



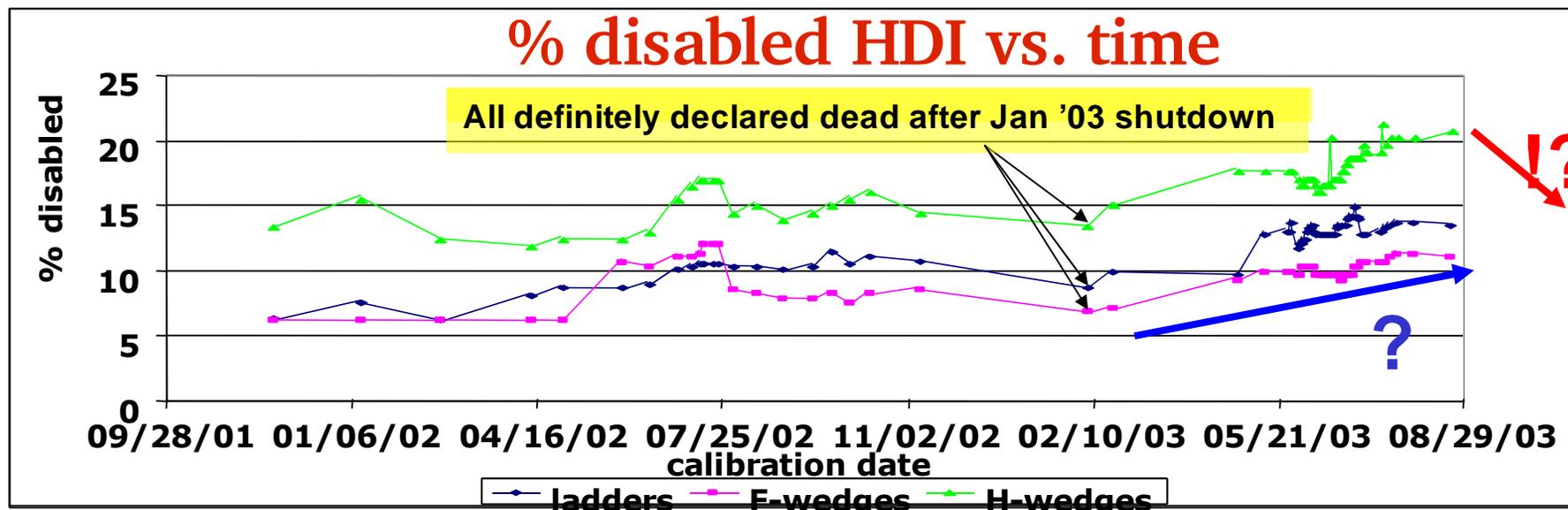
# Shutdown Progress

- Four scheduled power outages – recovered well from the first two (and the unscheduled power outage on September 26)
  - ◆ Two more on October 13 and 18 – we are gaining experience...
- 24x7 DAQ shifts and Mon-Fri day shift Captains
- In general all major tasks are on schedule
- We continue to assume
  - ◆ Access ends on November 17<sup>th</sup>
  - ◆ Plan to finish all major jobs in 7 weeks with only limited access needed during the last 3 weeks
  - ◆ Close detector during week 10



# Silicon Status

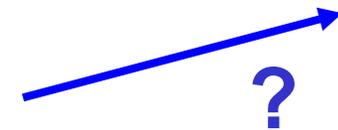
- Repairs of failed HDIs / electronics
  - ◆ Before shutdown: 136 disabled (up from 84 just after January shutdown)
  - ◆ ~100 are presently disabled
  - ◆ 12 are repaired (2 weeks of 2 shifts/day with 4 people)
  - ◆ 59 are unstable – study in the coming two weeks. Some recoverable for partial readout
- TLD' removed from the collision hall



Two projects:



and





- **CFT: Modifications of AFE boards to remove unused inputs from the readout**
  - ◆ Reduce data size and DAQ deadtime
  - ◆ Pedestal RMS's across all channels are higher than before the shutdown.
  - ◆ There are light leaks, so with the lights off and the temperature stable, will determine RMS
  - ◆ Continue testing AFE modifications over the coming week
- **Calorimeter: continuing studies of calorimeter noise**
  - ◆ Investigating how SMT noise gets into the Calorimeter
  - ◆ Source of 10MHz noise
    - Went around with a small antenna to identify sources
  - ◆ Grounding test planned for October 13
    - Detailed plan in place
    - Disconnect AC, safety ground, telephone, etc.
    - Attach current controlled power supply, slowly increase current up to 100A, and look for heat sources
  - ◆ Expect preliminary report this week (collaboration meeting), final report later



## ● Forward Muon

- ◆ Access to A layer forward muon tracker completed: replacement of preamplifiers, gas leaks, gas monitors; C layer repairs in progress
- ◆ Number of non-working channels now 0.15% (trigger counters), 0.5% (drift tubes)

## ● Central Muon

- ◆ Installation of extra trigger counters under way – running into a few snags (tight clearance on east side) but no show-stoppers
- ◆ Installation of 144 remote power cycle relays for front-end electronics and all relevant cabling – on schedule, first driver board being tested today
- ◆ Pulled a couple of wires drawing moderate to high currents for investigation
- ◆ Installed Power PC's in the remaining muon readout crates that had 68k's

## ● Luminosity system – Cable work in the gaps on Thursday completed

## ● Forward proton detector

- ◆ Maintenance and installation of electronics for full system operation on schedule. Waiting for parts

## ● Old Cryo UPS replaced – Switched to commercial power source on Tuesday, then to new UPS on Thursday



- Firmware upgrades on L1CTT and L1Muon progressing well
- All Level 2 Alphas have been replaced with Betas
  - ◆ Running smoothly so far, updated shifter instructions
  - ◆ Now progressing on “worker” and “administrator” code to run with 2 Betas per crate
- Online & Controls
  - ◆ Replaced 8 disks that have died over the last 2 years (4 buffer disks for the data logger)
  - ◆ Offline switch upgrade planned for Oct 13 – required electrical work means extended downtime for all online systems as well
  - ◆ Major software upgrades planned for this week
    - Python, Epics, VxWorks



# Summary

- Access is on schedule
- Commission detector for beam during the last week of the shutdown in order to be ready for physics as quickly as possible