

## DSG-SoLID R&D Meeting Minutes

**Date:** January 14, 2022

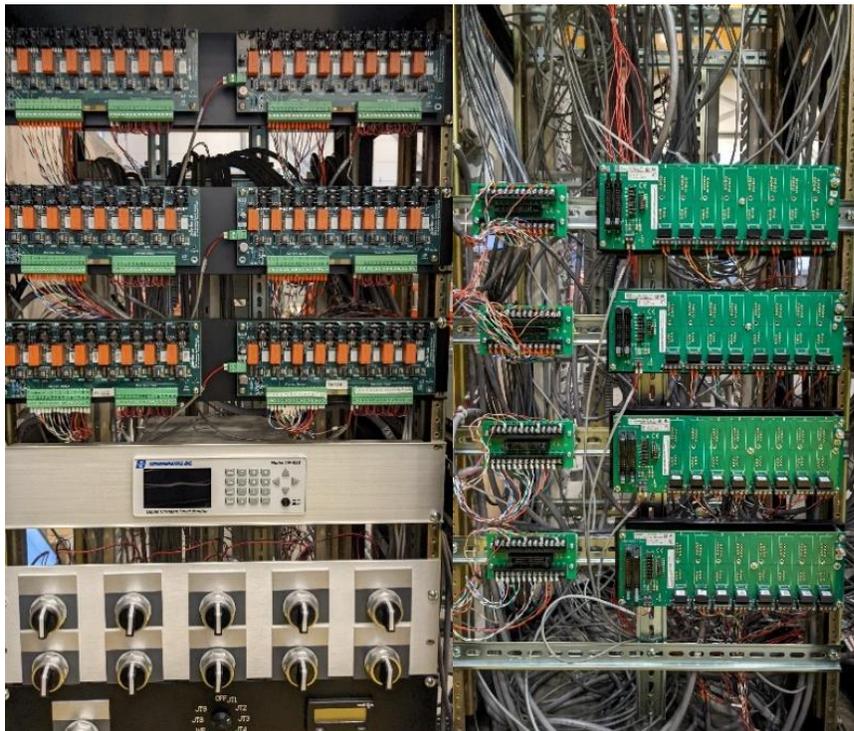
**Time:** 11:00 – 12:00

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

### 1. Racks wiring and cable fabrication

*Pablo Campero, Mindy Leffel,*

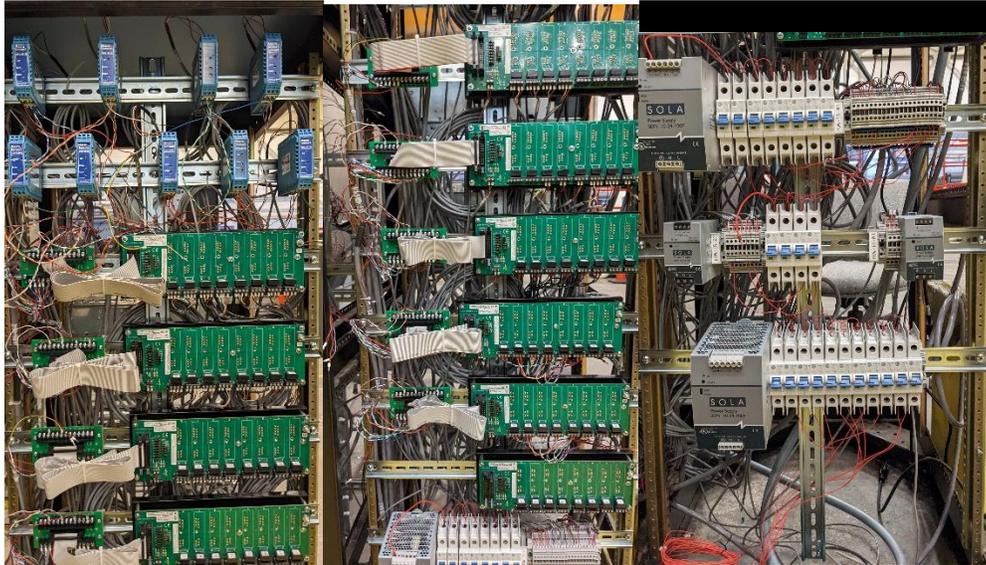
1. Updated *SoLID Cable Information* spreadsheet with information to fabricate an additional twelve cables
2. Fabricated a total of 150 of 215 cables
  - Fabrication of 100' cables to connect instrumentation from the magnet and CCR to racks are in progress
3. Wiring of rack A front 95% completed
  - Need to complete connectors P5, P6, and P1 of quench detector unit and analog input of voltmeter



Rack A front view upper section (left picture) and lower section (right picture)

4. Wiring of rack A rear 70% completed
  - Need to connect jumpers for PLC terminal blocks and wire PLC hardware watchdog (relay and timer)
  - Remaining work is connecting cables that will be used to connect the magnet and CCR instrumentation

5. Wiring of rack B front 95% completed
  - Requested five breakers, which need to be installed and wired
  - Need to connect power supplies to breakers and install power cords



Rack B front view upper section (left picture), mid-section (center figure) and lower section (right picture)

6. Wiring of rack B rear 95% completed
  - After power supply is selected, communication module might need to be installed
  - Need power strips for PLC chassis
7. For cable that connects temperature sensor signals from 10-pin vacuum feedthrough connector in the magnet-turret to terminal block in rack A, need cable termination details for the 10-pin vacuum feedthrough end

## **2. 3D model development of the SoLID instrumentation racks in progress**

*Marc McMullen*

1. Completed rack enclosure, using standard rack dimensions
2. Most electronic components placed in the rack
3. Working on 3D models for one, two and three-level terminal blocks