

VIA ELECTRONIC FILING

March 7, 2024

Hon. Michelle L. Phillips
Secretary
New York State Public Service Commission
Empire State Plaza, Agency Building 3
Albany, New York 12223-1350

Re: Case 18-E-0130 – In the Matter of Energy Storage Deployment Program

Dear Secretary Phillips:

The PEAK Coalition and undersigned organizations respectfully submit these comments in response to New York State Energy Research and Development (“NYSERDA”) and the New York Department of Public Service’s (“the Commission”) publication, “New York’s 6 GW Energy storage Roadmap: Policy Options for Continued Growth in Energy Storage” (“Roadmap”) on December 28, 2022.¹ We recognize that the official comment period has closed. However, given the importance of these issues and the diverse coalition represented in these comments, we hope that these comments will still be considered as the New York Public Service Commission (“Commission”) deliberates an order to implement the Roadmap.

The PEAK Coalition is made up of frontline community groups and environmental justice organizations that aim to end the long-standing pollution burden from power plants on New York City’s most climate-vulnerable people and seek to reduce the negative and racially disproportionate health impacts of New York City’s fossil fuel peaker plants by replacing them with renewable energy and storage solutions. As part of this work, the Coalition seeks to ensure that the deployment of energy storage in the state of New York prioritizes relieving overburdened communities and supports the retirement of peaking plants as required by the Climate Leadership and Community Protection Act and the ozone reduction requirements set forth in 6 NYCRR Subpart 227-3.

Support for the Roadmap’s Proposed 6 GW Storage Deployment Program

Energy storage resources provide critical benefits to the New York state electricity system, including the integration of large quantities of renewable energy, increased grid reliability, and

¹ New York State Department of Public Service et al., *New York’s 6 GW Energy Storage Roadmap: Policy Options for Continued Growth in Energy Storage* (Dec. 28, 2022), <https://www.nyserda.ny.gov/-/media/Project/Nyserda/Files/Programs/Energy-Storage/ny-6-gw-energy-storage-roadmap.pdf>.

significant consumer savings.² Storage resources also play a critical role in meeting State requirements to retire fossil-fueled peaking facilities that cannot meet NOx emissions requirements by 2025 and are essential to prioritizing the accelerated transition to clean, reliable, and affordable energy in overburdened communities. As part of the Roadmap report, NYSERDA and the New York Department of Public Service (“DPS”) conducted an extensive analysis of the locations and types of storage that would generate the greatest benefit to ratepayers, local communities, and the grid and determined that 6 GW of storage deployment by 2030 was necessary to support full decarbonization of New York’s electric system by 2040.³ They also found that such a deployment **would reduce future electric system costs by approximately \$2 billion in addition to the critical societal benefits of improved air quality in communities surrounding fossil-fuel generators.**⁴ To meet this 6 GW storage by 2030 target, the Roadmap analysis found that 4.7 GW of new projects would need to be rapidly developed across a diverse set of technologies and market segments.⁵ Consequently, NYSERDA and DPS staff recommended that new programs be developed for bulk, retail, and residential storage, with 3 GW of bulk storage to be procured through a new Index Storage Credit mechanism, along with 1.5 GW for retail projects and 200 MW for residential storage programs.⁶ The analysis also found that deployment of new capacity should be focused in the highly constrained areas in downstate New York (defined as Zones G-K) since such “constraints highlight storage as the primary option for replacing peaking facilities due to the space-efficiency of many storage technologies” and such facilities would also facilitate integration of offshore wind power resources being built in these areas into the bulk power system that would benefit the whole state.⁷ The Roadmap thus recommends that 4 GW of the 6 GW target be placed downstate, focusing on deployment in Zone J. PEAK Coalition and undersigned organizations strongly support NYSERDA and DPS Staff’s proposed 6 GW storage program. However, we urge the Commission to explicitly order this program to allocate no less than half of the 6 GW—including at least 2 GW of bulk storage—to Zone J and to prioritize funding those project proposals that most rapidly relieve the ongoing and grossly disproportionate energy burdens of communities surrounding peaker plants in New York City.

