

To: New York City Department of Buildings

From: Brookfield Renewable

Re: Brookfield Renewable Comments on the Department of Buildings proposed rules amending section 103-14 to establish penalties for noncompliance with Article 320 of Chapter 3 of Title 28 of the New York City Administrative Code requiring annual greenhouse gas (GHG) emissions limits for buildings.

Date: 10/24/2023

Brookfield Renewable appreciates the opportunity to comment on the Department of Buildings' ("DOB") most recently issued proposed rulemaking relating to the implementation of Local Law 97.¹ Combined with a previous rulemaking,² these rules are intended to provide necessary details and guidance for building owners to comply with the broader requirements under Local Law 97. However, the guidance provided through both issuances of rules fails to provide sufficient clarity for both building owners and renewable energy resources alike concerning what constitutes a compliant renewable energy credit ("REC"), which may be used for compliance under the law.

Brookfield Renewable believes that the plain language of the law allows for existing renewable resources to serve as sources of such RECs. However, previous statements by some DOB staff

¹ The Department of Buildings ("DOB" or "Department") is amending section 103-14 to establish penalties for noncompliance with Article 320 of Chapter 3 of Title 28 of the New York City Administrative Code requiring annual greenhouse gas (GHG) emissions limits for buildings. Issued September 12, 2023.

² Final-Rule-Procedures-for-Reporting-on-and-Complying-with-Annual-Greenhouse-Gas-Emissions-for-Certain-Buildings.pdf. Adopted December 7, 2023

indicating that no such RECs are currently available to building owners has caused confusion on this issue that necessitates clarification. Through our comments, Brookfield Renewable details how and why RECs sold as a bundled energy/REC product from a renewable energy resource and through the New York Independent Systems Operator's Internal Bilateral Transaction (IBT) market mechanism may be used for deductions from reported building emissions as contemplated in § 28-320.3.6.1 of Local Law 97. We ask DOB to issue rules confirming as much.

Brookfield Renewable Introduction

Headquartered in New York, NY, Brookfield Renewable has a significant presence in New York State, including 74 hydroelectric facilities on 15 river systems, 711 MW of installed capacity, plus three recently integrated Terraform Power wind projects totaling 160 MW, resulting in over 300 employees and 240 indirect jobs in New York. Brookfield Renewable is a strong advocate in support of many of New York City's and New York State's clean energy polices and is eager to be a partner to help achieve their goals.

Brookfield Renewable's hydro facilities are considered a "renewable energy system" under New York's Climate Leadership and Community Protection Act (CLCPA). RECs generated from these facilities are a vital component of the renewable energy and environmental landscape. The production, distribution, and retirement of these RECs are tracked in the New York Generation Attribute Tracking System (NYGATS). NYGATS is utilized in the accounting of the source of the RECs (technology, vintage, bundled/unbundled with energy, import/export, etc.) and what entity ultimately retained or took possession of the RECs prior to their retirement. RECs associated with energy delivered in New York State are eligible for renewable product

compliance for Community Choice Aggregations as well as mass-market ESCOs. Additionally, RECs are sold to a variety of entities as part of their environmental, social and governance goals.

RECs Are a Demonstrated Compliance Tool

In general terms, a REC is a certificate, typically created by a tracking system, that represents the attributes of one megawatt hour of electricity generated from a renewable source. These RECs, or certificates, are utilized to substantiate environmental claims related to energy use, such as for compliance with a mandated renewable compliance program, or for voluntary claims such as a climate action pledge. The definition in Local Law 97 is consistent with this common understanding, stating in §28-320.1:

RENEWABLE ENERGY CREDIT. The term "renewable energy credit" means a certificate representing the environmental, social and other non-power attributes of one megawatt-hour of electricity generated from a renewable energy resource, which certificate is recognized and tradable or transferable within national renewable energy markets or the New York generation attribute tracking system.

