April 17, 2023

VIA ELECTRONIC FILING
Hon. Michelle L. Phillips
Secretary to the Commision - New York State Public Service Commission
Three Empire Plaza
Albany, New York 12223

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

Dear Secretary Phillips:

NineDot Energy (NineDot, formerly known as CertainSolar) appreciates the opportunity to provide these brief reply comments in response to the initial comments on "New York's 6 GW Energy Storage Roadmap: Policy Options for Continued Growth in Energy Storage" filed by the New York State Energy Research and Development Authority (NYSERDA) and the Staff of the New York State Department of Public Service (DPS), in the above-referenced proceeding, on December 28, 2022.

We are available to discuss these comments further and can be reached at adam@nine.energy or +1-516-398-9482.

Respectfully submitted,

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Introduction

NineDot Energy (NineDot, formerly known as CertainSolar) submits these reply comments in response to initial comments received on "New York's 6 GW Energy Storage Roadmap: Policy Options for Continued Growth in Energy Storage," ("Energy Storage Roadmap" or "Roadmap") submitted by the New York State Energy Research and Development Authority (NYSERDA) and the Staff of the New York State Department of Public Service (DPS) and on December 28, 2022.

NineDot appreciates the input provided by stakeholders in this proceeding. We are encouraged by the widespread and strong support for the Energy Storage Roadmap in the initial comments. We have provided responses to those comments where we believe the Public Service Commision (Commission) would benefit from additional information to strengthen the record. NineDot reiterates its strong support for the proposed Energy Storage Roadmap and **encourages the Commission to approve the Roadmap proposal without delay, codifying the 6 GW storage goal and approving the proposed budget**.

About NineDot Energy

NineDot is a leading community-scale, clean energy developer with a growing portfolio of projects across a range of technologies. NineDot is creating innovative energy solutions that support a more resilient electric grid, deliver economic savings and reduce carbon emissions. We plan to develop, build and operate more than 400 megawatts of clean energy 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.

Reply Comments & Recommendations

- **Utility-owned storage should continue to be strategically limited.** NineDot recognizes that utilities have a critical role to play in the attainment of the State's clean energy goals. However, expanded ownership and operation of energy storage systems (ESS) as proposed in the comments of the Indicated Utilities is unjustified and undermines the Commission's previously established and long standing regulatory framework on utility ownership as well as the State's goals to develop a strong customer-focused energy storage industry. NineDot

further contends that the exceptions under which utility-owned storage should continue to be limited to exceptional use cases, based on a revision of the exceptions list identified by the Commission in Case 14-M-0101 in 2015 updated for current market conditions.

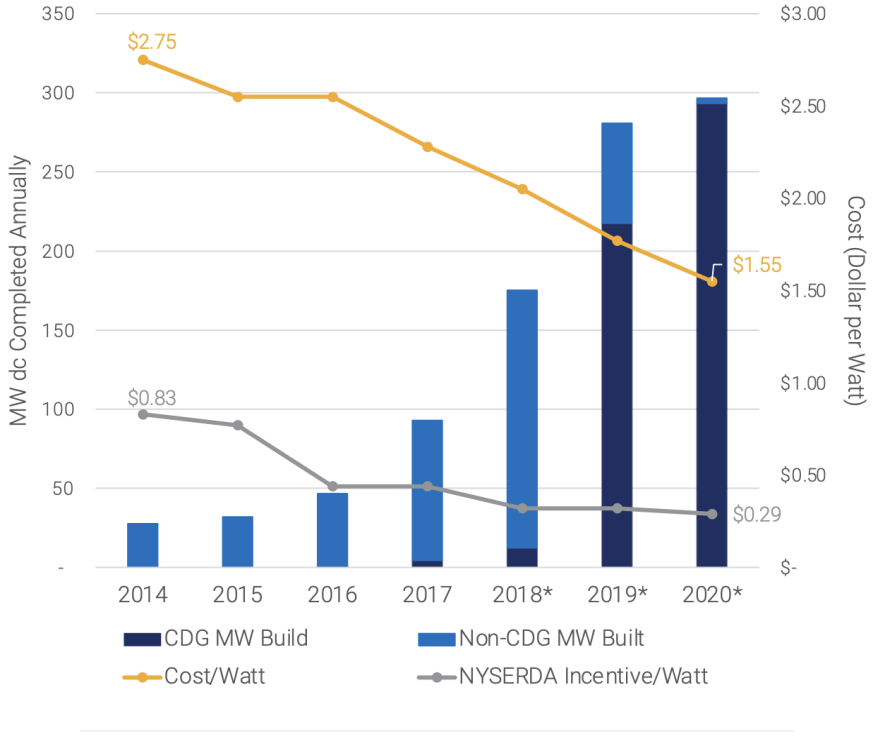
As was highlighted in the 2018 Storage Bill (A11099), "[t]he energy storage deployment policy also should be implemented in a manner consistent with the Commission's decisions related to the Reforming the Energy Vision (REV) and Clean Energy Standard proceedings, in order to assure the most efficient and least cost outcome for energy consumers. In its Order in the REV proceeding, *the PSC determined that 'unrestricted utility participation in DER (distributed energy resource) markets presents a risk of undermining markets more than a potential for accelerating market growth*.' Therefore, utility ownership of energy storage is limited only to projects consisting of energy storage integrated into distribution system architecture. Going forward, in order to provide least cost outcomes for energy consumers and to accelerate market growth, **energy storage projects should be developed and owned only by independent providers of energy storage services** selected through a competitive or other process that ensures lowest cost to electricity consumers."[1]

