Solenoid EPICS screens Meeting

Date: 11/23/2016
Time 14:30 – 16:000
Attenders: George Biallas, Pablo Campero, Ruben Fair, Wesley Moore, Renuka Rajput-Ghoshal

I. Presentation of the Solenoid EPICS screens progress:
   1. Drawings from the vendor ETI will be used to display location for some of the temperature sensors in the Solenoid.
   2. Wesley Moore presented model screens, for Vacuum, Fast_Daq, Magnet Power Supply and Helium Temperatures.
   3. Renuka Rajput-Ghoshal and Ruben Fair assigned tab names for the Solenoid Helium temperature screens.
   4. We will require a main screen that shows the entire Solenoid cryogenics system including the instrumentation in the Solenoid Service Tower.

II. We will require a Solenoid Forces screen to display the main Load Cell components.
   1. Wesley Moore will add a screen with the Load Cells in the radial and axial positions.
   2. Cold Mass weight will be added in the same screen.

III. For the Vacuum EPICS Screen, we defined vacuum PVs, which can generate an alarm if they are out of bounds.
   1. George Biallas proposed that the Combined Gauge, CG8606, be monitored by the Solenoid PLC controller.
      i. The PLC controller will send the data to EPICs, which will alarm if there is an error.
   2. The ESR signal will be shown in the same Solenoid Vacuum screen.
   3. Wesley Moore will correct some of the tag names displayed in the vacuum screen.

IV. Remaining work for the Solenoid Quench Detection screens:
   1. Renuka Rajput-Ghoshal and Ruben Fair will define the schematic to make the representation of the Solenoid Voltage Taps.
   2. Probir Ghoshal and Renuka Rajput-Ghoshal will calculate Solenoid Voltage Taps' comparator (differences between voltage taps) values.
      i. Once I get these calculations for the Voltage Taps differences, I will program the PLC and give the links to Wesley Moore.
      ii. Wesley Moore will add the Voltage taps and Quench Detection screens with all this information.

V. We discussed the levels for the Solenoid alarms which will be displayed in the EPICS screens.

VI. We agreed that we need a Solenoid Analyzer screen to make the analysis of the most important PVs, like we do for the Torus.