

# **MI BPM Installation and Commissioning**

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**May 16, 2006**

## Strategy

- Identify what is needed to install and commission the MI BPM system.
- Identify effort and skills needed for each of these jobs.
- Identify people who are available during the installation and commissioning period that have or can learn the skills.
- Write a draft schedule.
- Iterate.
- Do the work.

# Identify work required

- Some things are obvious, e.g.
  - Install equipment.
  - Cable it.
  - Power it up.
- Other steps require a bit more thought to plan and expertise to implement.
- We need coordination, to allow us to install and commission with the greatest efficiency and least disruption to accelerator operations.
- The work will be distributed amongst many people, taking advantage of the expertise of those working on the project.

## Schedule

- Would like to have all hardware and software ready when the shutdown ends.
  - Or at least enough to get started on the first building.
- Installation and commissioning will proceed as MI department gives the go-ahead.

## First draft of commissioning plan

- Worked out with Bob Webber last Friday.
  - Needs more input and refining.
  - Used experience with TeV BPM, MI BPM MI40, other systems, to put this together.
    - See beams-doc-1450 and beams-doc-1421

# Installation and Commissioning Plan

1. Install and cable a house or a building:  
Marv, John, Bill
2. FE and online software changes to  
switch to new system: Luciano, Steve,  
Brian
3. Enable and test Closed-orbit mode
  1. FTP
  2. 3-bumps
  3. Display frame
  4. Profile buffers

# Installation and Commissioning (2)

## 4. Enable and Test TBT modes

1. Injection from different accelerators
2. Relative timing
  1. Building to building
  2. BPM to BPM
  3. Proton
  4. Pbar
3. Triggered TBT
4. FLASH, EXTRACTION

