

## Solenoid Documentation and Other Tasks

**Date: January 18, 2017**

**Time: 10:00 – 10:45**

*Attendees: Pablo Campero, Renuka Rajput-Goshal.*

1. **Defined state of documentation for ERR Solenoid Cooldown and Power up**
  - 1.1. Renuka Rajput-Goshal and I were assigned four documents to write:
    1. B000000400-P003 Hall B Solenoid Pre-Power-Up Instrument Checkout Procedure
    2. B000000400-P005 Hall B Solenoid Pre-Power-Up Interlock Checkout Procedure
    3. B000000402-S002 Hall B Magnet & Cryogenic Control Systems
    4. B000000901-P011 Hall B Cryogenics, Pre-Cooldown Instrument Checkout Procedure.
  - 1.2. Documents mentioned above are to be written based on the documentation that already exists for the Torus magnet.
2. **Discussed current task: development of Solenoid controls.**
  - 2.1. I am working to add PV names in the Solenoid PLC code. These names will have to be agreed upon by Wesley Moore and Dave Kashy.
    - 2.1.1. The PLC programs in the controllers for the three systems Torus, Solenoid and D.Box are configured to send and receive as many as 500 bytes of data in a single connection, that's why 16 characters is the limit for the PV names.
    - 2.1.2. I found 13 PV names with more than 16 characters which I contracted and generated a spreadsheet as proposed names.
  - 2.2. I am solving issues related to the faults in the I/O communications modules. This needs to be solved to be able to set correct communication and share process variables with Torus and D.Box PLC controllers.
    - 2.2.1. I changed configuration for the Requested Packet Interval (RPI) from 10 [ms] to 100 [ms].
    - 2.2.2. The configurations in the PLC program for the chassis size backplane were changed from 17 slots to 10 slots.
3. **Renuka Rajput-Goshal will set up a meeting with George Biallas and Pablo Campero to discuss the Solenoid Vacuum system.**
  - 3.1. Updates made for solenoid vacuum controls system needs to be verified and match with the requirements needed by the Solenoid vacuum system.
4. **The Solenoid Service Tower Instrumentation test will continue after verification of the correct installation of hardware and wiring.**
  - 4.1. Renuka Rajput-Goshal and Scot Spiegel are currently checking and testing the correct wiring and hardware installation for the instrumentation in the SST.
  - 4.2. Once the hardware verifications are finished, Renuka Rajput-Goshal will let me know, so that I can proceed with the full Instrumentation Test (PLC control and EPICS monitoring).
  - 4.3. Platforms around to the SST were set; this will help to have a better access to perform the upcoming instrumentation tests.