



# ***MICE: Controls & Monitoring***

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# Outline

- **Since CM36**
- **C&M Tasks**
- **Run Control for EMR run**
- **Issues/Risks**

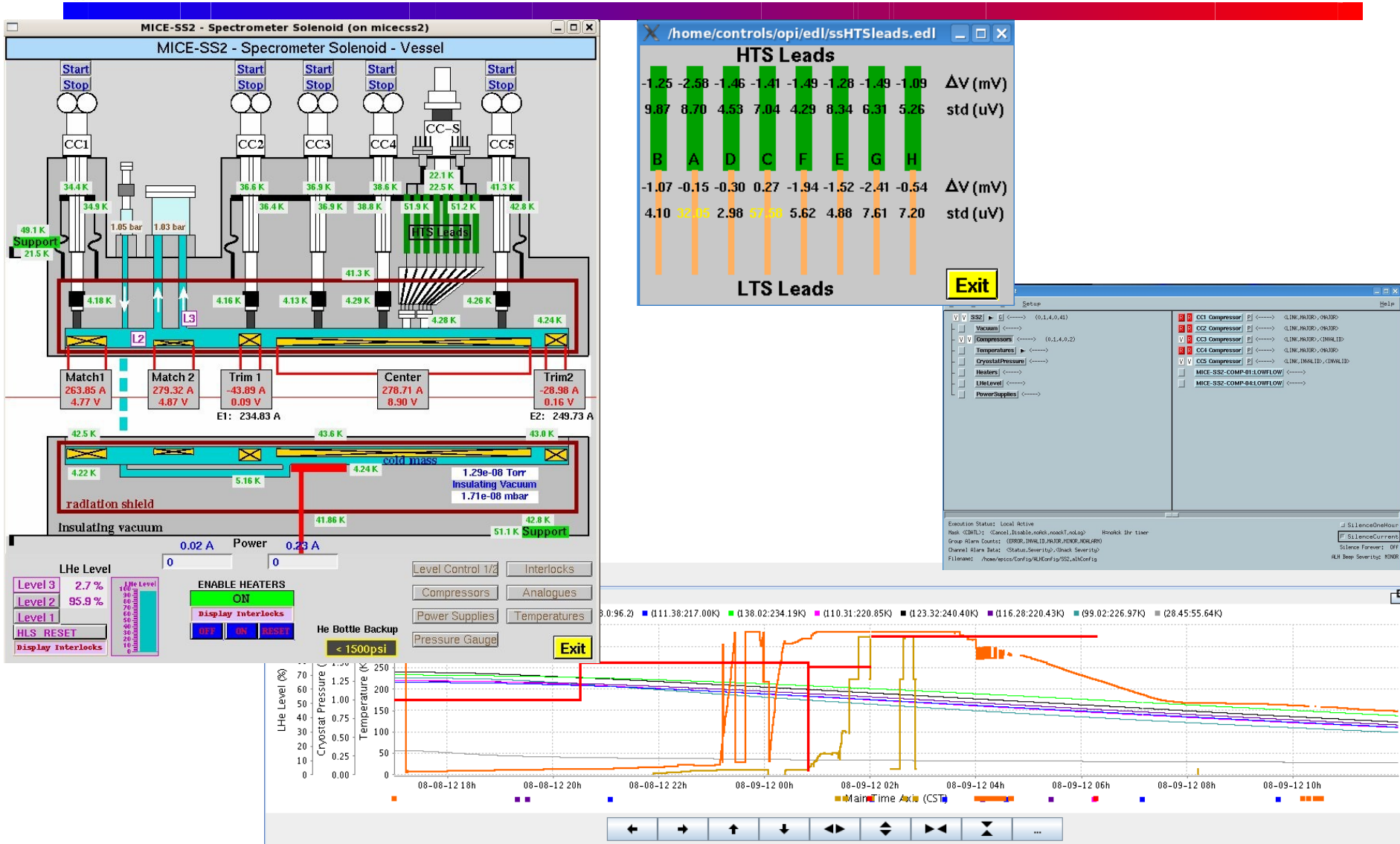


# *Since CM36*

- **Most smaller systems left hanging**
- **SS magnets C&M dominated my time**
- **SS1 state machine**
  - **operational**
  - **running with training**
  - **minor tuning still required**
- **Integration plan under way**
- **Run control progress**



# Since CM36 - SS





# *C&M Tasks*

- **Large systems provided by controls team from Daresbury lab:**
  - **SS/FC/DS/conventional magnets**
  - **LH<sub>2</sub> system**
  - **Integrated cooling channel controls**
  - **FC/DS quench protection**
- **Target and Tracker controls provided by Leaver/Robinson**
- **Overall coordination/integration by Hanlet**

