HARDWARE COMMISSIONING COORDINATION

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NEXT RAT meeting
Friday 23.03
8:30 in CCC
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March 21st, 2007, 8:30 in CCC

Present: Matteo Solfaroli, Alejandro Castaneda, Knud Dahlerup-Petersen,
Claude Dehavay, Jacques Toullieux, Jean-Pierre Malod-Dognin,
Hubert Gaillard, Ronaldus Suykerbuyk.

SCT in UJ33

- AC: -
- DC cables:
  - During the morning (Monday 19.03) temperature sensors are been
    positioned in the ducts for the heat runs. The powering of the
    cables has to be stopped. This operation will take 2 hours. DONE
  - Re-cabling of the DQS zone — RA38 — will start today. DONE
  - WorldFip cable in 600A EE racks will be replaced this afternoon (see
    WorldFip paragraph).
  - Jean Claude Guillaume has provided the table of the facteur de
    utilisation of the cables to be used for the 8h run (foreseen for 5th
    of April). He also asked to perform the 8h run on 4th of April
    (instead of 5th) in order to have 2 days. The approach proposed for
    this test is the following: beginning with the value reported in the
    table and then (4 hours or one day after), depending from the
    temperature, going up.
  - A cable installation is foreseen in the tunnel for week 14th. On 28th
    of March Jean Claude and Emmanuel Paulat will be in the tunnel in
    order to evaluate the situation. A person from HCC is required.
  - Jean Claude informed that the 13kA water cooled cables will be
    available from week 16th in the right part and from week 17th in
    the left one. Knud pointed out that it means a delay of 2 or 3
    weeks.
Power converters:

- All the Power Converters of the DFBAE have been tested.
- List of the Power Converter that will have the **green light** (after the *balisage* will be put in place) from this afternoon to be tested is the following (the short circuit of the cables starting from these converters end over the Warm Magnets):

<table>
<thead>
<tr>
<th>PC NAME</th>
<th>RACK NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>RPMC.UJ33.RQT5.R3</td>
<td>RYME02</td>
</tr>
<tr>
<td>RPMC.UJ33.RCBWV4.R3B1</td>
<td>RYME04</td>
</tr>
<tr>
<td>RPMC.UJ33.RCBWH4.L3B1</td>
<td>RYME05</td>
</tr>
<tr>
<td>RPMC.UJ33.RQT4.L3</td>
<td>RYME06</td>
</tr>
<tr>
<td>RPMC.UJ33.RCBWV5.L3B1</td>
<td>RYME07</td>
</tr>
<tr>
<td>RPMC.UJ33.RQT5.L3</td>
<td>RYME08</td>
</tr>
<tr>
<td>RPMC.UJ33.RCBWH5.L3B2</td>
<td>RYME09</td>
</tr>
<tr>
<td>RPMC.UJ33.RCBWV4.L3B2</td>
<td>RYME10</td>
</tr>
<tr>
<td>RPMC.UJ33.RCBWH4.R3B2</td>
<td>RYME11</td>
</tr>
<tr>
<td>RPMC.UJ33.RCBWH5.R3B1</td>
<td>RYME13</td>
</tr>
<tr>
<td>RPMC.UJ33.RCBWV5.R3B2</td>
<td>RYME15</td>
</tr>
<tr>
<td>RPMC.UJ33.RQT4.R3</td>
<td>RYME16</td>
</tr>
</tbody>
</table>

Cooling and Ventilation: -

WIFI: -

WorldFIP:

- After a discussion by phone, Baptiste Lebeau reported that the 18 WorldFip cables that cross the racks of 600A EE system will be replaced this afternoon. Then they will be changed before the 8h run as asked by Knud and Claude Dehavay.

Energy Extraction:

- 600A Interlock tests have been completed on Friday. **DONE**
- Re-fixing of the cables of the 13kA EE System in RA38 is ongoing.
- The functional tests of the 13kA (with measurement of timing and delaying) are finished – no problems encountered.
- The equipment for the electro-Magnetic compatibility (13kA EE sys – rest of the equipments working in the tunnel) test will be available by the end of this week. The set up will be next week; in this case the tunnel (up to R37) should be closed for 1 hour. The test will be performed on 2\(^{nd}\) of April.
13kA EE sys Interlock test will be performed after the 24hr run (after the 10.04). To power the DQS the possible solutions are:

- Bring to the DQS zone one portable converter, in this case only 2000A could be reached;
- Bring to the DQS zone two portable converters (Knud has one and David Nisbet the other one), in this case 4000A could be reached;
- Extend the cables of the near circuits. Cables of two circuits can be extended from the DFBM (meaning about 40 m) but the other four cables should be extended for about 120m. Jean Claude pointed out that this solution is probably too complicated and too expensive.

- Further discussions will follow – Jean-Claude/Knud/David.

**Balisage:**

- Visualization of the short circuit for the DFBA circuits has been put in place. DONE
- Balisage for the 120A is already done. DONE
- Visualization of the short circuit for the DFBM’s circuits and for the cable in the tunnel has been put in place.
- *Balisage* for the short circuits of the circuits that feed the Warm Magnets will be put in place in the first part of this afternoon. After this operation the green light to start with the short circuits test will be given.

**Installation:**

- The installation team (Huber) will attend the first RAT meeting every week to inform about the activities:
  - Warm magnets are being transported and placed in the tunnel during week w11.
  - Works on the DSL line (leak tests & connection)
  - The DFBL will be installed on Friday 23th of March in the UJ33. The arrival is supposed to be at 4pm. No current should be in the tunnel.
  - Installation of the ventilation door in UJ33 should be carried out w13. This issue will be confirmed by Hubert.

**AOB:**

- Knud informed that a PC that was inside a rack has been stolen in the UJ33.
Open Issues

15.03  Too short WorldFip cables in 600A EE sys racks
15.03  Connection of the 13kA switches to power
13.03  Re-fixing of the cables of the 13kA EE System in RA38
13.03  Temperature sensors positioning in the ducts for the heat runs
08.03  13kA water cooled cables to be installed
08.03  Definition of the powering strategy for the heat runs

Closed Issues

13.03  WorldFip QPS segments to be validated         15.03
08.03  Powering of the PIC racks (CYCIP01 - CYCIP02)  13.03
08.03  PIC system IP address verification            13.03
08.03  Grounding missing (DQR, DJRB box, Roese Station) 13.03
08.03  Missing cable: link between Roese Station and CCC 13.03
08.03  Cable 48 wires to be replaced on the DJPC       13.03

Boris/Blanca/Matteo

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Open Issues SCT in RR73 and UJ76

01.03  Leakage in the two water cooled cables in RR73 (Baptiste)
01.03  Disconnections of the cables from the EE in RR73 (Baptiste)
01.03  AU unexpected during 24hr run. TS-EL investigating
22.02  Polarity tests do not include the warm magnets cables
22.02  Verification of the EE water cooled cables of the odd points
22.02  Wrong filter position in the PC cooling circuits
08.02  Temporary WIFI cable to be replaced by TS/EL – IT/DI

Open Issues SCT in UA67 and UJ67

13.02  Report on the AUG-
12.02  PM generated but stacked in local
12.02  Few labels missing for cables identification
05.02  Little ducts between UA and RA not closed during the 24hr
02.02  RSF2.A67B1 and RSF2.A67B2 PIC cables to extend
02.02  NC opening on the bad connection of the “plages” on the 6kA racks
08.01  EE fan rotation problem – all ring