Urgency of Storage Deployments Downstate

As the Commission is well aware, the environmental and cost burdens of the New York energy system and the impacts from climate change do not affect all New Yorkers equally.⁸ Communities overburdened by fossil-fueled peaking facilities in New York are

² Roadmap at 6-7, 15, 22-29.

³ *Id.* at 8.

⁴ *Id.* at 6, 30.

⁵ *Id.* at 7.

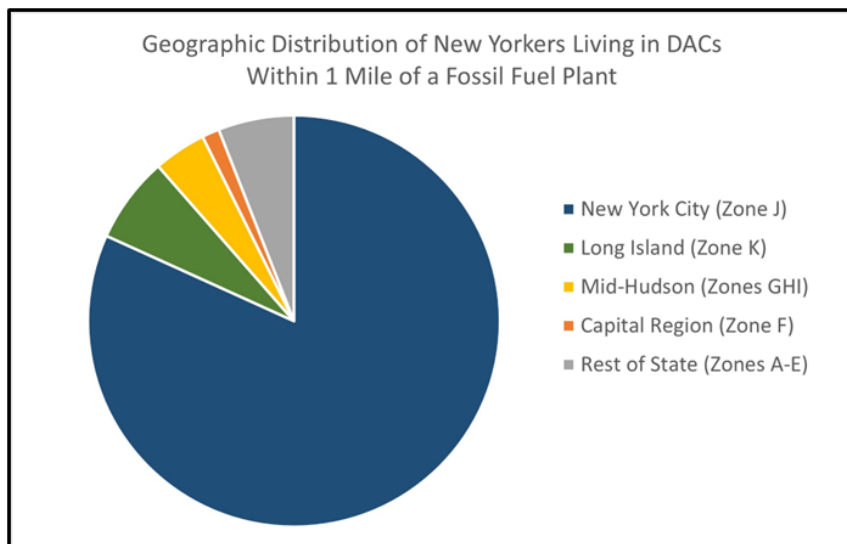
⁶ *Id.*

⁷ *Id.* at 24.

⁸ See NYS Dept. Of Env’tl. Conservation and NYSERDA, *New York State’s Disadvantaged Communities Criteria*, <https://climate.ny.gov/resources/disadvantaged-communities-criteria/>.

disproportionately located in New York City and Long Island. Over 750,000 people in New York City live within one mile of a peaker plant, 78 percent of whom have either low incomes or are people of color.⁹ In fact, 77 percent of the population meeting the New York State criteria¹⁰ for Disadvantaged Communities that have a fossil fuel plant within a one-mile radius live in New York City (Zone J), and 12 percent live in Long Island (Zone K).

Figure 1



(Source: Graph compiled by Flatiron Energy using data accessed 1/2024 from: <https://climate.ny.gov/resources/disadvantaged-communities-criteria/>)

The Roadmap notes that there is approximately 4.5 GW of the highly polluting simple cycle combustion turbines (SCCTs) left across New York and notes that “these SCCTs are almost entirely concentrated in New York City, Long Island, and the Lower Hudson Valley.”¹¹ Within New York City, the majority of the load is served by fossil-fueled peaking generation that is over 45 years old and disproportionately located near minority and low-income communities as shown below in Figure 2. Communities located near these power plants face an increased burden of air pollution. For example, one in every three children and one in every 4 adults in the Hunts Point neighborhood of the Bronx suffer from asthma and the Bronx repeatedly ranks last in New York’s counties in health outcomes.¹²

⁹ The PEAK Coalition, *Accelerate Now! Fossil Fuel End Game 2.0* 10 (Jan. 2024), <https://www.cleaneconomy.org/publication/accelerate-now-the-fossil-fuel-end-game-2-0/>.

