

To: MICE Management
From: MICE Project Board

Date: March 8, 2012

Close-out from MICE Project Board Meeting 3 – March 8, 2012

We congratulate the whole team for the significant and evident progress that is visible on all fronts, and for their increased confidence, since MPB2 !

Thanks for all the hard work made in preparation for this review.

It is gratifying to see the encouraging and interesting results of the successful December 2011 data-taking run.

2 SUPERCONDUCTING MAGNETS

Findings

There has been significant progress on all 3 types of magnet, but especially the Spectrometer Solenoids.

Much attention is being paid to the important issue of magnetic shielding in the MICE hall and its environs.

Comments

Supervision is in good hands, but vigilance is required to minimise schedule slippage.

Given the success of the ‘Roy Preece role’ with the Spectrometer Solenoid, we strongly support the assignment of a similarly qualified person to carry out this role for the Coupling Coils.

We endorse continued evaluation of magnetic shielding issues, with particular attention to the background turbo-pump and electronics rack shielding, and the search for alternatives.

The magnet schedules that were presented are more credible and realistic than before, but would still benefit from more contingency.

Recommendations

- 1.** Look further at the temperature margin on the Coupling Coils and make a decision as soon as possible on the copper to superconductor ratio for the production MICE coils.

3 RF SYSTEM

Findings

The first cavity was tested and achieved stable operation at nominal gradient and at about 50% of full magnetic field at the RF window.

There has been a thorough review of the RF system, including information from similar operationally representative systems.

Comments

Continued study of the RF design specifications is encouraged.

We endorse the creation of the MICE RF group that will be responsible for coordinating RF system activities across the collaborating institutions.

Recommendations – None.

4 COST, SCHEDULE AND MANAGEMENT

Findings

The Step 4 run is scheduled to occur before the ISIS long shutdown (August 2014 to February 2015) while Step 6 is targeted at beginning in 2016.

Plans for CC production testing and assembly have advanced significantly since MPB2. For the first time it seems possible to generate a fully resource loaded schedule for CC production.

“Ownership” of MICE, including responsibility for safety, has been taken on by the Director of PPD.

Comments

We endorse the plan to skip Step 5 and proceed directly to Step 6.

We encourage clarification of Roles and Responsibilities for all players, especially in preparation for the increased importance of operations, which will begin in Step 4 and be fully realized in Step 6.

We are concerned that safe operation of the liquid hydrogen system will require more resources than have so far been identified.

Recommendations

5. Assemble an operational support plan, that includes the resources required and types of resources needed for operation of MICE, both in the near term for Step 4 and also in the long term for Step 6, and present at the next MPB.
6. Make a single integrated resource loaded schedule for the production, assembly, installation and commissioning of all components, and present at the MPB.