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May 20, 2024

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

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

Dear Secretary Phillips:

NineDot Energy (NineDot) appreciates the opportunity to provide comments on the “New York’s 6 GW Energy Storage Roadmap: Policy Options for Continued Growth in Energy Storage,” submitted by Staff of the New York State Department of Public Service and the New York State Energy Research and Development Authority (NYSERDA) on March 15, 2024, and in response to the Notice of Comment published in the State Register on April 3, 2024.

We are available to discuss these comments further and can be reached at lindsay@nine.energy or +1-215-435-0460.

Respectfully submitted,

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About NineDot Energy

NineDot is a leading community-scale, clean energy developer with a growing portfolio of projects across a range of technologies across New York City, Long Island and Westchester. NineDot is creating innovative energy solutions that support a more resilient electric grid, deliver economic and environmental justice benefits and reduce carbon emissions. We plan to develop, build and operate more than 400 megawatts of battery energy storage systems by 2026 that will strengthen the local power grid infrastructure and provide clean, reliable and resilient power to tens of thousands of New York homes and businesses.

NineDot Comments and Recommendations

NineDot commends the DPS and NYSERDA for their commitments to the goals of transitioning the State to a clean energy economy, protecting the economic interests of ratepayers and allocating the benefits of clean energy to traditionally-underserved communities. In June 2018, the Storage Roadmap (“2018 Roadmap”) filed in Case 18-E-0130, proposed a 3.0 gigawatts (GW) storage deployment goal by 2030, codified the next year in the Climate Leadership and Community Protection Act (CLCPA). In 2022, Governor Hochul proposed to double the goal to 6 GW and the 6 GW Roadmap (“Roadmap”) proposes policies and funding that result in the *least cost path* to achieve the ambitious target and sets a viable path for energy storage to support an 85% greenhouse gas (GHG) reduction by 2050.

NineDot supports the work of DPS and NYSERDA in updating the Roadmap to reflect increased costs in New York. The updated Roadmap is a responsible use of ratepayer funds that will provide environmental, financial and social-equity benefits to ratepayers. The analysis in the original publication of the Roadmap quantified that while the procurement of storage increased costs slightly in the near term, it provided **net cost savings for the New York electricity system of nearly \$2 billion** (net present value-NPV) through 2050.¹

NineDot strongly encourages the Public Service Commission (“the Commission”) to expeditiously issue an Order to adopt a new energy storage goal of 6 GW by 2030, approve the updated Roadmap, and authorize the programs that are necessary to implement it. NineDot believes the Roadmap provides a solid foundation for achieving the 6 GW goal, but the challenges ahead are steep and time is of the essence. Over the six year period since adopting the 2018 Roadmap, New York State has deployed 396 MW of energy storage representing only 6.6% of the 2030 6 GW target.² Clearly, swift action is required to meet the 2030 goal.

¹ *New York’s 6 GW Energy Storage Roadmap: Policy Options for Continued Growth in Energy Storage CASE 18-E-0130: In the Matter of Energy Storage Deployment Program*, December 28, 2022, pages 80-81.

² *State of Storage in New York: Annual Energy Storage Deployment Report Pursuant to Public Service Law §74*, April 1, 2024, page 5.

Delays Increase Costs

NineDot encourages the Commission to approve the Roadmap without further delay given the long, complex and costly development cycle for the Retail energy storage market. Retail project development can take two to four years to complete owing to a variety of factors including siting, design, permitting, interconnection, construction, financing, equipment procurement and customer acquisition.

- **Energy storage projects are capital intensive.** With the understanding that the State is committed to meeting its ambitious goals and supporting the energy storage industry, developers—NineDot included—have made significant and ongoing efforts to acquire sites and build project pipelines. Site control is required prior to submitting a distribution grid interconnection application, and costs related to site acquisition and control (such as rent, insurance, property taxes and site management) are expensive monthly development costs that need to be financed in this high rate environment. Delays in approving the Order continue to add to project costs.

Moreover, financiers need a level of certainty to confidently invest in the NY storage market. The continued delay of the Order increases soft costs and creates uncertainty around the timing of the release of funds, which can shake the confidence of investors.