Local Law 97 does not provide a definition of a "renewable energy resource." However, the

CLCPA defines "renewable energy systems" as:

systems that generate electricity or thermal energy through use of the following technologies: solar thermal, photovoltaics, on land and offshore wind, hydroelectric, geothermal electric, geothermal ground source heat, tidal energy, wave energy, ocean thermal, and fuel cells which do not utilize a fossil fuel resource in the process of generating electricity.

Local Law 97 adds additional caveats to what characteristics a REC must have for it to be used

to deduct emissions from annual building reporting:

§ 28-320.3.6.1 Deductions from reported annual building emissions for renewable energy credits.

A deduction from the reported annual building emissions shall be authorized equal to the number of renewable energy credits purchased by or on behalf of a building owner, provided (i) the renewable energy resource that is the source of the renewable energy credits is considered by the New York independent system operator to be a capacity resource located in, or whose output **directly sinks into**, the zone J load zone for the reporting calendar year...

(italic and bold formatting added for emphasis)

Limitations on REC Usage for Compliance

In its Final Rule adopted in December 2022, the Department of Buildings provided additional clarity on the application of RECs as deductions for buildings' annual emissions calculations, limiting their usage such that "Renewable energy credits may only be deducted from the emissions attributed to consumption of utility supplied electricity in a covered building." Further, the currently proposed rules "Establishes a 100% limitation on the purchase of renewable energy credits (RECs) for building owners who pursue the Decarbonization Plan path."

While Local Law 97 places no limits on the quantity of compliant RECs that can be used to reduce reported emissions, a set of interested stakeholders have recommended adoption of certain limits. Amongst others, the Local Law Advisory Board and the New York City Comptroller have called for a limit on RECs such that they can only be applied as a deduction for 30% of a building's emissions overage associated with electricity.

IBT RECs Are a Practical Solution to Policy Needs

Brookfield Renewable takes no position on the proposal to limit REC deductions to a portion of building overages associated with electricity emissions. It is understood that the ultimate goal

of the program is to reduce buildings' emissions profiles, and measured limitations on the quantity of RECs that can be used for emission deductions is reasonable. However, RECs are a critical tool in the broad landscape of energy and environmental policy objectives. In fact, the Local Law 97 Advisory Board Report clearly recognizes this point, "RECs are created through the production of electricity from renewable resources and *support New York City and New York State long-term goals of reducing reliance on fossil fuels and slashing GHG emissions*." (p. 17, emphasis added)

RECs, particularly those delivered via IBTs sinking into Zone J, help solve two glaring issues that both the state and city are facing as they advance their separate but related policy objectives. First, there is a gap between when the Local Law 97 mandates come into effect and when direct delivery of new renewable generation into Zone J is expected to take place through some of the state's other renewable energy policies, Tier 4 and offshore wind most notably. Second, New York State is lagging on achieving some of the goals of the CLCPA, including the goal of being seventy percent renewable by 2030 (i.e., "70x30"). The exclusion of existing renewables is an important contributing factor to that shortcoming. Allowing use of IBT RECs to satisfy Local Law 97 requirements would help address both issues.

Regarding the Tier 4 and offshore wind projects, which are assumed to be compliant with the REC language currently contained in Local Law 97, the timing of commencement of energy deliveries from those resources is uncertain. This uncertainty, resulting from many of the same reasons that are plaguing the development of all types of renewable projects (inflation, supply chain disruptions, high demand for renewable energy system components, etc.), jeopardizes the

ability for building owners to rely on RECs from such resources for Local Law 97 compliance, at least in the early years.

The owners of several offshore wind resources – Sunrise Wind, Empire Wind 1 & 2, and Beacon Wind –filed petitions on June 7, 2023 with the state Public Service Commission seeking to amend their contracts with the New York State Energy Research and Development Authority ("NYSERDA") to increase their contracted bid price to account for inflation, supply chain issues, and other factors negatively impacting the economics of their projects. The filers claimed that the state's failure to grant such amendments would put their projects in jeopardy.³ On October 12, 2023, the Public Service Commission denied those petitions,⁴ calling into question the timing of those projects, if not their viability altogether.

