

MPP meeting 19 March 2010

Original agenda:

- SBF issue of Sunday 14.03 (B. Puccio)
- Status of injection and dump tests (ABT team)
- AOB

Present:

Matteo Solfaroli, Massimiliano Ferro-Luzzi, Nicola Bacchetta (CMS), Siegfried Wenig (ATLAS), Wolfgang Bartmann, Jan Uythoven, Chiara Bracco, Mario Deile (Totem), Bernd Dehning, Bruno Puccio, Christoph Kurfuerst, Markus Zerlauth, Benjamin Todd, Alejandro Castaneda, Maciej Kwiatkowski, Ruediger Schmidt, Mike Koratzinos

Minutes:

AOB

Excuses from Jorg, Ruediger is chairing the meeting. News: (Ruediger) First beam dump at 3.5TeV (after 3 minutes of beam) was the first test of the machine protection system at 3.5TeV (without problems from a first look).

SMP beam flag 1A event (Ben)

Ben started by reminding us about the system and a detailed account of the event. System is redundant: all flags are double (A and B). During this event, the overall state changed to undefined. 'Undefined' means that A and B flags are not the same. The discrepancy appeared on a masked channel but if there is any discrepancy, the masks are removed. If this happens, the loop is opened until things understood (we are using an 'on any fault → failsafe' approach). Discrepancy was due to a glitch for 6msecs on an external threshold board. The hardware will be changed to get rid of this problem. Implementation: a week to prepare and installation during the next technical stop to.

Measurements for 3.5TeV operation (Jan)

Jan presented the status of the LHC Injection and beam dump (LIBD) system starting with a to-do list, first for going up in energy and then for going up in intensity. Some of the items have already been done. He was surprised to find the LBDS to BIS timing as close as 20usec. P6 interlock threshold is 6mm for 3.5TeV and 4mm for high intensity. Ruediger: eventually we should review the threshold of 4mm, since orbit looks very stable. The threshold could be reduced and strengthen our protection.

Need to dump at intermediate energies, which will be time consuming. Ruediger: he is optimistic that we will get back to ramp rates of 10A/sec in the near future.

BIS loops should be linked all the time (so that a dump of one beam would dump the other). Need to demonstrate we can inject at $5 \cdot 10^{10}$ (problems before, need some hours to debug). LHC injection and beam dump changes. MKA and AC-dipole now require a physical key. Four people (including Jorg) have got keys.

AOB

Ruediger: suggestion from Jorg: All BLMs close to s/c magnets, should be put in the category of unmasked BLMs, if there are no other issues. For the small number where there are issues, discuss and agree with Jorg first.

Totem interlock tests finished. Report will be available.