ANS Issues Clarification on ANSI/ANS-59.2-1985;W1995, "Safety Criteria for HVAC Systems Located Outside Primary Containment."

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Inquiry:

Why does Table 6-1 of ANSI/ANS-59.2-1985;W1995 specify a low temperature alarm downstream of both heating and cooling coils? Our HVAC system has a cooling function only, and we use high temperature indicators and alarms in the return air ducting (as specified in ANS-59.2). What is the purpose of a low temperature alarm downstream of a cooling coil? Also, why is an alarm for high temperature not specified?

Response:

ANSI/ANS-59.2-1985;W1995 has not been revised for 20 years, in part because the working group did not remain active. Nor was the ANS standards committee able to locate any member of the working group who developed this document. The following discussion was prepared by members of the standards committee who participated in the review and balloting of ANS-59.2 in the mid-1980s or have recent experience in HVAC design.

A low temperature alarm in the downstream access space could serve to alert the operator of a potential degraded environment caused by condensation. For example, electronic equipment in this space could become inoperable in the presence of condensation. A similar situation could occur in those systems that employ reheat elements to maintain humidity control. A low temperature alarm could alert the operator of reheat coil failure, which could also lead to an undesirable level of condensation.

The reason for not having a high temperature alarm specified in Table 6-1 is not clear and may have been an oversight. To make the requirements for low and high temperature alarms unambiguous, it would have been preferable to list the requirements for heating and cooling coils individually, which was not done.