Powering tests and safety: Introduction

Why this meeting?

- Improve the knowledge on risks
- Clarify procedures to avoid risks

- A day dedicated to safety issues was organised in 2007
- In general, the material presented at that time is still valid and provides many details

- There is a new approach to powering and access, and this will be presented and discussed today

Safety during Hardware Commissioning

18 October 2007

Opening session
Conveners: Roberto Saban (CERN)
(AT Auditorium: 09:00 - 09:10)

Safety for the LHC
Conveners: John Robert Etheridge (CERN)
(AT Auditorium: 09:10 - 09:40)

Safety during Hardware Commissioning
Conveners: Matteo Solfaroli Camillocci
(AT Auditorium: 09:50 - 10:10)

Coffe break
(AT Auditorium: 10:20 - 10:40)

Safety during the interventions
Conveners: Hugues Thiesen
(AT Auditorium: 10:40 - 11:00)

Electrical works vs Not electrical works in electrical environment
Conveners: Valerie Montabonnet (CERN)
(AT Auditorium: 11:10 - 11:30)

Special cases of cryogenic intervention
Conveners: Serge Claudet
(AT Auditorium: 11:40 - 12:00)

Lunch break
(AT Auditorium: 12:15 - 14:00)

ElQA activities
Conveners: David Bozzini
(AT Auditorium: 14:00 - 14:20)

Energy Extraction system
Conveners: Knud Dahlerup-Petersen (CERN)
(AT Auditorium: 14:30 - 14:50)

QPS system and its risks
Conveners: Reiner Denz (CERN AT-MEL-PM)
(AT Auditorium: 15:00 - 15:10)

Coffe break
(AT Auditorium: 15:20 - 15:40)

New documentation
Conveners: Hugues Thiesen
(AT Auditorium: 15:40 - 16:00)

General CERN safety
Conveners: Marc Vadon (CERN)
(AT Auditorium: 16:10 - 16:30)

Closure session
Conveners: Rudiger Schmidt

http://indico.cern.ch/conferenceDisplay.py?confId=22150

Powering tests and safety

- Since the helium release last September, the safety measures were re-discussed and enforced
  - the event demonstrated that the rule of “no personnel in the tunnel during powering of above 1kA” was more than justified
- New constraints were introduced
- The most important parameter to assess the risk during powering is not the current in an electrical circuit, but the energy stored in the circuit
- Two phases of powering and access conditions were defined
  - Powering Phase I
  - Powering Phase II
- At several occasions this has been presented to LMC, and several procedures have been written
- Today, the outcome of this work is presented
- Comments and questions are welcome, to be clarified until restart of powering tests in August

Today's programme

- R. Schmidt - Opening session
- M. Pojer - Powering tests
- M.Solfaroli - Underground access during powering tests
- H. Thiesen - Electrical safety
- J. Coupard - Cryogenic safety
- L. Ponce - Operational tools
- G. Arduini – Discussion and conclusion: What did we learn? What can we improve?

Remarks

- Safety of people has always the highest priority
- All work, tests, interventions must be planned, prepared, authorized and the agreed procedures respected

There a several colleagues prepared to help for any kind of questions

- Ghislain Roy and his team
- John Robert Etheridge, Emmanuel Paulat, Michel Arnaud
- Safety commission (B.Delille and colleagues)

- and for the coordination the Hardware Commissioning Team (point owners) and the Shutdown Coordination Team