

End Week 13 (March 30th) – Status of Accelerators

AD

Re-installation work in the target area (magnet striplines) will start this week.

We aim to close the ring 20/4 and then start HW-checks.

Booster:

Cold check out phase completed, the machine is technically ready to take beam on Monday 30 March as scheduled. Patrouilles and safety chain tests for the PSB completed.

There are some issues with the fencing off of the PS surface area (caused by Linac4 civil engineering work), which is why the DSO does not give permission to send beam from Linac2 through the inflector zone. This will delay the start-up on Monday 30/3 until these issues are solved.

ISOLDE:

GPS: target #394 is now in the zone, a compressed air problem on the GPS V0 valve prevented it from going in on Friday 27/3 as scheduled, it will go in on Monday.

HRS: target is not yet ready, the target will be finished beginning of the week, will hopefully go in middle of next week.

Due to delayed targets, check out with beam can only start on Monday 30/3.

cooler RFQ: **vacuum integration not yet finished and RF installations scheduled for 6/4**; in the best case the ISCOOL will be running and tested end of week 15 (we cannot run a beam from HRS if the ISCOOL is off!) ***** becoming critical *****

REX

- EBIS and TRAP are already running

- **the linac RF is not yet ready**, needs to be up and running on the 6/4 to start the linac set-up (first REX run scheduled for 20/4). ***** becoming critical *****

PS

The PS shut down period officially ended last Friday. At the very last moment a ground loop current problem was solved. In the afternoon the PS patrol was done.

Good progress was made on the new main power supply regulation. This work will continue during the first few days of the cold check out. Tuesday afternoon a final discussion on whether to start with beam using the new or old regulation will be taken.

The PS Booster start up with beam, foreseen for Monday morning 8:30 is delayed, due to a non-conformity on the PS outside fencing as a consequence of LINAC4 work. The original fencing has partly been taken away and replaced by a temporary fencing, which is put too far inside the zone where the dose can be too high for the public (LINAC4 construction workers).

Monday morning this fencing will be modified to comply with radio protection standards, followed by the completion of the PS outside patrol, the installation of radiation warning panels and possibly a mobile radiation monitoring.

If this all goes well and smoothly the LINAC2 beam can then be transferred through the Ps tunnel to the PS Booster in the afternoon.

The cold check out of the PS will start on Monday morning and will last for the whole week.

SPS

On Friday evening the SPS was completely closed after a one's week extension of work in LSS2 and LSS5. This Monday the machine will be patrolled, chain 1 will be established so that we can start with the hardware commissioning of the main power supplies.

During the past week a first cold check out of TT10 took place. Changes in the timing control and LSA software, needed for the independent cycling, were tested and debugging was started using the TT10 power convertors.

Meanwhile a lot of accesses were still granted in the SPS ring in order to clean up the tunnel.

Technical infrastructure

No major problems for TI this week.

One minor event Tuesday 24 evening (in case somebody asks):

- Power cut in B866 trips ventilation in AMS clean room and fridges in resto 3. David Nisbet, EPC, called in to say that he had tripped a 3-phase switch. Some emergency stop alarms seen in the control room. TI operator and EL piquet on site to restore power.

LHC

Magnet testing finishing up the last SSS. Beam screen installation progressing well.

5 magnets installed in S34 last week.

A number of non-conformities (NCs) to be followed up.

1. Small partial gaps in bus-bar joints
2. Missing solder in bus bar ends
3. Loose spool cables

SSS006 – still trying to improve interconnect splice (quantity of solder etc.). LR recommends install SSS279 instead – would give 1 weeks delay.

D-area filling up nicely, brazing on-going but need to clear NCs as quickly as possible. Still aiming for finishing W24 but a lot to do.

Elsewhere in tunnel:

- W closure started, 1st 3 vacuum sub-sectors done in 56.
- S12: magnet replacement finished, SAM work progressing well
- S45: relief valves on IT
- S56: He SSS gauges finished
- 67: dipole out, replacement in tomorrow (31/3/09)
- Connection cryostat work ongoing
- DN200: S56 finished – work progressing well elsewhere.