



June 14, 2022

Dear Local Law 97 Advisory Board,

We are writing on behalf of the New York Solar Energy Industries Association (NYSEIA) to provide recommendations and requests for clarification regarding the treatment of solar photovoltaic (PV) technology as a Clean Distributed Energy Resource (DER) under Local Law 97 (LL97). These recommendations provide for more resources as buildings plan for compliance with LL97, enabling both onsite and offsite DERs to facilitate the City's carbon reduction.

We applaud the New York City Council and the Mayor's Office for enacting, and standing firm on, its ambitious climate legislation to decarbonize New York City's large buildings. We also appreciate the tireless, ongoing work of the NYC Department of Buildings (DOB) and the LL97 Advisory Board to develop rules to ensure that LL97 is implemented in a fair, predictable and impactful manner.

Founded in 1994, the New York Solar Energy Industries Association is the only statewide membership and trade association dedicated solely to advancing solar energy use in New York State. NYSEIA proudly represents hundreds of businesses across New York that employ thousands of workers throughout the solar value chain. NYSEIA's membership includes dozens of solar companies that are based in New York City and many more doing business in the City. Our members are rapidly deploying Clean DERs in NYC, and the future of their businesses are directly affected by the City's rule making for LL97.

Clean DERs are one of the most impactful and immediate ways for Covered Buildings to reduce their carbon emissions and comply with LL97. In addition to delivering immediate carbon emissions reduction, Clean DERs in New York City provide many unique benefits, including:

- Improved public health by eliminating harmful air pollution from in-City fossil fuel combustion;
- Direct economic benefits for participating customers that install solar on their premises or subscribe to an offsite solar project via community solar, a solar development model that allows low-income families and renters to participate in and benefit from solar energy;
- Local economic development, workforce development, and job creation for NYC residents and entrepreneurs; and
- Indirect utility bill savings for all energy customers by generating peak-coincident power in New York's most congested load zone and eliminating and/or deferring the need for costly upgrades to the electric transmission and distribution systems.



With clear and favorable guidance, Clean DERs can be a central component of Covered Buildings' LL97 compliance strategy. In turn, LL97 can help accelerate the deployment of Clean DERs in New York City, enabling the City achieve its ambitious goal to install 1,000 megawatts of solar by 2030. Accelerating the adoption of Clean DERs is aligned with both the spirit and letter of the Law. The recommendations and requests for clarification in this memorandum are intended to provide the solar industry and building owners with the clarity they need to ramp up investment in solar in the City.

We thank you for your leadership and for considering input from the New York solar industry. We welcome your questions and look forward to increasing our engagement in the City's efforts to implement LL97 and decarbonize NYC's buildings.

Sincerely,

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Clean Distributed Energy Resources in New York City as a High Impact Measure for Local Law 97 Compliance

Recommendation: clarify that Covered Buildings can receive equal LL97 credit for installing a Clean DER on the premises or entering into a contract to purchase solar energy from an offsite Clean DER within the City (i.e. Load Zone J) via Community Distributed Generation or Remote Crediting.

Discussion

Many of the LL97 Covered Buildings are mid-rise or high-rise buildings that are not well-suited to host solar PV systems. At the same time, many challenging but high-impact sites for potential solar development, such as parking lots, landfills, and affordable housing (“rent regulated”) developments, are not Covered Buildings. Over the last decade, the New York Public Service Commission enabled Community Distributed Generation and Remote Crediting, utility crediting mechanisms whereby solar energy generated anywhere within a utility service territory can be allocated toward one or many offsite satellite accounts in the same utility territory. Allowing Covered Buildings to meet their LL97 compliance obligation by entering into a contract to purchase solar energy credits from local solar projects will increase the economic viability of installing solar at challenging sites, accelerating solar deployment and grid decarbonization.

The actual carbon offset by a solar PV system in New York City is the same whether or not the PV system is co-located with a Covered Building and irrespective of the Con Edison electric meter configuration. The solar industry recommends that the carbon offset by a solar PV system in New York City be calculated by multiplying the [solar PV] carbon coefficient of electricity by the quantity of kilowatt hours generated by the solar PV system during the reporting year.

LL97 defines a DER, noting that it “may serve...one or more customers at the same location, and it may simultaneously or alternatively transmit all or part of the electricity it generates or stores onto the electric distribution system for sale to or use by other customers at other locations.” This definition demonstrates that the law contemplates both onsite and offset DERs. However, Section § 28-320.3.6.3 of LL97 creates some confusion by stating that “deduction from the reported annual building emissions shall be authorized based upon the calculated output of a clean distributed energy resource located **at, on, in, or directly connected to** the building subject to the report.”

We recommend that the DOB clarify that a contract, such as a solar roof lease or subscription/power purchase agreement, that specifically allocates LL97 compliance benefit to an electric utility customer in a Covered Building constitute a “direct connection” under Section § 28-320.3.6.3. This clarification aligns with the LL97 definition of a DER as well as Section § 28-320.3.6 of LL97, which states that the DOB may “authorize a deduction from the annual building



emissions required to be reported by an owner pursuant to section 28-320.3 where the owner demonstrates the purchase of greenhouse gas offsets or renewable energy credits, or the use of clean distributed energy resources”.

This clarification would allow a solar project the flexibility to allocate the LL97 compliance benefit associated with solar energy generation to the host site or to an offsite Covered Building, while still prohibiting double-counting. We appreciate the DOB’s need for administrative simplicity, and we are happy to work with the DOB to develop guidelines for allocating, reporting on and verifying LL97 benefits for the many solar projects where 100% of the solar energy is not used onsite.

