

ControlsMeetingMinutes-May-10-2006

Controls Group Meeting, May 10, 2006

date:	May 10, 2006
subject:	LCLS Controls Group Meeting
from:	Doug Murray
	x2235
department :	LCLS Controls

Attendees:

Arturo Alarcon	Bob Dalesio (remote)	Bob Fuller
Dave Dowell	Dayle Kotturi	Debbie Rogind
Diane Fairley	Doug Murray	Hamid Shoaee
James Bong	John Dusatko	Kristi Luchini
Mario Ortega (absent)	Mark Crane	Michael Cecere
Mike Browne	Mike Zelazny	Patrick Bong
Patrick Krejcik	Patrick Smith	Ponciano Rodriguez
Ron Chestnut	Sergei Chevtsov (absent)	Sheng Peng
Stephanie Allison (absent)	Stephen Norum	Stephen Schuh
Steve Lewis (remote)	Steve Smith	Terri Lahey
Till Straumann (absent)	Tom Porter	

Agenda:

1. Site Wide safety discussion
2. New LCLS Controls Group members
3. Control system project re-planning
4. Injector installation and commissioning schedule

Previous Actions:

1. None from Last Week.

New Actions: (*summary; see details below*)

1. None.

Minutes

1. Hamid reminded us about the site-wide safety discussion tomorrow.
 - a. He mentioned an accident last week relating to the FFTB removal. There were no injuries, but the incident involved cutting through the contractor's own live power cable. The same type of incident occurred this week.
 - b. Tomorrow's discussions were not caused by, or related to these contractor incidents. The meeting room for tomorrow's meeting will be determined later today.
 - c. Also, a reminder about the LCLS BBQ tomorrow at 11 a.m.
2. Mark Crane is new to our group, working roughly half time on a variety of issues. He will give a presentation of his previous work in next week or two. He's currently sharing Till's office in Bldg 280A.
3. Hamid then discussed the Control System Project re-planning work
 - a. He described the control system Estimate to Complete (ETC) and how it is determined.

- b. It will include a bottom-up estimate for the entire project in next few months.
 - i. There is a deadline of May 19 for the Cost Account Manager (CAM) to prepare that level of estimate.
 - ii. We know that some elements are not currently included, such as control room upgrades. These missing items and better estimates need to be rolled up.
 - iii. The Primavera P3 integration will be complete by June 1.
 - iv. He said a control system ETC presentation take place on June 12.
 - v. It was mentioned that several people will be at the EPICS meeting that week, and will not be able to attend the ETC presentation.
- c. Hamid then reminded us of the typical system engineering process that needs to be followed.
 - i. That includes all accepted tasks from requirements and design, through development, integration, testing, procurement, installation and maintenance.
- 4. We then discussed the ongoing engineering work and schedule.
 - a. Phase II installation, scheduled for completion in Aug-Sept is already under way.
 - b. Ponce mentioned that Phase 1 cable trays are currently being installed in the gallery, and finishing in the injection vault next week.
 - i. He expects the work to be done by June 20.
 - ii. Vacuum cables going to the waveguide are in question, since some of the waveguide does not yet exist.
 - iii. He also mentioned that some racks will not be available on time. We may need to extend the cabling contract.
 - c. Bob mentioned that connectors have not been ordered yet.
 - i. He reminder us to order the connectors soon, since procurement might be a problem.
 - ii. We also need pin-out diagrams; they need to be done and given to Phase II contractors.
 - d. Ponce said that many more cables are needed for phase II work.
 - e. Bob has list of tentative cable plant needs, but he needs more information from each system engineer. They must confirm the coding sheets are correct.
 - f. We were also reminded to get the electrical interconnect diagrams finished and turned in as soon as possible.
 - g. Hamid said the PeopleSoft software for purchasing would be unavailable starting this week.
 - i. It's important to put outstanding orders in now.
 - ii. He reminded us that after entering the requisition information, it would probably take another day to go through approval process.
 - h. Ponce asked if this was the start of a new ordering process.
 - i. Hamid said No, it is just a temporary situation because of a software upgrade.
- 5. Hamid said that we're working to develop a detailed schedule to include cable plant installation, loading crates, testing, installation, and onsite end-to-end testing.
 - a. Kristi asked when we could start loading racks, and if we could start in Phase II.
 - b. Bob said the racks might not be here on time.
- 6. Ponciano then reviewed his schedule.
 - a. Patrick Bong asked if cables were being pulled through the laser room.
 - i. Bob said Yes, Phase I is underway.
 - ii. We were reminded that the laser will be installed late June, so no cables will be pulled through room after that.
 - b. Ponce mentioned that the phase 1 racks would be installed before the dates on the schedule he was showing. There is a task for extra rack installation and for phase 2 racks.
 - c. Bob said that a positional or geographic installation diagram could be very useful. Rack profiles are very important, and we need to review and update them.
 - d. Kristi said that it looked like there would be no testing until November.
 - i. Hamid said Yes, this schedule cuts deeply into test time.
 - e. Doug mentioned that networking cable was not included here, and asked when those tasks would be scheduled.
 - f. Ponce said that everything being designed needs to be coded for CAPTAR by end of this month. He pointed out that these were the critical path tasks.
- 7. Hamid then reviewed the details of the current control system schedule
 - a. May 1 to May 30: all diagrams, cable plans, electrical interconnect diagrams, and other diagrams be completed and submitted by the end of the month. He agreed this was critical.
 - i. Kristi raised some concerns about the magnet and power supply schedule.
 - ii. Hamid said everyone should meet with he and Bob to voice concerns. He suggested that the "low tech stuff" would shape the schedule and concerns.
 - b. May 1 - June 30: reviews should be held and documented.
 - c. July 1: the bid package would be ready.
 - i. Ponce pointed out that we need to expedite this, it must interlace with his installation schedule.
 - d. Aug 1: start installation. The Linac is down, and the PEP downtime begins.
 - e. October: system testing.
 - f. Nov 1 to Nov 20: system, end-to-end testing.
 - g. Nov 21 - Nov 30: PPS certification.
 - h. Dec 1: injector commissioning begins.
 - i. Hamid then discussed the V&V tasks.
 - i. The goal is to deliver a system to physicists that has been tested as much as possible without beam.
 - ii. We'll have to do more bench-top testing. Verification of functionality, system setup, and using the control system in its ultimate state in the control room (with EDM screens, for example).
 - 1. Hamid asked to let him know what additional resources would be needed; more crates, more IOCs, etc.
 - iii. He reminded us that we must be thorough in our integration testing.
 - iv. He mentioned the MCC operation verification. Subsystem testing would be completed by then, so we can verify requirements are met.
 - v. Hamid summarized by saying that we was asking for 1 month from Ponce's schedule; Patrick Smith suggested with was more like 2 months.
 - vi. Doug mentioned that the BC1 assembly would be located in Bldg 26, and testing of those elements could be carried out there.
 - vii. Terri said that additional test area networking requests need to be prioritized.
 - viii. Ron mentioned that PPS testing and certification might pose a problem.
 - 1. Patrick Bong noted that the final review for the PPS occurs just before commissioning starts, in the last week of November.
 - j. Hamid suggested that we're currently working on serial tasks, and we need to understand how to parallelize our work. Bob mentioned that dependencies between systems are critical.

- k. Kristi asked when the straight through beam start up again. There was no definite answer, but it was suggested it would start again with the SABRE program.
- l. Tom suggested that people make a point to stay in touch with Mechanical engineers for each subsystem.