INTERPRETATION IC 90.1-2019-9 OF ANSI/ASHRAE/IES STANDARD 90.1-2019 Energy Standard for Buildings Except Low-Rise Residential Buildings

Date Approved: February 6, 2023

Request from: Aaron McEwin, Jordan & Skala Engineers, Inc., 17855 North Dallas Parkway, Dallas, TX 75287.

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE/IES Standard 90.1-2019, Section 3, regarding the definition of a *conditioned space – cooled space*.

Background: We are working on a LEED project, using the 90.1-2019 standard. We have a space that is cooled with a system that is 4 Btu/h-SF. This is below the 5 Btu/h-SF threshold for sensible cooling and falls below the threshold for a "Conditioned-Cooled Space". The space is also heated within the threshold of a semi-heated classification.

Ouestions:

- 1. Can a semi-heated space have a cooling system?
- 2. If a space has a cooling system in it, but the sensible cooling is below the 3.4 Btu/hr-SF in 90.1-2019 (or below 5 Btu/h-SF in 90.1-2010), what type of space is this considered?
- 3. Would a space that is only cooled with a system that is less than the cooling sensible threshold stated in "Cooled Space" be considered an "Unconditioned space"?

<u>Interpretation No. 1:</u> The semi-heated space can have a cooling system as it does state any prohibition of a cooling system.

Question No. 1: Is this interpretation correct?

Answer No. 1: Yes.

<u>Comments No. 1:</u> If a semi-heated space is served by a system that has a sensible cooling output capacity less than the threshold to be defined as a conditioned space, 3.4 Btu/h·ft², there is nothing that prohibits a cooling system from being provided for that space.

<u>Interpretation No. 2:</u> A space that has a cooling system in it, but the sensible cooling is below the 3.4 Btu/hr-SF in 90.1-2019 would fall into either a semi-heated or an unconditioned space classification since it is below the threshold.

Question No. 2: Is this interpretation correct?

Answer No. 2: No.

<u>Comments No. 2:</u> Even though the space is served by a system that has a sensible cooling output capacity less than 3.4 Btu/h·ft², the space can still be a heated space or indirectly conditioned space in addition to unconditioned space or semi-heated space.

Interpretation No. 3: Based on the definition of a conditioned, cooled space, a space with less than 3.4 Btu/hr-SF (90.1-2019) of cooling, the space would be considered "unconditioned space".

Question No. 3: Is this interpretation correct?

Answer No. 3: No.

<u>Comments No. 3:</u> The space could be a heated space, indirectly conditioned space, semi-heated space, or an unconditioned space.