

Comments on: New Jersey Board of Public Utilities Resource Adequacy Technical Conference

**Submitted by the New Jersey Environmental Justice Alliance to the
New Jersey Board of Public Utilities**

August 19, 2025

Introduction

The New Jersey Environmental Justice Alliance (NJEJA) respectfully submits our comments to the New Jersey Board of Public Utilities (BPU) in the matter of New Jersey's Growing Concerns Surrounding Resource Adequacy and Participation in Regional Wholesale Electricity Markets, Docket No. QO25060358.

The New Jersey Environmental Justice Alliance

The New Jersey Environmental Justice Alliance (NJEJA) is a statewide organization mobilizing other organizations and individuals in order to increase the quality of life and upward mobility opportunities for communities that experience additional burdens resulting from histories of systemic injustice. Our work covers a wide range of areas, and we believe that the community's vision of improvement will always be the most effective and an important part of strategic development.

Therefore, as part of our ongoing work to support communities most impacted by disproportionate pollution burdens - including those in LMI communities who are significantly harmed by high rate-payer costs, inequitable grid access, and increasingly frequent extreme weather events - we submit these comments today in an effort to assist the BPU in their effort:

“To ensure that safe, adequate, and proper utility services are provided at reasonable, non-discriminatory rates to all members of the public who desire such services. To develop and regulate a competitive, economically cost-effective energy policy that promotes responsible growth and clean renewable energy sources while maintaining a high quality of life in New Jersey.”¹

Our range of work, state-wide and national reach, and diversity of membership give us a unique perspective on environmental protection and allow us to bring the concerns of historically overburdened communities to the forefront of the conversation. We welcome continued conversation on this matter.

A Discussion on Adequacy

In first analysis of the BPU’s notice of the technical conference and in hearing the discussions heard during the meeting, we are immediately struck by the singular emphasis on cost, including cost of reliability (and in construct unreliability), affordability of projects, and the price of grid modernization. While these questions are certainly of critical importance, it is imperative that the focus on rates does not come at the cost of factoring in environmental justice concerns including air emissions from energy projects, equitable grid distribution, and the necessity of ensuring that communities are the center of the conversation.

To this end, while we recognize that the purview of the BPU is to oversee regulated utilities and to “ensure safe, adequate, and proper utility services at reasonable rates,” we argue that the BPU should include frameworks for environmental justice and see their work through a justice-lens in order to ensure that all decisions made by the board are community-centric, just, equitable, and ultimately in service of all communities in the state.

¹ New Jersey Board of Public Utilities. *Mission Statement*. Board of Public Utilities.
<https://www.nj.gov/bpu/about/mission/>.

As stated, the goals of the conference include:

- 1) Planning for future load growth,
- 2) Identification of barriers,
- 3) Examining and evaluations impacts of Regional Wholesale Electricity Markets,
- 4) Evaluating alternatives to the PJM market, and
- 5) Identification of paths forward.²

All of these goals stress the importance of ratepayer impacts and a “balanced mix of resources.” However, the goals through a lens of environmental justice would prioritize ratepayer impact for those most disproportionately affected by climate change and systemic economic challenges. Furthermore, a “balanced mix of resources” would focus singularly on energy resources which do not contribute to local air pollution through either greenhouse gases or greenhouse gas co-pollutants. In this, the BPU would be pursuing both ratepayer protection and resource adequacy while ensuring the protections and benefits are targeted in their approach to protecting environmental justice communities, decreasing local air pollution, and mitigating climate change, all of which are in line with the state’s environmental, climate, and environmental justice goals.

To this end, the following portions of our comments keep this framework in mind and provide thoughts to the BPU on how to achieve the stated goals of resource adequacy without sacrificing environmental justice principles or continuing to place undue burden on environmental justice communities.³

The Nexus of Weather and the Energy Resources

As lived experience demonstrates, the frequency of extreme weather events is steadily and distressingly rising. This is happening in conjunction with a changing climate, new weather

² New Jersey Board of Public Utilities. *Supplemental Notice of Technical Conference: In the Matter of New Jersey’s Growing Concerns Surrounding Resource Adequacy and Participation in Regional Wholesale Electricity Markets*. Docket No. QO25060358. Board of Public Utilities. July 2025.

