Recent Progress:

1. Added license to code repository

2. Corrected PWRMOD handling of states in VTS

3. Refined VTS order of operations and time vector

4. Created MiniWECC AGC results for Pload Step

5. Added handling of generator trip to AGC H and F calcs

6. Created MiniWECC AGC results for Gen Trips

7. Updated PST to version 4.0.0-a4

8. GitHub updated:
   `https://github.com/thadhaines/MT-Tech-SETO`

9. Employment "good" till 09/18/20

Current Tasks:

1. Create long term event (with pwrmod)
2. Verify VTS operation
3. Refine VTS documentation
4. Work for PST 4.0.0:
   - Verify and Validate operation of AGC, PWRMOD, IVMMOD, and VTS.
   - Clean up examples
   - Clean up code comments
   - Clean up readme files
5. Work on understanding PST operation
6. Document findings of PST functionality
7. Investigate Octave compatibility

Action Items From Sandia:

- Run long term simulation to show benefits of VTS.

Coding Thoughts:

1. Rework how switching & perturbance events are handled into a more flexible and general format. (flags? objects?)

2. Generate comparison scripts to verify simulated results match after code changes.

Current Questions:

1. Play in data for variable solar irradiance? (Slow Sine with step events for clouds.)

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 `s_simu_Batch`, the global `tap` value associated with HVDC is over-written with a value used to compute line current multiple times.

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.

8. A tripped generators inertia should be removed from total inertia calculations of average frequency used in the AGC model.