

DSG-NPS R&D Meeting Minutes

Date: May 23, 2023

Time: 02:00 PM – 02:30 PM

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

1. Thermal readback

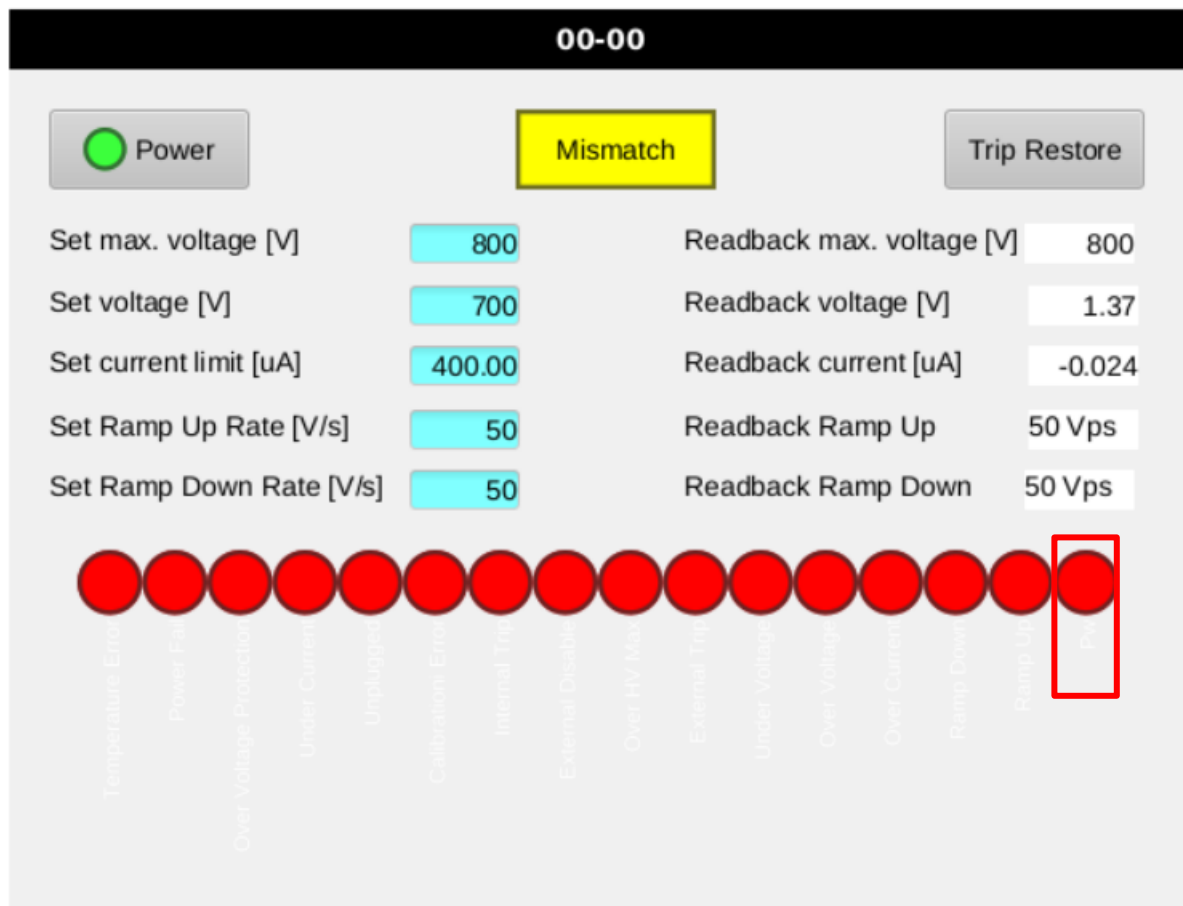
Mary Ann Antonioli, Peter Bonneau, Aaron Brown, Pablo Campero, and Tyler Lemon

1. Mary Ann is working on changing shared variables in the LabVIEW program

2. CAEN testing

Aaron Brown and George Jacobs

1. All high voltage channel parameters are now being archived with Mya
2. Debugging high voltage Overview screen in Hall C counting house with Simona Malace
 - Problems seem to stem from EPICS (hosted by CAEN)
 - PV for channel power does not work for some channels (e.g., hchv20:00:000:Pw)
 - Upgraded firmware for each of the 16 modules in crate 1



Screenshot of screen. Power button is ON, but status is showing the channel as OFF (boxed in red).

system

Custom	Name	I0Set	V0Set	IMon	VMon	Pw	Status	RUp	RDWn
00.000	CHANNEL00	400.00 uA	700.00 V	-0.024 uA	1.37 V	Off		50 Vps	50 Vps
00.001	CHANNEL01	400.00 uA	800.00 V	-0.028 uA	1.84 V	Off		50 Vps	50 Vps
00.002	CHANNEL02	400.00 uA	800.00 V	-0.146 uA	1.49 V	Off		50 Vps	50 Vps
00.003	CHANNEL03	400.00 uA	800.00 V	-0.082 uA	799.95 V	On		50 Vps	50 Vps
00.004	CHANNEL04	400.00 uA	800.00 V	-0.118 uA	3.28 V	Off		50 Vps	50 Vps
00.005	CHANNEL05	400.00 uA	800.00 V	-0.070 uA	0.96 V	Off		50 Vps	50 Vps
00.006	CHANNEL06	400.00 uA	800.00 V	-0.084 uA	1.14 V	Off		50 Vps	50 Vps
00.007	CHANNEL07	590.00 uA	825.00 V	-0.186 uA	3.77 V	Off		50 Vps	50 Vps
00.008	CHANNEL08	590.00 uA	790.00 V	-0.110 uA	3.23 V	Off		50 Vps	50 Vps
00.009	CHANNEL09	590.00 uA	800.00 V	-0.084 uA	0.03 V	Off		50 Vps	50 Vps
00.010	CHANNEL10	400.00 uA	408.00 V	-0.122 uA	0.77 V	Off		50 Vps	50 Vps
00.011	CHANNEL11	400.00 uA	800.00 V	-0.068 uA	2.10 V	Off		50 Vps	50 Vps
00.012	CHANNEL12	400.00 uA	800.00 V	-0.100 uA	799.99 V	On		50 Vps	50 Vps
00.013	CHANNEL13	400.00 uA	800.00 V	-0.106 uA	1.33 V	Off		50 Vps	50 Vps
00.014	CHANNEL14	400.00 uA	800.00 V	-0.064 uA	1.74 V	Off		50 Vps	50 Vps

Screenshot of GECCO 2020. Channel 0 (boxed in red) is shown as OFF despite power button on Overview screen showing the channel as ON.

3. Hardware

Aaron Brown Mindy Leffel, and Marc McMullen

1. Mindy made one 120-ft. serial cable to connect chiller and cRIO
 - Tested temperature readback; noticed no problems
 - Marc is procuring cable for fabrication of second cable for other chiller
2. Discussed cables to be fabricated
 - 120-ft. 9-conductor serial cables (1 remaining)
 - 120-ft. 2-conductor relay cables (x2)
 - 15-ft. LEMO cables with flying leads (x2)