³ We define environmental justice communities as communities Of Color and communities with low-income. These communities can be visualized on the NJDEP environmental justice map.

patterns, higher temperatures, and concerning changes to the flora and fauna around the globe. A NOAA report found that “nearly the entire contiguous U.S. experienced much-above-average temperatures during 2024,” with New Jersey having its warmest on record daytime temperature and seeing 2024 as a whole as the second warmest year on record.⁴ However, such extreme weather events were not constrained to heat and heat-related disasters. 2024 as a whole saw 27 different billion-dollar weather and climate disasters. This made 2024 the “14th consecutive year where the U.S. experienced 10 or more billion-dollar disasters and the fifth consecutive year (2020-24) where 18 or more billion-dollar disasters impacted the U.S.”⁵

While these disasters have profound and wide-spread impacts, the effects and burdens of these disasters are disproportionately harmful for environmental justice communities. Research suggests that there is evidence of racial disparities in climate change burden including but not limited to, “mortality, respiratory and cardiovascular disease, mental health, and heat-related illness.”⁶ In particular, children, older adults, and individuals with disabilities are at severe risk.⁷

The EPA confirms these findings - as well as the anecdotal evidence, oral evidence, and lived experience of vulnerable communities - and has found that climate change has disproportionate risk for ‘socially vulnerable populations’⁸ which are defined based on age, income, education, race, and ethnicity.⁹ These risks relate to extreme temperature and weather events as highlighted above, but also include risks associated with coastal and inland flooding, air quality risks, and property damage due to flood. Compared to other communities, low-income individuals are statistically more likely to contend with higher rates of childhood asthma, land loss to

⁴ National Centers for Environmental Information. *National Climate Report*. National Oceanic and Atmospheric Administration. 2024. <https://www.ncei.noaa.gov/access/monitoring/monthly-report/national/202413>

⁵ National Centers for Environmental Information. *National Climate Report*. National Oceanic and Atmospheric Administration. 2024. <https://www.ncei.noaa.gov/access/monitoring/monthly-report/national/202413>

⁶ Berberian, Alique G et al. “Racial Disparities in Climate Change-Related Health Effects in the United States.” *Current environmental health reports* vol. 9,3 (2022): 451-464. doi:10.1007/s40572-022-00360-w

⁷ Gonzalez et. al, *Environmental Disasters and Extreme Weather Had Disproportionate Impacts on Disabled Adults in 2023*. Urban Institute. April 2025. <https://www.urban.org/research/publication/environmental-disasters-and-extreme-weather-had-disproportionate-impacts>

⁸ *Findings on Disproportionate Risks of Climate Change to Low Income Individuals*. U.S. Environmental Protection Agency. September 2021. https://www.epa.gov/system/files/documents/2021-11/factsheet_low-income.pdf

⁹ These definitions and findings are in line with the New Jersey Environmental Justice Law.

inundation, extreme temperature related mortality, and traffic delays/property damage due to flooding.¹⁰

To this end, while the BPU is not the primary state agency tasked to contend with climate change and environmental harm as well as its associated impacts, the Board's decisions on energy production and prioritization of energy type can have profound implications for the climate, local air pollution, and subsequent health-related impacts. Therefore, as articulated in previous pages but underscored in this section, resource adequacy as a concept must include factors such as air pollution and emissions as well as extreme weather costs to low-income communities.

