopts and incorporates the entirety of NFCRC's Written Comments in connection with New Jersey's Clean Energy Programs and budget for the extension of fiscal year 2020.

IV. Conclusion

Accordingly, FCE submits its Written Comments in support of NFCRC's Written Comments and requests a manufacturer cap and program budget that more adequately reflects market demand as well as the community's urgent need for clean fuel cell distributed generation.

Respectfully submitted,

FUELCELL ENERGY, INC.

By Its Counsel

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