



Meyrin, 27.01.2016

# Minutes of Meeting on the 11T Dipole Trim Powering Meeting held on 27 January 2016

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## 1. Attendees

L. Grand-Clement, H. Prin, F. Savary, B. Auchmann, L. Bortot, H. Thiesen and S. Yammine

## 2. Agenda

The purpose of the meeting is to discuss the TRIM PC for the 11 T dipoles and its integration in the RB circuit.

## 3. Discussion

### 3.1 Deadlines

Two main deadlines were recalled in the meeting:

- The review deadline in April (06-08/04/2016) where all integration and technical issues should be raised
- The LS2 deadline at the end of 2018 where a TRIM PC and an 11 T dipole should be delivered to be integrated in the dipole circuit. The integration of the TRIM PC is important in the LS2 to be able to provide feedback on its necessity for the LS3 (2019-2020).

### 3.2 Technical Aspects

- Bernhard stated in the meeting that the CLIQ system could add around 0.5 V oscillatory voltage on the bypass diode and that should be taken into account in the TRIM PC design.
- Bernhard also recalled that the forward voltage of the bypass diode is around 6 - 6.3V and is quite constant. For his part, Hugues recalled that this bypass diode should not be turned on in the case of TRIM PC failure. Therefore, the forward voltage should not be passed, in the case of TRIM PC failure, with a certain margin taken into account.
- Hervé presented the schematic of the MBH prototype circuit with the presence of the collimators, and he stated that the first MBH magnet prototype will not include a bypass diode.
- The attendees agreed that the cables for the TRIM PC that will be added to the prototype should be sized for 600A – 1000 Amax.



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### 3.3 Testing

- Since the first MBH magnet prototype does not contain a bypass diode, Hugues proposed that the tests of the TRIM PC can take place on SM18.
- A test procedure should be analysed and discussed in the next meeting in order to decide on the prototype configuration for testing. This is urgent since it can impact the workload in the future. In consequence, simulations will be done and presented in the next meeting.

### 3.4 Organization

The attendees proposed a biweekly meeting to take place in order to follow the advancement of the 11 T dipole powering.