International Review of the Electrical Infrastructure for HL-LHC

Report of Contributions

https://indico.cern.ch/e/836349
Introduction to the HL-LHC project

Tuesday, 17 September 2019 09:00 (20 minutes)

Presenter: TAVIAN, Laurent Jean (CERN)
CERN transmission and distribution network

- Single line diagram
- Principles of CERN electrical network (normal, pulsed, secured, ups...)
- Overview existing and HL-LHC loads

**Presenters:** BELLEGARDE, Nicolas (CERN); BERTOLASI, Stefano (CERN)

**Session Classification:** Transmission network: LHC1
Technical description (Loads / Existing SLD / Proposed SLD) + cost and planning

Tuesday, 17 September 2019 09:50 (20 minutes)

**Presenter:** BERTOLASI, Stefano (CERN)

**Session Classification:** Transmission network: LHC1
Filtering

Tuesday, 17 September 2019 10:10 (30 minutes)

Presenter: KAHLE, Karsten (CERN)
Session Classification: Transmission network: LHC1
Technical description (Loads / Existing SLD / Proposed SLD / substation / power line) + cost and planning

Tuesday, 17 September 2019 11:00 (40 minutes)

Presenter: BERTOLASI, Stefano (CERN)
Session Classification: Transmission network: LHC5
Filtering

Tuesday, 17 September 2019 11:40 (30 minutes)

Presenter:  TE/EPC

Session Classification:  Transmission network: LHC5
CERN transmission and distribution network

Tuesday, 17 September 2019 09:20 (30 minutes)

- Single line diagram
- Principles of CERN electrical network (normal, pulsed, secured, ups...)
- Overview existing and HL-LHC loads

**Presenters:**  BELLEGARDE, Nicolas (CERN);  BERTOLASI, Stefano (CERN)
Distribution network (common for LHC1 and LHC5)

Tuesday, 17 September 2019 13:30 (2 hours)

- Technical description + planning - Medium voltage - Low voltage - Normal - Secured power systems (Gensets / UPS) - 48 Vdc - Safety systems (Emergency lighting / AUG)

Presenter: DOS SANTOS, Nuno (CERN)
Contribution ID: 9

**Question session**

*Tuesday, 17 September 2019 16:00 (1 hour)*

**Presenter:** ALL
Close out of the Review

Wednesday, 18 September 2019 09:00 (1 hour)