ControlsMeetingMinutes-Mar-08-2006

Controls Group Meeting, March 8, 2006

date:	March 8, 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	Doug Murray	Hamid Shoaee
James Bong	Jingchen Zhou	John Dusatko	Kristi Luchini
Mario Ortega	Michael Cecere	Mike Browne	Mike Zelazny
Patrick Bong	Patrick Krejcik	Paul Bellomo	Ron Chestnut
Sergei Chevtsov (absent)	Sheng Peng	Stephanie Allison	Stephen Norum
Stephen Schuh	Steve Lewis (remote)	Steve Smith	Terri Lahey
Till Straumann	Tom Porter		

Agenda:

1. Review Team organization.
2. Review Status of the Cable Plant.
3. Discuss Options for our Meeting Schedule

Previous Actions:

1. None from last week.

New Actions: (summary; see details below)

1. None this week.

Minutes:

1. Hamid reviewed the teams associated with each subsystem.
    a. He said it was clear that we need more support, and the best solution is to organize ourselves into system engineering teams.
    b. Some teams are already in place, but our goal is to ensure that we have support of experts with background in relevant disciplines. Ideally, we want to identify at least one member of each of these disciplines within each team.
    c. Each team will have members from the LCLS Controls group, CPE (including their production and installation facilities), and other disciplines including Mechanical Engineering, Physics and more.
    d. Hamid charged each group with the following goals:
        i. To provide work schedules.
        ii. To have these schedules include Design, Interface and other documents, with appropriate reviews.
        iii. To interact with Mario and Bob regarding procurement and rack, cabling and other infrastructure needs.
        iv. To produce progress reports, document important action items, and more.
        v. Essentially, to do proper, well-disciplined engineering work as we go forward.
    e. Hamid then reviewed each of the teams, in no specific order. The names of the individuals on each team were discussed, and will be reviewed again. We also realized that we needed to add some teams, so this list is tentative, pending more review.
    f. The teams include:
        i. Protective Systems
            1. Personnel Protection System (PPS)
            2. Laser safety
            3. Beam Stoppers

4. Machine Protection System (MPS)
5. Toroids, Ion Chambers, PLIC, Limit switches
6. Beam Containment System (BCS)

ii. Data communications and Network
1. Stephanie asked if this would include System Management also. Hamid said no, that we would need additional people in a separate team.

iii. Beam Instrumentation and Diagnostics
1. BPMs - Stripline style
2. BPMs - Cavity style
3. Toroids
4. Profile Monitors (OTRs, YAGs, etc.)
5. Faraday Cup
6. Bunch Length Monitor

iv. Timing Systems
v. Low-level RF (LLRF)
vi. Mover Systems
vii. Power Supplies
viii. Vacuum Systems
ix. Temperature monitoring and control
x. High-level applications and Feedback systems
xi. Laser Controls - Design
xii. Laser Heater - Controls
xiii. General signal distribution
xiv. General interlock power distribution
xv. High Power distribution
xvi. Emergency power interruption
xvii. X-Ray Transport, Optics and Diagnostics (XTOD)
xviii. X-Ray end-stations (XES)

g. Patrick asked about work related to laser controls. Hamid said those details are forthcoming.

2. There was a question regarding testing and operational readiness. Hamid indicated that a Readiness review must be complete before the system can be run, basically before electrons can be produced.
3. Hamid proposed that we meet every other week.
   a. Each of the teams could meet in the alternate week's time slot.
   b. Bob mentioned that the group's current meeting room is also available every Wednesday from 2:30 to 3:30.
4. Mario presented the status of the controls cable plant.
   a. He said it is in progress, but still pending detailed installation and design needs.
   b. He said there is an April/May to July installation time.
   c. Input to the CAPTAR database is crucial. All installed cables require CAPTAR input.
   d. The cable plant design was submitted to Citizen's Committee on Mar 7, 2006.
   e. Mario mentioned that fire and earthquake reviews still need to be done.
   f. He also pointed out that long haul cables are his (Mario's) responsibility, and the intra-rack cabling is the responsibility of each team's system engineer.
      i. Tom asked if it would be possible to pull more cable across the laser building ceiling in the future? And also, high voltage cable?
      ii. Mario said yes, there were some conduits specified, but not for high voltage at this point.
   g. Mario mentioned that contractors (following Davis/Bacon regulations) would install racks and long haul cables.
   h. He also said that updated rack profiles have been requested; the subsystem managers need to have them submitted to Noe at extension 2392.
      i. He mentioned that one should also bring chassis details, part numbers, drawing numbers, OEM numbers, size in rack units, and power consumption details.
      ii. Shared crates are okay, but slot assignments need to be understood.
      iii. For chassis and custom cable installation, we should use a specific charge number, which Mario can provide.
      iv. Steve Lewis asked about charges for similar needs in the XTOD area. Mario said that the charge number was not for the undulator or XTOD.
      v. Hamid suggested that we need to re-estimate costs. He asked Steve and Mario to further discuss this topic off-line.
   i. Mario mentioned that drawings are required.
      i. He pointed out that electrical interconnect or system block diagram (EI or BD) will be required.
      ii. A wiring diagram (WD) with pin out details are need. They are the most detailed, and should have high priority.
5. Kristi asked if it would be possible to take a tour of the injection area after construction completed. There was general interest, and Bob said it should be possible.