# **SoLID Magnet Controls System Meeting Minutes**

**Date:** April 28, 2021 **Time:** 10:30 – 12:00

Attendees: Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, Tyler Lemon, Steven Lassiter,

Marc McMullen, and Whit Seay

### 1. Reviewed markup for drawings

Pablo Campero

- 1. A00000-16-03-0210 Magnet Temperature Sensors Wiring Diagram
  - Will use the same letters shown in the *Controls-CLEO* spreadsheet for the 25 D internal connectors. i.e. change connector label from D-1 to H-1
  - Will use the same letters shown in the *Controls-CLEO* spreadsheet for the vacuum feedthrough connectors, i.e. change connector label from VF-1 to D-1
  - Will use a single cable to connect the terminal strips with each channel in the CCS boards
    - Need to change conductor colors shown in drawing
  - Will use a single cable to connect the terminal strips with the Dataforth signal conditioning modules
    - Need to change conductor colors shown in drawing
  - Will add note in each sheet where a cable is shown with a dashed line, which means
    that the cable has more conductors in the same or on a different sheet of the
    drawing
  - Will add sheet number to cable names, i.e. cable #210-S01-0X
- 2. A00000-16-03-302 PLC I/O Remote A, Slot 3, Module Wiring Diagram
  - Corrected colors and description text for cable used to connect terminal strips and PLC I/O module terminals
- 3. A00000-16-03-400 Rhodium-Iron Temperature Sensors Cable Diagram
  - Will use the same letters shown in the *Controls-CLEO* spreadsheet for the vacuum feedthroughs connectors. i.e. change connector label from VF-1 to D-1

#### 2. Electrical drawings completed

Mary Ann Antonioli and Pablo Campero

- 1. A000000-16-03-0309 Analog Input PLC I/O Module Wiring Diagram Module
  - Confirmed that channel 7 on module does not have any signal connected
  - Removed *Magnet* signal shown on *Control-CLEO* spreadsheet, at *CLEOII-Chassis Layout* tab
- 2. A000000-16-03-0252 Quench Detector Wiring Diagram
  - Confirmed that quench detector channel assignment is correct for all voltage taps
  - Confirmed that SoLID quench detector unit will have the same specifications as Hall C-SHMS quench detector unit

#### 3. Electrical drawings in progress

Mary Ann Antonioli and Pablo Campero

- 1. A00000-16-03-0401 Voltage Tap Cable Diagram
  - Will add description for cable once it is selected
  - Will ensure that colors on selected cable match cable colors shown on drawing
  - Will confirm connector to be used at resistor box end
- 2. A000000-16-03-0250 Voltage Taps Wiring Diagram
  - Will use the same letters shown in the *Controls-CLEO* spreadsheet for the vacuum feedthroughs connectors, i.e. change connector label from VF-1 to B-1
  - Labels FL1+ & FL1- for flux loop 1, and FL2+ & FL2- for flux loop 2, are correct
  - The signal conditioning module Dataforth-SCM5B31-09D has an input range rated for -40 to +40 V is adequate for all voltage taps

## 4. Cables and connector researching

Pablo Campero, Brian Eng, and Marc McMullen

- 1. Three 500' spools of multi-conductor cable required for magnet temperature sensors are in hand and will be placed in the Hall A storage facility
- 2. Discussed researched options for multi-conductor voltage tap cable rated for 600 V
- 3. Discussed researched option for 16-pin CPC connector to be installed in the resistor box used for voltage taps