# Installation and Commissioning (3)

## 5. Buffers and cycles

1. Check that the data is being saved/used properly

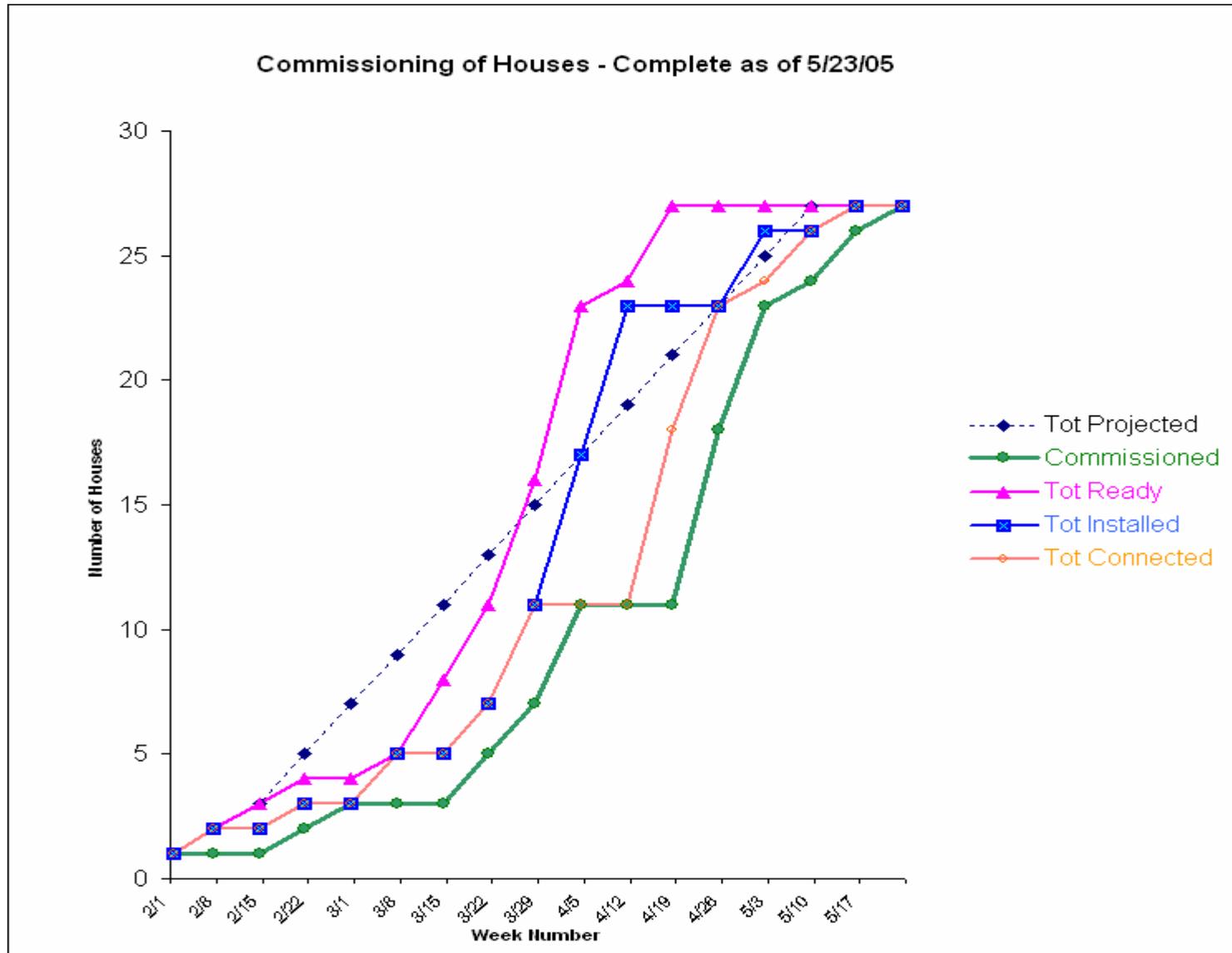
## 6. Diagnostics

## 7. Other?

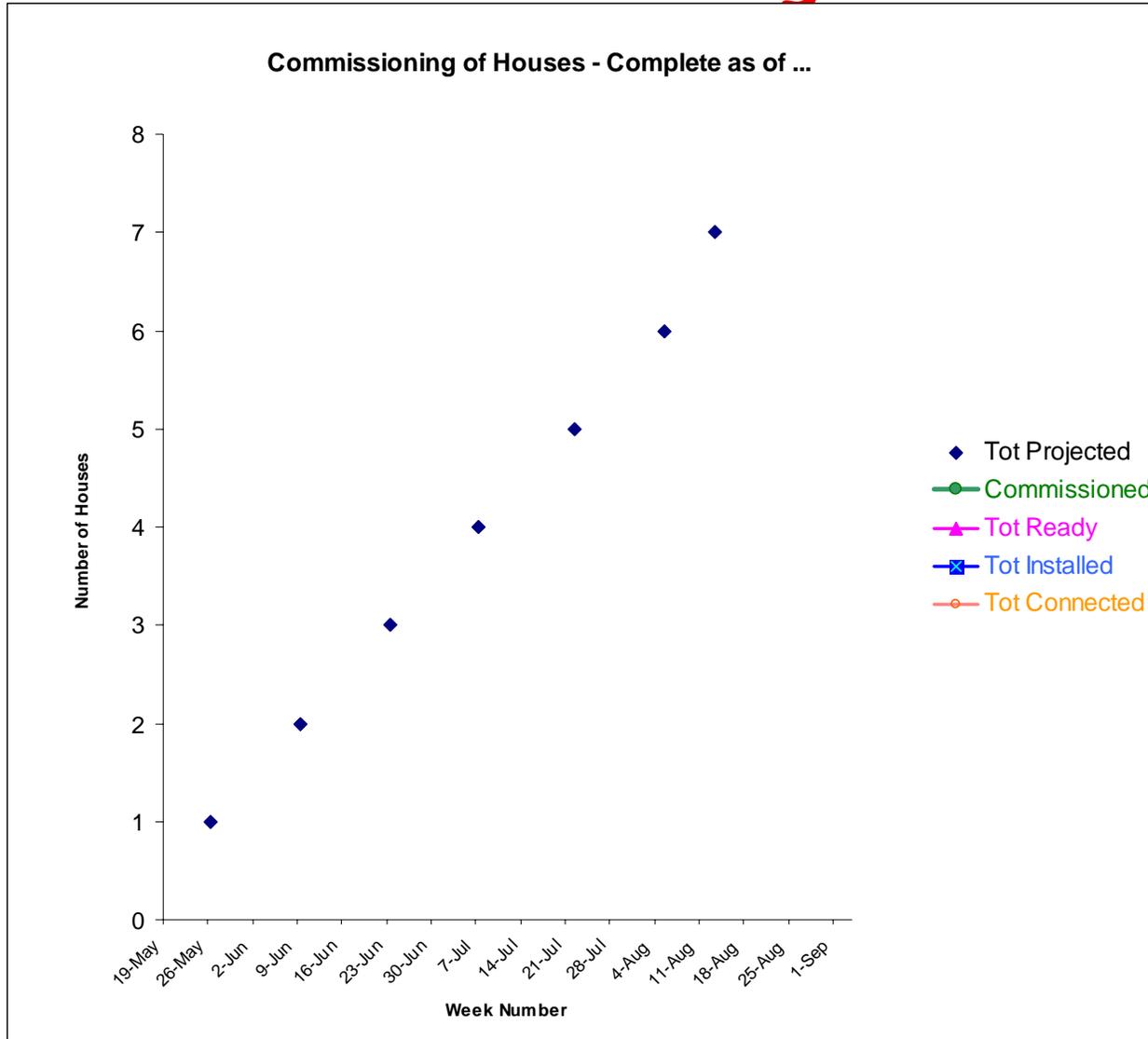
## 8. Coordination of all of the above

1. Discussions to identify someone to coordinate the activity.

# TeV BPM Schedule Actual and "planned"



# First Draft of MI BPM installation/commissioning from Bakul



## Summary

- We want to install and commission a successful MI BPM upgrade.
- To do so requires some planning and coordination. We don't want to make a mess of it and we don't want to install a system that is difficult to use and understand.
- With everyone's help we'll do a nice job.