INTERPRETATION IC 90.1-2019-2 OF
ANSI/ASHRAE/IES STANDARD 90.1-2019
Energy Standard for Buildings Except Low-Rise Residential Buildings

Date Approved: June 1, 2020

Request from: Richard Lord, Carrier Corporation, 2325 Sarvisberry Place, Monteagle, TN 37356.

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE/IES Standard 90.1-2019, Section 6 and Table 6.8.1-16, regarding minimum efficiency requirements for heat pump and heat recovery chiller packages.

Background: Table 6.8.1-16 was introduced into ASHRAE/IES 90.1-2019 to define the requirements for the new emerging chiller application that can provide simultaneous cooling and heat and offer great opportunities for systems related energy savings. In the table both cooling minimum efficiencies as well as heating efficiencies are defined.

There is growing interest for use of heat pump chillers in dedicated heating applications designed specifically for heating and not cooling and it is not clear if for these applications whether ASHRAE/IES 90.1 requires compliance with both the cooling and heating metrics listed in Table 6.8.1-16.

Interpretation 1: For a water-source heat pump that is dedicated to only heating applications, compliance with only one of the heating application rating conditions (105 °F, 120 °F, 140 °F, and 140 °F boost) is required and compliance with the cooling efficiency metrics is not required.

Question: Is this interpretation correct?

Answer: Yes.

Interpretation No.2: For an air-source heat pump that is dedicated to only heating applications, compliance with both heating efficiency metrics at 47 °F and 17 °F ambient source temperatures is required. Compliance with the cooling efficiency metrics is not required.

Question No.2: Is this interpretation correct?

Answer No.2: Yes.