

# SoLID Magnet Controls System Meeting Minutes

**Date:** May 11, 2022

**Time:** 11:00 – 12:00

Attendees: Pablo Campero, Tyler Lemon, Steven Lassiter, and Marc McMullen

## 1. Screens development

*Mary Ann Antonioli and Pablo Campero*

1. Reviewed modifications done to *CCR-Expert* HMI screen
  - Set up screen to stay in back when others screens are open
  - Added colors to readout boxes to indicate valve operation mode
  - Will add LED indicator to shown the valve control mode (local or remote)
2. *Solenoid Cooldown* HMI screen
  - Confirmed that heat exchanger valves' position and control button are required on screen
  - JTV7-LHe Pot Supply valve is not required for cooldown, so it will be removed from screen
  - Checked logic in PLC code to determine if the helium warm gas for cooldown is enabled
  - Confirmed temperature sensor at output of heat exchanger is the one named "PT\_HX\_GHe\_Mix"

## 2. EPICS process variables (PVs)

*Pablo Campero*

1. Generated PLC tags list
2. Checked and added more of the PVs that need to be read in the PLC from EPICS
3. Defined signals that will be monitored in EPICS
4. Plan to interface PLC tags with EPICS PVs and vice-versa
  - EthernetIP Drive to create softiocs is available
  - Using KepServer software was requested

## 3. Power supply for 100 A magnet test

*DSG*

1. Reviewed specifications of power supply to be used for the 100 A test in the Test Lab
2. Communication between PLC and power supply is required
  - Remote monitoring of status and output current
  - Remote control to set the output current
  - Readout of the current from the MPS DAC will be done
3. No need for external device to measure the output current of the power supply

## 4. Other topics

*DSG*

1. Steven Lassiter will send a request to fix the 10-pin vacuum feedthrough connector used for the temperature sensors
  - Connector has bent male pins
  - Connector located at the magnet's turret