

DSG NPS Work Status Meeting Minutes

Date: September 4, 2020

Time: 10:30AM – 11:30AM

Attendees: Peter Bonneau, Aaron Brown, Pablo Campero, George Jacobs, Tyler Lemon, Marc McMullen, Brad Sawatzky, Stephen Wood

1. CAEN System Testing Status (Aaron Brown, George Jacobs)

- 1.1. All 34 modules have been tested using GECO 2020
- 1.2. Twenty-two of 34 modules have been tested using EPICS
- 1.3. Still planning for CAEN tech support to come to the lab and fix the pin issue for all modules
- 1.4. A trip test is in development to ensure modules trip if in an “Over Voltage” state for too long

2. Cable Fabrication (Aaron Brown)

- 2.1. 720 HV divider cables fabricated so far
- 2.2. SAMTEC connectors for the 140’ multi-conductor HV cables will not be ordered until someone at JLab signs off on connector board design
- 2.3. One insertion/extraction tool, one crimper, and 40 Radiall 52-pin connectors have been ordered for multi-conductor HV cable fabrication; expected arrival date is 11/18/202

3. EPICS Monitoring Screens Development (Aaron Brown)

- 3.1. Overview, Voltage/Current Readback, Environment Monitoring, and Expert Settings CSS screens being developed
 - 3.1.1. For remote monitoring WEDM screens will also be developed
 - 3.1.2. A bulk read and save file will be needed for settings in case of system calibration
 - 3.1.3. DSG is using the Eclipse version of CSS for all controls and monitoring screen development, which is the same version that is used in Halls B and D
- 3.2. A configuration file for PVs needs to be made available in case a channel dies and needs to be replaced

4. Interlock system (Peter Bonneau)

- 4.1. Brad Sawatzky will provide information regarding lengths of cable runs and planned distance between detector and power supplies
- 4.2. Parts list will be compiled for needed cRIOs, modules, and other needed instrumentation
- 4.3. Sensors and related instrumentation need to be able to handle high levels of radiation.
 - 4.3.1. Three or four-wire RTD sensors will be acceptable
- 4.4. There will be no flow readback from the chillers, just pressure
- 4.5. Frame will be air conditioned to reduce humidity, thus no need for cryogenics

5. Miscellaneous

- 5.1. Stephen Wood will drop off additional modules for testing; George will pick these up from the shower curtain room.