DSG-ECAL Controls Meeting

Date: September 18, 2023
Time: 11:30 – 12:15

Attendees: Peter Bonneau, Aaron Brown, Jimmy Caylor, Brian Eng, Donald Jones, Tyler Lemon, Marc McMullen, Albert Shahinyan

1. **ECAL six-supermodule test stand controls in Hall A**
   Marc McMullen
   1. The installation in Hall A started on 2023-09-04 with all controls equipment relocated to the hall and the sensors and power supplies were connected to the controls
   2. Current status of the controls
      - cRIO installed and running
      - Safety system (Omega and power kill button) installed and tested
      - Supermodule heater controls running and tested
      - Troubleshooting left and right aluminum heater crosstalk issue; will continue in the October Hall opening
      - Troubleshooting damaged controls connector for the left and right aluminum heater controls; will continue in the October Hall opening
      - Installation scheduled during the October Hall opening of a watchdog relay for the cRIO, which will monitor the heartbeat and remove heater power if the heartbeat signal stops
      - The power supplies are disconnected from AC power until the installation is complete
   3. Two additional spare power supplies purchased for the test stand

2. **ECAL six-supermodule temperature monitoring (non-controls)**
   Hall A/DSG
   1. The cRIO, 16-channel, thermocouple module arrived on 2023-09-15 and will be used to monitor temperatures on the surfaces of the supermodule
      - Sensors are placed on various locations on each supermodule
      - They are not used in the controls system and will be monitored from a different display
      - Integration is scheduled during the October Hall opening

3. **EPICS monitoring**
   Hall A/DSG
   1. DSG will use the cRIO as an EPICS client to update process variables hosted by an IOC
      - A database file with the EPICS process variables will be provided by 2023-09-30 to Hall A so they can be added to the IOC

4. **Open discussion**
   1. Hall A has procured 10’ thermocouples samples to test for the final detector system
   2. Hall A will procure a Windows PC and install LabVIEW 19 to interface with the cRIO in the Hall on the Hall A development subnet
      - DSG has temporarily moved a computer to the Hall A development subnet to continue the in-beam tests of the six-supermodule test stand
   3. DSG is working on a controls mode to manually control the output of the power supplies