

**Recent Progress:**

1. Last Day: 09/18/20
2. Creation of draft PST 4 User Manual
3. Fix of AGC area calcs to use bus index (instead of bus number)
4. Added optional power flow solution to stand alone `s_simu`
5. changed `g.int` to `g.y` as it clearer that the y matrices are there and not just interface variables.
6. GitHub updated:  
<https://github.com/thadhaines/MT-Tech-SET0>

**Current Tasks:**

1. Write User Manual
2. Work towards PST 4.0.0:
  - Verify and Validate operation of AGC, PWRMOD, IVMMOD, and VTS.
  - Refine documentation
  - Clean up examples
  - Clean up code/comments
  - Clean up readme files
3. Work on understanding PST operation
4. Document findings of PST functionality
5. Investigate Octave compatibility

**Current Questions:**

1. Figures for Matt paper?

**Loose ends:** Moved to user manual chapter.

**Coding Thoughts:**

1. Rework how switching & perturbation events are handled into a more flexible and general format. (flags? objects?)
2. Generate comparison scripts to verify simulated results match between code revisions and modifications.

**Future Work: (not by me)**

- Optimize Y-matrix reduction when tripping generators
- Work on un-trip functionality:
  - Further study re-initialization actions / requirements
  - More generic/functionalized programming
  - Compatibility with VTS
- Create extended term event:
  - Use miniWECC and pwrmod
  - Issue: rolling blackouts in CA
  - High PV penetration
  - Drought has led to lower hydro output
  - Initial low N→S flows
  - Solar generation declines as load increases
  - Inadequate CA dispatchable generation
  - Leads to large N→S flows
  - EIA data from 8/14/20 18:00?