INTERPRETATION IC 90.1-2013-18 OF
ANSI/ASHRAE/IES STANDARD 90.1-2013
Energy Standard for Buildings Except Low-Rise Residential Buildings

Date Approved: October 12, 2019

<u>**Request from:**</u> Scott Lindgren, U.S. Army Corps of Engineers, 1616 Capitol Avenue, Omaha, NE 68102.

<u>**Reference:**</u> This request for interpretation refers to the requirements presented in ANSI/ASHRAE/IES Standard 90.1-2013, Sections 9.4.1.1 and 9.6.1, regarding controls for spaces broken up into smaller subspaces.

<u>**Background:**</u> Section 9.4.1.1 states the space type used for determining control requirements shall be the same space type used to determine the LPD. The title and contents of Section 9.6.1 permits spaces to be broken up into smaller subspaces if a space has multiple functions (more than one space type is applicable) for the purposes of "Lighting Power Allowance", however, this space division makes no mention of control requirements. This omission leads to uncertainty as to whether the most restrictive control requirements must be employed throughout the entire space, the control requirements for the subspace that forms the largest function of the space must be used throughout, or if fixtures dedicated to each subspace may be controlled in a manner consistent with the individual subspace's space type control requirements.

Similar language has been used in 90.1-2016.

<u>**Example**</u>: A large break area in the dormitory portion of a multi-function building has identifiable separate components of a commercial kitchen, dining area, TV lounge, and video gaming area, but no interior walls greater than 80 percent of the ceiling height. Area-weighted lighting power allowances based on Table 9.6.1 subspaces of "Food Preparation Area", "Dining Area: All other dining areas", "Lounge/Breakroom: All other lounges/breakroom", and "Lounge/Breakroom: All other lounges/breakroom", respectively, (and corresponding lighting illuminance performance from separate standards and criteria) are employed in accordance with Section 9.6.1(c).

<u>**Interpretation No.1:**</u> The separate subspaces within the collective enclosed space may be provided with separate controls satisfying the individual control requirements of Table 9.6.1 for each subspace independently or may be controlled in the most restrictive method for subspaces with shared controls. Also, where specific exceptions exist (such as the safety and security exception), such exception shall only apply to the given subspace's controls and not to the collective space's controls.

<u>**Question No.1:**</u> Is this interpretation correct?

<u>**Answer No.1:**</u> No.

Comment: When a space is subdivided as allowed by Section 9.6.1, each of the subspaces must comply with the minimum control requirements for that space type as shown in Table 9.6.1. Section 9.4.1.1 states, "If using the Space-by-Space Method, the *space* type used for determining *controls* requirements shall be the same *space* type used for determining the *LPD* allowance." Exceptions allowed for each of the subdivided space types may be utilized.

Interpretation No.2: This interpretation also applies to 90.1-2016.

Question No.2: Is this interpretation correct?

Answer No.2: No.

Comment: The applicable language appears in both the 2013 and 2016 versions of the Standard. Therefore, the comment is the same as above.