SoLID Magnet Controls System Meeting Minutes

Date: February 10, 2023
Time: 11:00–12:00

Attendees: *Aaron Brown, Peter Bonneau, Pablo Campero, Brian Eng, Steven Lassiter, Marc McMullen, and Whit Seay*

1. **HMI screens**
   Pablo Campero
   1. Swapped locations for numeric inputs on *Solenoid Cooldown* screen
      - Whit Seay requested the addition of a numeric input to allow changes to the liquid nitrogen delta temperature set point
   2. Modified *Solenoid CCR-Expert* screen
      - Removed dotted lines to show control variables for JT2 valve, as requested by Whit Seay
      - Will modified cryogenic lines using diagram provided by Whit Seay
      - Will add indicators for EPICS variables used for total recovered flow and recovery pressure
         - Both EPICS variables need to be archived by HMI data logger system
      - Will add symbols for manual needle and ball valves for gas helium supply lines
      - Will add "cold" to liquid helium return line and "warm" to gas helium return line
   3. Steven Lassiter stated that more instrumentation for monitoring and control of cooldown operations will be added; this implies changes and additions to the HMI screens

2. **Completed configurations of PHYCAD56 computer**
   Pablo Campero
   1. Completed rebuild and assigned new host name (ENPWSEAY-PC) to computer
   2. Installed and configured FactoryTalk View so computer can access HMI system as client
      - Solved patch and compatibility version issues
      - Found that FactoryTalk View Enterprise version needed to be installed on the client PCs to allow sending of emails
         - Changes will be applied to other client PCs
   3. Completed installation of PLC RSLogix-5000 software and necessary configurations to connect with the PLC controller
   4. Tested remote connections

3. **Other Topics**
   All
   1. Discussed the procedure to save and open group of trends for easy and personalized monitoring of signals
      - Ran test using chart properties under template options
   2. Monitored logbooks
      - Changes in PLC code for nitrogen average temperature calculation
      - Adjusted values for valves in remote automatic mode
      - Increased liquid nitrogen temperature limit for cooldown
   3. Monitored cooldown progress
      - Helium and nitrogen temperatures changed this week in the magnet coil and radiation shields. Helium average temperature for coil shell ~264 K at the time of meeting