

g2p/GEp Beam Transport Meeting Minutes

Attendees: T. Michalski, P. Kjeldsen, R. Lauzé, E. Folts, K. Allada, D. Williams, B. Dillon-Townes, K. Slifer, J. Butler

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

- Installation is going well. SR and FZ1 stands are installed and have initial alignment complete.
- The SR needs to have quantity 4 RG-58 cables run from the counting house down to the electronics rack. Kalyan will take this one, understanding if we have cables in place already which can serve the SR, ordering more cable (if needed), etc.
- The polarity switch control is 110V vs 220V, requiring a transformer. This will be taken care of after the PSs are moved to the Hall on Friday/Monday.
- The pallet for the AI magnet is already in Hall A. Therefore, the AI magnet can be moved down at any time (probably after the PSs are move in).
- Need to clarify what is required for powering the SR PS (Bill Gunning mentioned a UPS – who supplies?) and FZ2 stand motion mechanism.
- SR fans can be moved down to the hall; they have been identified and tagged by Shirley, currently located on the Physics Storage Building.
- The FZ magnets and their support structures (go between the stands and the magnets) can be moved down at any time. Ed says they will find a place in the hall to stash them.
- Butch to check fiducials on the FZ magnets.

STATUS:

OPTICS:

- Nothing new to report.

MAGNETS:

- Nothing new to report.

BEAM TRANSPORT:

- Region 1 – nothing new to report.
- Region 2 – nothing new to report.
- Region 3 – The FZ2 stand is on track. Butch to visit supplier next week. The moving mechanism has been shipped directly to the supplier.
- Finishing up the arms and girders – drawings starting today. Still working to finalize the orchestrated movement between the FZ2 and viewer/articulating arm.
- Harps – nothing new to report.
- Viewer – nothing new to report.

RAD CON:

- Nothing new to report.

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SOFTWARE:

- Brian Bevins will get BPM receiver hardware for his SW development/testing in 2 weeks (per Dave W.).

VACUUM:

- No status report.

INSTALLATION:

- Grouting of the installed stands will be at the end of this week or beginning of next.

ALIGNMENT:

- Getting final input from MEG for alignment of the FZ1 stand.

EES – I&C:

- Still on track for dates getting the harp motor controller and BPM receiver completed.

EES – DCP:

- Issue with voltage of polarity switch. Will be reworked in the hall.
- PSs moving to hall on Friday or Monday.

EES – SSG:

- No status update

TARGET/DUMP DESIGN ACTIVITIES:

- No status update

PHYSICS

- Mid summer collaboration meeting has been cancelled.

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Action Items:

Action Item #	Date Added	Action Item	Responsible Individual	Due Date	Date Closed
11	9/28/10	Define the settings for chicane magnet current monitoring.	Y. Roblin	TBD	
36	1/11/11	BPM testing with new electronics in North Linac – ½ done	J. Musson / D. Williams	???	
37	2/1/11	Resolve open question on FZ magnet power supplies.	V. Chen	6/23/11	
49	6/7/11	Address potential schedule issues with shifts in Harp controller chassis and Harp assembly completion dates	T. Michalski	6/21/11	6/14/11
50	6/7/11	See if Hall A Radcon box is acceptable for storing tungsten inserts for the dump.	E. Folts	6/14/11	6/14/11
51	6/14/11	Run quantity 4 RG-58 cables from the counting house to the SR electronics rack.	TBD	TBD	
52	6/14/11	Brian Bevins needs BPM receiver hardware for his SW development/testing.	D. Williams	7/5/11	
53	6/21/11	RG-58 cabling from SR electronics rack to counting house.	K. Allada	9/1/11	
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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. Will use helium bag – issue closed.
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.
12/6/10	Use 5.5" M15 antenna style BPMs in articulating arm!
12/6/10	JP committed to a 2 cm raster, if need be, to accommodate threading the beam through the articulating arm.
1/11/11	Decision to use harps in tune mode rather than low current.
4/5/11	We will not accommodate a special 1.1 GeV run with the target at the pivot. There will be no change to the FZ2 stand design and no need to reposition the chicane. Evaluation of 1.1 GeV beam through 2.2 GeV chicane position to be performed.
4/18/11	It was agreed that we will be moving the target up 9cm for the 1.1, 1.7, and 2.2 GeV runs when the target is in the 87cm upstream location. For the 1.1 and 1.7 GeV runs, the target magnet will be at 2.5 T, versus the 5 T for all other runs. Issue resolved without having to raise the target.
4/26/11	Decision to use 4'x4' platform for Al magnet and address any safety issues – rather than alternative to use existing stand in BSY which requires rework.