SECTION 25 1119
BUILDING CONTROLS SYSTEM SERVER

PART 1 - GENERAL

1.1 SUMMARY
A. This section includes Building Controls System Server hardware for a DDC System.
B. This is the main building level server, often referred to in the past as the workstation. It provides functionality such as schedules, trends, alarms, reports and graphics. The Building Controls System Server is the Supervisor PC in Niagara terminology.
C. Related Sections:
   1. 25 1500 Building Controls System Server Software
   2. 25 1516 Software for control and monitoring network
   3. Stanford Network Architecture diagram (MC-01)

1.2 REFERENCES
A. Refer to 25 0000 Integrated Automation

1.3 DEFINITIONS
A. Refer to 25 0000 Integrated Automation

1.4 SYSTEM DESCRIPTION
A. The Building Controls System Server is the Supervisor PC in Niagara, a flexible network server used in applications where multiple Niagara-based stations are networked together. The Niagara Supervisor PC serves real time graphical information displays to standard web-browser clients and also provides server-level functions such as centralized data logging, archiving, alarming, real time graphical displays, master scheduling, and integration with enterprise software applications. In addition, the Niagara Supervisor provides a comprehensive, graphical engineering toolset for application development. Common industry generic terms for the Supervisor PC include: Operator Workstation, Front End Computer, Head End Computer, Host Computer, etc.

1.5 SUBMITTALS
A. Refer to 25 0000 Integrated Automation

1.6 QUALITY ASSURANCE:
A. Refer to 25 0000 Integrated Automation

B. The contractor shall confirm compatibility between controls system server hardware, software, and Niagara.

C. Hardware must be supported by all current server operating systems.

PART 2 - PRODUCTS

2.1 BUILDING CONTROL SYSTEM SERVER
A. The Building Control Systems Server host name shall be: hqxxbxxxxaxhost, as named by owner to match campus naming convention.
B. The Supervisor Station, running on the Building Controls System Server, shall be named: sqxxbxxSup, as named by owner to match campus naming convention.

C. Provide one rack-mounted server, to be located in a server rack in room as designated by owner.
   1. The server shall consist of the following minimum equipment: Dell PowerEdge R320 rack-mounted workstation (Quad core Intel Xeon processor E5-2407 2.20ghz), 8GB DDR3 RDIMM memory 1333mhz, two 1-TB 7200 rpm 3.5” sata 3gb/s RAID 1 hard drives, integrated SATA 3gb/s controller that supports host-based (software) RAID 1, on-board Broadcom 5720 dual port 1 gigabit Ethernet controllers, 16x DVD (RW) with windows server 2008 r2 sp1, standard edition, x64, includes 5 CAL (64-bit), recovery media for windows server 2008 r2 sp1, standard Edition, x64, media kit (system recovery), 3 year basic hardware support service agreement, and ReadyRails sliding rails without cable management arm. (Contractor shall field verify that rails are compatible with existing rack.) No monitor, keyboard or mouse. (Contractor will need to provide a temporary monitor, keyboard and mouse to load and configure software.)
   2. Include rack-mounted UPS: APC SMART-UPS 1000va LCD RM 2U 120v. APC smart-ups,700 watts /1000 va, input 120v /output 120v, Interface port smartslot, USB, rack height: 2 U, Including: cd with software, documentation cd, installation guide, Rack mounting support rails, smart ups signaling RS-232 cable, USB cable.

PART 3 - EXECUTION

3.1 SERVER WORKSTATION
   A. The Building Control Systems Server shall be dual homed with 2 Network Interface Cards (NIC). One NIC shall be connected to the Campus Controls Network. The secondary NIC shall be connected to the Building Level Controls Network (Private Network)

END OF SECTION