SoLID Magnet Controls System Meeting Minutes

Date: March 30 2022
Time: 11:00 – 12:00

Attendees: Mary Ann Antonioli, Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng, George Jacobs, Steven Lassiter, Tyler Lemon, and Marc McMullen

1. Cable fabrication
Pablo Campero and Mindy Leffel
1. Completed 56 of 64, 100' cables
2. Installed CPC connectors and labeled sixteen cut cables for radial support load sensors

2. Instrumentation
Pablo Campero and Mindy
1. Wired fourteen 100' cables for the magnet temperature sensors to the terminal blocks in the rack
2. Testing electric ball valve readout
   - Monitored voltage at voltmeter (Red Lion) is -0.23 V; measured voltage at valve terminal shows the same value
   - Fully open valve should show 5 V and closed valve 0 V ;troubleshooting in progress
3. Status of ordered instrumentation
   - Received terminal blocks plugs for testing
   - Connectors for heat exchanger temperature sensors not received

3. Screens development
Pablo Campero, Mary Ann Antonioli, and Marc McMullen
1. Developing Solenoid Voltage Tap HMI screen
   - Reviewed Oxford documentation and drawings to understand the physical location of voltage taps
   - Noticed that the location of voltage taps (current leads stacks, VT6 and VT7) shown in simplified isometric drawing in Oxford manual are not consistent with the other documentation and drawing
   - NX12 isometric model of the physical location of the voltage taps in progress, however will only show the electrical diagram on the screen
2. Adding fault and interlock monitoring features to the *Axial & Radial Supports* and the *Radial Supports* HMI and EPICS Phoebus screens
   - Added text that will show next to each load indicator when the interlock is disabled, the sensor is faulted, or when the readout value is out of the set limits
3. Working on *Solenoid Interlock Setup* HMI screen
   - Checked PLC code to confirm needed interlocks to be set using the screen
   - Second level set point for software quench detection is not required
   - First level set point will be used to fast dump the magnet
   - Reset time for dump switch set point is not required on screen