



**STATE OF NEW YORK
PUBLIC SERVICE COMMISSION**

**Motion of the Commission to
Implement Transmission Planning
Pursuant to the Accelerated Renewable
Energy Growth and Community Benefit Act**

Case 20-E-0197

**Comments of New York Solar Energy Industries Association Regarding
Motion of the Commission to Implement Transmission Planning Pursuant to the
Accelerated Renewable Energy Growth and Community Benefit Act**

Dated: January 18, 2020

**New York Solar Energy Industries Association Comments to New York State Public
Service Commission**

**Regarding Motion of the Commission to Implement Transmission Planning Pursuant to
the Accelerated Renewable Energy Growth and Community Benefit Act**

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A. Introduction

The New York Solar Energy Industries Association (NYSEIA) submits the below comments for the Public Service Commission’s consideration in response to the Utility Transmission and Distribution Investment Working Group Report (Report) filed on November 2, 2020, as required pursuant to the Commission’s “Order on Transmission Planning Pursuant to the Accelerated Renewable Energy Growth and Community Benefit Act,” issued May 14, 2020. NYSEIA is a not-for-profit industry trade association with a mission to advance and accelerate the deployment of distributed solar energy and energy storage in New York State, acting as the voice of the distributed solar and storage industry for more than 125 member organizations on key legislative, regulatory, and statutory policy matters affecting these industries. Our membership is primarily comprised of local, regional and national firms that develop and install distributed solar energy and battery storage systems across New York State.

B. Background

The Accelerated Renewable Energy Growth and Community Benefit Act (“AREGCBA”) was enacted in 2020¹ to hasten progress toward climate goals set forth in the Climate Leadership and Community Protection Act (“CLCPA”). Specifically, the AREGCBA directs the Public Service Commission (“Commission”) to develop and implement plans for future investments in the State’s electric grid that are necessary to ensure that it will support the CLCPA’s significant climate and clean energy goals.

In the above-referenced Commission Order, the Commission directed a Utility Transmission and Distribution Investment Working Group (“Working Group”) to complete a study and identify local transmission and distribution (“LT&D”) upgrades that may be “necessary or appropriate” for the timely achievement of the CLCPA targets after considering, among other items, existing constraints or bottlenecks, synergies with traditional capital expenditure projects, and potential new or emerging solutions.² In response to this directive, the Working Group filed its Utility Transmission Investment Working Group Report (“Working Group Report”), which outlines the

¹ Chapter 58 (Part JJJ) of the laws of 2020.

² *Order on Transmission Planning Pursuant to the Accelerated Renewable Energy Growth and Community Benefit Act*, at 5-6.

Working Group’s proposals and recommendations to guide future investments in LT&D projects and potential cost-allocation and cost-recovery methodologies for those projects.

NYSEIA appreciates the opportunity to submit comments pertaining to the results of the Working Group Report, detailed below, as the Commission considers the level of investment and implementation pathways required to enable New York to meet its CLCPA goals. Our specific concerns and recommendations are discussed in more detail in our comments below and are summarized here:

1. The Commission and utilities should act with urgency regarding project selection and implementation for Phase 1 and Phase 2 projects.
2. NYSEIA welcomes a continued and more expansive view of integrated system planning that includes stakeholder input and takes into account factors that span both the bulk and distribution electric systems.
3. The Commission should consider accelerated deployment of advanced technologies, many of which have been tested in New York and other areas of the United States.
4. The Commission should prioritize distribution investments in regions where there is a system need and collaborate with NYSERDA to ensure these investments complement the NY-Sun incentive program to optimize distributed generation (“DG”) development.
5. The Commission should consider the initiation of the Coordinated Electric Standardized Interconnection Review (“CESIR”) cost-sharing mechanism and capital project queue creation to enable the utilization of utility investments and promote continued distributed generation development as Phase 1 and Phase 2 projects are progressed.
6. The Commission should consider the initiation of the CESIR cost-sharing mechanism and capital queue to enable the utilization of utility investments and promote continued distributed generation development as Phase 1 and Phase 2 projects are progressed.

C. NYSEIA Comments and Recommendations

1. The Commission and utilities should act with urgency regarding project selection and implementation for Phase 1 and Phase 2 projects.