Furthermore, the two Tier 4 projects, Champlain Hudson Power Express and Clean Path, currently have in-service dates of 2026 and 2027, respectively, two to three years after Local Law 97's mandates are scheduled to go into effect. Moreover, even those dates are not certain as the owners of those projects have sought schedule relief through similar amendments to their contracts.⁵

These circumstances create a critical a lack of Local Law 97 compliance options for owners of covered buildings. Absent availability of compliant RECs from other sources, subject building

 ³ Notably, these petitions followed previous modifications to the in-service dates of several of the projects, which had already made it difficult to accurately predict when they would be commercially operable.
⁴ ORDER DENYING PETITIONS SEEKING TO AMEND CONTRACTS WITH RENEWABLE ENERGY PROJECTS, 15-E-0302

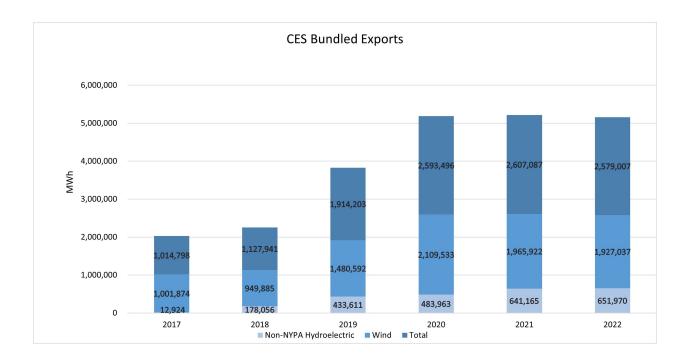
⁵ On June 14, 2023, Clean Path New York filed a similar petition as the other NYSERDA contracted resources seeking amendments to its contract as well, stating if the contract is not adjusted the project's "economics will be eroded and the CPNY Project will be rendered non-viable". On August 28, 2023 Champlain Hudson Power Express also submitted a petition seeking to amend its contract.

owners are confronted with unavoidable and inequitable non-compliance penalties with no practical means of supporting city or state environmental policies.

Amongst those threatened state policies is the 70x30 target. NYSERDA reports that the state is on track presently to achieve roughly 66% renewables by 2030, presumably premised on making up the shortfall through subsequent Clean Energy Standard (CES) Tier 1 solicitations. However, in a petition also filed on June 7, 2023, Alliance for Clean Energy New York asked for an inflation adjustment for awarded NYSERDA contracts (Tier 1 projects in this case) and contends that without such an adjustment, an attrition rate for renewables projects under development will be experienced that is much higher than the 20% assumed by NYSERDA. This would put the 70x30 goal at significant risk. Notwithstanding these program compliance risks, in the same order denying the petition of the offshore wind developers, the Public Service Commission also denied the Tier 1 petition.

Compounding these scheduling concerns is the significant erosion of the state's existing renewable baseline experienced in recent years due to a lack of state-backed programs to support existing renewable generators. Due to this programmatic gap, existing generators are economically incentivized to export their power out of state, undermining achievement of the state's goals. The graph below illustrates the continually increasing amount of existing renewable resources that are flowing energy and their renewable attributes out of New York State, further putting at risk achievement of the state's clean energy targets.





Source: New York Generation Attribute Tracking System

As explained below, the delivery of bundled renewable energy and RECs via an IBT with New York City counterparts is not only consistent with the language in Local Law 97, it also allows existing renewable resources to become partners in the city's efforts and both harmonizes and supports state and city environmental policies.

IBT RECs Are Compliant With Local Law 97's REC Definitions

The above-mentioned Code § 28-320.3.6.1 references the NYISO and some of its terminology in determining an eligible source of RECs. It can either be a capacity resource located in Zone J, which is a NYISO defined term and NYISO defined location, or the source can "directly sink" into Zone J.



