

**James H. Chrzanowski**

**From:** Brad Nelson [NelsonBE@ornl.gov]  
**Sent:** Friday, April 16, 2004 3:43 PM  
**To:** Michael Zarnstorff; Williamson, David E.; James H. Chrzanowski; mkalish@pppl.gov; George H. Neilson; hirshmansp-ornl-gov-offsite; Strickler, Dennis J.; sraftopoulos@pppl.gov; Thomas G. Brown; Cole, Michael J.; Michael E. Viola; pheitzen@mailserver.pppl.gov; Chang H. Jun  
**Cc:** Arthur W. Brooks; Wayne T. Reiersen  
**Subject:** Peer review of the NCSX Coil Tolerance, Trim Coil Requirements, and Magnetic Material in the Test Cell

Folks

There will be a peer review of the NCSX Coil Tolerance, Trim Coil Requirements, and Magnetic Material in the Test Cell on Monday, April 19, at 9:30. The meeting will take place in the PPPL engineering conference room.

Please plan to attend.

Thanks,

Brad

Cog engineer: Art Brooks  
 RLM: Brad Nelson  
 Chair Wayne Reiersen

Charge:

1. Are the bases for the coil tolerance requirements complete?
  - Field errors from coil imperfections
  - Errors from fixed ferromagnetic material in building
2. Are the tolerance requirements well defined?
  - For mod coils
  - For TF and PF coils
  - For trim coils
3. Are the trim coil performance requirements (no., current,  $di/dt$ , etc.) well defined?
4. Are additional analyses underway to investigate relaxation of tolerances, if needed, to address:
  - coil deflections from cooldown and magnetic loads
  - magnetic material in coil structures
  - coil position optimization
5. Are additional analyses planned to address final coil design, including actual crossover and lead geometry and location?

Committee  
 Mike Zarnstorff  
 Dave Williamson  
 Jim Chrzanowski  
 Mike Kalish

Invitees  
 Hutch Neilson  
 Steve Hirshman  
 Dennis Strickler

4/21/2004