

WARM MAGNETS COMMISSIONING POINT 5
HARDWARE COMMISSIONING COORDINATION

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NEXT RAT meeting
Monday 21.05
08:30 in 3595/R-013
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May 11th, 2007

Present: Esther Barbero, Boris Bellesia, Maria Paz Casas Lino, Pierre Dahlen, Carlos Fernández, Jacky Mazet, Blanca Perea, Hugues Thiesen, Jean Weber.

Point 5 – Contact HCC person: María Paz Casas / Boris Bellesia / Blanca Perea

During the meeting the following points were agreed:

1. People involved in each step of the tests
2. The latest that the infrastructure conditions must be ready
3. DC cables connection to the power converters after the WIC Magnet
4. Time requirement for each step and planning
5. Security issues

The presentation attached below shows the conclusions.

Maria Paz for the Hardware Commissioning Coordination

WARM MAGNETS COMMISSIONING POINT 5

11/05/2007

MAIN STEPS

- ❑ **POWER CONVERTERS IST** (Type 1, high voltage)
(Hugues Thiesen)
- ❑ **WELQA** (Mikko Karppinen, David Smekens, Jacky Mazet)
- ❑ **WIC MAGNET** (Pierre Dahlen)
- ❑ **WIC PC** (Pierre Dahlen)
- ❑ **SETUP WARM CIRCUITS** (Hugues Thiesen)
- ❑ **WARM CIRCUIT POLARITY TEST** (Mikko Karppinen, David Smekens, Jacky Mazet)
- ❑ **WARM CIRCUIT HEAT RUN** (Mikko Karppinen, Jacky Mazet, Jean Claude Guillaume, Hugues Thiesen, Baptiste Lebeau)

INSTALLATION REQUIREMENTS

Before PC IST (HV) (Surface)

- ✓ AC Distribution ready
- ✓ Interlock system disconnected from converters end
- ✓ Worldfip, WiFi
- ✓ DC cables disconnected from the PC and PC in SC

Before WELQA

- ✓ DC Distribution ready: *Labelling at the level of the magnets and PC properly done*
- ✓ Demineralized water circulating: *Connections and balancing properly done*
- ✓ Ventilation ready
- * DC cables connected to magnets and disconnected from PC
- ✓ Magnets aligned and vacuum chambers between magnets and cold sections installed (*not imperative*)
- ✓ Magnet yokes connected to ground
- ✓ Instrumentation interlock system disconnected from magnets end

Before WIC

- ✓ Interlock system connected at the converters end (*not imperative*)
- ✓ Instrumentation interlock system connected at the magnets end
- ✓ Ethernet ready
- ✓ WiFi ready
- ✓ Control infrastructure completely operational (FCR and CCC)
- * WIC MAGNETS: DC cables connected to magnets and disconnected from PC . (If for any reason the cables are connected to the PC, the PC must be connected to ground and “consigné”)
- * WIC PC: DC cables connected to magnets and to PC . (PC “déconsigné”)

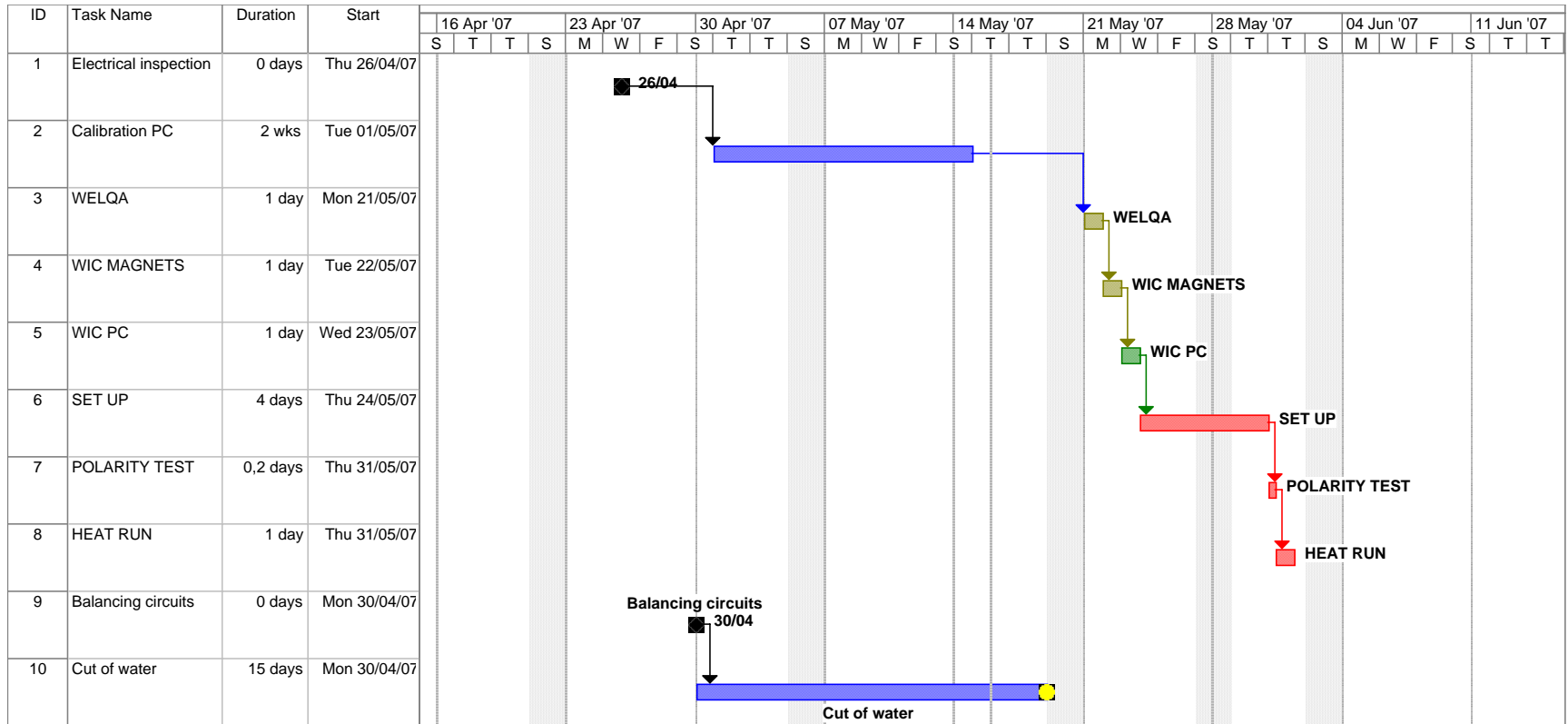
Before SETUP

- ✓ Worldfip ready

TIME REQUIREMENTS

- POWER CONVERTERS IST (Type 1, high voltage) → 2 WEEK
- WELQA → 1 DAY
- WIC → 1 DAY
- WIC PC → 1 DAY
- SETUP WARM CIRCUITS → 4 DAY
- WARM CIRCUIT POLARITY TEST } 1-2 DAYS
- WARM CIRCUIT HEAT RUN }

PLANNING WM5



Power converters:

- Proper signalization and fencing

Tunnel:

- Barriers with signalization to prevent the access into the warm magnets area.

- During the **WELQA**, AT/MEL personnel must be at the level of the PC and Magnets to prevent the access.