Procedures for the Checkout of BACnet/IP Installations

Prior to connection to the campus backbone network, it must be demonstrated to Cornell Controls Shop Engineering, Dave Roman, 607-255-5104, that these criteria have been met:

1) The IP address, subnet mask and IP gateway address of the device to be connected must be shown to be correct for the network connection about to be made. See *Design and Construction Standards*, 15956 §3.05.B.

2) The device's Device Name must be shown to conform to Cornell standards. See *Design and Construction Standards*, 15956 §3.03.A.1.

3) The names of BACnet objects within a device must be shown to conform to Cornell's naming conventions. See *Design and Construction Standards*, 15956 §3.03.A.3.

4) The device's Device Instance Number (DIN) must be shown to conform to Cornell's naming conventions. See *Design and Construction Standards*, 15956 §3.03.A.2.

5) In the case of devices that route to subordinate BACnet MS/TP or ARCNET networks, the network numbering must be shown to conform to Cornell numbering standards. See *Design and Construction Standards*, 15956 §3.05.A.

6) The BACnet alarm Recipient List must contain the DIN (or BACnet Address, i.e., [BACnet Network Number, MAC Address]) of both the appropriate vendor server (ALC or Alerton) and the EMCS alarm server (currently Jarlsberg, DIN 510).

7) For each device containing network variables, a list of network variables must be provided showing that each network variable references a valid network-accessible point.

8) For each device containing points that are to issue UnconfirmedCOVNotifications, a list of the points and their respective Change of Value (COV) increments must be provided to prove that the device will not generate COV storms.

9) BACnet Broadcast Management Device (BBMD) capability must be shown to be disabled unless explicitly authorized by Cornell, i.e., the device's Broadcast Distribution Table (BDT) must be shown to be empty or non-existent.

10) Ethernet devices must be connected to CIT provided Ethernet network jacks, or a CIT managed switch. In the event a switch needs to be installed in a mechanical room, closet, enclosure, or other non-CIT node room location, the switch can be procured from CIT network engineering. The equipment used must be selected from the list of approved equipment published at https://pminfo.emcs.cornell.edu/switch_hardware/