

DSG-NPS R&D Meeting Minutes

Date: February 16, 2021

Time: 11:00AM – 12:30 PM

Attendees: Mary Ann Antonioli, Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, George Jacobs, Mindy Leffel, Tyler Lemon, Marc McMullen, and Amrit Yegneswaran

1. CSS screen development status

- 1.1. For the Power On/Off CSS-BOY screen, Javascripts will be used to turn on/off all channels of a module at once
 - 1.1.1. A button to turn off all channels of all modules in each crate will be added

2. Hardware Interlock System development

- 2.1. Peter Bonneau and Aaron Brown are revising block diagram to show each component of hardware interlock system; Mary Ann Antonioli will revise Visio drawing
 - 2.1.1. EPICS communication lines and multiple PCs to show that Keysight Temperature Scanning System can be accessed from more than one machine will be added
- 2.2. Discussed alternate sensor readout system in the event that Keysight mainframe is damaged; replacement Keysight readout system is best option

3. Module Testing

- 3.1. Brad Sawatzky requested testing of five CAEN A7435SN, 24-channel, HV modules
 - 3.1.1. Ramp tests will be conducted first, then trip tests, then stability tests
- 3.2. Two modules will be tested at a time since the load box can handle up to 48 channels
 - 3.2.1. Marc McMullen will leave additional SHV-to-SHV cables in the cleanroom
 - 3.2.2. Aaron Brown will modify the existing test programs to accommodate A7435SN modules and to allow simultaneous testing of two modules

4. Cable fabrication/testing

- 4.1. Mindy Leffel completed four Radiall-to-SAMTEC-connectors HV cables
- 4.2. Discussed grounding the shielding of the Radiall-to-SAMTEC-connectors HV cables
 - 4.2.1. Mindy Leffel will continue to attach pigtailed to the braided shielding
- 4.3. Marc McMullen is developing an AutoCAD schematic to show internal connections (resistors and safety loop) of test chassis
- 4.4. Aaron Brown developed a cable testing Python program; analysis program in development