Constraints to distribution-level hosting capacity and the associated costs of upgrading the distribution grid to expand hosting capacity continue to hinder the development, financing, and installation of distributed solar and storage projects in New York and are a first-order barrier to the realization of the deployment of six gigawatts of distributed solar by 2025 as directed by the CLCPA. There is an immediate need to create capacity, through infrastructure investment and advanced technologies, to facilitate interconnection at the transmission and distribution level. The Working Group Report has identified a number of projects that, if implemented, would alleviate interconnection challenges at the transmission and distribution level.

- a. Phase 1 Projects:** The Working Group Report makes clear that Phase 1 projects are required due to existing reliability and compliance concerns, are immediately actionable, provide tangible benefits for compliance and reliability, and enable progress towards our 2030 goals. NYSEIA agrees with the Utilities that "...the Commission should authorize project cost recovery outside of rate case processes to expedite projects"³, and urges the Commission to require utilities to file and seek Phase 1 approvals by the second quarter of 2021. While the Commission may find that a standard utility rate case proceeding may be an appropriate vehicle to review and approve projects, we urge the Commission to consider the significant lag between rate cases and the time and expenditures required by industry associations or individual market participants to participate in this form of proceeding. Additionally, as we describe below, we believe there are alternative forums to solicit robust and valuable feedback and ensure these investments are fully leveraged and enable clean energy development.
- b. Phase 2 Projects:** The Utilities have compiled a suite of Phase 2 projects that constitute a significant level of investment and based on their analysis, support New York's achievement of CLCPA goals. Due to the level of need, and the expected duration for the development and implementation for this level of infrastructure investment, we urge the Commission to consider a timely and collaborative process to identify those projects that should commence immediately in order to ensure New York can achieve compliance with 2030 goals. We urge the Commission to consider a robust stakeholder process that will allow for Phase 2 Plans to be developed and submitted to the Commission by Quarter 4, 2021. As described below, utilities should be required to seek stakeholder input and provide requisite information on the projects, subject to Critical Energy Infrastructure Information (CEII) requirements.

2. NYSEIA welcomes an expansive view of integrated system planning that includes stakeholder input and takes into account factors that span both the bulk and distribution electric systems.

In the Working Group Report, the New York Utilities outline proposals to increase the effectiveness of LT&D projects required to meet CLCPA goals. One recommendation was the formation of an annual stakeholder summit.⁴ NYSEIA supports embedding public participation in the process of identifying and assessing projects. An annual engagement with stakeholders for local transmission and distribution planning that would enable dialogue and information sharing between the utilities - who are tasked with building out infrastructure to enable renewable energy development - and renewable energy developers themselves. Ultimately, the process should be designed to ensure that market players, at the utility scale and distributed generation level, can

³ Working Group Report, at 4.

⁴ Working Group Report, at 43.

provide timely and valuable feedback to ensure the best use and alignment of ratepayer funds and private investment deployment. This is particularly important for Phase 2 projects, which may be required solely to meet CLCPA goals and are not required for reliability, safety and compliance. We suggest this process be expanded to ensure there are frequent collaborative engagement sessions that can support efficient deployment of investment.

Additionally, we urge the Commission to consider a more fulsome alignment of planning activities occurring at the bulk, local transmission, and distribution level and ensure that all entities are exploring scenarios that will have an impact on the types of infrastructure needed to support reliability, resiliency and clean energy integration within the network and provide service to New York load customers. One such example is appropriately forecasting Distributed Energy Resource (“DER”) saturation and integration when planning for transmission which has become a significant choke point for renewable energy development at the distribution level in Massachusetts. The Commission’s actions to ensure there is regulatory support, utility alignment, and New York ISO involvement, for such efforts is critical.

We therefore make the following recommendations to further a collaborative and aligned shared clean energy vision for New York state:

1. DER stakeholder engagement should be included in the Annual Stakeholder Summit described by the New York Joint Utilities and this broad engagement process should be complemented by tactical engagement activities described below.
2. Order the creation of an Advisory Group for the transmission and/or distribution sector tasked with ensuring there is a collaborative exchange between utilities and renewable energy developers. This could occur at the utility or regional level. Alternatively, this advisory function for DER stakeholders could be embedded and prioritized within the existing Interconnection Policy Working Group, the Interconnection Technical Working Group, and the PSEG/LI Interconnection Policy Working Group which already provide a collaborative forum for engagement yet could benefit from a shared CLCPA-driven mandate.
3. Incorporate Advisory Group feedback in the Project approval process to provide the Commission and Department Staff insight into the range of alternatives explored by Advisory Group members as the Commission considers approvals for Phase 2 projects.

