

STATE OF NEW YORK

PUBLIC SERVICE COMMISSION

Proceeding on Motion of the Commission to
Implement a Large-Scale Renewable Program
and a Clean Energy Standard.

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Case 15-E-0302

**BROOKFIELD RENEWABLE COMMENTS ON THE WHITE PAPER ON CLEAN
ENERGY STANDARD PROCUREMENTS TO IMPLEMENT NEW YORK’S CLIMATE
LEADERSHIP AND COMMUNITY PROTECTION ACT**

Brookfield Renewable submits the following comments in response to the White Paper issued by the New York State Energy Research and Development Authority (“NYSERDA”) and the New York State Department of Public Service (“DPS”) recommending modifications to the existing Clean Energy Standard (“CES”) program to implement New York’s Climate Leadership and Community Protection Act (“CLCPA”) (“White Paper”¹). Brookfield Renewable has been an active participant in this proceeding through the evolution of the CES and appreciates the opportunity to weigh in on the latest proposals put forward in the White Paper. As noted in earlier filings, Brookfield Renewable has a significant presence in New York, including 74 hydroelectric facilities on 15 river systems (54 of which are LIHI certified²), 711 MW of installed capacity, plus 2 recently integrated Terraform Power wind projects totaling 160 MW, resulting in over 300 employees and 240 indirect jobs in New York.

¹ Case 15-E-0302. *White Paper on Clean Energy Standard Procurements to Implement New York’s Climate Leadership and Community Protection Act*. Filed June 18, 2020.

² “LIHI certified” refers to the certification of hydropower projects that have avoided or reduced their environmental impacts pursuant to the Low Impact Hydropower Institute’s criteria (<https://lowimpacthydro.org/>).

Brookfield Renewable offers the following feedback on the White Paper:

- Current and anticipated market conditions warrant the adoption of a competitive Tier 2 immediately.
- NYSERDA resale of Tier 2 RECs should be conditioned on adoption of other Tier 2 design changes already submitted by Brookfield Renewable (“Tier 2 Comments”³), which includes increasing the pool of baseline renewable resources procured by NYSERDA within each solicitation and extending the Tier 2 program beyond its proposed five-year duration.
- Brookfield Renewable supports the White Paper’s repowering proposal, which, until the end of the facility’s useful life, allows generation in excess of the facility’s projected generation to be eligible for Tier 1. After the facility’s useful life (proposed to be 50 years for hydro), the full generation would become eligible. However, the qualification criteria concerning the types of investment that constitutes a repowering should be amended to recognize the unique attributes of different technology types, hydropower in particular.
- The proposed Tier 4 criteria should be redefined to introduce more competition and allow existing in-state renewable resources that deliver into New York City an equal opportunity to qualify.

A ROBUST TIER 2 IS ESSENTIAL TO ACHIEVE THE CLCPA’S MANDATES

The White Paper focuses almost exclusively on what incentives can be offered by the State within existing CES tiers, or through the creation of new tiers, to add incremental renewable

³ Case 15-E-0302. *Brookfield Renewable Comments on NYSERDA’s Petition Regarding Clean Energy Standard Competitive Tier 2 Program for Baseline Renewable Generation*. P. 10. April 30, 2020.

energy to the state’s renewable energy baseline in pursuit of the CLCPA’s mandates. Yet it does so without properly recognizing the predicament that existing renewables find themselves in presently – unsupported within the CES, relying on wholesale energy prices that are being depressed by State support offered to new resources, and lacking a robust voluntary market for in-state renewable attributes.

