

DSG-SoLID R&D Meeting Minutes

Date: March 11, 2021

Time: 11:00 – 12:30

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

1. Reviewed Hall A SoLID Magnet Controls meeting minutes from March 10, 2021

DSG

1. Modifications done to *Cryo Control Reservoir Expert* HMI screen, version 2; more changes required
2. All eight constant current source boards were populated
3. Drawings to show wiring diagrams for PT-102 and diode temperature sensors are under development

2. PLC programming status

Pablo Campero

1. Wrote code for interlock radial support upstream
 - Created add-on instruction to compare readout with set limits
 - Added overall radial support upstream indicator to show interlock if any of the eight radial supports is out of limits

3. Reviewed modifications for Flow = $f(I_{max})$ plots

DSG

1. Plots show relation between required GHe flow in the leads and current through the leads
2. Combined two lines ($Flow = f(I_{max})$) into a single plot

4. AutoCAD mechanical drawings for the Valve Control Panels are still under revision; no changes since last week

Pablo Campero

1. Drawings posted on DSG technical documentation website need to be approved; if no corrections are required, panel drawings will be sent for fabrication

5. Wrote description of fourth sub-routine (sheet) of the CLEO routine for the PLC Programming Manual

Pablo Campero and Mary Ann Antonioli

1. Described how the PLC code calculates the average and checks errors for all helium rhodium iron temperature sensors that are installed in the magnet coil shell

6. Upcoming tasks

Pablo Campero and Mary Ann Antonioli

1. Continue instrumentation rack electrical wiring drawings
2. Modify CCR, Radial and Axial Support – Expert and Current Leads Turret Temperatures HMI screens
3. Write DSG note on Valve Setup and Proportional Position HMI and CSS screens
4. Begin flowcharts for PLC Programming Manual
5. Upload all Oxford Instruments' magnet engineering drawings to DSG's website