

Headed: Roger

Present: Roger, Me, Jim Morgan, Bob Mau, Jerry Annala, Ioanis K., Keith Gollwitzer, Craig Moore, Eric Prebys

- **Goals:**
 - It will be a challenge to meet our goals this year.
 - Studies and tests are ok, but will be fit in where there are little impact.
- **Proton Source**
 - Request for Booster RF testing
 - 9Hz is milestone for Proton Plan
 - 10Hz for first stage SNooMI.
 - We need to know possible impact.
 - What will they do?
 - ◻ Claim is that we can run 9Hz.
 - ◻ Measure temperature in BIAS supplies and feeders?
 - Issues
 - Intensity is going up.
 - Have not realized benefits from shutdown yet.
 - Best running is when watt loss limit limited and individual loss monitors low. Watt loss monitor losses due to losses on collimator.
 - Coming up with a set of beam quality plots.
 - Weekend went well. Intensities going up, but still more work to do.
 - Pushing to higher intensities
 - Effects - beam gets bigger -
 - Have to do some beam position tuning, especially around cogging.
 - Also, coupled bunch modes.
 - Beam is larger at injection that they would like.
 - Magnet Moves
 - Want to look at this over the next couple of weeks to see if there are any good magnet moves. Could clear the high field orbits.
 - Now only one extraction point. Doubled distance between the doglegs and took out one of the sets.
 - Orbit Stabilization
 - Two modes: calculation, or three bumps.
 - Now that the lattice is right, it might work
- **Main Injector**
 - BPM
 - Lost a week due to reverse direction. Display - Flash to do the closure. New BPMs worked a little differently. The new system could not take the display fast enough.
 - Different modes. The end of the story, commissioned new TBT in BPM system. Puts back on schedule.
 - Will do MI60N this week.
 - Last two houses next week to finish up.
 - BLM
 - Plan was to install them same time as BPM. Not going by plan.
 - Common mode noise problem on BLM. Makes it look worse than old BPM system. After installed two houses. Are getting help from Instrumentation.
 - Hope to make progress in a week.
 - MI-8 Collimator
 - Still need some calculations - hopefully by end of the week.
 - Hope to do testing after that .
 - Have different energies coming out of the Booster for different events.

- Now with Texas wires in they see the emittances and dp/p coming out of Booster.
 - Higher Intensities
 - Get about $7e12$ on target with 90%. Want 95%.
 - With NuMI coming back up be more sensitive to st=lip-stacking.
 - Large aperture quads
 - Gain 10mm of aperture.
 - Extraction Parameters
- **Pbar**
 - BPMs
 - Plot two P1 BPMs against each other, you get an ellipse.
 - Echotec cards:
 - Bunch Length on last turn at 120GeV? Can trust the Pbar AP1 proton torpedo if bunch length gets below 2 nsec. Discussed possibility of MI providing this number or getting a faster scope for the existing Proton Torpedo.
 - Pbar will look into
 - BPM issue
 - Houses at F23 and F27.
 - Ethernet is wireless from MI60
 - Problem
 - VME BPMs - don't talk anymore. Have to power cycle them.
 - Fiber Optic.
 - Test a VME BPM.
 - Overthruster
 - Working without P1 BPMs.
 - Beam positions are now stable.
 - Access
 - Fixed Debuncher Tank horizontal band 1.
 - Stacked 17ma/hr. To get back to 20mA/hr
 - $8e12$ on target
 - Work on Stacktail
 - Stacktail needs lots of attention.
 - Hot weather, cooling water was warm, changed bend field. Got into strange hysteresis. After access and bus cycling, better.
 - Three legs each have a notch, and are in different places.
 - How to go behind 20mA/hr
 - AP2 - center beam in lens and quads.
- **Recycler**
 - No Report
- **Tevatron**
 - How will Tev handle more Pbars:
 - Will run into tune space issues when we get a lot more Pbars.
 - Worked in a small box in tune space.
 - Protons now above 7/12 instead of below. Pbars are where they have always been. They get shifted when there are intense protons. To get a much larger tune space, would have to use chromaticity circuits. Work still being done on this.
 - Lifetime for Pbars has been great.
 - Efficiencies are impacted by emittances.
 - Jerry would like to push proton intensity, and scrape back down to where were are at now. This would give us the same intensity with a smaller emittance.
 - Can we control the orbit real time?
 - IPM
 - They have some RAW data. Not ready yet
- **External Beams**
 - **Mtest**
 - In the short term. Problems - repair Meson roof.
 - Could run at 1GeV in the future. Would require some \$\$.

- **MiniBooNE**
 - Have a spare horn.
- **NuMI**
 - Beam as soon as tomorrow afternoon?
 - Need to have JEA say that the shielding is ok before we can run.
- **MuCool**
 - Kicker magnet is long term
 - Plan is over next shutdown to get a beamline in. 5 dipoles, 6 to 8 quads, multiwires, etc...
 - Installation - we have to be careful about NTF.
- **Operations**
 - Planning on Zebra Mussel treatment #2. They will want to be manipulating values.
 - Should discuss with FESS the ponds. Seaweed is getting worse.
 - Problems at MuCool. When re-routed water - used to be clean water, now at the end of the line. Filters clogging daily.