

DSG-NPS R&D Meeting Minutes

Date: December 15, 2020

Time: 11:00AM – 12:00 PM

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

1. CSS screen development status

- 1.1. Mary Ann Antonioli completed 648 of 1080 PMT Settings blocks on the main NPS screen
- 1.2. The units for voltage and current (currently being taken from the PVs) will be changed to V and μ A, respectively
 - 1.2.1. Tyler Lemon suggested that changing the EGU field for the PV records would be an easy way to change the units and still take them from the PVs
- 1.3. Mary Ann Antonioli will be developing the rest of the PMT Status pop-up screens (1010) for the *NPS CAEN Overview* screen
- 1.4. Aaron Brown began developing a script to assign values to macros and PVs to widgets programmatically

2. CAEN testing and data analysis

- 2.1. Marc McMullen submitted a PR for a chassis to fabricate the new SHV load box
- 2.2. Python analysis package for ramp test data analysis is being developed
 - 2.2.1. Mary Ann Antonioli will generate plots for individual channels of all 33 modules
- 2.3. All test analysis plots will be posted to the NPS section of the DSG technical documentation website by Mary Ann Antonioli
- 2.4. Mary Ann Antonioli will summarize testing analysis of the trip and ramp tests in tables to be included on the website

3. Hardware Interlock System development

- 3.1. Jami Anthony was assigned to procure the spare temperature readout system components; Aaron Brown will request expected arrival date
- 3.2. Aaron Brown is developing a three-dimensional model of detector using NX 12 to aid the development of Hardware Interlock System

4. Cable fabrication

- 4.1. Mindy Leffel fabricated 1090 of 1100 HV divider cables
- 4.2. Mindy Leffel picked up the connectors and cable from the lab to fabricate the 140' multi-conductor cables
 - 4.2.1. Received the remaining 20 male Radiall 52-pin connectors from CAEN
- 4.3. Aaron Brown submitted PR for the pins for the SAMTEC connectors; signed by Stephen Wood, assigned buyer is Brittany Tolbert