MERIT Video Conf.
Cryogenics
CERN
Feb. 14, 2007
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Cryogenics for Experiments
On Surface Commissioning at Hall 180 + Final location of MERIT

Location of **test area at hall 180** for the pre-commissioning cryogenic equipment in combination with the control system

Approximate location of LN2 dewar (at surface)

Approximate location of MERIT at n-TOF (underground)

Lay-out of CERN Meyrin (western part) with MERIT locations

Control room
Distribution Valve Box and other equipment

DVB and Heat Exchanger

GN2 bottles for pressurisation

Electric cabinet on DVB
Distribution Valve Box with Heat Exchanger and temporary buffer volume

Buffer volume to simulate magnet cryostat volume with integrated Heater to simulate evaporation during recooling
Liquid Nitrogen Dewar

Control Valves installed and connected.
Special Filling « Safety » Valve
Controls

- Functional cryogenics logic terminated
- Unicos Process logic programmed
- Supervision (PVSS) program terminated for final point (with magnet) and for test area (with magnet cryostat simulated)
- Implemented in control room
Situation at test area

- Mechanical installation completed
- All instrumentation installed
- Cabling terminated this week
- Process control PLC, supervision and network installed
- Process control and supervision logics done and implemented
- Week 7: « synchronisation » of the complete system
- Week 8 +: pressure test, cold tests (filling of dewar, cooldown of system, calibration of sensors and control equipment, simulation of cycle with cooling, filling, emptying etc.)
Progress on Construction site at final place

- Building
- Dewar
- Transfer line
- Lid
- Concrete platform for dewar
- Flexible transfer line under construction
- Concrete support posts for transfer line