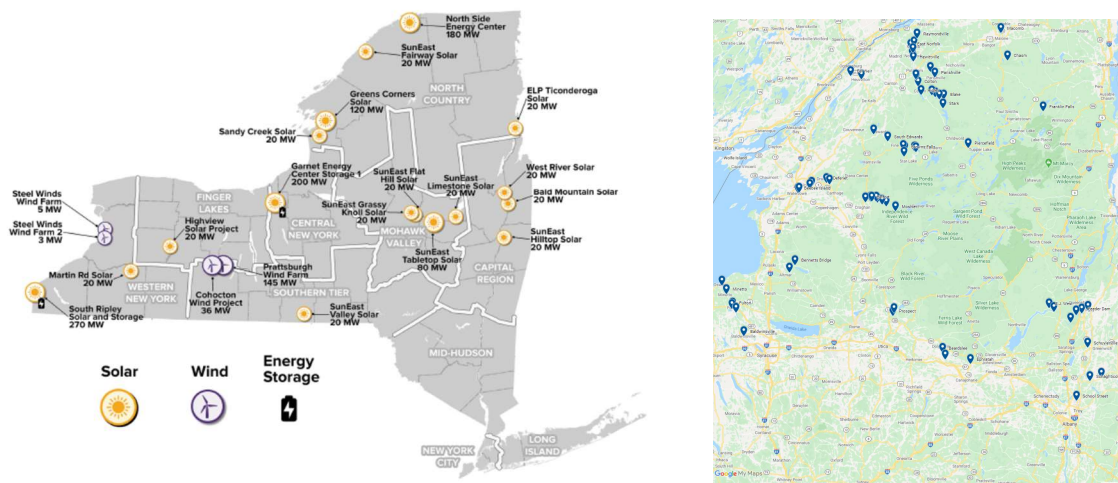
Wholesale Markets

NYISO wholesale market prices⁴ have not offered adequate support for baseline renewable resources. Nearly all of these resources are located in the northern and western areas of the state that historically have had the lowest energy and capacity prices within the NYISO footprint. Low demand has been part of the issue, but State subsidies targeting new renewable resources exclusively have exacerbated the problem, causing addition of new zero-marginal-cost resources that further depress pricing received by existing resources. While it is unknown when energy demand may return to historically normal levels, what is known is that large volumes of new State-supported, zero-marginal-cost energy supply will be entering the market in these same locations. NYSERDA anticipates needing 4,500 GWh of new resources through annual Tier 1 solicitations between now and 2026,⁵ but that targeted volume assumes that the existing baseline will be retained. That assumption is questionable given projected wholesale market pricing under the existing regulatory regime.

⁴ July 2020 average year to date monthly cost of \$24.11/MWh is a 33% decrease from \$35.75/MWh in July. From NYISO Market Operations Report. August 12, 2020.
https://www.nyiso.com/documents/20142/14403020/Market%20Operations%20Report_%20BIC_081220.pdf/f2ce0265-483a-5fda-9dec-d56e63dc6983

⁵ White Paper. P. 26.

The image below on the left⁶ illustrates just a portion of the anticipated influx of new resources, in this case accounting for nearly 1,300 MW of new resources. The locations of these resources overlap the locations of much of the state's existing renewable energy baseline (certainly the footprint of Brookfield Renewable's in-state hydro resources, which are reflected on the right). Results from previous NYSERDA procurements paint a similar picture.



The substantial locational and market overlap will lead to an unfortunate and economically wasteful result where State-supported zero-marginal-cost NYSERDA-contracted Tier 1 resources will be competing directly against existing renewable resources in the wholesale market, exacerbating declines in wholesale energy prices that unsupported existing renewable resources depend on. The State is forcing existing renewable resources to compete head-to-head against new renewable resources on a tilted playing field. There can be no assurance that all existing resources will survive in this unfair environment (or will continue to offer their power into NYISO markets), and New York's renewable energy policies may be undercut.

⁶ FACT SHEET Large Scale Renewables 2019 Renewable Energy Standard Solicitation.
<https://www.nyseda.ny.gov/All-Programs/Programs/Clean-Energy-Standard/Renewable-Generators-and-Developers/RES-Tier-One-Eligibility/Solicitations-for-Long-term-Contracts/2019-Solicitation-Resources>

Voluntary REC Markets

Understandably, the State wishes to see some of this revenue shortfall be made up via REC purchases from voluntary buyers. Brookfield Renewable actively markets these products and has had some success in finding such counterparties. However, those opportunities have been limited and in general the market is illiquid with minimal volume traded. For example, three Community Choice Aggregation (“CCA”) initiatives have failed to launch in the last three months due to historically low utility prices being reflected in the “Price-to-Beat” metric. This pricing gap is further exacerbated by the voluntary renewable component adder. In addition, there is no new CCA demand expected for 2021 and likely further demand destruction with existing CCAs struggling to relaunch.

Compounding the issues with the RECs market is that the State-backed voluntary REC purchases have given no preference to RECs generated from in-state baseline resources. In fact, all recent RFPs from New York State public entities have sought Green-e RECs, which rules out in-state hydro participation. This includes RFPs issued by the State University of New York, Roswell Park Cancer Institute, and the Olympic Regional Development Authority. Simply put, current voluntary market buyers are not providing sufficient support to Tier 2 resources.