Recommendation: clarify that the subset of Clean DERs compensated under the Value of Distributed Energy Resources (VDER) utility tariff do not need to forego the Environmental (“E”) Value portion of the electric rate in order to generate LL97 compliance benefit.

Discussion

Over the last five years, New York has adopted many changes to the way that utilities compensate Clean DERs for the energy they generate. Currently, many solar projects receive compensation via net energy metering while others are compensated via the Value of Distributed Energy Resources (VDER) tariff. VDER is a complex tariff through which distributed solar projects are compensated in a manner similar to large-scale power plants, receiving payment based on the real-time wholesale energy price and capacity market. The VDER tariff also includes a ~\$0.03/kWh E-Value, which is a rough proxy intended to compensate for the environmental value created by the Clean DER. We strongly recommend that the DOB clarify that solar projects do not need to forego the E-Value in order to be used for LL97 compliance for the following reasons:

1. Only a subset of solar projects is compensated under the VDER tariff, so there is no way for many solar projects to forego the E-Value because they are not on the VDER tariff;
2. The current E-Value in the VDER tariff is not connected to the Department of Environmental Conservation social cost of carbon, the carbon coefficient of electricity in New York City, or what a Renewable Energy Credit might cost in NYC; instead, it is a statewide value that was administratively set by the Public Service Commission to encourage solar development across the State; and
3. Forgoing the E-Value is not economically feasible for most Clean DER projects, so clarifying that this is not required will allow Clean DERs to play a central role in LL97 compliance.



Recommendation: clarify that Covered Buildings can deduct the net electricity consumption of an Energy Storage System (ESS) from building energy use when determining emissions.

Discussion

Energy Storage Systems can eliminate carbon emissions and other harmful air pollution by dispatching power during peak demand, when the electric grid has the highest carbon intensity due to increased reliance on fossil fuels to meet peak demand. However, ESS are net electricity consumers due to ancillary HVAC/ventilation equipment and roundtrip efficiency/heat loss during the charge/discharge cycle. ESS deployment at Covered Buildings constitutes beneficial electrification which will help decarbonize the grid, and we recommend that the Department clarify that the net electricity consumption of an ESS can be deducted from building energy use when determining building emissions.

Recommendation: define the 2024-2029 carbon coefficient for electricity offset by solar photovoltaic (PV) generation to be 0.000410713 mTCO₂e per kilowatt hour, which is the carbon coefficient for electricity generated by natural gas combustion¹.

Discussion

In Section § 28-320.3.6.3 of LL97, the DOB is charged with “establishing separate calculations for each type of commercially available clean distributed energy resource.” The primary source of grid electricity in New York City is natural gas combustion, especially during times of peak demand. Solar PV is a Clean DER with a high degree of peak coincidence, so NYSEIA recommends that the DOB set the calculation for the LL97 deduction value of solar PV to be 0.000410713 mTCO₂e X kilowatt hours of solar generated during the compliance year.

It is possible that one could read LL97 and assume that the deduction value of solar PV should be calculated using the general greenhouse gas coefficient of electricity defined in Section § 28-320.3.1.1, which is 0.000288962 tCO₂e per kilowatt hour. However, the true carbon coefficient of electricity offset by solar PV in New York City during the first compliance period will be significantly higher, and NYSEIA encourages the DOB to establish a more accurate coefficient for solar PV pursuant to Section § 28-320.3.6.3.

In New York City’s 2020 Greenhouse Gas Inventory, the most recent available, the carbon coefficient of electricity was calculated to be 0.0003202296 tCO₂e per kilowatt hour², which is 11% higher than the coefficient defined in LL97. However, the Indian Point nuclear power

¹ <https://www.eia.gov/tools/faqs/faq.php?id=74&t=11>. U.S. Energy Information Administration. 2020. Accessed May 25, 2022.

² <https://nyc-ghg-inventory.cusp.nyu.edu/#about>. City of New York Greenhouse Gas Inventory. 2020. Accessed May 25, 2022.



station was just retired in 2021. Indian Point was the largest source of zero-emissions electricity for the City, and this capacity was primarily replaced by natural gas power plants.

NYSEIA appreciates that eliminating onsite fossil fuel combustion within buildings via electrification is critical to the City and State's long-term emissions reduction strategy. We want Covered Buildings to have strong incentives to convert to efficient heat pump technology, so we do not recommend any increases to the carbon coefficient for grid electricity consumed by Covered Buildings. However, we do recommend that electricity offset by Solar PV be credited based on the carbon coefficient of electricity generated by natural gas combustion; 0.000410713 mTCO₂e per kilowatt hour. Setting an accurate carbon coefficient for solar PV will create a strong incentive for Covered Buildings to install solar PV as a means of LL97 compliance, helping the City achieve its solar deployment goal of 1,000 megawatt by 2030 and providing additional public health, workforce and economic benefits to New Yorkers.

Recommendation: work with the solar industry and other impacted stakeholders to discuss these recommendations and requests for clarifications, and issue a Technical Bulletin to provide the solar industry, Covered Buildings and other stakeholders with the information that they need to plan for LL97 compliance.

Discussion

In the DOB's 2021-019 Technical Bulletin, the Department issued technical guidance clarifying that electricity consumption from electric vehicle supply equipment (EVSE) can be deducted from building energy use when determining building emissions. This technology-specific technical guidance is immensely valuable to Covered Buildings and the industry. The solar industry respectfully seeks similar clarity regarding the treatment of solar PV under LL97.