



Cooling activities update

Claudio Bortolin



SDD/SSD cooling maintenance



- pump: replaced
- outlet filter: **replaced**
- demineralized cartridge: replaced
- mechanic filter on air control: replaced
- SSD chilled water valve: replaced (it was leaking)
- safety valve on the tank: replaced
- alarm security test: done
- upload new program PLC (ramp of p regulator SSD): **done**
- temperature sensors loop 17 & 18: replaced



SPD cooling maintenance



- pump replaced
- dehydrator cartridge replaced
- inlet mechanic 1um filter replaced
- chilled water valve replaced (leak on the top)
- one of compressor was replaced
- some safety valves were recalibrated and installed (10 bar pump valve and 8,5 bar in the inlet manifold, 3,5 bar tank valves): done
- 10 safety valves on the loops (return side) replaced
- test security alarm: **to be done**
- BPRs installation: **Postponed to 2013**



UPS integration



In case of UPS intervention a 24 V signal is issued to the control rack. UPS is supposed to supply the power to the plant for ~15'. When the UPS signal is triggered, the plant should:

- wait for 30"
- decrease the pressure to the minimum value (3 bar?) in ~1'
- put the plant in recovery mode

in case the plant is in recovery and the detector is off:

- the shift leader or the DCS shifter calls the SPD expert on call
- the SPD expert on call calls the cooling piquet when the situation is safe enough to put the system back in run mode.



UX25 access restrictions



		Dec					Jan				Feb				Mar
Wk	49	50	51	52	1	2	3	4	· 5	6	· 7	· 8	9 ·	10 ·	11
Мо	Ę	5	19) 26	2	9	16	23	30) 6	•	20	27	5	12
Tu		After							•		After				
We		17:00							•		17:00				
Th													DSO		
Fr	After 17:00	Open L3					AUG			Close L3	48V (EL)	Lift	030		
Sa											After 17:00				
Su			Xmas Day	NY Day											

Access restrictions:

Removal/installation of shielding (restriction includes RB24 triplets)

- PX24 blocks: no access CR5 and UX25
- PX24 beams (35t): no access CR1-5, Expo, and UX-25
- All other blocks: no access to UX-25 (or 1-2 teams max, not on A-side) TRD insertion: no access to MNF and L3

AUG test (*Arrêt Urgence General* – General Emergency Stop) – no access UX25 DSO test (Department Safety Officer) – no access UX25

No access SX2 during manipulation of blocks in SX2 (except ACR and WRs)



No access (except transport)

Access possible

No access



L3 and MNF access restrictions



	Dec						Jan				Feb				Mar	
Wk	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	
Мо	5		19	26	2	9	16	23	30	6		20	27	5	12	
Tu		After									After					
We		17:00									17:00					
Th													DSO			
Fr	After 17:00	Op en L3					AUG			Ventilation	48V (EL)	Lift	- 050			
Sa		ventilatio n									After 17:00					
Su			Xmas Day	NY Day												

Wks 49-50 and 7: access in normal hours (e.g. TPC) to be coordinated with TC

Wks 1-2: no access inside L3 during TRD SMs insertion

When moving from low-beta to insertion platform: no access to MNF When inserting the module: no access L3 and MNF

Watcher needed in wks 49-50 and from wk 6 (Fri 10/2) onwards