This is why Brookfield Renewable suggested a two-stage mechanism for Tier 2 in response to the NYSERDA Tier 2 Petition,⁷ with the first stage having NYSERDA procure a large volume (75-85%) of Tier 2 RECs, to be followed by NYSERDA offering those RECs to voluntary purchasers at a discount in the second stage. In the notice soliciting comments on the White

⁷ Case 15-E-0302 *Petition Regarding Clean Energy Standard Competitive Tier 2 Program for Baseline Renewable Generation*. 1/27/20.

Paper, NYERDA and DPS posed a question whether this second stage should be a component of Tier 2. Brookfield Renewable addresses that question later within these comments.

State Renewable Programs

The Tier 2 proposal submitted via the NYSERDA Tier 2 Petition earlier this year fails to acknowledge the reality confronting existing baseline resources and the ambitiousness of the CLCPA's targets. The petition contemplates a short-term mechanism in which one-third of the baseline will be procured via NYSERDA procurements in three annual solicitations, resulting in the full baseline or majority thereof having their RECs contracted for three-year periods. Assuming an order is issued in time for the first awarded contracts to begin in 2021, the Tier 2 program would cease to exist (at least based on the NYSERDA petition) at the end of 2025.

This proposal ignores the overarching theme of the White Paper, which is how ambitious the CLCPA's targets are and, therefore, how aggressive the State needs to be to grow its pool of renewable resources in order to achieve those targets. Specifically, the White Paper states that the CLCPA targets are so ambitious and the new project attrition rate is so high that 24,990 GWh of Tier 1 resources "should be procured in total no later than 2026."⁸ However, the Tier 2 proposal at its conclusion would leave over 7,000 GWh of existing baseline renewables (plus any incremental GWh rolling off State contracts in that period of time) exposed and unsupported for the five-year period leading up to the 2030 compliance deadline. The disappearance of support for the renewable baseline will coincide with ~25,000 GWh of NYSERDA procured Tier 1 resources beginning to deliver their energy – an untenable situation for existing renewable

⁸ White Paper. P. 26.

resources. Such a program design creates serious doubts that the CLCPA targets will be achieved.

From a policy perspective, non-contracted existing renewable resources are not compelled to sell their power or renewable attributes within New York (nor should they be), especially at a time when the state's neighbors are aggressively seeking both.⁹ As noted by Brookfield Renewable in our Tier 2 Comments on the NYSERDA Tier 2 Petition, the volume of non-NYPA hydroelectric REC exports for the year was 433,611 MWh, representing a 144% increase over 2018 hydroelectric REC exports. Similarly, wind exports increased from 949,885 MWh in 2018 to 1,480,592 MWh in 2019, an increase of 56%. Without significant supporting action by the State, these exports will undoubtedly increase, as more baseline resources complete their registration for the various external programs and existing Tier 1 resources roll off their contracts and seek better opportunities elsewhere.

For all of the reasons stated above and in Brookfield Renewable's comments on the NYSERDA Tier 2 Petition, we encourage the Commission to approve expeditiously an improved Tier 2 construct that reflects the feedback from Brookfield Renewable and other renewable baseline resources within this proceeding.

⁹ Brookfield estimates that approximately 86% of the non-NYPA owned hydroelectric baseline in New York is eligible for export opportunities based on eligibility in other regional states' renewable energy programs. Examples include Massachusetts Class I and II, Pennsylvania Tier 1, and Maryland Tier 1.

TIER 2 RESALE

In the solicitation for comments,¹⁰ which includes both the aforementioned White Paper as well as the NYSERDA Petition, feedback was requested on a few specific questions contained within both documents, including:

- a. The Tier 2 Petition proposed to size the overall program to include the majority of eligible generation, but to limit annual procurement volumes so as to promote competition and lower-cost bids. Unpurchased RECs would be available for voluntary market purchase by CCAs, ESCOs, or any other interested entities. Should NYSERDA be authorized to re-sell Tier 2 RECs to such entities?¹¹

For the first time within the CES, DPS and NYSERDA are recommending that NYSERDA be allowed to resell procured RECs to voluntary buyers prior to establishing LSE obligations.¹² However, it is not in a context associated with Tier 2, which is the subject of the question above. Instead, DPS and NYSERDA have recommended the ability for NYSERDA to resell offshore wind RECs (“ORECs”) and the proposed Tier 4 RECs. The resale of Tier 2 RECs was not a component of the NYSERDA Tier 2 Petition and, in fact, was not introduced as a concept within the proceeding until put forward by Brookfield Renewable in our comments on the petition.¹³ Therefore, Brookfield Renewable answers “yes” to the question above, but with a caveat. The resale of Tier 2 RECs was put forward by Brookfield Renewable as part of a package of recommended modifications to the petition’s proposed process, all of which are meant to work in concert. Cherry-picking this one aspect without incorporating the others actually introduces the possibility of more harm to the renewable baseline than support.

