CBETA FFAG Magnets and Girders

Meeting notes, September 27, 2017

R. Michnoff, 09/27/2017

Agenda

- Status of permanent magnet material order - any news on delivery schedule?

- Status of Halbach magnet assembly bids

- Status of BDH magnet drawings

- Status of fractional arc test mounting plate drawings and fabrication plan

- Status of Halbach magnet testing, including disassembly/reassembly test

- Discussion of last week's design review

- Action items list

Personnel Present: Dejan Trbojevic, Nick Tsoupas, Steve Peggs, Steve Trabocchi, Stephen Brooks, Scott Berg, George Mahler, Joe Tuozzolo, Peter Wanderer, Rob Michnoff

Notes

1. Permanent magnet material delivery schedule is expected to be received from AllSTar Magnetics by the end of this week.
2. Halbach magnet assembly bids have been received. 5 vendors submitted bids. A bid review meeting is scheduled for next Tuesday, and the order is expected to be placed by 10/20/2017.
3. Steve T. completed the BDH drawing and submitted to central shops for fabrication of one magnet. Fabrication is expected to be completed in about 4 weeks.
4. Steve T. is continuing to work on the fractional arc test girder plate drawing.
5. Stephen Brooks expects that all 8 preproduction magnets will be able to be tuned as required for the fractional arc test, and possibly the final machine.
6. George is researching options for purchasing a survey arm, which is required for the magnet center surveys. Need to also determine if an existing in-house survey arm is available to begin measuring and tuning of the 8 preproduction magnets.
7. The Halbach magnet disassembly/reassembly test has not yet been performed but is expected to be performed very soon.
8. We discussed the need to ensure that we will be able to measure and tune 2 magnets per day in order to stay on schedule. Peter Wanderer will begin planning to have a second magnetic measurement system assembled. He indicated that a second technician would be need to operate this additional unit.
9. Custom designed fixtures will be needed for the magnet measurements. George will be responsible for the design and fabrication of this.
10. Stephen Brooks stated that the magnetic field measurement inconsistency when consecutive measurements are taken may be resolved.
11. We reviewed a list of action items that I prepared after last week’s design review. Joe and I will finalize this list and send to the group.