The NYISO provides a mechanism called an "internal bilateral transaction," or IBT, by which two counterparties can schedule physical transactions directly within the NYISO system. As described in the NYISO's Market Participants User's Guide (p. 161), these transactions require a source and a sink:

A trading hub energy owner must have a balanced megawatt position at each trading hub in order for its trading hub transaction bids to be scheduled. A balanced megawatt position means that the trading hub energy owner must source the same amount of megawatts as it sinks at that zonal trading hub in a given market and hour. If an internal bilateral transaction involving a trading hub is not part of a balanced set by the time the market closes for that hour, it will not be scheduled

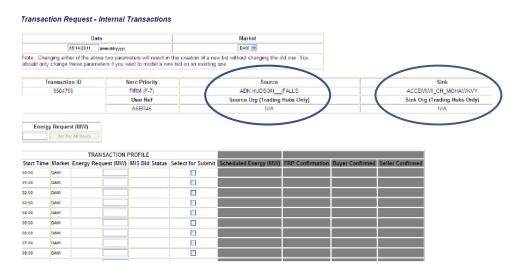
Further, as illustrated in the figure below (also from the NYISO Market Participants

User's Guide), each IBT that is scheduled needs to identify the source of the scheduled

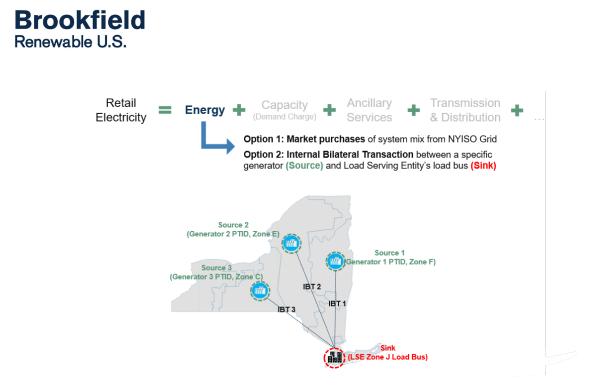
energy as well as where such energy will sink.

Scheduling of Internal Transactions

Figure 72: Internal Transaction Request display



The illustration below provides a visual representation of an IBT.



Brookfield maintains that an IBT fulfills the requirement of Local Law 97 Code § 28-320.3.6.1 for a resource to "directly" sink into the Zone J load zone. Utilizing the NYISO wholesale market scheduling and dispatch operations, through an IBT energy is produced by a generation resource and it enters the transmission system at its generation bus. Energy flows over the transmission system and sinks into Zone J.⁶ A counterparty then pays for that energy where it is consumed in Zone J. In this case, the building owner has a direct relationship in supporting the energy production of a renewable resource and, therefore, is making a direct investment in progressing towards the city's and state's policy objectives. Energy that comes from a renewable energy system creates RECs associated with that energy, and the RECs associated with the energy purchased by the bi-lateral partner located in Zone J will be transferred to that partner to use at their discretion, presumably as a compliance mechanism for LL97.

⁶ It is worth noting that the NYISO treats these transactions with an enhanced priority, as the firm transmission afforded to these transactions cannot be curtailed.



Furthermore, IBTs encourage cost-efficient build out of renewables through private investment of capital into renewable projects that are deliverable to New York City. IBTs also capitalize on already existing renewable projects throughout New York State and provide those resources with the means to re-invest in maintenance and potential upgrades to support their continued viability. Building owners are able to "point" to a renewable asset via the IBT mechanism and demonstrate not only compliance with LL97, but also avoided emissions associated with thermal generation. This also reduces reliance upon "system" power from undefined sources to serve load.

Accordingly, for the reasons outlined above, Brookfield Renewable requests the New York City Department of Buildings to issue guidance making clear that energy and REC products from an eligible renewable energy resource utilizing the NYISO's IBT mechanism are eligible to be used by building owners to meet emissions reductions requirements under § 28-320.3.6.1 of Local Law 97.