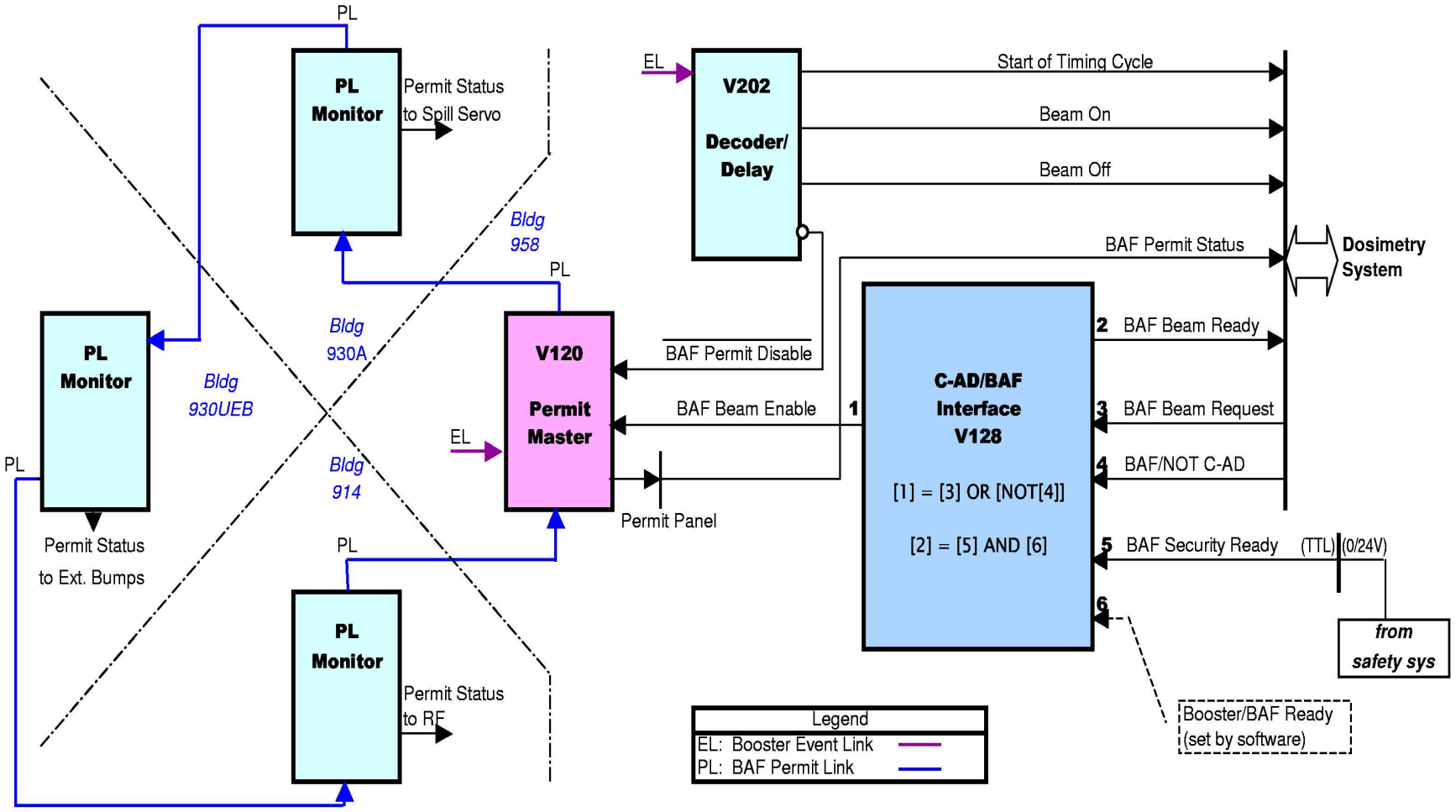
Operational Aspects 1

- Beam delivery prevented by:
  - inhibiting extraction bumps
  - inhibiting RF excitation
- Spill terminated by spill servo:
  - quick ramp-up of BMMPS
- Two modes of Operation:
  - BAF dosimetry system in control
  - MCR in control (dosimetry state ignored)
- Action must be “PPM-aware”
  - RF must be interlocked only on BAF cycles
- **Not** for personnel or accelerator equipment protection!

