

DSG-NPS R&D Meeting Minutes

Date: November 17, 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 has completed 432 PMT Settings blocks on the main NPS screen
- 1.2. Aaron Brown will continue to revise *NPS CAEN Overview* screen
 - 1.2.1. Each LED will blink yellow if channel has a fault
 - 1.2.2. If LED is clicked, a *PMT Status* pop-up window appears displaying individual LEDs for each fault type, and voltage and current readback

2. CAEN testing and data analysis

- 2.1. Bogdan Wojtsekhowski dropped off RG59 cables to be used for additional DSG-designed SHV load box; Marc will pick them up from the lab on his next visit
- 2.2. George Jacobs completed ramp tests on five modules in crate #2 using the Primary and Booster power supplies from crate #3 to determine if network reconfiguration would resolve EPICS communication issues; numerous errors noted
- 2.3. George Jacobs will begin ramp testing using the new Python-based ramp test
- 2.4. In Python analysis package for trip test data analysis, code being revised to remove unwanted leading and trailing zeros

3. Hardware Interlock System development

- 3.1. Aaron Brown sent list of requested items for Hardware Interlock System development to Brad Sawatzky

Items to Order For Hardware Interlock System					
Vendor	Part #	Name	Price	Qty	Total
Keysight/Agilent	34980A	Mainframe	\$3,117	1	\$3,117
Keysight/Agilent	34921A	Multiplexer	\$1,034	2	\$2,068
Keysight/Agilent	34921T	Terminal Block	\$254	2	\$508.00
Keysight/Agilent	Y1136A	D-Sub cables (50-pin)	\$141	2	\$242
TC Direct	201-301	K-type Thermocouple	\$8.00	10	\$80.00
Total					\$6,015

- 3.2. Aaron Brown received step files for the detector frame from Carlos Munoz-Camacho, which will be used to draw, using NX12, a three-dimensional model of detector to aid in development of Hardware Interlock System

4. Cable fabrication

- 4.1. Mindy Leffel has fabricated 1000 of 1100 HV divider cables
- 4.2. SAMTEC IPBD-08-D-K and IPBD-15-D-K connectors and CAEN insertion/extraction and crimping tools have arrived in Shipping/Receiving
 - 4.2.1. Still awaiting the Radiall 52-pin connectors and General Wire Products multi-conductor cable