Recent Progress:

1. **PSLF License Expires June 30**.
2. Timing added to simulation.
3. AMQP message grouping speed results.
4. Batch processing of test cases functional.
5. GE 4 machine 2 area system too sloppy for actual study ∴ Kundur 4 machine 2 area system created and adapted for LTD
6. Work on step and ramp perturbances for Loads and Generators.
7. GitHub updated: `https://github.com/thadhaines/`

Current Tasks:

1. Compile Code flowchart to aid in further development.
2. Work to incorporate Matt's *Suggested Use Cases* into simulation.
   - Add perturbance Agents for Generator/Slack, Shunt, Branch, …
   - Think about Shunt Control / Generic Agent control based on system state(s)
   - Add logging to Shunt and Branch Agents
   - Define Agent actions for AGC/LFC (i.e. ACE calculations)
3. Keep Goals and Requests in mind.

Current Questions:

1. Should the Global Slack = Area slack from Area with most buses?

   OR Should global slack error be average Area slack error?

'Soft Goals':

1. Simulate 10× faster than PSDS.
   Not met — MiniWECC ≈8x faster.
   Varies with system size & time step.

Future Tasks:

1. Formulate an experiment utilizing a multi-area model that can be validated with PSDS.
2. Formulate feasible plan of action for casting all WECC governors to LTD governors (tgov1). Something like:
   (a) Parse models of interest from dyd.
   (b) Create dyd from parsed model.
   (c) Automate a Pref step test for a one machine infinite bus in PSDS.
   (d) Read output data
   (e) Generate/Calculate LTD equivalent model parameters from results (this will probably use MATLAB and `jfind`)
   (f) Export custom dyd for LTD simulation. (PSDS would still use original the dyd, though *could* use modified dyd)
3. Add import mirror / bypass mirror init sequence option to prevent repeated mirror creations.
4. Create an agent for every object: SVD, Transformer, …

Matt Requests:

1. Enable multiple dyd files to overwrite / replace previously defined agents/parameters
2. Allow for variable time steps.