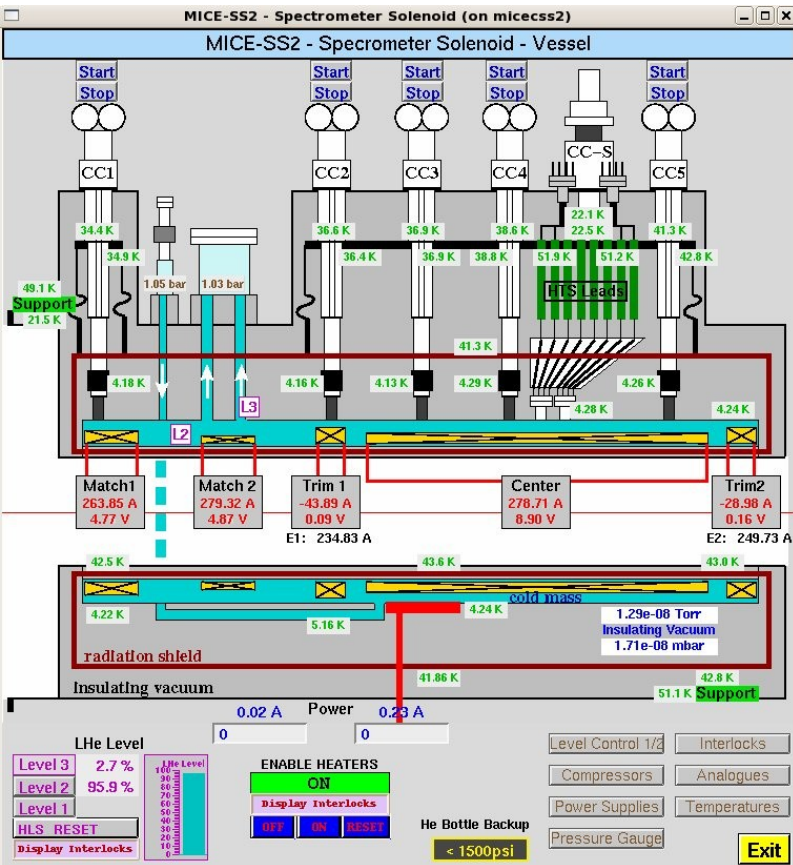


# C&M Tasks

- **Smaller systems:**
  - **Environment - add O<sub>2</sub> and radiation**
  - **PID: HV - ToF/CKOV/GVa/EMR**
  - **Radiation monitoring**
  - **Target monitoring - updating**
  - **Beamline monitoring - diffuser**
  - **LH<sub>2</sub> monitoring**
  - **Proton absorber - finally**
  - **RF tuners - on hold**
  - **DAQ monitor**



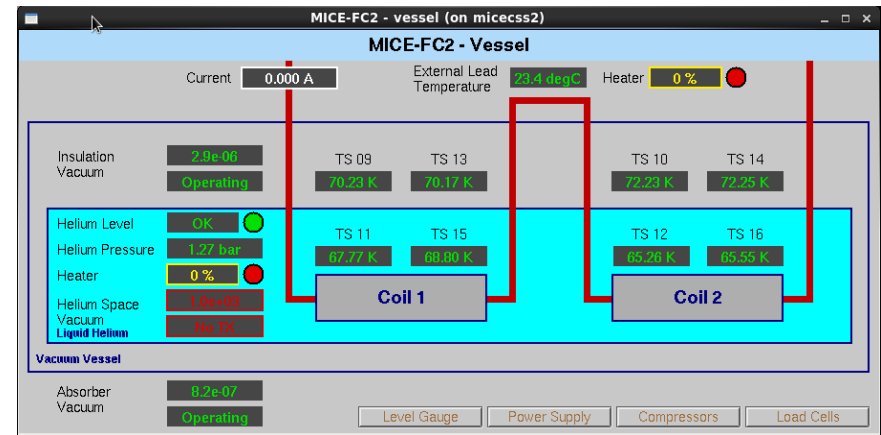
# Preparation for FC



**SS**

**Still need:**

- **synoptic displays**
- **state machine**



**FC**





# Run Control & EMR Run

- **RunControl (RC) is work in progress**
- **Job is to:**
  - **set run conditions**
  - **store readback conditions**
  - **save end of run statistics**
- **EMR runs were *not* standard runs**
- **Required untested use of RC**
  - **errors in writing to CDB**
- **Most problems solved**
  - **1 unsolved**
  - **target information changed**





# *Big Need*

# Documentation!



# *Risks*

- **Personnel**
- **Expertise**
- **Time**
- **Need to identify SS/FC differences in stand-alone and integrated systems**

**Good news: there is now time and I'm located here**