Minutes from the LBNF-BARC meeting

July 23, 2020

Present:

1. From BARC: Sanjay Malhotra, Elina Mishra, Kumud Singh, Vikas Teotia, (S.Sundar Rajan, Janvin Itteera, U.G.P.S.Sachan, Prashant Karn)
2. From FNAL: David J Harding, Kevin Duel, Dave Hixon, Vladimir Kashikhin, Jonathan Lewis, Thomas R Kobilarcik, Philip Schlabach, Salman Tariq, George Velev, Karl Williams, Miao M Yu

Agenda:

1. Project update
2. Action items update
3. Engineering design of 6-m long dipole
4. BARC magnet qualification traveler
5. AOB: Risk
6. Project update: None
7. Action items update: the status list is uploaded to the Indico page.
8. Engineering design of 6-m long dipole by Udai Sachan

Question and Discussion:

* 1. George: hydraulic press is existing or to be built?

Answer: to be built.

* 1. Dave: concerning about the flatness of the stacking core.

BARC Required flatness will be ensured

* 1. Miao: Sagitta for 6-m dipole is 16 mm.
  2. Jonathan: is Sagitta taken care of during winding?

Answer: the straight coil will be shaped during moulding/vacuum impregnation. Chris: When the Hipot is planned during coil fabrication and magnet assembly?

Dave: Coil in the mold before and after impregnation, into half core and finally in the magnet. After potted, the Hipot voltage is the same.

* 1. Dave: did BARC receive the FNAL traveler including coil test specification. FNAL will send BARC again the document.
  2. Dave: QC on the lamination, go/no-go gauge?

Answer: Random samples of main body lamination and all end-pack laminations will be inspected.

* 1. George: is the die planned to be sharpened frequently?

BARC: few magnets, not many laminations. BARC will check the lamination carefully.

Dave will look

1. BARC Traveler by Elina Mishra
   1. Does Assembly Cert. contain the traveler steps? Is the responsible person assigned for each step?

BARC: Yes. Responsible person is assigned for each step.

* 1. Magnets will be built outside in the industry.
  2. Jonathan: When will the traveler for FNAL magnet be ready, for coil, lamination, and magnet?

Sanjay: before design report review.

1. AOB: project risk

Action item:

1. FNAL will send the FNAL traveler including coil test specification to BARC.
2. FNAL (George and Dave): Design report review for quadrupole and dipole (2-day review, each day 3 hrs). What documents are required for the review.
3. Salman will provide an example for magnet risk document.

Next meeting will be held on 8/13, 8:45am/7:15pm (FNAL/BARC)

Agenda:

1. Project update
2. Follow up with all the action items on quadrupole/dipole design.
3. Risk registration
4. AOB