

**Recent Progress:**

1. Mention progress from last week?
2. Added zeroing of derivatives for tripped machines to improve VTS performance.
3. Updated PST versioning document.
4. FTS  $\rightarrow$  VTS seems okay  
VTS  $\rightarrow$  FTS may have minor issues
5. Added capacity tracking and interchange modulation capabilities to area/AGC.
6. Created `icAdj` use case document and code example.
7. Updated AGC doc to include `icAdj`
8. Updated PST to version 4.0.0-a7
9. miniWECC 3 area à la EIA regions
10. GitHub updated:  
<https://github.com/thadhaines/MT-Tech-SET0>

**Current Tasks:**

1. 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 $\rightarrow$ S flows
  - Solar generation declines as load increases
  - Inadequate CA dispatchable generation
  - Leads to large N $\rightarrow$ S flows
  - EIA data from 8/14/20 18:00?
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. Only 1 `pwrmod` **model** allowed per case?
2. Real data for case/paper?
3. Paper expectations?

**Loose ends:**

1. As infinite buses don't seem to be used in dynamic simulation, they were not converted to use the `golbal g`.
2. `tgh` model not converted for use with global `g`. (no examples of `tgh gov`)
3. In original (and current) `s_simu`, the global `tap` value associated with HVDC is over-written with a value used to compute line current multiple times. It probably shouldn't be.
4. Constant Power or Current loads seem to require a portion of constant Impedance.
5. PSS design functionality not explored
6. No examples of of delta P omega filter or user defined damping controls for SVC and TCSC models
7. Differences in `mac_ind` between pst 2 and 3 seem backward compatible - untested.

**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.