Solutions At Hand: Both Just and Unjust

In examining paths forward for resource adequacy, we understand the Board is seeking to have a 'balanced mix of resources.' We recognize that multiple options significantly increase the likelihood of sustained, reliable connectivity where some resources may fill in gaps as needed when other options fail or are less effective. While this is a valuable endeavor and a strong strategy, it must be made clear that our mix should focus singularly on bringing on new renewables, sustaining our existing access to renewable resource projects, and divesting from fossil-fuel and nuclear projects. To this end, we posit that the definition of clean energy must be outlined to ensure cohesion in discussion and understanding. We define clean energy, green energy, renewables, etc. - including all such terms and another used to describe energy which does not rely on fossil fuels - as only solar power, wind power, small hydropower projects, and employment on battery storage. These terms encompass energy generation which does not contribute to local air pollution via greenhouse gases nor greenhouse gas co-pollutants and therefore does not accelerate climate change. We have raised these points to the BPU in previous comments, including in our discussion on the Energy Master Plan (EMP) where we said,

“We do not consider hydrogen fuel/hydrogen combustion, the use of carbon capture utilization and storage/carbon capture and storage (CCUS/CCS), nuclear, incineration,

¹⁰ *Social Vulnerability Report*. U.S. Environmental Protection Agency. March 2025.
<https://www.epa.gov/cira/social-vulnerability-report>

burning of biomass, liquid natural gas (LNG), or renewable natural gas (RNG) as clean, renewable, or green.

Similarly, any definition of clean energy must not use “net zero” measurements, offsets, or emissions trading mechanisms.¹¹ There is debate as to whether these methodologies actually reduce CO2 emissions. However, if we were to assume that these systems truly do successfully and efficiently lower CO2 emissions, they do not guarantee reductions in CO2 in aggregate nor do they reduce GHG co-pollutants in EJ communities.”¹²

In measuring which projects to bring online, any emerging or existing technology which poses an additional emissions burden and/or contributes to the cumulative impact of toxic local air pollution in or around environmental justice communities should not be allowed to be brought to fruition. Each project and technology should be assessed for its impact on host communities including its financial viability, financing, and efficacy in achieving emissions reductions while still contributing to the reliability and adequacy of the grid and energy mix within the state.

False Solutions: Carbon Capture, and Hydrogen

To this point, we wish to highlight two forms of energy which we cannot endorse and see as active threats to environmental justice communities as well as residents anywhere near the lifecycle of these technologies.

Although much of the discussion surrounding carbon capture (CCS) and hydrogen (including both hydrogen production of all colors and hydrogen co-firing) has abetted since the inauguration of the Trump administration and the tax cuts associated with these forms of energy, there is still an ongoing push for these projects and facility types. Proponents argue that these forms of energy are necessary in the clean energy transition. However, NJEJA and environmental

¹¹ Sheats, Nicky. *Comments on the Draft 2019 New Jersey Energy Master Plan*. New Jersey Environmental Justice Alliance. September 16, 2019. https://njeja.org/wp-content/uploads/2021/08/Comments-on-the-Draft-2019-New-Jersey-Energy-Master-Plan_2019.pdf.

¹² Helmick, Thomas. *Comments on: New Jersey Board of Public Utilities Energy Master Plan 2024*. New Jersey Environmental Justice Alliance, Ironbound Community Corporation. June 2024. <https://njeja.org/2024-emp-comments/>.

justice communities across the country have pointed to the flaws in these systems including highly dangerous risks connected to their production, lack of financial feasibility, and the undercurrent of fossil fuel focus associated with both of these technologies.¹³

To this point, we once again refer to our comments submitted in the 2024 EMP where we highlighted the inefficiency of CCS projects as was the case in the Petra Nova project in Thompsons, Texas. Receiving \$195 million in funding from the Department of Energy, the project was unable to remain consistently operational and failed to capture CO₂ at the promised rate, averaging around 17% despite an aim for a 33% capture rate.¹⁴

However, even if we were to assume that these projects hold value and demonstrable positive success at promised goals, they still pose significant risk for EJ communities. In other words, CCS projects do not divest our system from fossil fuel energy nor do they support reductions in local air pollution by capturing greenhouse gas co-pollutants. Instead, these CCS projects merely - and theoretically - divert the associated CO₂. This diversion (capture) does not ameliorate the damage and risk of local air pollution or support positive health outcomes in surrounding communities. Furthermore, as CO₂ is odorless, colorless, and heavier than air, it is an asphyxiant and intoxicant¹⁵ which has led to physical harm and death in humans and surrounding animals when leaked. The risks of pipeline leakage and rupture, thereby causing highly hazardous situations and emergencies, as well as the potential for seismic activity and groundwater contamination is far too great of a risk to put on New Jersey communities.