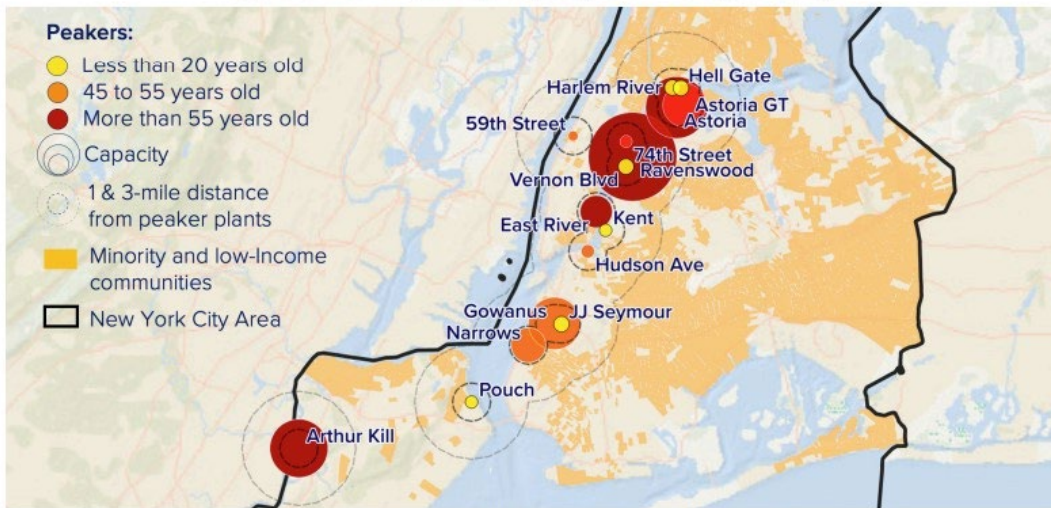
¹⁰ NYS Dept. Of Env’tl. Conservation and NYSERDA, *supra* n.8.

¹¹ Roadmap at 23.

¹² The PEAK Coalition, *supra* n.9 at 8.

Figure 2¹³

Figure 5. Peaker Sites by Capacity and Average Unit Age



Source: Strategen with US Census and EPA data

As noted by the PEAK Coalition:

The emissions produced by peakers have an adverse impact on New York’s air quality and the health of community members. Moreover, these emissions make it almost impossible for the State to achieve compliance with National Ambient Air Quality Standards (NAAQS). In New York, peakers contribute as much as 94% percent of the State’s NO_x emissions on high ozone days despite providing as little as 36% of the gross load. These disproportionately large emissions occur because many of the older peaker plants do not have any form of NO_x controls and are not compatible with retrofits.¹⁴

Moreover, residents of these communities pay some of the highest costs for energy in the State—electricity from peaker plants in New York City is up to 1,300 percent more expensive than the average cost of electricity in the rest of the state.¹⁵ Additionally, despite the fact that the majority of these peaking units operate for less than 1 percent of the year (fewer than 100 hours), their owners received approximately \$4.5 billion in ratepayer revenue over ten years.¹⁶ Many of these peakers run for relatively short durations, with over 50 percent of them operating no more than eight hours in duration each time they fired up and 28 units, totaling

¹³ See The PEAK Coalition, *The Fossil Fuel End Game: A Frontline Vision to Retire New York City’s Peaker Plants by 2030*, published by Clean Energy Group 10 (Mar. 2021) (hereinafter “Fossil Fuel End Game”), <https://www.cleaneenergy.org/wp-content/uploads/Fossil-Fuel-End-Game.pdf>

¹⁴ Fossil Fuel End Game at 13 (internal citation omitted).

¹⁵ *Id.* at 6.

¹⁶ *Id.* at 6.

765 MW of installed capacity, ran for four hours or less.¹⁷ This makes such units perfect for replacement with cleaner, more affordable, and commercially available storage technologies.

