Hall C EPICS HV CSS Testing

Date: February 15, 2019
Time: 10:00AM – 11:00AM

Attendees: Pablo Campero, Amanda Hoebel, Tyler Lemon, Steve Wood

1. Discussed DSG-developed CSS screens for HV controls.
    - 1.1. HV CSS screens located on cdaql2 at /home/cdsg/CSS-Workspace/HV-test/CSS.
    - 1.2. Shell script hv-css-test in /home/cdsg opens CS-Studio in workspace containing screens.
    - 1.3. DSG is working on startup script to open CSS screens in run-time environment from command line.

2. Tested first version of HV CSS screens
    - 2.1. Channel On/Off control did not work.
        - 2.1.1. DSG will debug today (February 15, 2019) since all HMS HV is off for HMS Q2 power supply repair.
        - 2.1.2. Debugging of controls will only be done on HMS Hodoscope 1 X channel *h1x01+*
        - 2.1.3. All debugging should be concluded by 4:00PM.
            - 2.1.3.1. Steve Wood will notify DSG if deadline moves to earlier time.
    - 2.2. Controls did not work as they were using PVs for readback.
        - 2.2.1. Channels have separate control and readback PVs.
        - 2.2.2. Screens were incorrectly programed to use readback PVs../hv
        - 2.2.3. Manually changed *h1x01+* set voltage control to correct PV and verified correct operation.
        - 2.2.4. DSG will modify program used to generate CSS screens to use correct PVs.

3. Discussed features from TCL/TK HV screens yet to be added to CSS HV screens.
    - 3.1. Crate-level voltage on/off controls will be added.
    - 3.2. Crate-level controls for current trip level and ramp up/down rates will be added.
        - 3.2.1. Confirmation message will be displayed if control is used.
    - 3.3. Trip reset control will be implemented.

4. Hall C would like to use HV CSS screens in summer experimental run.
    - 4.1. Development and thorough testing of operational versions of HV CSS screens should be complete by the end of April 2019.

5. Discussed Hall C alarm handler.
    - 5.1. Steve Wood showed DSG Hall C's current alarm handler running in EPICS ALH.
    - 5.2. All systems (HMS HV, SHMS HV, and PLCs) are included in overall alarm handler.
    - 5.3. For alarms, copies of existing PVs are being used to allow Hall C to change alarm limits without affecting original PV's settings.

6. Discussed new CAEN mainframe and HV cards on loan to DSG.
    - 6.1. DSG has powered CAEN mainframe and connected it to a PC using a crossover cable to view its web interface.
    - 6.2. Steve Wood explained GECO, CAEN's crate control GUI.