

BD/TD Joint Projects Meeting
Wednesday, 12 November 2003, 10:30 AM
TD/Hermitage Conference Room

Present: Paul Czarapata, Hank Glass, Dave Harding (scribe), Bob Kephart, Jim Kerby, Dave McGinnis, Victor Yarba

AGENDA

Schedule plans

- Booster septum and dogleg projects
- Booster ORBUMP
- FMI IQD spares
- FMI/Tev Lambertsons
- RR Electron cooling beam line shielding

Continued refinement of project list

- Expected review and decision dates for:
 - AP2/Debuncher aperture work
 - Tev RF
 - Tev reference magnet system
 - FMI large aperture quad

Specifications

Various

Job descriptions due

- Electron cooling beam line vacuum
- Tev HLS
- Tev electron lens
- Tev electrostatic separators

Schedules

L13 Dogleg -- TD expects to have the L13 dogleg system ready for the 2004 summer shutdown. The only possible hang-up is the coils for the new dogleg magnets. Dave H's plan is to resist engineering changes in spite of the potential for reducing assembly costs. Engineering will proceed. A task number for material purchases will probably be needed in about a month to maintain the schedule. The requisition for new stands could be delayed two or three months without impacting the schedule.

ORBUMP -- TD thinks that a new design for the ORBUMP is unlikely to be ready to install next summer, though it is possible. This is a challenging design that will require extensive testing. The changes under consideration would require a new power supply as well. The new system will allow high repetition rate running and should reduce losses by improving the field quality during injection.

FMI IQD spares -- TD forecasts that the first new IQD will be ready by the end of the calendar year, possibly by mid-December. In a crunch, that might be reduced to early December. After that, magnets should be completed at a rate of about one per month. All of the planned IQD coils are wound, but the coil potting is a major bottleneck. TD proposes to build a new potting mold, in the neighborhood of \$20K for M&S, to pot four coils simultaneously rather than one. Only a concept is done at this point. After the IQD coils are done, TD would move to the IQC coils that have already been wound and to

reworks of failed IQB magnets, depending on needs. Winding of more IQC coils would not resume until late in FY04, after the Lambertson and dogleg coils.

FMI/Tev Lambertsons -- After workers finish this week's push in the tunnel, TD will start this job in earnest, with both coil winding and core stacking. All four magnets may not be done before the next shutdown, but the first should be done on the order of six to seven months from now with the rest coming at roughly one month intervals.

RR electron cooling return line shielding -- The quotes are in for the prototype and the order is being placed with the low bidder (who also had the shortest delivery time), with parts due in early December.

Reviews and Decisions

At the very least TD needs to know the time scale for BD making decisions on these items. Time is already critical for almost any serious work that is to be installed during the 2005 summer, like the AP2/Debuncher aperture improvements. Other tasks that are on hold pending decisions include the Tev RF vibration abatement, the Tev reference magnet system, and the FMI large aperture quad.

Job Descriptions Due

TD needs to know what BD is asking for on a number of the other jobs, especially Electron cooling beam line vacuum, Tev HLS, Tev electron lens, and the Tev electrostatic separators. The last generated a long discussion about the relative advantages of sites for the work. TD is expected to participate in the studies.

Specifications

There are some specifications due, but, especially with the Proton Source work, there is a plan for providing them, so this is not an urgent item.

Other Business

Burle and the 7835 tubes -- Paul Czarapata reported that Los Alamos has now had a tube failure. He is working on a proposal to the director to fund a serious effort to develop an improved tube in house. This would include building the facility to process tubes and well as refining the associated procedures.

Dave McGinnis will get reactions from the BD systems departments on the latest comments from TD on the job list items. When most BD and TD comments converge, we can concentrate on any areas needing resolution.

**Next Meeting: Wednesday, 26 November 2003, 10:30 AM,
Hermitage Conference Room (Industrial Center Building, 2nd Floor, East)**