Relaxation of utility-owned generation restrictions is not necessary to meet the State's aggressive clean energy goals and would be a major disruption to the State's energy storage momentum. The success of the State's nation-leading solar industry under NYSERDA's NY Sun program is striking evidence of how private markets thrive when underpinned by a consistent and supportive policy roadmap. Since the NY Sun program was launched in 2014, commercial and industrial ("C&I") solar installations grew nearly tenfold to an annual rate of nearly 300 MW. During the same period, system costs and incentives declined precipitously. As depicted in Figure 1, C&I solar project costs fell 77% from $2.75/W in 2014 to $1.55/W in 2020, while over the same period, incentives fell 65% from $0.83/W to $0.23/W, respectively. Underpinned by a similarly strong regulatory framework, the storage industry is well

[1] BILL NO A11099, https://nyassembly.gov/leg/?default_fld=&leg_video=&bn=A11099&term=2017&Summary=Y&Memo=Y&Text=Y

positioned to meet, and even exceed, the 6.0 GW goal for storage deployment by 2030. It is inappropriate for the State to deviate from the lessons learned over a decade of successful distributed-scale DER development.

Figure 1: Annual C/I MW Installed, Cost, and Incentive



Source: NYSERDA, Future of New York Commercial / Industrial & Community Distributed Generation Solar Markets, Technical Conference Day, April 2021

The Commission has long held the position that investor owned utilities (IOUs) would be able to exercise vertical market power if they were permitted to own electricity generation or storage assets and this power would be difficult to identify and prevent. This remains true today given the need for a transparent and efficient interconnection process that keeps pace with expected growth of distributed assets. NineDot believes emphasis should be made to ensure bottlenecks in this process are addressed, enabling the robust pipeline of market projects to move forward in a timely manner. In particular, IOU incentive structures for interconnection should be re-examined. One idea that could spur a more efficient and timely interconnection process would be rewarding IOUs with a fixed implementation incentive (i.e.,

$10,000 per project or $2,000/MW), via an Interconnection Earnings Adjustment Mechanism (IX-EAM), for every project that is interconnected according to prescribed deadlines.

Further, Given the Development of the Distributed Generation Market, Exceptions for Utility-Owned Generation Are No Longer Necessary

The exceptions for utility-owned DERs laid out in PSC Case 14-M-0101 are no longer necessary given the changing market dynamics in battery storage since the related Order was issued in 2015 and narrowing of the exceptions is warranted. The Commission outlined four exceptions under which it may consider utility-owned generation:

> 1.) procurement of DER has been solicited to meet a system need, and a utility has demonstrated that competitive alternatives proposed by nonutility parties are clearly inadequate or more costly than a traditional utility infrastructure alternative;
>
> 2.) a project consists of energy storage integrated into distribution system architecture;
>
> 3.) a project will enable low- or moderate-income residential customers to benefit from DER where markets are not likely to satisfy the need; or
>
> 4.) a project is being sponsored for demonstration purposes."[2]

