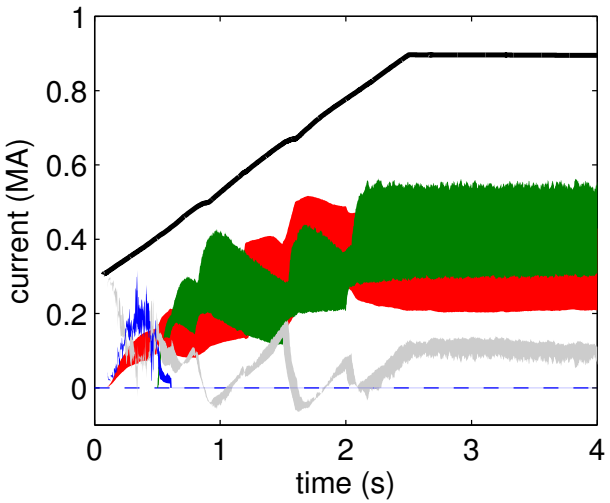
Ramp-down (a multi-year program ...)

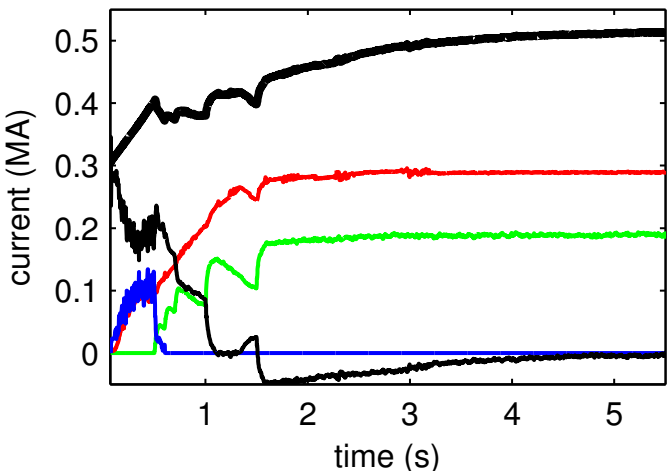
- controlled exit from H mode (Heating)
  - tune-down of auxiliary power and fueling
  - maintain control of power handling, impurities, radiation
- ramp-down
  - avoid VDE
    - by controlling increase in li (shape+heating control?)
  - remain in X-point as long as possible to maintain particle and power handling

Propose to do in wise steps: in FY15 learn from SPG automated shut-down, piggyback from RF and NB XPs (extend H/CD phase to move H-L transition), etc.

NBI sustainment (also non-inductive ramp-up)

Naturally follows NB XMP at large non-inductive fraction





- Clamp OH and sustain with NBI
- Keep broad current profiles, keep beam pressure low
  - How you ramp does matter
  - NB configuration effect on I_P (might be) stronger than Greenwald fraction.