Minutes, 5/12/04 Tevatron BPM Upgrade Meeting
Stephen Wolbers

This set of minutes, and all future minutes, are or will be deposited in the Beams Document Database as document number 792.

The agenda as announced consisted of:

1. Report from Bob and Steve
   (including new baseline schedule)
2. Update from Dehong on the teststand
3. Reports from subproject leaders
4. Report from Jim Steimel
5. AOB

1. Report from Bob and Steve.

- The new milestones for V3.0 of the TeV BPM upgrade project (which is part of the Run 2 upgrade project) was shown. The new DOE milestones are the following. If these are not appropriate, not well-defined, or otherwise are not wise to use as major DOE milestones they should be modified quickly:

Tev BPM: Requirements Review (Milestone) 9/22/03
Core HW technical choice review complete 12/16/03
Core electronics PO complete 3/11/04
Core electronics 1st modified board delivered 6/15/04
Electronics design review complete 6/25/04
Core electronics 1st production board available 8/13/04
First production qualty crate installation begins 8/23/04
All Tev BPM crates functionally available (for F bldg.) 11/22/04
Tev BPM Electronics comissioning complete 2/17/05
Tev BPM Upgrade Operational 3/3/05

- Note that some of the milestones are tied to delivery of hardware (EchoTek boards), some are tied to the accelerator schedule (Installation from 8/23/04 to 11/22/04). Commissioning begins as soon as beam returns. The length of commissioning is a bit of a guess and depends on how commissioning and accelerator operations can be interleaved.

- There was a question about the integration milestone. It is not a DOE milestone but is one of the internal milestones for the project. Though not yet well-defined, it is clear that an integration of the project H/W and S/W on the teststand is essential. The integration test

will probably move from the teststand to the accelerator before the beam is turned off on August 23 so the integration will include a beam measurement as well with project H/W and S/W.

- A question came up about the BLM interface. At the moment we do not know what the BLM project intends to do about their connection to the controls system. We (the BPM project) will ask.

2. Reports from L2 Managers

Margaret Votava:

- A new version of the Echotek testing plan, AD doc 1114, has been posted (it is now at version 9). Steve asked whether this document has all the information needed to test and validate/verify that the modified EchoTek boards that arrive in June. This is necessary for us to give EchoTek the go-ahead to build the production boards. The answer is "yes". Bob, Jim and others should take a look and verify that this document (and the tests and measurements described) are complete.

- Luciano is away for another week or so.

Vince Pavlicek:

- Work proceeds on preparing for the hardware design review on Friday May 14.

Rob Kutschke:

- Rob is thinking about the offline software specifications document and does have a plan to finish it by next Monday.

- The calibration strategy will go in a separate document. This involves the frequency of calibrations, what needs to be stored, etc.

Dehong Zhang:

- As mentioned above the doc #1114 has been updated.

- Working on the new driver from EchoTek. Dehong has a plan to compile it and to gain as much understanding as possible prior to the new boards arriving in June.

Jim Steimel: Technical Coordinator Report

- The calibration specification document is in the doc DB as doc #1161. The

commissioning plan outline update is also in the doc DB as doc #1116-v2.

- The pbar cables are released all around the ring so that work went well. Some cables have been pulled back to the rack location where the new TeV BPM electronics will be housed (A3 was finished first).

- At the first opportunity the pbar ends of the pickups for all of A3 will be connected and it will be verified (or not) that this does not affect the current BPM measurements.

- The cable TV's have been moved. Don't know yet whether we have the open space we need in all the service building locations.

- Some information about all the data-taking modes that we will be using needs to be fed back to the specification/design/etc. stages of the project to ensure that the hardware and software are all prepared to handle them.

Brian Hendricks:

- Will look at the calibration document.

4. AOB.

- Margaret Votava brought up two issues:

  - Who will program the FPGA in the EchoTek?
  - Do we need to autodetect devices in the VME crate?