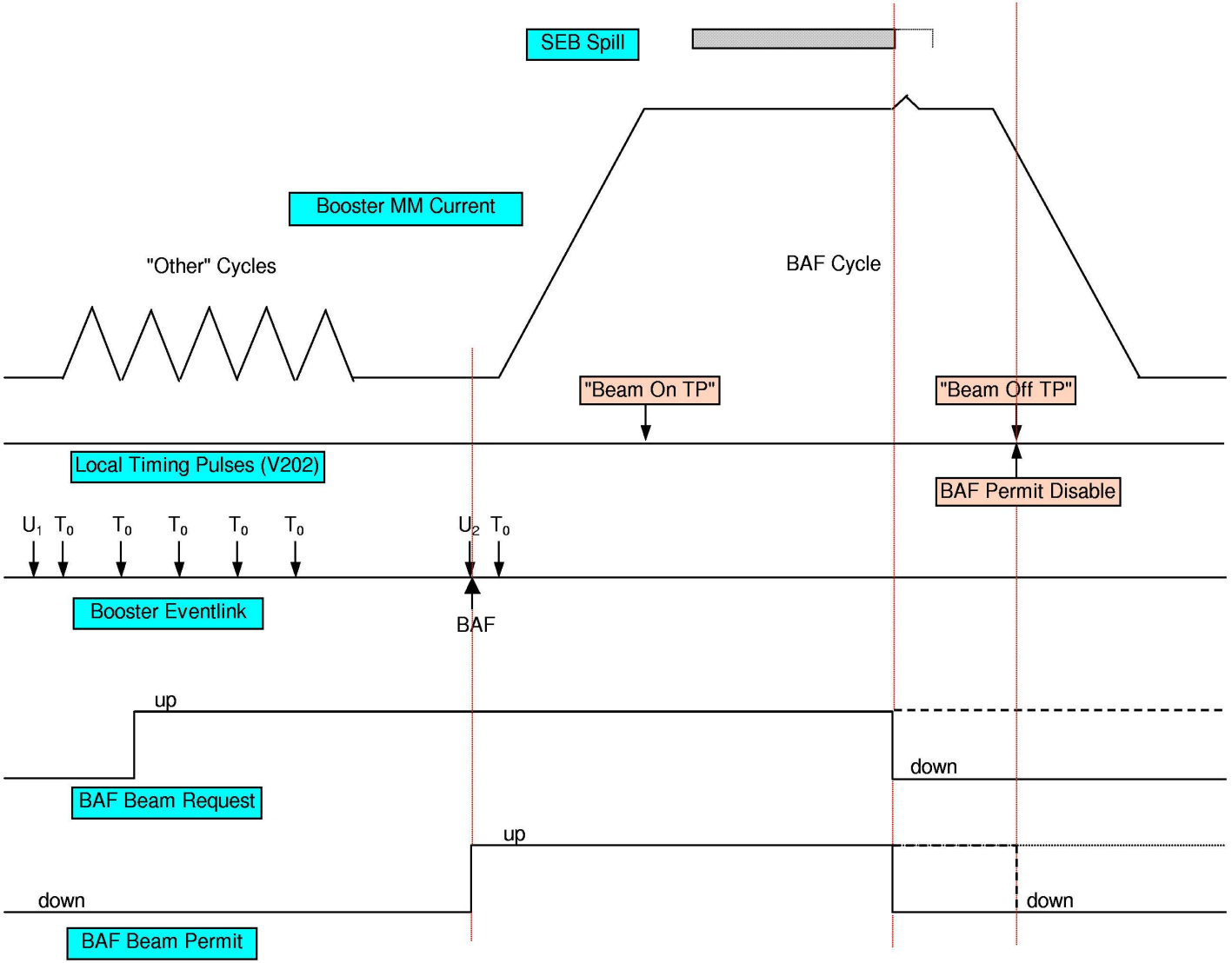
Equipment & BAF Control

- Dosimetry System Bldg 958 (new)
  - Instrumentation provides dc level for duration of beam request.
- Spill Servo Bldg 930A
  - "Dose end" signal to prematurely end spill
- Extraction Bumps Bldg 930UEB
  - 5 separate PSs
  - gated according to beam request
    Open Issue: D1 inj. Bump – *float present PS(?) or no permit to D1(?)*
- RF Bldg 914
  - presently uses PPM pulses to start/stop excitation
  - gated during the BAF cycle according to beam request

C-AD Controls
Permit, Timing, I/O
for BAF Dosimetry



BAF Permit Link Timing



Operational Aspects 2

- During early commissioning, system will be in “MCR” mode simply because Dosimetry input won’t be connected.
- The same will be true if the Dosimetry system is powered down. *(The state of all inputs will be readable from VME.)*
- For BAF-related Booster studies without extraction – assign a PPM user, but don’t add “BAF” event to the supercycle.
- For commissioning or studies *(or operation with Dosimetry control)* with extraction – schedule “BAF” event so that the permit level is established.
- RF should be inhibited according to permit level if-and-only-if the “BAF” event occurs on that cycle.