DSG-NPS R&D Meeting Minutes

Date: April 18, 2023
Time: 02:00 PM – 02:50 PM

Attendees: Mary Ann Antonioli, Peter Bonneau, Aaron Brown, Pablo Campero, Brian Eng,
George Jacobs, and Marc McMullen

1. **Thermal readback**
   Mary Ann Antonioli, Peter Bonneau, Aaron Brown, Pablo Campero, and Tyler Lemon
   1. Mary Ann finished all Phoebus thermal readback screens, replacing arrays with individual process variables
   2. Started testing the crystal zone back temps Phoebus screen using random numbers
      - Discussed issue with the *cz_t_back_3* PV
        – This PV does not read back the random number that has been sent to it via EPICS and shows as disconnected; instead, the random number shows in the *cz_t_back_avg_3* PV, which is right next to it on the screen
        – Potential solution is to remove this PV from the EPICS client and put it back in
   3. A production softIOC has been created and works as expected; developing a LabVIEW EPICS client based on this softIOC
   4. Resolved problems with chiller communication, restoring serial communication with the chiller
   5. Discussed thermal readback LabVIEW program initialization issue
      - Some shared variables get initialized and then after the first program loop are disconnected; debugging in progress

2. **Hardware**
   1. In an effort to resolve issues with high voltage controls (oscillating voltages, parameters not retaining their setpoints), a firmware upgrade will be performed on both CAEN crates
   2. Aaron will check with Hall C staff about whether a spare CAEN crate is available