INTERPRETATION IC 90.1-2010-11 OF
ANSI/ASHRAE/IES STANDARD 90.1-2010
Energy Standard for Buildings Except Low-Rise Residential Buildings

Date Approved: October 22, 2011

Request from: Richard Pavlak (rpavlak@heapy.com), Heapy Engineering, 1400 W. Dorothy Lane, Dayton, OH 45409.

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE/IES Standard 90.1-2010, Section 6.5.1 Economizers, Exception k.2, relating to data centers.

Background: Our firm is retrofitting and replacing the HVAC systems serving a data center facility. It is our intent to meet the Tier IV requirements outlined in ANSI/TIA-942 for those mechanical systems. For example, our CRAC units are sized for 2N redundancy and all CRAC units have dual electrical feeds.

Interpretation: Based on Section 6.5.1, Exception k.2, this system is exempt from the prescriptive requirements for economizers and therefore an economizer is not required to be installed on the data center HVAC system.

Question: Is this interpretation correct?

Answer: Yes.

Comments: Provided that 75% of the design load of dedicated systems for computer rooms serves those spaces having a mechanical cooling design of Tier IV as defined by ANSI/TIA-942. The MSC is looking at this particular exception and are anticipating a proposal will be developed to further restrict this exception.