

# g2p/GEp Beam Transport Meeting Minutes

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**Attendees:** E. Folts, A. Gavalya, B. Dillon-Townes, K. Allada, D. Williams, T. Michalski, P. Kjeldsen, K. Mahoney, A. Camsonne, R. Lauzé

The following is a summary of issues discussed during the g2p/gep Beam Transport Meeting:

- The power requirements for PS for the FZ magnets was stated as 480V, 3 phase, 50A (x2)
- The total number of runs is projected at 26. Details will be included in the next revision of the Design Requirements Document.
- We discussed what is needed for monitoring the dump. This isn't the right forum, but we will track it to closure at this meeting.
- Need to inform George Lahti, Chris Cuevas, and Bill Gunning that they have action items.
- Butch presented an overview of the BPM and Harp layout at the meeting showing that we should be able to fit both. Since the meeting, 2 revelations have surfaced; the wall and window of the target chamber project further upstream than was thought and the bellows manufacturer says he needs another ~2" to accommodate the offset and angle required. We will discuss in a separate subject meeting next week.
- General statements:
  - Need feedback on the Experimental Definition Drawing
  - Need feedback on the Design Requirements Document
  - Need schedule of major milestones several groups

## **STATUS:**

### **OPTICS:**

- Nothing new to report.

### **MAGNETS:**

- We don't have any spare BD magnets, but 2 will be purchased from 12 GeV's bevy of spares.
- The FZ vacuum chamber should be ready for fabrication on 10/12/10.

### **BEAM TRANSPORT:**

- It was stated that 2 harps fit on the short articulating arm. In reality, it does not appear that they will due to new information since the meeting on Tuesday. This issue is still open.
- They are closing in on the 12" flange bellows.
- It is finalized that there is at least .5" clearance between the rastered beam and all hardware.
- Looking to sign off the Experimental Definition Drawing. Completion of the schedule is also close.

### **RAD CON:**

- Dump design is getting better.

### **SOFTWARE:**

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- It was noted that removing HW from Hall C for slow raster caused delay in bringing up beam to halls – Configuration Management...its coming.

## **VACUUM:**

- No status update

## **INSTALLATION:**

- No status update

## **ALIGNMENT:**

- No status update

## **EES – I&C:**

- The stripline BPM testing is on for this week-Thursday. Should have data by Friday.
- Arne has looked at the Calorimeter control chassis and the memories came flooding back. No resolution yet. Arne also thinks there might be a PS problem to supplement the PC104 probable issues.

## **EES – OPS:**

- The FZ1 magnet PS does not have current monitoring. Simon will add it.

## **EES – SSG:**

- No status update

## **TARGET/DUMP DESIGN ACTIVITIES:**

- Windows finalized. Continuing to design components

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## ***Action Items:***

Action Item #	Date Added	Action Item	Responsible Individual	Due Date	Date Closed
9	9/28/10	Power requirements for FZ magnets to Ed Folts. – 480V 3phase, 50A	S. Wood	10/8/10	10/12/10
10	9/28/10	Get a list of targets to Kelly Mahoney. The same info sent to RADCON	J.P. Chen	10/8/10	
11	9/28/10	Define the settings for chicane magnet current monitoring.	Y. Roblin	10/19/10	
12	9/28/10	Define if instrumentation is required for the low current dump. If so, what should be monitored?	TBD	TRACK to close	
13	9/28/10	Get SANE target screens to Henry Robertson.	G. Lahti	10/19/10	
14	10/5/10	Need to assess if two harps will fit on the articulating arm.	L. Dillon-Townes	10/12/10	
15	10/5/10	What is the actual quantity and order for the runs planned for the test plan? – 26 – see requirements document	J.P. Chen	10/12/10	10/12/10
16	10/5/10	Understand why there is a hole in the center of the rastered beam that comes from the faster raster/slow raster combination. Stated to be a waveform generator issue. Clarify this. If not HW, then probably SW?	C. Cuevas B. Gunning	10/26/10	
17	10/5/10	Get Accelerator Ops involved in reviewing the LC dump monitoring issues.	T. Michalski	10/26/10	

## ***Design Decisions:***

Date	Decision Item
8/31/10	The transport line exiting the FZ2 will have no vacuum connection to the target chamber. A beryllium window will terminate that line.
8/31/10	M20 BPM's were decided to be used on the transport line exiting the FZ2.
9/14/10	The Target will only be set at 80° and 90°, not 70°, per Al Gavalya.
9/14/10	The gap between the beam tube end and the target window was discussed. It should be minimized – consider 1 cm as a maximum gap. Re-opened during 9/21/10 meeting – look at using helium bag.
9/30/10	The requirement for BPM accuracy is 0.1mm – per discussion at BPM requirements meeting and subsequent analysis/e-mail from K. Allada.