New York State has taken important legislative steps to address these injustices. In 2019, New York passed the Climate Leadership and Community Protection Act (CLCPA) to better empower the state to fight climate change, protect disadvantaged communities, and prioritize the retirement of fossil-fueled peaking plants. To this end, the CLCPA requires that: “State agencies, authorities and entities ...shall... invest or direct available and relevant programmatic resources in a manner designed to achieve a goal for disadvantaged communities to receive forty percent of overall benefits of spending on clean energy and energy efficiency programs.”¹⁸ The CLCPA legislation also directly addresses the topic of energy storage noting that state policies should endeavor that a minimum percentage of “energy storage projects should deliver clean energy benefits into NYISO zones that serve disadvantaged communities ... and that energy storage projects be deployed to reduce the usage of combustion-powered peaking facilities located in or near disadvantaged communities.”¹⁹

In 2019, the New York Department of Environmental Conservation (DEC) adopted the “Peaker Rule” as set forth in 6 NYCRR Subpart 227-3, which requires tighter NOx emissions from fossil fuel plants during ozone season. This rule is designed to help New York address its air quality nonattainment status and remedy the harms caused by peaker plants in disadvantaged communities.²⁰

However, legislation mandating higher standards for generation emissions will not be sufficient to drive fossil-fueled peaking plant retirements in downstate New York. First, the New York Independent System Operator (“NYISO”) has established a Locational Minimum Installed Capacity Requirement in Zone J of 81.7%.²¹ Without a viable plan to replace existing capacity with new generation, these peaker plants cannot retire without causing significant reliability issues for the NYISO grid. The NYISO 2023 Star Report explicitly details these constraints. The report found that by the summer of 2025, the New York City zone will be deficient by as much as 446 megawatts of needed capacity.²² This finding caused NYISO to issue a solicitation for short-term resources; after analyzing different scenarios of planned generation retirement in the city, NYISO concluded: “Without the retention of these [peaker] generators, the New York

¹⁷ *Id.*

¹⁸ CLCPA § 2, S.B. 6599, 242d Sess. (N.Y. 2019), <https://legislation.nysenate.gov/pdf/bills/2019/S6599> [hereinafter CLCPA] and N.Y. E.C.L. § 75-0117.

¹⁹ CLCPA § 4 and N.Y. P.S.L. § 66-p(7(a)).

²⁰ Fossil Fuel End Game at 19.

²¹ NYISO, *Locational Minimum Installed Capacity Requirements Study For the 2024–2025 Capability Year* (Jan. 2024), <https://www.nyiso.com/documents/20142/42519933/2024-2025-LCR-Report.pdf/04ee02a1-3a67-f4df-ff8a-0c1a5c9cf7da>.

²² NYISO, *Short-Term Assessment of Reliability: 2023 Quarter 2*, 4 (Jan. 14, 2023), available at: <https://www.nyiso.com/documents/20142/16004172/2023-Q2-STAR-Report-Final.pdf/>.

City area would not meet the mandatory reliability criteria during expected summer weather peak demand periods.”²³

As a consequence, NYISO will require the continued operation of peaking units at Gowanus and the Narrows that were scheduled to retire in May 2025 in order to cover the forecasted deficiency.

The New York transmission system also currently suffers a series of binding constraints, most notably between Zones J and I and between Zones J and K. These constraints mean that generation located outside of Zones J and K cannot serve these zones in a capacity call event. As such, new energy storage generation built upstate, including in Zones GHI, will be insufficient for NYISO to allow the retirement of peaking plants in Zone J required for reliability. Only clean capacity built within Zone J can enable the replacement of those peaking plants consistent with NYISO reliability standards. The Roadmap further clarifies this point noting: “To ensure this capacity [fossil-fueled peaking plants] is able to retire on schedule and remaining capacity can transition to clean resources, new capacity should be deployed in highly space-constrained areas in downstate New York. These constraints highlight storage as the primary option for replacing peaking facilities due to the space-efficiency of many storage technologies.”²⁴

