## **Recent Progress:**

- 1. Results from turbine type code.
- 2. Re-test of WECC dyd runs..., flatlines seemed to work in 2018 case from gui...
- 3. Generic generator created
- 4. Generic governor work started

  lcfb1 Prime mover really a load
  controller .. There are 88 in WECC.
- 5. Update of Tgov1 to account for area gov deadband.
- 6. GitHub updated: https://github.com/thadhaines/

#### **Current Tasks:**

- 1. Generic Governor Coding
- 2. Don't forget to Refine BA ACE actions.
- 3. Update Code flowchart
- 4. Thesis Outline and Introduction

### **Current Questions:**

- 1. Realistic AGC results?
- 2. Typical deadbands of AGC?
- 3. What to do with wind generators and governors? (no H, no R?)
- 4. Types of generic governors to create? Steam, Hydro, Gas ...
- 5. Turbine type to governor type check

#### Future Tasks:

- (a) Add import mirror / bypass mirror init sequence option to prevent repeated mirror creations.
- (b) Bring wind into simulation (ramp ungoverned generators?)
- (c) Find best/correct way to trip gens in PSLF from python.
- (d) Investigate line current data.

# Future Work: (not by me)

- Account for different types of loads. (exponential load model)
- Work to incorporate Matt's Suggested Use Cases into simulation.
  - Add Shunt Group Agent
  - Work to Define Definite Time Controller user input
- Investigate ULTC action.
- Create an agent for every object: ULTC, SVD, Transformer, ...
- Get away from reliance on GE

## Matt Requests:

- (a) Enable multiple dyd files to overwrite / replace previously defined agents/parameters
- (b) Allow for variable time steps.