MICE Spectrometer Solenoid Repair Plan Overview

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Background

- The spectrometer solenoids for MICE are *very* late
  - they are presently delaying the experiment!
- After the most recent problem with a burned out lead, a MICE review committee was convened
  - they made many recommendations that are being addressed by the Spectr. Sol. team
    - review report and draft responses posted on PMG indico web site
    - also posted are the repair plan, instrumentation plan, and a "straw man" schedule

The Situation

- **MAP** management (SG/MZ) and **MICE** management (ABl) agreed to a schedule for getting the revised plan ready
  - **MAP** TB review yesterday ✓
  - **MAP** PMG review today ✓
  - **MICE** TB review on 1/17
  - report to **MICE** FAC on 1/21
    - report to DOE due on 1/19, in advance of FAC meeting
- Unfortunately, key element of the plan (QP) is incomplete (SV will discuss)
  - $\Rightarrow$ cost-to-complete and schedule still uncertain

MAP TB Comments

- Agree with approach to address problems
- A few issues raised
  - assess need for shielding G-M cooler from stray fields
  - assess impact of other MICE magnets on quench behavior of spectrometer solenoids
  - assess how leads protected during power outage
  - active quench protection concept questioned
    - heaters inside mandrel may not do the job
    - heaters outside coil banding may also be ineffective
    - may need "fully active" circuit with external switch and dump resistor

What We Want

- ## We want feedback on
  - whether plan as outlined seems reasonable and adequate
  - whether cost and contingency are reasonable and adequate
  - whether schedule is reasonable and adequate
- ## Because plan is not final, cannot formally "bless" either cost or schedule at this point
  - but we must assess whether right steps are being taken to get to final plan + cost & schedule