To provide context, when these exceptions were published, the market landscape for utility storage was dramatically different. The case pre-dates the existence of commercially-viable storage systems, as well as a policy framework to support the development of such a market. Since that time, battery storage technology has evolved, with off-the-shelf, integrated storage systems available in the commercial market. In line with these technological advances, prices have come down relative to 2015. These factors, in addition to the establishment of a supportive policy framework provided by the Value of Distributed Resource (VDER) program and the Retail Storage Incentive Program (RSIP), introduced in 2019, have culminated in a thriving competitive market. This can be evidenced by the current interconnection queue: there was over 1.1 GW of total storage projects reported in the Con Edison (February 2023)

[2] Order Adopting Regulatory Policy Framework and Implementation Plan PSC Matter/Case: 14-00581/14-M-0101, February 2015

and PSEG-LI (December 2022) interconnection queue, while over 7.0 GW of storage was in the NYISO interconnection queue. Due to these factors, the exceptions outlined in PSC Case 14-M-0101 should be re-examined and narrowed. In particular, Exceptions (2) and (3) are directly obviated by the robust pipeline for distribution-interconnected VDER projects and the proposed Clean Energy For All (CEFA) bill-credit program. Support for redundant utility-ownership and market-driven activities would be an inappropriate use of ratepayer funds.

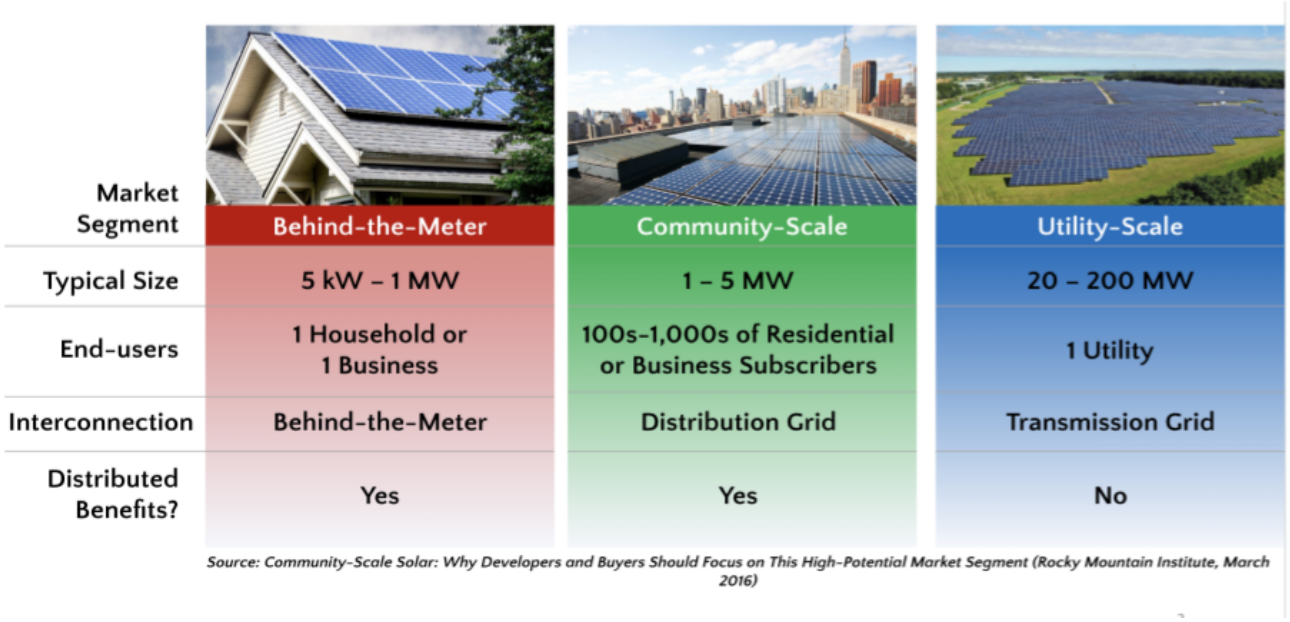
- NineDot appreciates the perspective that the New York Power Authority (NYPA) shared in their thoughtful comments on the Energy Storage Roadmap. However, the dilatory DPS decision to extend the comment deadline based on NYPA's lack of timeliness in preparing their comments was incongruous with the urgency in meeting the State's energy storage and clean energy goals. While only a minor delay, it is illustrative of the lack of priority given to energy storage by the State's public utilities and IOUs. It further demonstrates why an expanded role for utility-owned energy storage is a cause for concern in meeting the State's aggressive timelines.
- NineDot appreciates the sentiment behind ConEdison and Orange & Rockland Counties proposal for a standalone incentive program for Behind-the-Meter (BTM) to increase storage deployment. **While, in theory, NineDot supports the idea of a BTM incentive program, in practice, it is many years premature in terms of technology and market readiness. As such, we believe it would be an ineffective use of limited ratepayer funds.** We strongly support benefits being directed towards disadvantaged communities and for projects to be sited *adjacent* to loads. However, we believe this would be better achieved through community-scale FTM storage projects, which represent a "sweet spot" in terms of cost-effectiveness, grid benefits and the ability for rapid project deployment. The current RSIP program does not specify interconnection type and NineDot believes the small number of BTM projects reflects this dynamic.

