

g2p/GEp Safety Systems and MPS Review Meeting Minutes

Attendees: T. Michalski, P. Kjeldsen, E. Folts, R. Lauzé, JP Chen, Z. (Vick) Chen, L. Dillon-Townes, A. Gavalya, K. Mahoney, C. Michaelides, G. Lahti

The following is a summary of issues discussed during the g2p/GEp Safety Systems and MPS Review Meeting:

- The goal of the meeting was to review the current state of the g2p system design to understand impacts to the Safety Systems and MPS. We wanted to go through this review prior to a potential experimental readiness review within the next 1-2 months.
- Region 1:
 - The question was asked if any MPS existed for the Calorimeter. The expectation is that there should be something as it has been used before. Need to check – Folts.
- Region 2:
 - There is supposed to be a jacket on the upside down girder's BCM. Butch says he took the jacket into account when doing the design. It should fit between the girder and the Moeller detector.
 - Is there anything from the Moeller detector which could lead to a false trigger on the BLM used at the BCM? The discussion stated that it was not felt so as field deflects the beam down, away from the upside down girder.
 - The statement was made that the constriction may be more of an issue if the beam is mis-steered.
- Region 3:
 - Lockout for the FZ2 stand will be implemented to make sure it is off. Will use a lever disconnect with administrative lock.
 - It was agreed that the FZ1 current monitoring will be at the PS. No issue or concern with the 2nd magnet in series.
 - If the viewer fails, it will be out of the beam (spring loaded).
 - There will be an ion chamber in the vicinity, after the chicane.
 - Stanchions will be used to support the viewer and articulating arm. Should not be an issue with space.
- Region 4:
 - There will be an ion chamber for the target.
 - There will not be additional shielding around the target chamber. Nothing will prevent sweeping the area.
 - Will add a thermocouple to the low current dump.
 - George asked if FSD masking judges will change. The answer from Kelly is yes.
 - There will be high radiation at the LC dump immediately after the beam is turned off. The LC dump will have an insert that is removable so that work can go on in the area. Not deemed a concern for performing sweeps.
 - A shield wall, ~4 ft from the FZ2, will protect a couple of racks. It is L-shaped and therefore does not require additional safety systems protection. It won't be in a location that shields ion chambers.
- 1 uA straight through current, 150 nA max through chicane. BLA can't go below 2 uA and therefore won't monitor g2p.
- Need a decision on dump regarding a thermal threshold interlock. Ask Pavel what temp the LC dump will get up to.