Policy Recommendations

The language in the upcoming order on Case 18-E-0130 must be strengthened from that in the roadmap to ensure sufficient storage is procured downstate. The Roadmap acknowledges the need to comply with the requirements of the CLCPA. In the Roadmap, NYSERDA and DPS Staff recommend that at least 35% of program funding be utilized to “support projects in areas of the state with the highest benefits to DACs and peaker reductions,” and further note “NYSERDA and DPS Staff expect Zone J (New York City) to receive particular focus in program design.”²⁵ While the Roadmap nods to the importance of Zone J, stronger language is needed to ensure adequate investment is deployed downstate and prioritizes compliance with the Peaker Rule and the protection of New York City’s frontline communities.

The language in the Roadmap is problematically vague in that the “highest benefits to DACs and peaker reductions” are not further defined. Without further clarification, this language could be interpreted to justify storage procurement almost anywhere in the state. As currently defined, there is at least one Disadvantaged Community in every NYISO zone and at least one fossil generator in all NYISO zones except I. However, as established above, the vast majority of the New York population impacted by these criteria are located in Zones J and K. While transmission scale storage does provide a myriad of statewide benefits, only storage located in

²³ NYISO, *Short-Term Reliability Process Report: 2025 Near-Term Reliability Need Solution Selection* 3, 8, (Nov. 20, 2023), <https://www.nyiso.com/documents/20142/39103148/2023-Q2-Short-Term-Reliability-Process-Report.pdf/>.

²⁴ Roadmap at 24.

²⁵ Roadmap at 62.

Zone J and Zone K can provide locational capacity sufficient to enable the replacement of fossil-fueled generation in these areas.

To fix these issues, the Commission should first clarify that the “highest benefits to DACs and peaker reductions” are defined by the proportion of New Yorkers living in disadvantaged communities that are located near fossil-fueled peaking plants. Metrics that simply look at the number of Disadvantaged Communities in a zone without considering population density and proximity to peakers are too simplistic and do not adequately capture the concept of the “highest benefit” to the state’s population. Second, the Commission must require energy storage projects to be located in the same zone as the fossil-fueled peaking plants targeted for replacement. For example, storage should not be procured in Zone G under the justification that it will help with peaker reductions in Zone J, when this is not possible under NYISO’s current locational capacity rules.

Need For Zone J-Specific Storage Requirements

The difference in cost and risk to develop energy storage projects downstate versus upstate further compounds the concerns regarding Roadmap language highlighted above. Energy storage project development in New York City is significantly more expensive, complicated, and risky compared to project development upstate. Downstate projects must contend with higher land costs, land constraints, and vastly more complex permitting regimes and approvals. Because of the critical need to replace peakers in Zone J in order to meet the Peaker Rule and CLCPA requirements, a carveout is necessary for Zone J to ensure that rapid deployment of critical storage resources occurs as quickly as possible. Without such a carveout, energy storage developers may be unable to develop projects downstate. Moreover, without a Zone J-specific carveout, NYSERDA may be biased towards procurement of lower-cost upstate storage, despite creating fewer benefits to disadvantaged communities and failing to address the immediate need to replace the 508 MW at Gowanus and Narrows that NYISO currently plans to have run past the scheduled May 2025 retirement deadline under the Peaker Rule. A Zone J carveout is thus necessary to both meet air nonattainment requirements and address the profound injustices faced by communities that were promised an end to these peaker plant harms back in 2019, but the replacement of which NYISO and the State did not proactively address.

To effectively and unambiguously ensure that sufficient program investment reaches Zone J, we encourage the Commission to implement a locational carveout of no less than 3 GW of storage for Zone J as part of a future order, with no less than 2 GW of bulk storage proposal allocated for Zone J by 2030.

Sincerely,

The [PEAK Coalition](#), which includes:

[New York City Environmental Justice Alliance](#)

[UPROSE](#)

[THE POINT CDC](#)

[New York Lawyers for the Public Interest](#)

[Clean Energy Group](#)

[Earthjustice](#)

[El Puente](#)