

Hall C EPICS Project Status Report

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1. HV System

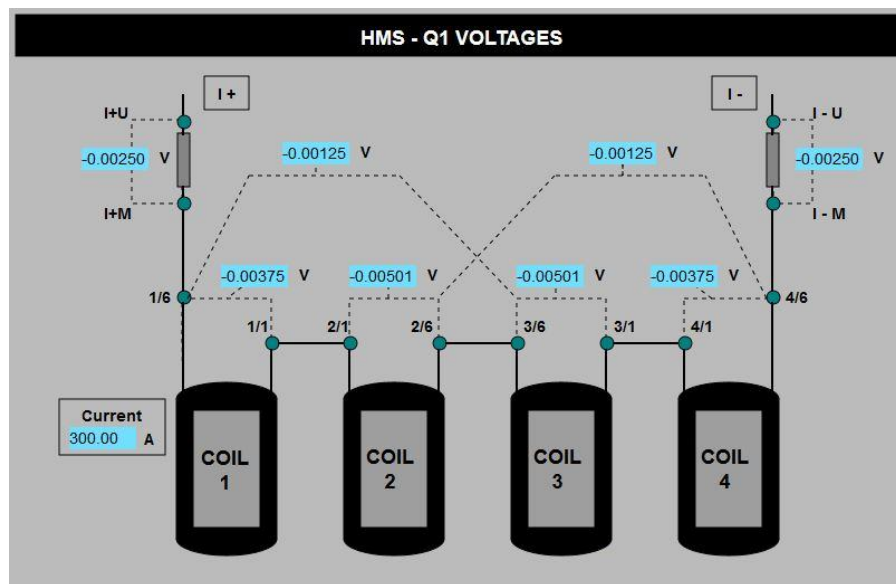
- 1.1. Implemented embedded script in control widgets on list-view screens to allow readback PVs to be displayed on screen while still allowing user to change control PVs.
- 1.2. Wrote user manual for Hall C CSS High Voltage system.

2. HMS & SHMS PLC to EPICS Communication

- 2.1. Installed Ether/IP driver on development PC to create a test setup for long-term stability of EPICS-to-PLC communication.

3. WEDM (HMS & SHMS Remote Monitoring)

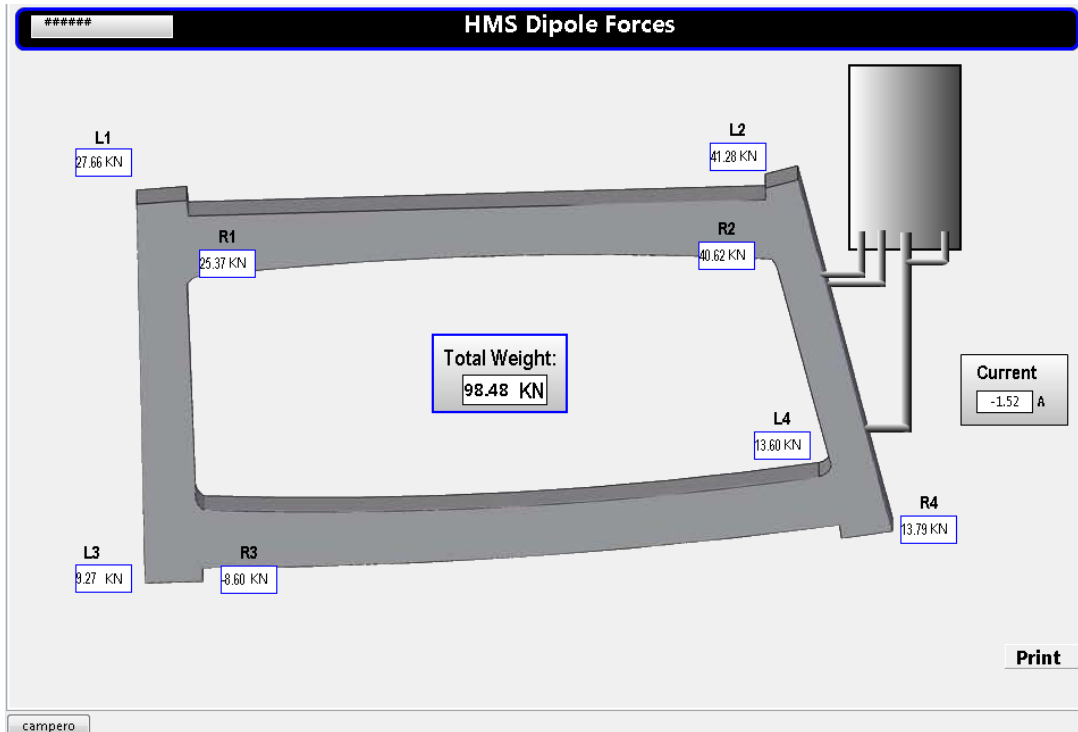
- 3.1. CSS-BOY voltage tap screens for SHMS Q1, Q2, Q3, and Dipole and all HMS magnets converted to WEDM and added to epicsweb menu.