- **NYC energy storage equipment has long lead times.** NYC has one of the most complicated grids in the world, and some of the equipment required to build projects are more bespoke than if that same type of energy storage project were built elsewhere. Equipment includes interconnection hardware such as transformers, switch gears and electrical houses (e-houses) and some may have lead times anywhere from 12-24 months. These long lead times compounded with continued delay of the release of Roadmap 2.0 funds means commercial operation date of projects will be pushed out further. These deployment delays do not align with State and City deployment goals.

- **Allow for Non-Wires Alternatives (NWA)³ projects to receive RSIP funds.** NYSERDA released an updated Energy Storage Market Acceleration Incentives Implementation Plan (the Plan) on May 14, 2024. The Plan specifically says: “Projects previously selected under an IOU Non-Wires Alternative, and projects that submitted a proposal to an open NWA prior to March 11, 2019 for all Retail incentive Blocks other than NYC Block 5 prior to May 14, 2024 for NYC Block 5 and are pending decision or negotiations.”⁴ While any project that applied for a NWA award before March 2019 could not apply for RSIP; any project that applied to a NWA after March 2019 could.

RSIP Blocks were released from spring 2019 through 2021, meaning there were projects that received both NWA and RSIP. As such, the industry expectation was that storage projects would be eligible for both programs and were moving projects forward under those assumptions. NWA projects on a whole are materially more expensive and riskier for developers to take on. For example, these projects require redundant protective equipment. RSIP Blocks issued under the 2022 Roadmap must maintain eligibility for IOU NWA projects, as it impacts the feasibility of projects in the highest-need locations whose designs and economics are premised on participating in RSIP funding. It is critical that the industry has certainty surrounding incentive program eligibility and we strongly believe that NWA and RSIP programs are compatible.

- **New York City (NYC) should have a higher allocation of incentives compared to other jurisdictions.** NYC has one of the most complex power grids in the world, with bespoke equipment, long development cycles, arduous permitting processes and heightened soft and hard costs. Land, labor, interconnection, etc., are much more expensive compared to other New York regions. Storage is the clean energy technology that is uniquely suitable for the dense urban environment of Zone J, which has largely precluded community-scale solar development. Community Distributed Generation (CDG) solar projects in Zone J have received less than 5% of total incentive funding, despite housing 55% of the State's population. For these reasons, the Commission should strongly consider allocating a larger tranche of incentives at a higher rate to Zone J.

³ For the Con Edison Investor-Owned Utility (IOU), Customer-Side Solution (CSS) Energy Storage System (ESS) Distributed Energy Resource (DER) Non-Wires Alternative (NWA) projects are, without exception, defined as those authorized under “Order Approving Shareholder Incentives” (Case 15-E-0229, January 25, 2017), 2017 Rate Case Order (Case 16-E-0060, January 25, 2017), 2020 Rate Case Order (Case 19-E-0065, January 16, 2020) or 2023 Rate Case (Case 22-E-0064, July 20, 2023) and detailed in an annually-updated (or more frequent) NWA/Non-Wires Solution (“NWS”) Implementation Plan. Projects that pursue revenue through an alternative IOU program not authorized in these specific NWA Orders are eligible for RSIP funds.

⁴ *Energy Storage Market Acceleration Incentives Implementation Plan*, March 14, 2024, page 5.

- **Maintain flexibility to adjust funding allocation between Retail and Bulk markets.** NYSERDA should be able to shift funding between markets based on observed market activities. For example, if the community-scale Retail market displays robust, cost-effective growth, NYSERDA should shift funding from the Bulk program to further Retail Blocks. The stability of New York's Community Distributed Generation (CDG) solar market over the past decade shows evidence of being repeated with a steady growth of Retail-scale energy storage system deployments, if a fits-and-starts approach to funding is avoided. Over the next three years (2024-2027), it is more likely that Retail-scale deployment will be significantly faster than Bulk-scale deployment due to maturity of bankability and development activities.
- **Reliability risks in Zone J.** The New York Independent System Operator (NYISO) highlighted potential shortfalls in its *Short-Term Assessment of Reliability: 2023 Quarter 2* report, stating that in 2025, the NYC will see a deficiency of 446 MW over 9 hours, which could be exacerbated by weather event such as a heatwave. Faster deployment of energy storage in Zone J could help address this reliability risk, lowering costs to ratepayers by allowing inexpensive and inefficient peaker plants to retire, improving local air quality, particularly for Disadvantaged Communities.
- **Delayed cost savings and benefits for Disadvantaged Communities.** Battery storage is uniquely suited for displacing peaker plants, which are disproportionately located Downstate and in Disadvantaged Communities. The Department of Environmental Conservation's 2019 Peaker Rule established phased in limits to NOx emissions, which impacts the oldest peaker plants by limiting nitrogen oxides (NOx) emissions from simple-cycle combustion turbines. However, NYISO stated in its Reliability Plan that upon further assessment, they may decide to maintain peaker units so as to maintain NYC's grid reliability.⁵ In 2022, 95% of electricity produced in and around NYC came from oil and fracked gas, compared to 7% of electricity in upstate New York.⁶ In addition, the retirement of the City's peaker plants would result in an additional \$1 billion in savings because of reduced environmental and health impacts from avoided emissions.⁷ Shutting existing peaker plants and replacing them with wind, solar and storage is critical to reducing ratepayer costs, increasing health impacts, and increasing grid reliability.

