PS Hardware Commissioning



Many thanks to: Fernando, Patrick, Mike, Antoine, Thierry, Pieter, Alvaro, Didier Thibaut, Denis, Frank, Raul, Vincent, Fabrice, Abdel, Oliver, Stephane, James, Yves, Fulvio, Quentin, Gilles, Raul, Jean-Marc, Carlo, Heiko, Alexander, Dominique, Anthony....



HWC week 47

	Monday 16/11	Tuesday 17/11	Wednesday 18/11	Thursday 19/11	Friday 20/11
Morning	Main coils tests (Heat run, audio, visual and thermal checks) POPS stress tests	PFW+W8L coils tests (Heat run, audio, visual and thermal checks) Polarity checks PFW	POPS + PFW lockout Intervention on the main units to fix issues	Will depend on progress made (Polarity checks PFW, magnets in series with SWY)	Will depend on progress made (Polarity checks PFW, magnets in series with SWY)
Afternoon	Main coils tests continued	PFW+W8L coils tests continued	Main + PFW + W8L Heat run and checks		
Comments	Only POPS pulsing SPECIAL PERMIT	Only PFW/8L pulsing SPECIAL PERMIT (for safety reason)	M : Access A : SPECIAL PERMIT	C10 MHz water cooling circuits works	

HWC week 48

	Monday 23/11	Tuesday 24/11	Wednesday 25/11	Thursday 26/11	Friday 27/11
Morning	Main coils + PFW + W8L tests (Heat run, audio, visual and thermal checks)	Lockout and remove Covers aux. magnets circuits common with PSR F61 magnets tests	Magnets tests Recabling S74 Lockout circuits (common SWY-PSR) Re-install covers	Bumpers magnets tests PSR LE correctors /quads heat runs and polarity tests	PSR/SWY accesses 10 MHz Long. Damper Survey
Afternoon	Main coils + PFW + W8L tests (Heat run, audio, visual and thermal checks)	Switchyard aux. magnets circuits common with PSR F61 magnets tests	PSR LE correctors /quads heat runs and polarity tests	Lockout circuits Re-install covers	PSR/SWY accesses 10 MHz Long. Damper Survey
Comments	SPECIAL PERMIT	SPECIAL PERMIT			
CERN BE BE					

- Safety first
 - Current accesses in Special Permit Mode
 - The n-TOF situation : the grid installation will be completed this morning
 - Then we will patrol, remove the lockout on FTN power converters and proceed with the HW commissioning
 - SMH16 out of the chain



- MSC tests
 - Heat runs, magnets inspections and polarity tests ongoing
 - Main coils / PFW / W8L inspections finished yesterday "only"
 - Preventive maintenance, reparation of W8L took longer than expected because of too long screws
 - Unusual noise heard in the machine, thorough investigation all day long yesterday
 - Source of the noise has been identified as the new regulation of the PFW and our functions with singular points (to be smoothed)
 - Shift and rearrangements of the original planning but no delays
 - Today beginning of the switchyard magnets with common circuit with PSR

Commissioning

ms Department | Operation

- Almost all auxiliary power converters are ready for magnets tests and controllable from the CCC
- PR.DVT74 / PR.QSK74 : cabling in the machine tomorrow
- Programmed functions for MTE and Slow Extraction multipoles (and bumps) have been optimized (avoid singular points with new converters and regulation)
 - Fine tuning initially scheduled 01/2021
- Support of the vacuum chamber broke between F16.BHZ377 and F16.BHZ378
 - Several bellows broken
 - TE-VSC organizing repair
 - No showstopper for beam enough time margin for TT2
 - See Jose's presentation in AOB

- Dry runs and tests completed
 - KFA28 ok (signal saturation issue solved)
 - KFA13 and 21 ok
 - SMH26 ok but no acquisition : diagnostics delayed since SMH26 now has a veto
 - No rush
 - SMH16 ok
 - SMH61 ok
 - SMH57 good progress, Phase 4 will begin soon
 - Earlier start of B ramp-up tests ok for POPS



Comments / Questions

Gantt: <u>https://oss-coordination.web.cern.ch/gantt/latest</u>

Do not forget to send email if an IST is done: <u>ist.done.ps@cern.ch</u>

16:30 Daily Zoom meeting Web address: <u>https://cern.zoom.us/j/95705566988?pwd=ZVZFOEVLV2dzZDZ0V2FQZzJvZkdRUT09</u> Meeting ID: 957 0556 6988 Passcode: 848884