Upon Commission Order these Advisory Groups, or existing stakeholder forums, would be equipped to assemble immediately and tackle key issues that could benefit from a focused level of collaboration between the utilities, the New York ISO, and clean energy developers. In addition to specific projects, these discussion topics could include: the prioritization of CARIS congestion pockets, the review of existing technical and policy constraints inhibiting maximized use of capacity, and how to operationalize DER and existing technologies to streamline interconnection.

3. The Commission should consider accelerated deployment of advanced technologies, many of which have been tested in New York and other areas of the United States.

NYSEIA believes that New York can play a critical role in leveraging advanced technologies to improve the deliverability of clean energy in New York state and identifying those opportunities where a non-traditional solution can provide a low-cost, but right-sized, alternative to more costly infrastructure development. Advanced technologies may also offer an important bridge between Phase 1 and Phase 2 project implementation and offer permanent or interim solutions to continue the trajectory to CLCPA goals.

- i. NYSEIA supports the role of NYSERDA and the involvement of other stakeholders (that may span between manufacturers, vendors, and clean energy developers) that can offer a voice of the customer and practical experiences in technology deployment and market implementation in other states.
- ii. The Commission should consider the role of a facilitator or “ombudsperson” within the New York R&D consortium (“consortium”). The activities of this group will gain significant market interest and some level of facilitation may be required to solicit external input and allow for the group to explore concepts that are “deemed of interest and value” and can address the prioritized issues highlighted in the Report.
- iii. The Advanced Technologies Working Group has identified a number of studies that may be required to support the application of those technologies as a solution to facilitate CLCPA goals. To harness these technologies in the near-term and to utilize them in Phase 2 project planning, these areas of study should be prioritized.
- iv. The Advanced Technologies Working Group has identified a number of technology solutions that have been piloted by a number of New York utilities in addition to the recommendation to identify additional pilots to test dynamic line ratings, power flow control devices, and energy storage. A priority of the consortium and participating utilities should be to move from pilot to implementation. A set of metrics and a timeline to establish scope, seek pilot project approval, and an estimated duration of the pilot would provide the market visibility into the potential availability of an advanced technology solution.

Additionally, while the focus of the Advanced Technologies Working Group is the exploration of technologies that can be deployed at the sub-transmission or transmission level, we wish to expand our comments to include the full consideration of distribution-level technologies that are being piloted by utilities and we believe are ready for broader implementation.

- i. We urge the Commission to solicit actionable plans from the utilities for widespread deployment of a DERMS (Distributed Energy Resource Management system) for the distribution grid. DERMS along with ANM (Active Network Management) has the potential to unlock existing hosting capacity and allow more renewable distributed

energy resources to interconnect without having to incur excessive and unreasonable system upgrade costs. The deployment of such technology also allows resources to interconnect without long delays. The Commission and other stakeholders will have an important role to play in determining the principle of access and the construct of a regulatory framework for such a program and we urge that it be consistent across all New York utilities. The Commission should order the utilities to identify opportunities, such as Avangrid's Flexible Interconnection Capacity Solution, to interconnect distributed generation resources in parallel with Phase 1 and Phase 2 project implementation.

- ii. Smart inverters are capable of providing grid services such as voltage and frequency regulation, ride-through and dynamic current injections and anti-islanding. Their use allows renewable energy resources to not only interconnect to the grid, but also allow complete integration of non-conventional generator resources like wind and solar. Smart inverters are capable of reducing their own impact on the grid at minimal costs and offer reliability benefits. The commission should urge utilities to consider the rapid adoption of the various capabilities of smart inverters, especially on the distribution grid, as a necessary step to the full implementation of DERMS. This should be included in advisory group or working group discussions with the goal of establishing an implementation roadmap with specific milestones to be completed by the end of 2021.

5. The Commission should evaluate long-term distribution investments in regions where there is a system need and collaborate with NYSEIDA to ensure these investments complement the NY-Sun incentive program to support clean DG development.