⁵ *ibid.*

⁶ *Accelerate Now! The Fossil Fuel End Game 2.0: Tracking New York City's Peaker Power Plant Closures and the Clean Energy Transition*, A Peak Coalition Report, January 2024, page 10.

⁷ *Accelerate Now! The Fossil Fuel End Game 2.0: Tracking New York City's Peaker Power Plant Closures and the Clean Energy Transition*, A Peak Coalition Report, January 2024, page 6.

In January 2024, Governor Hochul announced that her administration is launching a Statewide Solar for All Program (S-SFA), combining a utility-managed Energy Affordability Program (EAP) and Community Solar program to pass along clean energy benefits to low-income households.⁸ The hope for the program is that it delivers \$40 of annual savings to 800,000 households. The cost-savings benefits of shared, local, clean energy generation and energy storage can be harnessed as an immediate, effective tool to help alleviate the needs for New Yorkers that are least able to afford it. However, with the continued delays of the Roadmap, the community-scale storage projects that could deliver such benefits will also be delayed.

Community-scale projects can only provide benefits to ratepayers within their respective territories, meaning that community-scale projects within ConEd territory can only provide benefits to ConEd customers. Because urban centers such as NYC are so space constrained, it is difficult to site community solar projects within ConEd territory. As an example, a 5 MW solar project takes up 25 acres compared to a 5 MW storage project that only occupies 0.25 acres of land. Community-scale storage is a well-suited solution for New York City and further delays in the Roadmap release will delay benefits reaching low-income households who are most burdened by the City's high electricity prices.

- **Delayed savings for all New Yorkers.** NYSERDA and DPS estimates that while the procurement of storage increased costs slightly in the near term, it provided net cost savings for the New York electricity system of nearly \$2 billion (net present value-NPV) through 2050.⁹
- **Delays chill the energy storage Retail market.** The energy storage market, while fast growing, is still in its nascency. As such, the industry requires state incentives to make projects pencil. Boom and bust cycles create market instability. Block 4 incentives were last available in July 2021 and the market has been anticipating the release of the roadmap for the last eighteen months.¹⁰

⁸ Governor Hochul Announces Energy Affordability Plan and Actions to Accelerate Clean Energy Future, January 9, 2024:

<https://www.governor.ny.gov/news/governor-hochul-announces-energy-affordability-plan-and-actions-accelerate-clean-energy-future>.

⁹ New York's 6 GW Energy Storage Roadmap: Policy Options for Continued Growth in Energy Storage CASE 18-E-0130: In the Matter of Energy Storage Deployment Program, December 28, 2022, pages 80-81.

¹⁰ Incentive Dashboard, NYSERDA, Accessed May 12, 2024.

<https://www.nysERDA.ny.gov/All-Programs/Energy-Storage-Program/Developers-and-Contractors/Retail-Incentive-Offfer/Incentive-Dashboard>.

Conclusion

NineDot sincerely appreciates the hard work of DPS and NYSERDA Staff to update the Roadmap. NineDot is supportive of the updated Roadmap but continues to urge the Commission to issue an Order to adopt the 6 GW by 2030 target and to approve the Roadmap and the programs necessary to implement it. Thank you for the opportunity to share our input and feedback.