  While it is true that interconnection costs for BTM projects are often lower, total project costs are markedly higher than FTM projects. Community-scale FTM projects have more standardized designs and sizes that allow for economies of scale. BTM projects tend to be smaller and lack a cost-effective commercially-available ESS product in NYC, the State's most important energy storage market. In addition, BTM projects require significant customization

and often are complicated by differing owner and tenant incentives. As a result, hardware costs and soft costs (e.g. customer acquisition, design, engineering, installation, permitting, and financing) for BTM projects are currently 3-5x the FTM costs on a $/kWh basis.

The ability of community-scale FTM projects to scale rapidly has been demonstrated by the NYS solar industry and were elucidated earlier by the Rocky Mountain Institute (RMI) in a 2016 report. RMI compared the attributes and benefits of the BTM, community scale and utility-scale DER projects, depicted in Figure 2. They noted that "community-scale solar avoids constraints facing other markets and can reach utility-scale economics while leveraging distributed benefits."[3] In NYS, the community solar market grew rapidly following several policy changes, including the rollout of the VDER framework (2017) and changes to the NY Sun program (2018). Community solar projects became the largest share of new project developments in 2019 and have remained the main driver of commercial and industrial growth since that time. Moreover, NYS recognized a significant achievement in April 2022, when it became the first state in the country to reach 1 GW of community solar deployments. Project costs and incentives have declined steadily alongside this growth. *Community-scale FTM storage has the same potential for rapid deployment while offering*

Figure 2: Community Solar: A Case Study for Rapid Clean Energy Scale-up



Source: Community-Scale Solar: Why Developers and Buyers Should Focus on This High-Potential Market Segment (Rocky Mountain Institute, March 2016)

[3] Community-Scale Solar: Why Developers and Buyers Should Focus on This High-Potential Market Segment, Rocky Mountain Institute, March 2016

the benefits to the distribution grid offered by BTM projects, unlike larger utility scale projects.

In summary, we strongly encourage DPS and NYSERDA to recognize the lessons of the community solar market design in its approach to retail storage incentives. BTM projects are costlier, difficult to scale and a dedicated program to incentivize these projects would not be a good use of ratepayer funding. While unlikely during the time period covered by this Roadmap; however, **should the conditions change to the extent that a standalone BTM incentive program were warranted, the Commission should ensure that program funding comes out of a budget distinct from RSIP. In addition, such a program should not be utility-administered, but instead be run by NYSERDA like successful BTM solar programs.**

- **NineDot support's LIPA's comments on the significant role Zone K can fill in the State's clean energy transition. However, in order to achieve this role, rate structures and incentives in Long Island need to be systematically addressed.** The Roadmap calls for 1.5 GW of ESS projects in Zone K by 2030, which will support 9 GW of offshore wind slated to come online in the downstate market. A working group comprising NYSERDA, DPS, LIPA, PSEG-LI, and industry participants should be formed to establish viable retail program economics by updating VDER Value Stack compensation and distribution and supply cost structures. Long Island has the opportunity to be the State, national, and global leader in the energy storage market that other markets and utilities can learn from, rather than its current position as a market laggard and policy afterthought.