BPM Commissioning Goals

- Should not interfere with Tevatron luminosity production.
- Should be done quickly and efficiently.
- Should maintain consistent position readings with the old system upon replacement.

Single House Commissioning Tasks

- Install BPM crates; connect all timing and digital communication cables. Verify communication and timing.
- Install BLM chassis. Verify timing and communication.
- Connect pbar cables to pbar end of the pickup.
- Make necessary changes to application software for proper analysis of new hardware.
- Run hardware diagnostic systems and routines to establish baseline for stability comparisons.
- Run calibration routines (with beam?) to establish proper offsets, scaling, and directivity corrections.
- Adjust offset and scaling corrections in application programs to keep orbit tuning consistent.

First House Commissioning

- Establish location to install BPM crate and BLM chassis.
- Connect pbar ends of cables to the BPM tunnel hardware.
- Install BPM and BLM hardware.
- Test and debug hardware and frontend software. Check timing and diagnostics functions.
- Test application software with the new system. Take data for different operational scenarios and verify consistency.

Final Commissioning

- Assumes that all individual houses have been commissioned.
- Test all global functions (turn-by-turn, first turn, orbit smoothing, etc.)
- Test software features of new system that are not available with old system.

Implications of Commissioning Goals

- We will not request a separate shutdown to install BPM/BLM systems.
- We should keep the single house commissioning time to < 8hrs (one shift).
- The single house commissioning must be completed and verified during a time of relatively stable Tevatron conditions (no magnet moves). This is necessary to verify equivalent position readings with the old system for consistent tuning.