Hall C EPICS

Date: April 5, 2019

Time: 10:00AM - 10:30AM

Attendees: Peter Bonneau, Pablo Campero, Mike Fowler, Amanda Hoebel, Tyler Lemon, Steve Wood

1. Hall C schedule

- 1.1. Spring run scheduled to end April 15, 2019.
- 1.2. Summer run scheduled June 16, 2019 July 8, 2019.
- 1.3. A second, longer shutdown is scheduled for the end of summer run to November 2019

2. WEDM alarms

- 2.1. DSG has modified existing screens to use copied PVs that have alarm fields.
 - 2.1.1. Only LHe liquid level, LN₂ Liquid Level, LHe Pressure, Magnet Vacuum for each magnet currently have alarm fields in use.
- 2.2. Mike Fowler and Steve Wood will review what other PVs should have alarms.
 - 2.2.1. If additional alarms are desired, appropriate fields will be added to KEPServerEX database file and DSG will modify WEDM screens to use those PVs.

3. PLC-EPICS heartbeat

- 3.1. Pablo Campero demonstrated a PLC-to-EPICS and EPICS-to-PLC heartbeats using DSG-PLC test station.
- 3.2. Pablo will give Steve Wood the new EPICS IOC database records needed to implement the heartbeats.
- 3.3. Pablo will give Mike Fowler the PLC routine to add to SHMS/HMS PLCs for heartbeats.3.3.1. DSG will arrange a meeting during summer shutdown with Mike and Steve Lassiter to test PLC changes.
- 3.4. Heartbeat indicators will be added to all existing and future WEDM and CSS screens.

4. HV CSS screens to replace Tcl/Tk

- 4.1. Amanda Hoebel demonstrated HMS Hodoscope 1 X histogram screen with dropdown menus for opening different screens and backup/restore options.
- 4.2. Tyler Lemon demonstrated Python-based backup program and CSS-BOY GUI.
- 4.3. DSG will coordinate with Steve Wood to test and install a production version of the HV CSS screens after April 15, 2019 so screens can be used during the summer run.
 - 4.3.1. Tcl/Tk screens will be kept as backup in case problems arise with HV CSS screens.

5. DSG testing of spare CAEN SY4257 mainframe

- 5.1. There is no hard deadline on completion of tests as mainframe is currently a spare; however, it will be used in future (in ~1 year) for new detectors.
- 5.2. DSG is in the process of testing both hardware and EPICS functionality of mainframe.
 - 5.2.1. Voltage output tests of mainframe in progress.
 - 5.2.2. Development of EPICS and CSS interface in progress for mainframe.
- 5.3. Pablo Campero demonstrated Expert and Novice CSS screens he developed for the mainframe's EPICS interface.
- 6. Next DSG Hall C EPICS meeting will be scheduled for April 26, 2019.