Distributed Generation – Example 2

Written for PSCAD v4.5 and v4.6.
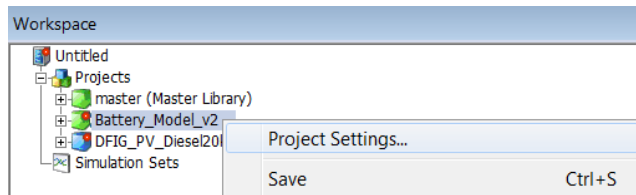
Simulation Setup

Load the library (Battery_Model_v2.pslx) into PSCAD, then load the project
DFIG_PV_Batt_Diesel20kV.pscx) into PSCAD.

In the library Project Settings, link in the library file corresponding to your Fortran compiler.

For example:

- Display the library Project Settings (right-click on the library file, and select "Project Settings"):

- When the Project Settings dialog displays, select the "Link" tab, and delete any text from the "Additional Static Library…" field:
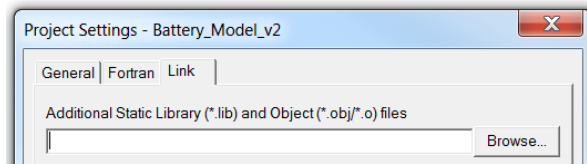
- Click on the "Browse" button, and browse to the .lib file corresponding to the Intel Fortran compiler that you will be compiling this project with.
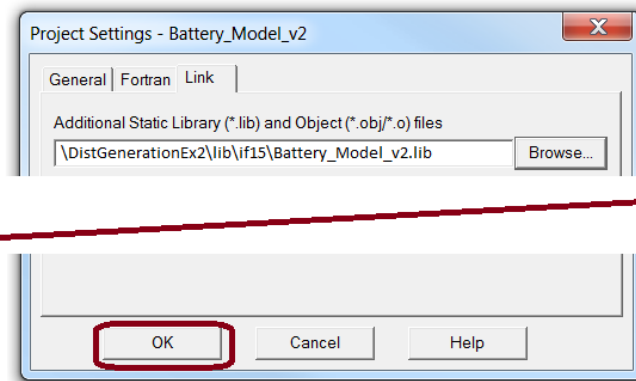
  For example,

  > If you are using Intel Fortran Version 15, select the .lib file in " if15 " folder.
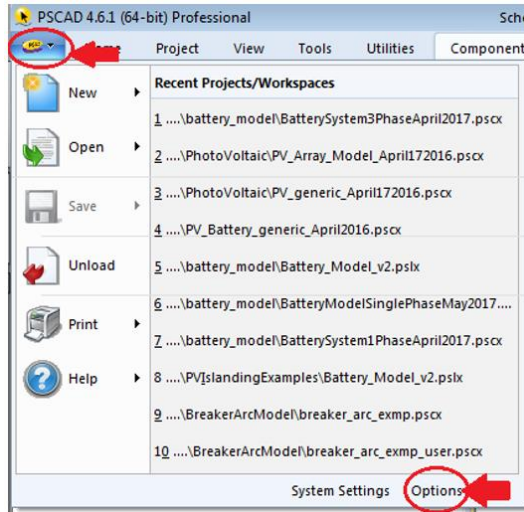
  > Or

  > If you are using GFortran version 4.2, select the .lib file in " gf42 " folder.

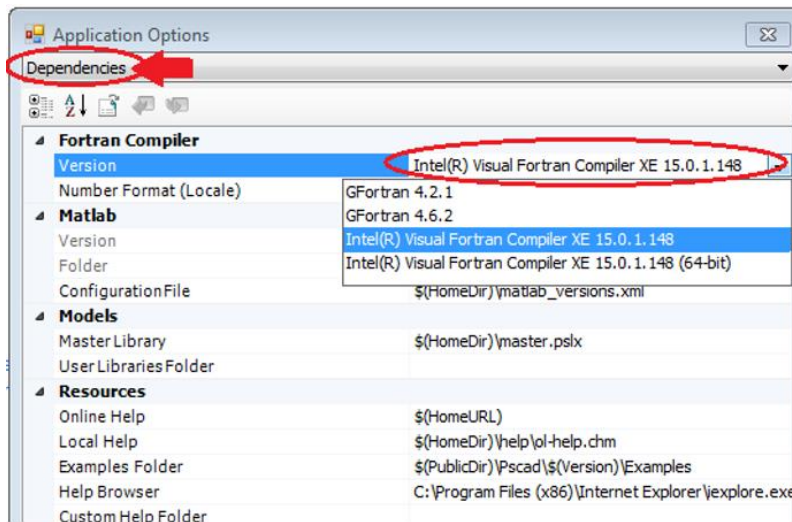- Select "OK" to apply these changes and close Project Settings.

Select the compiler for PSCAD:

- Display the Application Options dialog (display the PSCAD Start menu, and select "Options").

- In the Application Options dialog, select the "Dependencies" tab from the drop-down menu, and select the compiler. Select "OK" to apply the changes and close the dialog.

The "project tree" shows the sub-modules in the simulation. Click on the modules to navigate between them. For example, to see the graphs and controls, click on the "DFIG_Detailed_Model_1" module or double-click on the module shown as follows (it can be found in the main canvas).
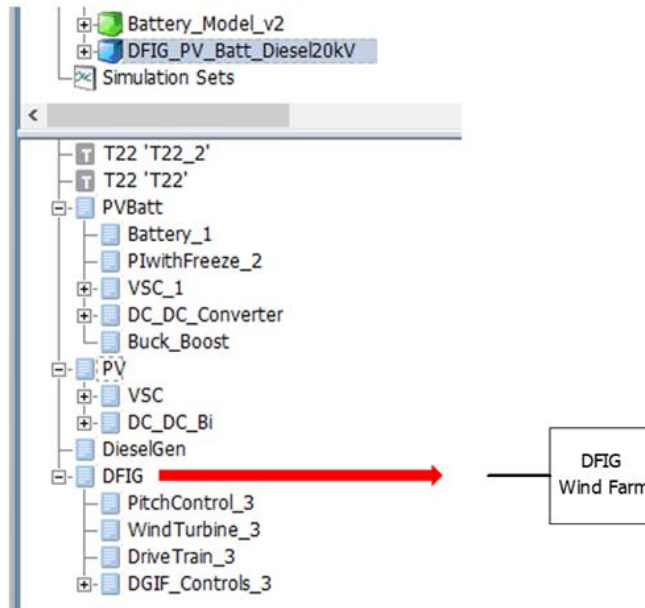
The signals in the canvas can be traced using the "virtual wires" option as shown below. The simulation must be compiled to activate "virtual wires".