¹⁰ Case 15-E-0302. *Notice Scheduling Technical Conference and Soliciting Comments*. June 30, 2020.

¹¹ *Id.* P 5.

¹² White Paper. P. 41, 55.

¹³ Brookfield Renewable’s proposal was supported by a variety of baseline renewable resources as well as CCA administrators in comments filed in response to the NYSERDA Tier 2 Petition.

The NYSERDA Tier 2 Petition proposes that NYSERDA procure approximately one-third of the renewable baseline annually over a period of three years, culminating in most of the renewable baseline being contracted after the third annual auction. By design, this proposal leaves two-thirds of the baseline unprocured during the first year of the program and one-third unprocured during the second. Such a design leaves a large portion of the baseline unprocured and at risk for an unnecessarily extended period. Should the Public Service Commission (“Commission”) decide that NYSERDA should be allowed to resell Tier 2 RECs under such a design, it would compound the problem for renewable baseline resources, as unprocured renewable resources would now be competing with NYSERDA within the voluntary REC market. It stands to logic that if NYSERDA were to price the resale of the Tier 2 RECs at a price that reflects their cost to procure them, that price would be lower than the price able to be offered by the unprocured renewable baseline resources. This would certainly be the case if NYSERDA offered a discount to voluntary buyers. Otherwise, those resources would have likely been selected by NYSERDA in a Tier 2 procurement. Whether it is a year where NYSERDA has contracted for one-third, two-thirds or most of the baseline, the volumes are such that the RECs procured by NYSERDA will be more than enough to meet voluntary REC demand. As a result, unprocured baseline renewable resources, which would constitute a large portion of the baseline, will find themselves closed out of the State program and unable to compete with the State in the voluntary market.

Brookfield Renewable proposes to avoid the problem described in the previous paragraph by providing that NYSERDA procure a large portion of the baseline (75-85%) to make sure a large portion of the baseline receives immediate support while also preserving a level of competition within the procurement. That only leaves 15-25% of the renewable baseline unprocured during

the first year, which is less than would be unprocured for two years under the NYSERDA Tier 2 Petition proposal. Much of that remaining supply would end up being procured in the subsequent auction, as NYSERDA would solicit another 75-85% of that remaining renewable baseline. Therefore, the overwhelming majority of the renewable baseline would find itself selling RECs to NYSERDA, not competing with it.

With this revised procurement structure in place, it now makes sense to allow NYSERDA to make resales to voluntary buyers, potentially at a discounted offer floor that better reflects the ability of CCAs and ESCOs to pay. There is clearly a gap between the price needed to support baseline resources and the price that voluntary buyers are able to pay. The Brookfield Renewable proposal allows NYSERDA to bridge that gap in a way that supports the renewable baseline as well as voluntary buyers, and, in doing so, defrays some of the cost obligations the program would place on LSEs by having a portion of NYSERDA's costs covered by the resale of the RECs. However, the Commission should recognize that all of those components must work in harmony and not at odds with each other.

It is worth noting that in all other CES Tiers, DPS Staff and NYSERDA do not propose to only procure a percentage of the determined annual target for that year, with the hopes and expectations that the voluntary market will contract bilaterally for the development of new Tier 1, Tier 4 and/or offshore wind resources to reach the actual target. It would be too risky to do so, as there is no evidence to date that mechanisms outside of NYSERDA procurements will come close to meeting the State's clean energy mandates.

The same holds true for the renewable baseline. As discussed above and in Brookfield Renewable's Tier 2 Comments, the current regulatory and market regime threatens to erode the

renewable baseline in New York. Yet under the NYSERDA Tier 2 proposal, in all but one year of the Tier 2 program – year three, which is the only year in which each of the procurements’ contract periods overlap – NYSERDA is leaving to chance the viability of a large portion of the renewable baseline. Furthermore, upon conclusion of the program after its proposed five-year duration, the entire baseline will once again be left depending on in-state voluntary buyers or, more likely, out-of-state renewable programs that value existing resources.

There is no reason to treat Tier 2 differently than other tiers. NYSERDA should recognize that there is an amount of existing renewable resources that contribute to the renewable baseline, and it should seek to preserve that baseline. We encourage the Commission to adopt the design advocated by Brookfield Renewable and to extend the Tier 2 program at least until the initial CLCPA target year of 2030, or until a different market-based mechanism is designed to support existing renewable resources.

