

## End Week 8 (March 1<sup>st</sup> 2010) – Status of Accelerators

### Summary

<b>LINAC 2</b>	Good week overall
<b>PSB</b>	Very smooth operation last week
<b>PS</b>	Good week without major problems
<b>SPS</b>	Good week with LHCPROBE and LHCINDIV beams. No problems to report
<b>AD</b>	
<b>TI</b>	No major problems noted
<b>LHC</b>	Operation with beams since weekend.

### Linacs (M. O Neil)

#### Linac2:

Linac2 had a good week overall. Some problems with the DSC DLINTRAF front end on Thursday and Friday caused several short stops (<3hrs total). No further problems, since the CPU board was replaced on Friday.

### PS Booster (G. Rumolo)

The PSB operation during last week went very smoothly.

A few more beams were set up, or we started working on them, (LHC50, LHC25A, CNGS) and the energy matching to the PS was applied to a few users (LHCINDIV, LHC25A, TSTPS, LHCPROBE).

Some previous problems on the transformers in the BT/BTP line were fixed by BI. There was a request to perform some tests for Vistar by pulsing some magnets in the BTY line, but these have been postponed by a few weeks, because it is necessary to produce and install covers for some of the BTY magnets before powering any magnet in the line.

### PS (A. Grudiev)

Good week without major problems. Mainly work on the preparation of the LHC beams is going on.

LHCINDIV, LHCPROBE are ready and used in SPS.

LHCPILOT, LHC50 are in preparation.

Working point for LHC beams was reestablished and working point application was reinitialized.

Work on MTE extraction is well under way as well.

## SPS (K.Cornelis)

Last week the SPS was kept on standby, ready to provide beam to the LHC whenever required. Several tests and measurements were performed with the newly installed graphite scraper on the LHCFAST cycle.

We also commissioned a 26 GeV injection platform, which is used for the setting up of the transverse damper. We will need the damper for the setting up of the 50nsec LHC beam next week.

A recurrent “ghost” with the RF controls came back in the middle of the week. This problem seems to be linked to a bad contact in one of the crates in the Faraday cage. Shaking some cables and modules seems to cure a problem which is, until now, still under investigation. During the weekend the problem did not come back. The LHCPROBE beam was provided to the LHC for commissioning during the weekend.

## TI (P. Sollander)

No major problems noted this week.

No further electrical perturbations and no UPS problems to mention. Investigations are however continuing concerning the UPS + QPS problems seen the previous week.

This week, Friday, EN/CV had a controls (PLC) problem at point 5 stopping chilled water production and causing some trouble for detector cooling circuits. No major consequences though.

## LHC

Machine preparations for circulating and dump mode during the weekend.

RF setup of beam 1 started around lunchtime on Sunday. By 15:00 beam 1 was captured and the lifetime was 5 hours. At 21:00 RF work was finished also with beam 2.

At 22:00 circulating beams in both rings, beam measurement campaign (Q, Q', coupling, beta-beat, etc.). Also the synchrotron light undulators were on and measurements made.

At midnight beam operation stopped as planned for the cryo filter change in point 8. The intervention was planned for a minimum time of 12 hours, but might take a bit longer because of a problem with a level sensor.

In the shadow of the cryo intervention pre-cycles were made in the available six sectors. Some repairs are ongoing e.g. exchange of noisy QPS boards, etc.

Next steps for this week are to re-cycle all sectors, continuation optics measurements, work on timing & post mortem issues.