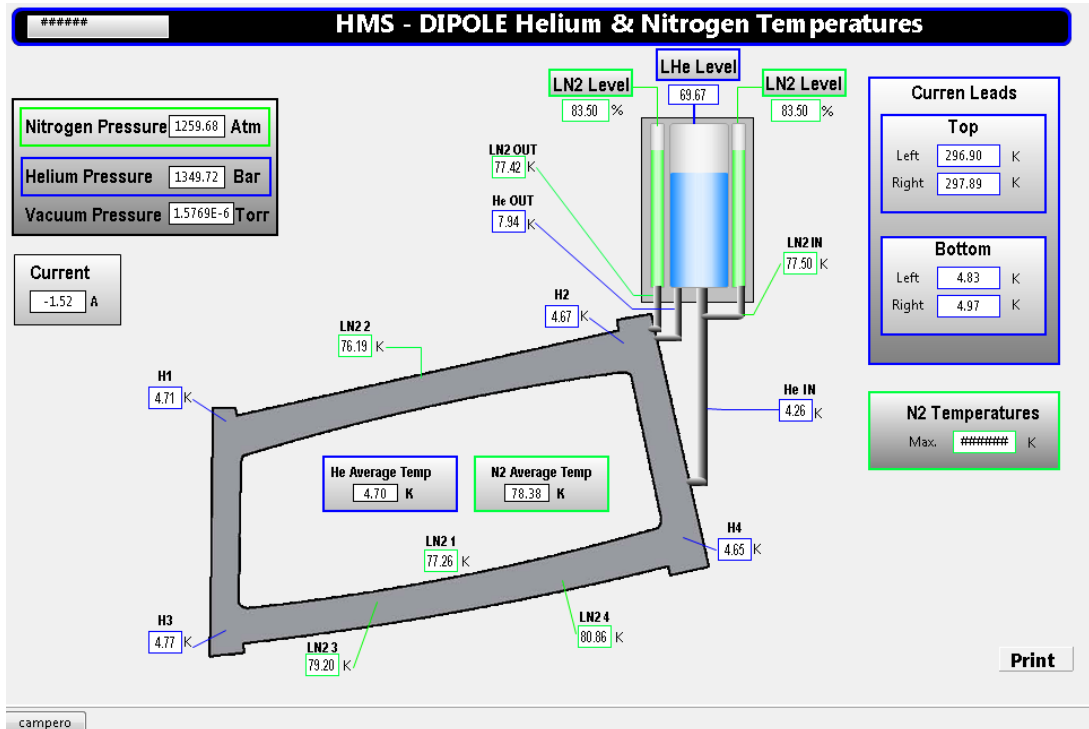
WEDM screen for HMS Q1 voltage taps.

4. CSS-BOY Screen Development

- 4.1. Developed two CSS-BOY screens to monitor HMS helium and nitrogen temperatures and HMS forces.
 - 4.1.1. Generated AutoCAD 3D model of HMS dipole to show approximated location of the forces based on HMI screen.



HMS Dipole forces CSS-BOY screen



HMS Dipole Helium and Nitrogen Temperatures CSS-BOY screen

5. CSS-BEAST Alarm System Development

- 5.1. Researched CSS site deployment packages that include the BEAST Alarm handler.
 - 5.1.1. Deployment packages are distributed in pre-compiled and source code versions.
 - 5.1.2. The alarm handler requires the setup and configuration of a Relational Database (RDB) server and a Java Messaging Service (JMS) server external to CSS.
 - 5.1.3. Halls B & D use the SNS ORNL source package with a MySQL RDB database.