

# DSG-SoLID Magnet Controls Meeting Minutes

**Date:** June 16, 2021

**Time:** 11:00 – 12:00

*Attendees: Aaron Brown, Pablo Campero, Brian Eng, George Jacobs, Marc McMullen, Steven Lassiter, Tyler Lemon, and Whit Seay*

## **1. Cables for SoLID magnet instrumentation**

*Pablo Campero, Brian Eng, and Marc McMullen*

1. Discussed the ordered CPC connectors for voltage tap connections
  - Re-ordered male pins for connector. Previous order would take two months; new order will be here this week
  - Cable, connector shells, female pins are in hand
  - Connector and pins will be assembled and tested for fit prior to delivery to Physics storage building
2. Discussed cable and connectors for LVTD and motor drive connections
  - Reviewed extra cable ordered (700' LVDT and 500' motor drive)
  - Will check if ordered cables for the LVDTs connections have a drain wire
3. Researching cable for the temperature sensors in the magnet and CCR
  - *Cable List* spreadsheet will be updated with required specifications for each cable
  - Cables that connect temperature sensors readout signals from PLC I/O terminal to PLC I/O terminal block will have at least two extra conductors

## **2. Markups for drawings**

*Pablo Campero and Mary Ann Antonioli*

1. Drawing A00000-16-03-0402 *JT and EB Valve Cable Diagram*
  - Space required for terminal block is enough; if more terminal strips are needed, will consider changing the terminal blocks from 1-level to 2-level
  - If selected cable does not have a drain wire, then a wire could be soldered to the shield. Therefore, the additional terminal block for drain wire shown in A00000-16-03-0260 will stay.
  - Will add extra terminal strip for drain wire drawing 0402

## **3. Completed electrical drawings**

*Mary Ann Antonioli and Pablo Campero*

1. A00000-16-03-0262 *Electric Linear Actuator Drive Motors*
2. A00000-16-03-0351 *Valve Motor Drive Wiring Diagram*

## **4. Generated Terminal Strips Mapping table**

*Pablo Campero*

1. Table shows correlations between terminal strips groups and related instrumentation
2. Includes information about type, amount, and label for each terminal strip group

## 5. Electrical drawings in progress

*Mary Ann and Pablo Campero*

1. A00000-16-03-0101 *Instrumentation Control Panel – Rear View*
  - Verified number of terminal blocks required for CCR instrumentation
  - Added missing terminal blocks for temperature sensors, and valves' motor driver connections
2. A00000-16-03-0406 *PT-102 and Diode Temperature Sensors Cable Diagram*
  - Will confirm if two 4-conductor cables can be used instead of a single 8-conductor cable
  - Will check specification of 10-pin feedthrough connector located in the heat exchanger to determine if two 4-conductor cables can be used with it