The Working Group Report has identified approximately \$5 billion of distribution-level investment required to meet a combination of safety, reliability, compliance, and CLCPA-driven needs. Phase 1 comprises \$2.6 billion of investment that is considered immediately implementable and needed to address reliability and compliance issues. As described above, NYSEIA supports the implementation of immediate investments in the distribution system and approval of Phase 1 projects to address increasingly prohibitive interconnection costs for renewable resources. However, we advocate that we need a fully integrated system planning approach. Through the advisory group, or alternative stakeholder processes, planning scenarios assessing and *balancing* the impact of increased loads due to electrification, areas available for renewable development and available points of interconnection to best identify long-term distribution needs.

Additionally, distribution investment alone will not maximize the opportunity for renewable energy development - and progress towards the CLCPA goals - if the process for selecting them does not account for the market signals created by the NY-Sun incentive program. Distribution investments where NY-Sun incentives and other market signals are too low may not reduce interconnection costs enough to attract clean DG projects. Conversely, distribution investments

where the NY-Sun incentive and other market signals are already sufficient to attract clean DG development will have the opportunity cost of distribution investments that are necessary to attract clean DG development elsewhere. Consequently, NYSEIA recommends that the Commission collaborate with NYSEIDA in its process for prioritizing and selecting Phase 2 distribution system investments. This collaboration should be a means for the Commission to factor into that process the CLCPA goals - in addition to the already-considered resiliency and compliance requirements - by understanding how distribution system investments can work in concert with the ever-evolving NYSEIDA incentive programs, such as NY-Sun, to maximize clean DG deployment.

6. The Commission should consider the initiation of the CESIR cost-sharing mechanism and capital queue to enable the utilization of utility investments and promote continued distributed generation development as Phase 1 and Phase 2 projects are progressed.

In addition to the above recommendations pertaining to the Working Group Report, NYSEIA believes it is pertinent to highlight the importance of pending interconnection reforms filed for Commission consideration as an important enabler for existing DG development and in furtherance of CLCPA goals. On October 29, 2020 IPWG Members⁵ filed a the “*Petition of the IPWG Members Seeking a Cost-sharing Amendment to the New York State Standardized Interconnection Requirements for New Distributed Generator and Energy Storage Systems 5 5MW or less connected in parallel with utility distribution systems*” (20-E-0543). These reforms include the implementation of a comprehensive cost-sharing proposal to allow for cost sharing between projects with common capacity-enhancing upgrades. This proposal was driven by current impediments to interconnection created by saturated distribution networks and resulting costly upgrades.

As noted in the filing, the current cost-sharing mechanism has not resulted in any DG/ESS projects taking on the first-mover cost impact and paying for substation upgrades and as such, no DG/ESS projects have been sited in distribution-saturated areas of the Joint Utilities’ respective service territories. An expanded cost-sharing model between interconnecting customers is a necessary but interim solution for the increasing needs and associated costs produced by electrification and renewable development (the costs of such infrastructure is cost prohibitive even via the proposed amended cost sharing mechanism). The mechanics contained in this proposal are worthy of consideration by the Commission to enable the implementation of Phase 1 and Phase 2 distribution projects and allow for continued deployment of distributed generation that may otherwise be stymied due to lengthy construction timeframes. Specifically, the creation

⁵ IPWG members include Central Hudson Gas & Electric Corporation, Consolidated Edison Company of New York, Inc., New York State Electric & Gas Corporation, Niagara Mohawk Power Corporation d/b/a National Grid, Orange and Rockland Utilities, Inc., and Rochester Gas and Electric Corporation (collectively, the “Joint Utilities”) and the New York Solar Energy Industries Association (“NYSEIA”), New York Battery and Energy Storage Technology Consortium (“NY-BEST”) and DER market participants.

of a “Capital Project Queue” would allow Interconnection Customers to submit applications while a long-lead capital project is taking place.⁶ The Commission may consider the importance of establishing a metric of market interest, demonstrated by interconnection queue activity, as a key consideration when considering the amount of clean energy enabled by the implementation of distribution-level Phase 1 or Phase 2 projects. The immediate adoption of the Capital Project Queue process will provide an opportunity for renewable energy developers to signal that interest and support the utilities in their planning efforts to ensure that a solution can be adequately sized and utilized.

D. Conclusion

NYSEIA appreciates the opportunity to provide comments on this important matter and the Commission’s consideration of the above recommendations. Please contact NYSEIA Executive Director Shyam Mehta at shyam@nyseia.org with any questions.

Dated: January 18, 2020

By: Shyam Mehta, Executive Director
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⁶ The Standard Interconnection Review (“SIR”) process would then be advanced when the utility is within 18 months of completing the long lead upgrade.