

SoLID Magnet Controls System Meeting Minutes

Date: March 24, 2021

Time: 10:30 – 12:00

Attendees: Aaron Brown, Peter Bonneau, Pablo Campero, Brian Eng, George Jacobs, Steven Lassiter, Tyler Lemon, and Whit Seay

1. Reviewed drawings A00000-16-03-0212 and 0213–Temperature sensors

Pablo Campero and Mary Ann Antonioli

1. Verified type of temperature sensor used for liquid helium reservoir
 - Controls CLEO II spreadsheet shows sensor as a diode sensor named TD_He_Reservoir
 - Drawing A00000-16-02-0100 shows sensor as carbon ceramic named T_He_Reservoir
 - After looking at newer version of drawing A00000-16-02-0100, determined that temperature sensor is a diode and not a carbon ceramic
 - Decided to name temperature sensor as TD_He_Reservoir in PLC, HMI, and all documentation
2. Confirmed that temperature sensors *PT_CL_A_Temp_Warm* and *PT_CL_B_Temp_Warm* are not the same as Type T thermocouple temperature sensors mentioned in Oxford's Operating Manual for CLEO II.
 - Controls CLEO II spreadsheet shows sensors as PT-102 sensors
 - Oxford Operations Manual, page 30 shows four Type T thermocouple (two per lead, with one being redundant)
 - Decided that Type T thermocouple sensors mentioned in the Oxford Manual will not be readout i.e. will not be implemented in PLC
 - Decided that Type T thermocouple sensors will not be shown in drawings
 - Decided PT-102 sensors mentioned in Controls CLEO II spreadsheet will be shown in drawing
3. Reviewed two Type K thermocouple temperature sensors located at cartridge heaters of current leads
 - Two sensors shown in Oxford's Operating Manual, one per lead
 - Decided that thermocouple sensors' readout will not be implemented in the PLC
 - Decided that sensors will not be shown in drawings

2. Drawing A00000-16-03-0214 – Constant Current Source Boards Wire Diagram

Pablo Campero and Mary Ann Antonioli

1. Drawing in progress; verified total number of CCS board channels used for the temperature sensors

3. Drawing A00000-16-03-0101– Instrumentation Rack – Rear View

Pablo Campero and Mary Ann Antonioli

1. Modified drawing, adding sixteen second-level terminal blocks to install redundant temperature sensors located in the Cryo Control Reservoir
2. Modified A00000-16-03-0105 drawing – Part List

4. Reviewed drawing A00000-16-03-0221 – Vacuum, Pressure and Mass Flow Wire Diagram

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1. Confirmed that wiring shown in drawing is correct
2. Need to remove word “Meter” from drawing

5. Reviewed HMI screens

Pablo Campero

1. Narrow numbers shown in indicators of *Turret Temperatures* and *Coil Shell & Radiation Shield Temperatures* HMI screen need to be corrected
2. Enable resizing option for HMI screens

6. Upcoming work

Pablo Campero and Mary Ann Antonioli

1. Complete drawings in progress
2. Place copy of already developed drawings on the M drive
3. Update *Hall A SoLID Controls Drawings List* spreadsheet with current status of developed drawings
4. Work on *Cable Diagram* drawings