Clarification Request

References: BTL Specified Tests 15.0.Final; BACnet Standard 135-2016

Date of BTL-WG Response: 6-June-2019

☒All Actions Necessitated have been Completed

Background:

7.3.2.X37.1.6 Out_Of_Service Accumulator Test

Reason for Change: New test for Accumulator object.

Purpose: This test case verifies that Present_Value, Pulse_Rate, and the Reliability property are writable when Out_Of_Service is TRUE.

Test Concept: Select one instance of each appropriate object type and test it as described. Verify the interrelationship between the Out_Of_Service, Status_Flags, and Reliability properties. If the Out_Of_Service property of the object under test is not writable, and the value of the property cannot be changed by other means, then this test shall be omitted. If the Reliability property is not supported then step 5 shall be omitted.

Test Steps:

1. IF (Out_Of_Service is writable) THEN
   WRITE Out_Of_Service = TRUE
   ELSE
   MAKE (Out_Of_Service TRUE)
2. VERIFY Out_Of_Service = TRUE
3. VERIFY Status_Flags = (?, FALSE, ?, TRUE)
4. REPEAT X = (all values meeting the functional range requirements of 7.2.1) DO {
   WRITE Present_Value = X
   VERIFY Present_Value = X
   }
5. IF (Reliability is present and writable) THEN
   REPEAT X = (all values of the Reliability enumeration appropriate to the object type except NO_FAULT_DETECTED) DO {
   WRITE Reliability = X
   VERIFY Reliability = X
   VERIFY Status_Flags = ~~(TRUE, TRUE, ?, TRUE)~~ *(?, TRUE, ?, TRUE)*
   WRITE Reliability = NO_FAULT_DETECTED
   VERIFY Reliability = NO_FAULT_DETECTED
   VERIFY Status_Flags = (?, FALSE, ?, TRUE)
   }
6. REPEAT X = (all values meeting the functional range requirements of 7.2.1) DO {
   WRITE Pulse_Rate = X
   VERIFY Pulse_Rate = X
   }
7. IF (Out_Of_Service is writable) THEN
   WRITE Out_Of_Service = FALSE
   ELSE
   MAKE (Out_Of_Service FALSE)
8. VERIFY Out_Of_Service = FALSE

9. VERIFY Status_Flags = (?, ?, ?, FALSE)

Problem:

If an Accumulator Object does not support intrinsic reporting, the standard says:

12.61.8 Event_State
…
If the object does not support event reporting then the value of this property shall be NORMAL.

But if the Event_State remains NORMAL, the alarm flag will not be set in the Status_Flags.

Question:

Should the test be changed as outlined above?

Response:

Yes.