Research - Created: 08/04/20 PST Versions Thad Haines Updated: August 21, 2020 Page 1 of 1

Purpose

To document past, present, and future PST versions.

Current Versions

- 2.3 Based on PST 2, includes Dan Trudnowski's pwrmod, ivmmod, and generator tripping modifications.
- 3.0 From Joe Chow's website. Includes fixes and alterations. Notably multiple DC lines and PSS modifications.
- 3.1 Based on 3.0, includes Dan Trudnowski's pwrmod and ivmmod models in non-linear simulation. pwrmod included linear simulation and various model patches. Multiple generator tripping code is included, but untested.
- 3.1.1 Based on 3.1. Ryan Elliott's version with energy storage and updated linear simulation along with various other fixes and code cleanup alterations. Not to be included in GitHub repository.
- SETO Based on 3.1. New global structure. Includes automatic generation (AGC) models and variable time step (VTS) options. Also includes many patches as documented in PSTsetoVersionChanges. Will become 4.0 after clean up actions taken.
- 4.0.0-aX Alpha version of PST 4 based on SETO version. Includes a refined VTS routine, confirmed multi-generator tripping, and improved AGC action/modulation. Examples in repository will be re-worked/updated and cleaned to use this version, documentation of changes will be updated, and PST code will be cleaned up where possible. May go into beta, which may then go into the 'release candidate' phase, but may also just turn into 4.0.0.

Planned Versions

- 4.0.0 Finished VTS, AGC, code cleanup, and documentation work by Thad Haines.
- 4.1.0 Based on 4.0.x planned to incorporate energy storage models for non-linear simulation and possibly the updated linear simulation based on 3.1.1. Examples of ess model use required.