g2p/GEp Beam Transport Meeting Minutes

Attendees: T. Michalski, P. Kjeldsen, R. Lauzé, A. Camsonne, Z. (Vick) Chen, L. Dillon-Townes, K. Allada, E. Folts, T. DelaCruz, M. Ivanco

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

- Welcome back Marie. Mechanical Engineering co-op, focus on viewer and beamline install status.
- The 6MSD has started. Ed's crew has started disconnecting the beamline vacuum and wants to remove the EP and long girder. Need to have the EES techs disconnect their stuff and pull back/label their cables. Also check them for damage from radiation.
- Tim will check with Kelly to make sure he is aware of the timeline for disconnecting the diagnostics, etc.
- Update on the SR – DAQ is now tied to the SR and validation of the sweep path should occur tomorrow, Wednesday.
- The BCM action item is now closed.
- The BPM action item is still open, but the electronics are set. There will be more bench testing and adjustments will be made to the FW/algorithm. Currently capable of 250 um at 50 nA.
- Reviewed the latest list of runs.

STATUS:

OPTICS:

- New orbits for all runs to be completed by Wednesday.

MAGNETS:

- Nothing new to report

BEAM TRANSPORT:

- Region 1 – nothing new to report
- Region 2 – nothing new to report
- Region 3 – FZ2 stand – ordered and should be here by end of June. Need to work issue with motion system from collaborator. Still finalizing the support arms and positioning mechanism.
- Harps – due end of May.
- Working viewer screen and YAG crystal. Only have 1. Need to test the viewer with air, in the location where it will be installed.

RAD CON:

- No status update

SOFTWARE:

- Brian is making final adjustments to screens.

VACUUM:
- No status update

INSTALLATION:
- No status update

ALIGNMENT:
- No status update

EES – I&C:
- Harp – control chassis 1st proto due end of May.

EES – DCP:
- Testing of PSs will be in Bldg 36. Get them ASAP.

EES – SSG:
- No status update

TARGET/DUMP DESIGN ACTIVITIES:
- No status update

PHYSICS
- No status update

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	By 5/6	
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	TBD	
35	1/4/11	BCM testing at low current, w/ helicity, in ~~January~~ April.	J. Musson / A. Camsonne	4/?/11	5/17/11
36	1/11/11	BPM testing with new electronics in North Linac – ½ done	J. Musson / D. Willaims	4/5/11	
37	2/1/11	Resolve open question on FZ magnet power supplies.	V. Chen	Ongoing	
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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.
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.