

AD/TD Joint Projects Meeting
Wednesday, 28 April 2004, 10:30 AM
Club 157 Conference Room

Present: John Carson, Dave Harding (scribe), Gregg Kobliska, Keith Gollwitzer, Jeff Spalding

Notable Achievements or Problems

IQD slips again

Further difficulty with the old curing fixture has postponed the projected delivery date of the first spare IQD with the new insulation scheme until May. The most recent estimate had been by the end of April. Dave reviewed the history of the project, saying that although it has dragged on for several years, the current availability of two spares has tempered the urgency. The new design uses the same yoke and bare coils, but vacuum impregnates the individual coils rather than the whole magnet. This allows inspection of the potting job, avoiding what are believed to be defects in the potting that led to the failure of several magnets early in the Main Injector running. An early decision to reuse the curing mold that held the coils during curing of the B-stage impregnated tape before vacuum impregnation of the whole magnet has led to numerous problems in holding dimensional tolerances. Once this magnet is complete, TD will stop work until after the 2004 shutdown when a new, closed cavity mold, capable of potting four coils (one magnet) at a time, will be ready. This will improve quality and throughput.

NuMI ceramic beam tubes

The order has been placed for the spare NuMI ceramic beam tubes. In spite of the extensive research done by Material Control, the job was bid with the job going to the only company that MC had found able to do the work. Work is proceeding on the Debuncher and Booster extraction kicker tube dimensions, trying to ensure that the tubes will fit into the existing magnets. We will work hard to place the order for these tubes with the same vendor. The Debuncher tubes are the only ones with a tight time schedule.

Electrostatic separators

Two of the spare old separators have developed vacuum leaks in the ceramic feedthroughs. One only developed after a week of running. It shows some porosity. The second will be inspected closely. The ceramic is a known weak link. The supply of spare parts is dwindling.

Jeff proposed a meeting to ensure that everyone is in agreement on the scope of work, including which parts of each task each division is responsible for. Dave will organize it.

M&S Task Numbers, funds

TD has established M&S task numbers for the two projects that have been held up and the one that was coming up very imminently.

Cost estimates were distributed for M&S for the balance of the fiscal year as well as amounts already charged to TD codes. AD will study the numbers. It was clear immediately that some of the separator work was incorrectly categorized or matched with incorrect AD codes. The proper allocation of the MP9 improvements was uncertain. Jeff

will sort it out and provide correct information. TJ will send Jeff an electronic copy by e-mail.

New jobs

TD labor may be needed to assemble separator HV power supplies. This needs to be sorted out. It will take people away from the other efforts.

With the failure last week of another P-Bar pulsed dipole magnet, the inventory of spare magnet cores (provided by TD) needs to be reassessed. The rest of the work on building these magnets is done by AD/MS. They have consulted with John Carson on improving the joint that fails and he had a few suggestions, but this is not expected to be an on-going project for TD.

There may be a request to upgrade the water manifolding on some spare P-Bar 5-foot modified B1 dipoles.

P-Bar is interested in exploring modifications to some small quads to add a significant sextupole component (some normal, some skew?) to address chromaticity issues in AP2. The project is as yet ill-defined. At least some magnet locations, in the 730's, are very inconvenient to change. This sounds like a project for the 2005 shutdown.

Priorities

Reports

Regarding the job list, Jeff thinks that the three columns system, priority, and status are sufficient to categorize jobs, but they should be displayed together at the left of the line.

Jeff's list of proposed the priorities with one modification from Dave:

1. Urgent due to schedule need (e.g., summer 04 shutdown) with a deadline within about six months.
2. Urgent operational need (operating without a spare).
3. Important, but less urgent due to more distant deadline.
4. Proceed with low priority.
5. Defer.
6. Cancel (will disappear from list in one month).
7. Complete (will disappear from list in one month)..

Priorities 1 and 2 have equal status, but the motivation is different. Priority 3 cannot be ignored because it has a due date, although that date is farther away. A comment on the status of the first three priorities should be entered at least monthly.

Jeff proposes just two statuses

0. No issue (proceeding as planned)
1. Stuck due to something (requires explanatory comment)

The systems are appropriate now.

We need to work out a mechanism to ensure that the comments, both from AD and TD, are updated periodically. TJ Gardner is working on a database version of the job list that will support comment updates and so forth more flexibly. TJ should call Jeff to discuss formats, procedures, and such.

An up-to-date projected completion date should be standard content.

Priority changes

Jeff has been working through the list assigning priorities and will have a complete update very soon. He notes some duplication of jobs, for example jobs 222 and 333 should now be combined into 222 and the scope changed to "upgrade existing" from "build new". AD regards jobs 276 and 279 as complete.

Next Meeting: Wednesday, 12 May 2004, 10:30 AM

Hermitage Videoconference Room (ICB)

Special topic: Power amplifier tubes