In regards to hydrogen usage, NJEJA and our partners have been steadfast and resolute in our opposition to the development of hydrogen projects. Whether in usage, blending, or co-firing,

¹³ Ana I. Baptista, Yukyan Lam, Jennifer Ventrella, Nicky Sheats, Thomas Ikeda, Ansha Zaman, Brooke Helmick; Climate Justice Futures: Carbon Management Risks and Alternatives. *Journal of Climate Resilience and Justice* 2025; 2 1–17. doi: https://doi.org/10.1162/crcj_a_00013.

¹⁴ Directors, Clarion Energy Content. “Groundbreaking Petra Nova CCS Project Back up and Running, Owner Says.” *Power Engineering* (blog), September 14, 2023. <https://www.power-eng.com/emissions/groundbreaking-petra-nova-ccs-project-back-up-and-running-owner-says/>.

¹⁵ Cagle. *A Leaking CO₂ Pipeline Can Cause Suffocation Within a Minute. The Government Needs to Regulate Them, Fast*. Earthjustice. September 2024. <https://earthjustice.org/article/a-leaking-co2-pipeline-can-cause-suffocation-within-a-minute-the-government-needs-to-regulate-them-fast>

there are significant associated risks. From start to finish, the lifecycle of a hydrogen project from production, transportation, storage, and usage has a strong likelihood for damage and dangerous situations for workers, communities, and the natural environment. Several proponents of hydrogen have pointed to the various colors of hydrogen - which refers to its original production process - as a mechanism for differentiating which forms can be considered 'clean'. We would argue that even the 'cleanest' form of hydrogen¹⁶ is highly subjective due to the reliance on significant fresh water consumption and diversion of valuable renewable resources which could be more efficiently used elsewhere.

As stated in other comments, hydrogen is not a viable solution for New Jersey nor should it be considered by the BPU as part of a 'balanced mix of resources':

“Hydrogen as an energy source will require significant infrastructural development, even if current pipeline systems are utilized. Production facilities, transportation infrastructure, storage operations, and the ability to utilize hydrogen will require vast public subsidies all of which has not yet seen adequate public engagement, input, or transparency. Furthermore, the risks of leakage, explosion, and increased emissions associated with hydrogen production demonstrates that this technology is not a viable investment. Hydrogen in general, as the smallest element, vibrates at an incredibly high frequency and thus is more prone to creating cracks and fissures in pipelines, especially if rigorous safety measures are not put into place. Such cracks can lead to leaks and explosions as a result of hydrogen's high flammability. Hydrogen explosions are larger and burn hotter than methane, risking the lives of host communities and damage to the environment where this infrastructure is situated. Additionally, hydrogen production holds the potential to increase NOx emissions as well. Such renewable energy would be more effective and better suited to the goals of electrifying sectors currently relying on fossil fuels.”¹⁷

¹⁶ In general, many proponents of clean hydrogen refer to green hydrogen or yellow hydrogen. Green hydrogen refers to any form of hydrogen powered by renewable energy (wind, solar, hydroelectric) while yellow hydrogen refers to hydrogen produced solely via solar power. These two forms are not inclusive of hydrogen produced by nuclear power which is often referred to as pink hydrogen.

¹⁷ Helmick, Thomas. *Comments on: New Jersey Board of Public Utilities Energy Master Plan 2024*. New Jersey Environmental Justice Alliance, Ironbound Community Corporation. June 2024. <https://njeja.org/2024-emp-comments/>.

In all, we highlight these two forms of energy as serious flags for the Board of Public Utilities so that the Board may weigh out the associated costs of these projects including both the physical and environmental cost as well as the financial cost to ratepayers for funding projects which do not yield positive results. These two forms of energy cannot and should not be considered as part of New Jersey's development for a 'balanced mix' in order to achieve resource adequacy. Instead, the BPU should focus on infrastructural investment which prioritizes clean, renewable sources of energy exclusively including solar, wind, small-scale hydroelectric, virtual power plants, microgrids, community solar, solar farms, co-location of renewable energy, and battery storage. This will allow the BPU to achieve their stated goals and ensure resource adequacy without undue burden on ratepayers while still operating as an agency that is protective of EJ communities.

