**INTERPRETATION IC 135-2004-13 OF**
**ANSI/ASHRAE STANDARD 135-2004 BACnet® - A Data Communication Protocol for Building Automation and Control Networks**

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**Request from:** Carl Neilson (cneilson@deltacontrols.com) Delta Controls, 61 Seagirt Road, East Sooke, BC V0S 1N0.

**Reference:** This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 135-2004, Sections 12.1.10, 12.2.10, 12.3.10, 12.4.9, 12.6.10, 12.7.10, 12.8.9, 12.15.11, 12.16.11, 12.17.9, 12.18.10, 12.19.10, 12.20.9, 12.23.10, relating to the Reliability and Out_Of_Service properties.

**Background:** The Reliability property exists as an optional property in numerous object types. In some of those object types (Accumulator, Analog Input, Binary Input, Life Safety Point, Life Safety Zone, Multi-state Input, Multi-state Output, Multi-state Value, Pulse Converter,) the standard implies that the property shall be made writable when Out_Of_Service is TRUE.

An example of this is in Section 12.1.10, the second last sentence reads "While the Out_Of_Service property is TRUE, the Present_Value, Pulse_Rate and Reliability properties may be changed to any value as a means of simulating specific fixed conditions or for testing purposes."

In the Analog Output, Binary Output object, the equivalent sentence reads slightly differently: "While the Out_Of_Service property is TRUE, the Present_Value and Reliability properties may still be changed to any value as a means of simulating specific fixed conditions or for testing purposes."

In other object types (Analog Value, Binary Value, Loop), there is no such implication.

**Interpretation:** The Reliability property shall be writable, in all object types, when Out_Of_Service is TRUE and in the case of the Accumulator object, the Pulse_Rate property shall also be writable when Out_Of_Service is TRUE.

**Question:** Is this interpretation correct?

**Answer:** No

**Comments:** Reliability is not required to be writable when Out_Of_Service is TRUE for any object type. While the committee agreed that the concept outlined in the interpretation is desirable, the standard does not currently mandate this functionality.

The committee originally drafted the language so as to describe a mechanism that allows the testing of specific system conditions. It was not the intention of the committee to mandate support for the testing mechanism. The committee also felt that it would be reasonable that the changing of the Reliability property be supported through a proprietary configuration tool.