PS 2008/9 Shut down progress report: Summary of shut down from November until now.

All Beams off: 12/Nov Tunnel open: 01/Dec Tunnel closed: 20/Feb

<u>Pre-shutdown tests</u> B-train studies: 12/Nov – 14/Nov MPS studies: 17/Nov – 21/Nov HV Tests; PFW measurements; Figure of Eight meas.

<u>Refurbishment of the last 9 Main magnets:</u> These magnets represent the last of the planned refurbishment program of 51 magnets. The program started in the long shutdown 2004/6.

MU68 type U13; MU70 type R13; MU26 type R27; MU65 type T23; MU99 type S06; MU72 type R36; MU58 type U0; MU69 type T08; MU23 type T21.

The MU23 has to be completed with a newly made vacuum chamber, reinstalled today: 4 February in the ring.

Magnet MU25: The Ion injection vacuum chamber at MU25 has been re-installed, also the flat figure of eight winding, done without displacing MU25.

There will be 4 refurbished spare magnets, one of each type R, S, T, U. Actually S07, R29 and T25 are refurbishing and will become the reserve magnets. Magnet U14 remains in reserve.

SMH and SEH maintenance has been done: SMH16-SMH26-SMH42-SMH57

<u>Vacuum Maintenance</u>: the LEIR to PS Ion injection chamber SS26/MU25 has been re-installed. Vacuum leak detected in the vacuum chamber going through BTP.DHZ40 and BTP.DVT50, the vacuum chamber has been replaced.

MTV Replacement of radiation tinted viewing ports. FTA.MTV9031, FTA.MTV9043 has been done.

Kicker Maintenance is on going.

<u>RF Maintenance</u> RF Bye-pass has been removed and reinstalled. (not measured). General maintenance of all 10MHz cavities is going on. Replacement of a faulty tuner on cavity PSC80-08 will be done tomorrow.

Beam Instrumentation PS

BPM's in MU 26, 34, 39, 68, 99 logbook 09/02/09 has been removed and re-installed.

Re-cabling of wideband electrostatic pick-up in SS94 is on going.

Calibration of pick-ups has been done. The gain to avoid the saturation problem with the CODD has been increased for few of them. A new pick-up has been installed in SS76 (with an impedance of 50 ohm, others are 75 ohm).

The Q-kicker magnet in SS82 has been removed.

Interventions on wire scanners 54, 64, 65 has been done

SEM Grid Installation new PLC control for which are in the injection: 42 and for 48, 52, 54 is on going. Installation of piping for N2 supply from building 350 to LSD63

Beam Instrumentation TT2

MTV Camera maintenance is ongoing

MTV Replace MTV352 by new tank + mecanism has been done.

Cooling and Ventilation Maintenance has been done.

Radiation Door 111-PO128 Conformity modifications: done.

Survey alignment : Booster to PS alignment reference established.

Re-cabling in PS tunnel plus buildings 355 and 365. is on going

Elimination of isolation drawers in building 365 has been done in December 2008. Displacement of SMH16 & SMH26 power supplies from building 367 to 359 plus cabling has been done.

Re-cabling of QSE, BSW23, BSW31, QKE16, BSW57, XSE, QKE16CT25

QKE16CT73, ODE in tunnel and building 355 or 365 is progressing well.

Reconfiguration of Doublets A and B new circuits in tunnel and building 365 is on going, also for the recabling of auxiliaries magnet interlocks.

All the latest information concerning the PS shutdown will be obtainable via the EN-MEF-ABA (ex-AB-ABP-RTL) web pages:

Planning and all shutdown news : <<u>http://ab-dep-abp.web.cern.ch/ab-dep-abp/RTL/Accelerators/PS.html</u>>