INTERPRETATION IC 90.1-2016-1 OF ANSI/ASHRAE/IES STANDARD 90.1-2016 Energy Standard for Buildings Except Low-Rise Residential Buildings

Date Approved: January 30, 2017

Request from: Alois Malik, Dectron Inc., 4001 Côte Vertu, Montréal, QC H4R 1R5.

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE/IES Standard 90.1-2016, Table 6.8.1-14, Footnote a, regarding type of condenser.

<u>Background</u>: Per AHRI Standard 910 (I-P)-2014 and Standard 911 (S-I)-2014 Section 3. Definitions:

"3.2 Indoor Pool Dehumidifier. A type of air-cooled or water-cooled electrically operated, vapor compression refrigeration system; factory assembled as a single package or split system, which includes an indoor cooling/dehumidifying coil, **an air reheat coil**, compressor(s) and an air moving device. It may also include a Refrigerant Heat Recovery Unit, **an auxiliary refrigerant condenser**, Economizer, and an air-to-air heat recovery device. It shall provide the function of dehumidifying, air circulation, air reheating and may include the function of air-cooling, air-cleaning, pool water heating and air-to-air heat recovery."

The Indoor Pool Dehumidifier shall include an **air reheat coil**. Air Reheat Coil is typically an air-cooled condenser.

Table 6.8.1-14, Footnote a. states "Units without air-cooled condenser". This can be misinterpreted as "Units without an Air Reheat Coil" such as Cool-only mechanical vapor-compression refrigeration systems or the DOE definition of residential dehumidifier without an air reheat coil.

In order to avoid the footnote a. misinterpretation for users of the ANSI/ASHRAE/IES Standard 90.1-2016 this Interpretation shall clarify condenser type in footnote a. as per the AHRI Standard definition of the Indoor Pool Dehumidifier.

<u>Interpretation</u>: The type of condenser referred to in Table 6.8.1-14 footnote a. "Units without air-cooled condenser" refers to **an auxiliary refrigerant condenser** as per the AHRI Standard definition of the Indoor Pool Dehumidifier.

Question: Is this interpretation correct?

Answer: No.

<u>Comment</u>: Footnote "a" is intended to exclude single package indoor pool dehumidifiers (classifications SPI and SPI-PH per AHRI Standard 910) equipped with 100% remote rejection capabilities (i.e. external to the dehumidification process air stream) from the requirements of

Table 6.8.1-14. 100% remote rejection can be achieved through several means including but not limited to auxiliary refrigerant condensers. The committee recognizes that the current wording of footnote "a", which refers only to air cooled, is confusing and intends to issue an addendum in the near future to clarify this matter.