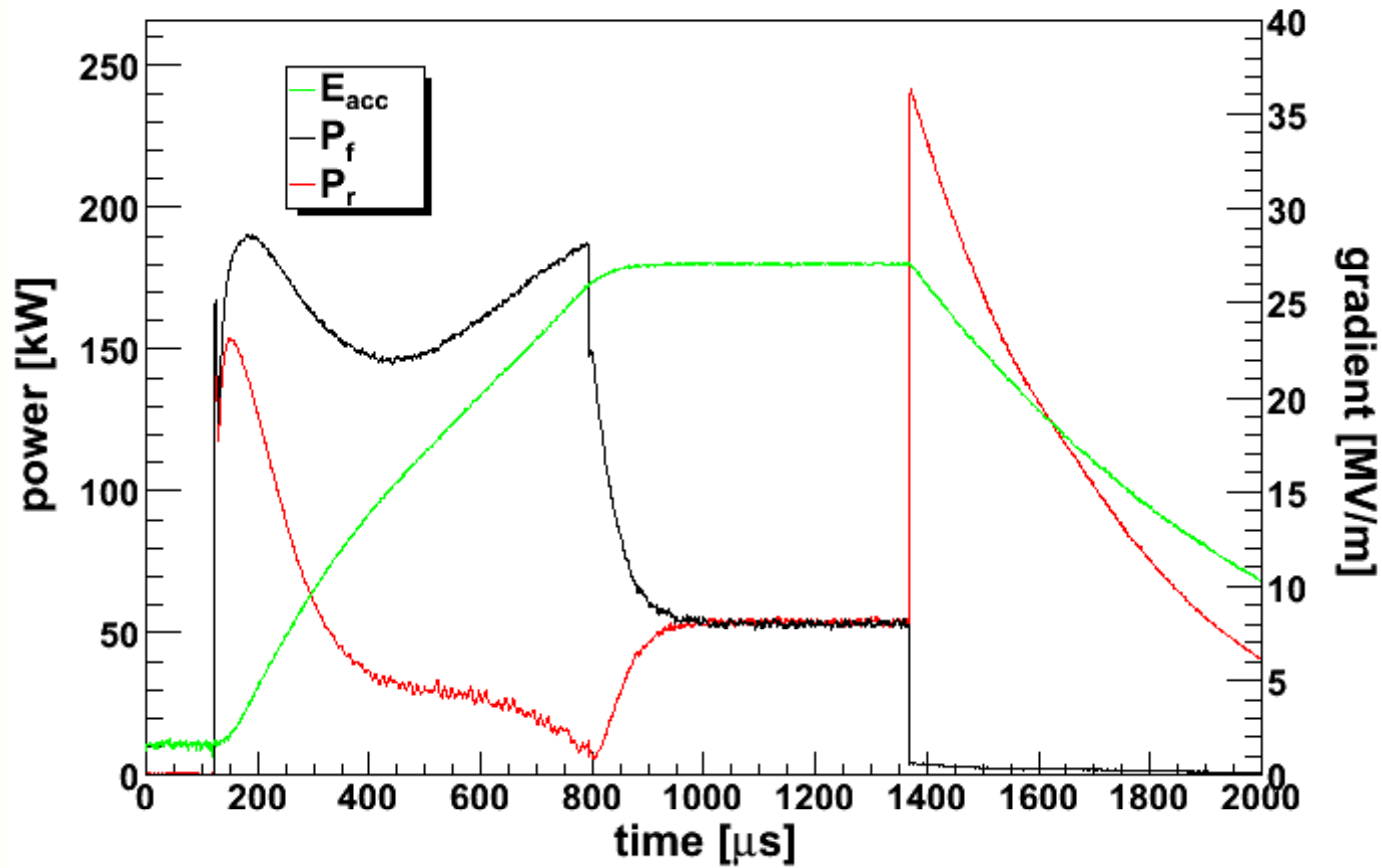


CC2, 1.8 K, 5 Hz



CC2's Future

Andy Hocker

- **Maximum gradient is 28 MV/m, limited by quench**
- **Operated whenever HTS isn't running**
 - ~constantly since beginning of this year
- **At MDB, becomes a paperweight in ~early April**
 - Parade of CM2 cavities through HTS begins
 - 2 month shutdown for HINS transfer line
- **As of today**
 - High-power operation has ceased
 - Warm-up to begin at noon
- **Next two weeks: preparing for transport to NML**
 - 2-MAR is scheduled delivery date

- **The immediate need for CC2 at NML is to commission the cryo system**
 - They are ready and waiting
 - Of course, this could be done with a dummy load...
- **The REAL need for CC2 at NML is to kick-start the process of bringing everything else at NML into real operation**
 - HLRF, LLRF, vacuum systems, controls, DAQ, datalogging, RF interlocks, safety systems, assorted bureaucracy
 - CC2 provides something to rally around
- **My initial impression: bringing CC2 to life at NML will be valuable experience for bringing CM1 to life**
 - General consensus of NML crew: “Not really --- CM1 is a different beast”

- **2-MAR: CC2 arrives**
- **2-MAR: Signoffs obtained to run RF into dummy load**
- **1-APR: Running RF to coupler, start coupler conditioning**
- **15-APR: Cryo mechanical/electrical work finished**
- **1-MAY: Ready to cool down**
- **15-MAY: Cold, high-power RF operation**
- **1-JUN: All kinks worked out, CC2 running as well as at it was at MDB**

- **The subsystem experts believe this is achievable**
 - **There is a concern that LLRF group lacks resources to support CC2 @ NML on this time scale**

- **Having an operational high-gradient cavity is really valuable**
 - See Yuriy's slides
- **It would be a real shame for CC2 to sit like a lump at NML, and there are a lot of scenarios where that could happen**
 1. **CM1 (NML's top priority) quickly becomes reality and drains resources**
 2. **Things slip into June and accelerator shutdown drains more resources**
 3. **CC2 becomes operational just in time for the cryo downtime required to hook up CM1**
 4. **Stimulus package swamps us with money and everyone has to sit around writing reqs all day for the rest of FY09**
- **Bottom line: To avoid wasted effort and wasted opportunity, we need to work hard to bring CC2 on-line as quickly as possible**