REPOWERING

Section II.c.5 of the White Paper proposes criteria to allow repowered projects to qualify all their capacity as Tier 1 eligible versus the current rules that only allow incremental energy from eligible facilities to qualify as Tier 1. Under the proposal, a repowered facility would be able to qualify all generation above a projected output baseline until it reaches the end of the project’s life, at which point all generation would qualify. To qualify as repowered, facilities must meet three criteria:

- Replacement of each prime mover. (For wind facilities, this would be the wind turbine including generator, gearbox, nacelle, rotor, and blades. For solar facilities, this would be

the modules and inverters. For hydroelectric facilities, this would be the generator, the entire turbines and structures supporting the turbines).

- Overall increase of 15% or more in the production of the generation unit compared to its projected future output; and
- 80% of the tax basis is derived from new capital expenditures.

It is reasonable that DPS and NYSERDA believe there needs to be an investment in a facility that prolongs its life in order to qualify for Tier 1. Unfortunately, the nature of technologies involved makes a one-size-fits-all approach to repowering criteria difficult to develop.

Brookfield Renewable supports the proposed revised criteria submitted by the Alliance for Clean Energy New York, the American Wind Energy Association, the Advanced Energy Economy Institute, and the Solar Energy Industries Association (“Clean Energy Industry”) in their comments¹⁴ on the White Paper. That group’s comments provided examples of significant investments required to maintain the operations of real-life hydropower facilities that would fail to meet all of the proposed repowering criteria but were nevertheless critical to preserving the future operations of those facilities. Clean Energy Industry recommends modifying the requirements such that only one of the criteria needs to be met to qualify for repowering, and that FERC relicensing be an additional qualifier. Brookfield Renewable supports that position.

Brookfield Renewable has several FERC licenses either in the process of being renewed or coming up for renewal within the next ten years, culminating in over 125MW worth of capacity subject to FERC directives and the associated costs. The process for each facility is time-consuming and costly, with many of the costs being unrelated to the prime mover and associated

¹⁴ Case 15-E-0302. Comments on Staff’s *White Paper on Clean Energy Standard Procurements to Implement New York’s Climate Leadership and Community Protection Act*. July 24, 2020

equipment. Yet such investments will be mandatory for the continued operations of each facility and, therefore, should allow FERC relicensing to qualify as Tier 1 eligibility criteria.

TIER 4

The White Paper posits the creation of a new Tier 4, with the intention of motivating additional renewable supply directly into downstate New York, NYISO Zone J (which correlates with New York City) specifically. It is a laudable goal to incentivize more renewable supply to locate or deliver to the area of the state that has the highest energy consumption and a larger percentage of fossil-based generation than elsewhere in the state. As noted above, NYSERDA Tier 1 procurements consistently result in projects locating in areas to the north and west of the high-demand downstate area.

However, the criteria for Tier 4 includes requirements concerning additionality, both in terms of historic delivery into the New York Control Area (“NYCA”) as well as in terms of the supplier’s Greenhouse Gas baseline.¹⁵ The White Paper states that these requirements are intended to prevent the switching of the delivery of renewable energy intended for one area to instead deliver into Zone J, thereby resulting in the previous buyer to rely on fossil fuel to backfill the lost energy. There may be situations where that is the case. However, it is very unlikely that would hold true for in-state renewable resources. Renewable power delivered to Zone J from existing in-state renewable resources located throughout NYCA is unlikely to result in an increase in dispatch of fossil-backed resources. The current penetration of renewable resources across the NYCA is significant, and as noted earlier, it is expected that many more will locate there as well. Allowing existing in-state renewable resources an opportunity to deliver into

¹⁵ White Paper. P. 48.

Zone J and qualify for Tier 4 would lead to less cannibalizing of upstate renewable resources, plus it would create a competitive market revenue opportunity for resources that otherwise would need to rely on a Tier 2 (or have little to no in-state options should Tier 2 actually only exist for the proposed five years). Clean Energy Industry has submitted comments further detailing this notion and Brookfield Renewable supports their comments.

CONCLUSION

Brookfield Renewable reiterates our continued support for the State's laudable and aggressive renewable energy goals. New York serves as a model in that regard, and therefore it is imperative that the CES program is designed such that it most efficiently and effectively achieves those goals. Brookfield Renewable respectfully encourages the Commission to consider our feedback when evaluating both the White Paper and NYSERDA Tier 2 Petition.

Respectfully submitted,



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