

ControlsMeetingMinutes-Apr-12-2006

Controls Group Meeting, April 12, 2006

date:	April 12, 2006
subject:	Controls Group Weekly Meeting
from:	Doug Murray
	x2235
department :	LCLS Controls

Attendees:

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

Agenda:

1. Review the Injector installation schedule with Kathleen
2. Discuss the Instrumentation and Control Schedule with Bob
3. Discuss FAC Meeting next week
4. Control System Project Re-planning

Previous Actions:

1. None from Last Week.

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

1. None.

Minutes:

1. We reviewed Kathleen Ratcliffe's injector installation schedule.
 - a. Kathleen's schedule is quite comprehensive, including specific dates and responsible people.
 - b. It includes tasks for Phases 1 and 2 of cable installation.
 - c. Currently, the process is such that Carl updates a spreadsheet with devices and components required for installation, which is then communicated to Bob. He then communicates with the appropriate system engineers. It's important that the tasks then get back to Kathleen.
 - d. We were reminded that the contract for phase 1 cable pull could start April 28, although a lot of preliminary tasks will need to be done first.
 - e. Kristi mentioned that rack related tasks scheduled for June 5 need to be updated, since they will just be arriving around that time.
 - i. Bob said that intra rack cable plant would be staged as well, in the high-bay area.
 - f. Hamid - full dress rehearsal in high bay area.
 - g. Mario mentioned that AC power might not be available until mid June.
 - i. He said there are 17 racks in total, including those for the RF hut, Klystron Gallery, Laser room and others.
 - h. Kathleen said that her schedule has hourly details for proper installation sequence and logistics.

- i. Bob pointed out that larger assemblies will require less detail in this schedule.
- i. Kathleen is considered a choreographer, and her schedule is somewhat a collision avoidance plan.
- 2. Bob Fuller spoke about his Instrumentation and Control Schedule.
 - a. He has started a generic template for Microsoft Project. Ideally, subsystem engineering can all make use the same major steps, including details of installation, documentation, reviews, earthquake preparedness, AC power, and more.
 - b. Requirements, design, prototyping are also included. Tasks have dependency links drawn where appropriate.
 - c. He also mentioned the EEIP; the electrical equipment inspection program. All hardware needs inspection and proper labeling for safety purposes. For instance, some recently purchased VME crates need appropriate labels for AC levels, etc.
 - i. He mentioned that we are one of several Labs which is a NRTL (Nationally Recognized Testing Lab.) We can share NRTL certified equipment with other NRTL institutions.
 - ii. Till had asked to what level does equipment need to be EEIP certified? Mario said that the power consumption or current draw is typically checked for plug-in modules such as VME, PMC or Industry Pack.
 - iii. Mario also said that EEIP personnel would be inspecting racks in the high-bay area once assembled.
 - iv. He said that only 1 unit of a certain type needs inspection, not each instance. Inspection stickers will be applied.
 - d. Bob indicated that the final production and procurement tasks need to be in the template.
 - i. There is also a need for system checkout via control and safety systems such PPS and MPS. These tasks are included in the template as a worst case, and are easily removed if they're not necessary.
 - e. Hamid reminded us that we need to turn over a completed, tested system to physicists on December 1.
 - f. Kristi mentioned that the BC1 dependency for commissioning was added later in the injector planning process. Is it still needed? Hamid confirmed that it is required.
- 3. Hamid then discussed the FAC Meeting next week
 - a. It will be held on Thursday and Friday, April 20 and 21 in the Orange Room of Building 40, the Central Lab building just south of the Cafeteria.
 - b. He reminded us that this is an advisory committee not a review committee. We should focus on areas where they can best advise. They like to interact, and are considered to be technical experts; Tom Himmel of SLAC and Karen White of Jefferson Lab.
 - c. A draft agenda was shown, and they're expecting to hear little or no history, just a description of our current plans.
 - d. There is a breakout session for Controls, and we'll need to address concerns from the previous review
 - i. We need a system-wide controls RDB.
 - ii. High level applications.
 - iii. PPS needs further investigation; Kelly Mahoney will be here tomorrow to discuss PLCs.
 - iv. The MPS system.
 - v. Management.
 - vi. Engineering process.
 - vii. BPMs
 - viii. Security, and specifically network security should be described.
- 4. Hamid then discussed the Controls re-planning effort currently underway.
 - a. He mentioned that the WBS for controls has evolved for several years, thanks to the efforts of Dayle, Mario, Bob Dalesio and others. The engineering approach has changed dramatically, in some cases, so the current WBS doesn't reflect reality.
 - b. He said it is difficult to track progress and see status. The cost and schedule variances are reviewed and reported each month.
 - c. A re-planning exercise has been started. Hamid said that it cannot be done in isolation, and everyone will be involved.
 - d. The plan is to have a first draft by May 1, and a new plan in place by June 1.
 - e. Each subsystem team will meet with PMCS team to spell out their tasks; there is no need to learn tools such as Primavera.
 - f. Kristi will start with magnet power supply systems.
 - g. Hamid then presented a typical system engineering process. It has 10 steps:
 - i. Requirements, with a PRD.
 - ii. High-level concept, with a CDR.
 - iii. Software Development
 - iv. Hardware Development
 - v. Hardware and Software Integration
 - vi. Iteration (if needed)
 - vii. First Prototype
 - viii. Procurement
 - ix. Installation
 - x. Commissioning
 - h. Dayle mentioned that non-recurring Engineering (NRE) tasks were separated under a Global Controls heading.
 - i. She suggested that starting over with NRE tasks doesn't make sense.
 - ii. Hamid agreed, in that the global NRE tasks will remain separate, but suggested that we need to make sure they reflect reality.
 - i. Hamid also said that reasonable durations are important.
 - i. Dayle mentioned that the milestones are important, but questioned their usefulness if each subsystem adds distinct ones.
 - ii. Hamid insisted they need to be reviewed, since some of the current dates indicate we won't have a control system for injection commissioning until December 2007. There is little faith in the current schedule.
- 5. With the FAC review next week, our next meeting will be in 2 weeks.
- 6. Ron reminded us that performance evaluations are coming up.