

American Council of Engineering Companies of New York

## Comments to the NYC Department of Buildings Re: Local Law 97 rulemaking, *Article 320*

## October 24, 2023

**About ACEC New York:** The American Council of Engineering Companies of New York (ACEC New York) is an association representing nearly 300 engineering and affiliate firms with 30,000 employees across New York, with a concentrated presence in New York City. Founded in 1921, our association is one of the oldest continuing organizations of professional consulting engineers in the United States. Our members are the professionals who plan and design the structural, mechanical, electrical, energy performance, plumbing, civil, environmental, fire protection, and technology systems for buildings and infrastructure across New York and the world.

**Comments:** Our Energy Code Committee reviewed the proposed rule regarding Local Law 97 implementation and Article 320. We offer the following comments:

- The Beneficial Electrification credit will provide building owners with an incentive to electrify their properties in a timely manner. We offer the following observations and recommendations which would serve to clarify and strengthen the credit.
  - We recommend that it be clarified in the Rule if Beneficial Electrification only applies to retrofits of existing systems or if it also applies to new construction.
  - O The prescriptive minimum efficiency requirement for the equipment eligible for Beneficial Electrification is indicated as a COP greater than 1.5 at 5 deg F. There is not an AHRI standard rating at 5 deg F. Therefore, for certain equipment the efficiency at this temperature may not be available or consistent. Our recommendation is to simply not allow any heat pumps that include electric resistance supplemental heat to qualify for the credit.
  - More clarification is required regarding how to apply the Beneficial Electrification to water source heat pump systems, as follows:
    - There does not appear to be a feasible path for ground source heat pumps to qualify for the Beneficial Electrification credit. They are not included in the equipment listed for the Deemed Electric Use path. For a system with individual ground source heat pumps in each apartment it is not economical to separately meter each heat pump to take advantage of the metered option for Beneficial Electrification. We recommend including ground source heat pumps in the Equipment Table for Beneficial Electrification Deemed Electric Use with the caveat that fossil fuel is not allowed as a backup heat source.
    - Furthermore, for systems that utilize central air-to-water heat pumps for heat injection into a condenser water loop that serve terminal water source heat pumps, further clarification is needed as to how the credit should be applied. Would only the central heat pump qualify under the metered option?
    - In addition, in cases where there is a balanced load in the building and the majority of heat into the condenser water loop is from heat recovery, could the

- terminal water source heat pumps be applicable for the metered credit even if there is a supplemental fossil-fuel boiler?
- We also recommend clarifying if under the metered option, the credit only applies to the compressor energy or the whole system, including the pumping energy. We recommend simplifying the approach by only allowing the compressor energy to qualify.
- The Rule states that equipment must have been installed and operating after January 1, 2021 to be eligible for the Beneficial Electrification credit. Local Law 97 was enacted in April of 2019. The current date in the Rule would not allow very early adopters of electrification to take advantage of the credit. We recommend modifying this date so it better aligns with the enactment of Local Law 97.
- o For Deemed Electric Use, it is unclear if the 1,200,000 Btu/hr limit applies to individual pieces of equipment or a total equipment capacity for the building. The capacity is fairly large to apply to a single piece of equipment but may not be sufficient if meant to apply to a whole building. We recommend clarifying the intent of the limitation and considering decreasing if it is meant to be for a single piece of equipment or including a capacity/SF limit instead of a firm number if applicable for a whole building.
- o In equation 103-14.14, we recommend clarifying the square footage that is to be used. If the building is only partially electrified should the square footage only apply to the portion of the building that is provided with electrified heating?
- We understand that the intent of Beneficial Electrification is to promote electrification of heating and domestic hot water. We want to confirm that for the Metered Option the electricity associated with operating the HVAC equipment, in both the heating and the cooling modes, will be eligible for the credit. It is not feasible to meter only the heating usage in a heat pump system that serves both heating and cooling loads. Similarly for the Deemed Electric Use option, only the heating capacity is used in equation 103-14.14 but the full load hours definition appears to allow for both heating and cooling hours to be used.
- We also recommend that the annual metered data is submitted including a
  breakdown by month. This will help monitor that the installed equipment is being used
  for heating and not just cooling.
- For the ESPM property types, understanding that "Other" and "Mixed Use" are not allowable property types, we request that more guidance be provided by the Department in cases where a space does not easily fall into a property type category.
- Under Good Faith Efforts, more clarification is needed as to the compliance of adjustments that have been granted. It is unclear from the Rule if an adjustment is required to show Good Faith Effort.
- For the Decarbonization Plan under Good Faith Efforts, is it required to have completed work that resulted in a 10% emissions reduction? How would that reduction be calculated? Through utility bills or modeling? It is also not clear which GHG coefficients should be used for work completed prior to 2024.

Thank you for the opportunity to provides these comments.

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