Hall D Slow Controls Meeting

Date: June 11, 2020

Time: 10:00AM - 10:30AM

<u>Attendees</u>: Aaron Brown, Peter Bonneau, Hovanes Egiyan, Brian Eng, Tyler Lemon, Nick Sandoval, Scot Spiegel, Tim Whitlatch, Beni Zihlmann

- 1. Physics run expected to resume July 27, 2020.
 - 1.1. Starting set up for run this week

2. Solenoid

- 2.1. During MEDCON period, there were cryogenic alarms caused by a compressor trip 2.1.1. Relief valve blown during trip will be checked to ensure it has reseated properly
- 2.2. Checkout of Magnet Power Supply (MPS) and interlocks will occur within the next few weeks.
- 2.3. IOC will be rebooted to re-implement magnet status bit PVs created for WEDM screens 2.3.1. Reboot will be coordinated with Hall work and Cryo group to ensure no issues

3. BCAL alarms

- 3.1. Upstream BCAL PLC was giving alarms for detector's chiller, but alarms were really for temperature sensors read by PLC
 - 3.1.1. Misinterpretation of alarms caused by incorrect labeling of alarms
 - 3.1.2. Alarms labeled have been corrected
- 3.2. Ethernet issues in PLC controller appear to be cause of errors that triggered alarms
 - 3.2.1. Computer Center further verified by finding that Ethernet port PLC is connected to had several duplex errors
- 3.3. More processing power allotted to Ethernet port on PLC controller to help resolve issue 3.3.1. Resolved similar issue with BCAL PLCs in 2016
- 3.4. Ethernet cable for PLC will be replaced in further attempts to resolve network errors

4. PLC licenses

- 4.1. Nick Sandoval had Computer Center set up a Windows 10 virtual machine with Hall D PLC software and licenses.
- 4.2. Host name of virtual machine: "halldts1"

5. Rockwell has discontinued L35E CompactLogix PLC processor

- 5.1. Processor is used by several detector systems
 5.1.1. Hall D has two spares on hand if problems arise
- 5.2. The Rockwell-suggested replacement model of the processor will be procured to verify that it works correctly for Hall D systems

6. Shutdown work after upcoming physics run is completed

- 6.1. Installation of remote PointIO system for DIRC and ComCal gas monitoring
- 6.2. Implementation of Ethernet/IP communication for chillers
- 6.3. Installation of additional temperature and flow monitoring in Solenoid MPS.