READ ME: Enhanced IEEE 39 Bus System

* PSSE
  + Network (raw) file and Dynamic (dyr) file are provided
  + Python file for running dynamic simulation with run commands, output channels and csv file conversion of the channels
  + PSSE version 35 used for results shown
  + By modifying the value of “eventType” in the ‘disturbance.py’ file, one can simulate either a Busfault or GenTrip scenario.
* PSLF
  + Network (raw, sav) files and Dynamic (dyd) file are provided
  + EPCL (.p) file for running dynamic simulation with run commands
  + For conversion of csv file, utilize the EPCL script in PLOT22.exe, and select "chf2csv\_Plot\_Case"
  + PSLF version 32 used for results shown
  + By modifying the value of “case\_idx” in the ‘Disturbance.p’ file, one can simulate either a BusFault or GenTrip scenario.
* PSCAD
  + PSCAD file with network information converted using ETRAN from PSSE raw file
  + Dynamic (dyr) file which provides parameters for dynamic characteristics of generators, exciters, and governors
  + PSCAD version 5.0 used for results shown
  + By modifying the time of breaker operation in “Timed Breaker Logic” in PSCAD, one can simulate either a BusFault or GenTrip scenario.
  + E-TRAN runtime library files for initializing ETRAN-based components in PSCAD file
  + Adding file path where ETRAN\_G95.lib / ETRAN\_GF46.lib located is needed
    - Right click “ETRAN\_GF46.lib”, then click “Settings”
    - Insert file path of ETRAN\_GF46.lib, the corresponding path of the file wherever the library files are downloaded

OR

* + - Add ETRAN\_GF46.lib, by right clicking “Resources” tab, then click “Add”, then “Other”
    - Find the location where “ETRAN\_GF46.lib” is located, select the .lib file and click open
  + Change Fortran Compiler
    - Click “File”, then go into “Application Options”
    - In “Dependencies” tab, check whether Fortran compiler version is “GFortran 4.6.2.”
    - Make sure Fortran Compiler is compatible with the ETRAN lib file

 