Other Considerations

Grid Equity

In addition to considering what types of energy should be allowed onto the grid in New Jersey, it is important to also flag that equitability must be wrapped into the grid modification and update process. To this end, the BPU should conduct a cumulative impacts analysis of emissions burdens from the grid - including projects that plug into the regional grid from New Jersey - in order to measure and understand the impact of emissions burdens in production and transmission on environmental justice communities. While the technical conference focused on the cost of grid modernization, infrastructure elements, and resource adequacy, the central and determining factor for grid modernization and reliability should be the burden on environmental justice communities. An EJ and equity lens would ensure that the mapping of plants, projects, and transmission infrastructure would seek to not only ensure cost containment and reliability for ratepayers, but a mitigation of harm for EJ communities. Therefore, the BPU should collaborate with community-based organizations operating in EJ communities - including faith-based, labor, and advocacy organizations - to learn from residents about their day-to-day experiences with the grid, reliability, and ratepayer costs. With this in mind, grid development would include

equitability in the grid and ensuring that modernization is done in such a way as to not leave behind or sacrifice environmental justice communities.

Data Center Impact

Highlighted in other sections, EJ Communities both in New Jersey and across the nation, live in positions of precarity, with risk to health, physical safety, and life. As such, there must be a prioritization of these communities in making siting decisions, investment calculuses, and in planning landscapes, including both state and local design. This is of particular importance when considering the rising impacts of data centers. Although data centers as physical entities and as a concept is by no means new, there has been a steady increase in data center development and the conversation regarding resources for data centers has been top of mind for many advocates in the environmental justice and energy sector. To this end, we wish to highlight a few key points for consideration as it relates to AI and Data Center development.

First, all considerations regarding data center proliferation must involve communities including extensive public input, public comment, and community education. These hearings and meetings should be done in a way that is unbiased and in language that can be understood by residents not trained in these fields. All decisions about data centers should be done transparently and with accountability to the communities in the surrounding areas as well as those who may be impacted by the resource needs of these centers including energy, water, and other potentially negative effects.

Furthermore, we argue that any data center allowed to operate in the state of New Jersey should be responsible for their own costs so that these financial burdens are not shifted onto ratepayers. We support measures which protect ratepayers, especially ratepayers in LMI communities, from shouldering the economic needs of these centers. Additionally, we strongly urge the BPU to collaborate with any other entity involved in permitting and monitoring these data centers. As these centers are highly resource- and energy-intensive, particularly if they are running AI programs and data, such centers in the state should be required to utilize clean energy and battery storage to the maximum extent possible. This must and should include on-site co-location of

renewable energy and battery storage. Finally, no data center should be allowed to operate in a shared energy or trading program as these programs cannot guarantee emissions reductions or protections for environmental justice communities.

Conclusion

These comments have been submitted in an effort to share with the NJ Board of Public Utilities, our understanding, expertise, and lessons learned regarding best practices. As a result of our over 20 years of experience in energy work, emissions reduction, and support for LMI and Environmental Justice communities¹⁸ in the state of New Jersey as well as those across the nation, we are uniquely positioned to shed light on the disproportionate impacts of an inefficient energy system and the associated toxic air pollution on vulnerable communities, particularly those in frontline and fenceline areas as well as renters and low-income households.

We support the BPU in their ongoing work to bring new renewable projects online, turn away from climate-harming fossil fuel projects, contain costs for residents, and increase both the reliability and equitability of the grid. We offer our continued support in advancing these goals within the state in a way that is equitable and just. We are willing to engage in ongoing conversation with the NJ BPU concerning the thoughts presented in these comments.

¹⁸ The term “environmental justice communities” refers to communities Of Color and communities with low-income.

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