
Handover to Ops: End of 6MSD

Documents In Place

- **12 GeV Project: *12 GeV Checkout, Testing, and Commissioning Plan***
 - **Governing doc for “startup”**
 - Required by DOE O413.3
 - Tells how we intend to demonstrate that we’ve met the CD4 deliverables
 - **Addresses accelerator, halls, and civil**
 - **Fairly fine detail on staged demonstration of performance**
 - **Presently deals with “all at once”**
- **12 GeV Accelerator Systems: *Handover to Operations***
 - **Adds approach for “not all at once”, i.e. 6MSD then 12MSD**
 - **Requires:**
 - Transmittal of data (surveyed locations, field measurements, Q-vs-gradient, etc)
 - Training of Operations and maintenance staff
 - Provide system documentation
- **Not specifically required but will happen: system person and Ops person will “walk” the new/modified hardware**

Data That will be provided

cryomodules

same as C50 + piezo

power

rf a bunch

magnet power NC

cryo

JT

beam transport

arc dipoles BL, B'L, survey coords

linac girders Correctors: BL(l)
Quads: B'L(l) & survey coords

vacuum NC

extraction

NA

I&C

diag usual for girder change

controls usual for girder change

safety

PSS usual for change in zone count

MPS NA

BELS NA

Finer-level Details

- **Each system has put together detailed check-out processes**
 - **Examples:**
 - **Arc dipoles:** LCW leak checks, hi-pot/short-to-ground, polarity
 - **RF:** Chassis checks, cable ring-outs, run zone into shorts
 - **Cryomodules:** same as C50 plus HOM and piezo checks
- **Procedures: C100's + RF are only places with changes**
 - **Primary maintenance procedures and rf zone procedures will be in place and staff trained**
 - **Some cavity/RF operating procedures may not be final when it's time to run physics beam**
 - **Depends on how much “learning” time there is and what surprises might show up**
 - **RF experts will be on hand during cryomodule commissioning and “first beam” runs**

LH has briefed Arne and Steve

- Meeting was right after the last 6MSD meeting
- Pre-brief had been sent
- Went over the details of what's planned
- Outcome
 - Arne and Steve reasonably satisfied
 - Open items at the end of the discussion:
 - Blowing out LCW (Steve reminded system owners at the Monday meeting)
 - Need to work details of data transmittal to Ops database
 - Request for long-range spares needs
 - Will first LCW leak test be done at operating temp and pressure?
- “Feel free to let me know of any questions or comments”

Questions?