# IEEE 118-bus system

**File** : case118.py

**Source** : Pypower library <https://github.com/rwl/PYPOWER/tree/master/pypower>

**Files**: IEEE 118 Bus.EPC ; IEEE 118 Bus.pwb ; IEEE 118 Bus.pwd ; IEEE 118 Bus.RAW

**Source**: Texas A&M University's Electric Grid Test Case Repository <https://electricgrids.engr.tamu.edu/electric-grid-test-cases/>

**File** : pglib\_opf\_case118\_ieee.m

**Source**: Power Grid Lib (pglib) (for OPF) <https://github.com/power-grid-lib/pglib-opf>

# IEEE 118-bus modified test system (with dynamics data)

It “consists of 54 synchronous machines with IEEE type-1 exciters, 20 of which are synchronous compensators used only for reactive power support and 15 of which are motors. There are 172 buses, 185 transmission lines, 76 transformers and 91 constant impedance loads, which consume in total 3668 MW and 1438 MVAr.”

**Files**: “IEEE 118-bus modified test system data.pdf” & IEEE 118-bus modified.emf & IEEE 118 Bus\_modified.pwd & IEEE 118 Bus\_modified.pwb & IEEE 118 Bus\_modified.pfd

**Source**: University of Cyprus repository with “Dynamic IEEE Test Systems for Transient Analysis” <https://www2.kios.ucy.ac.cy/testsystems/index.php/ieee-14-bus-modified-test-system/>

# IEEE 118-bus European version

It consists of an IEEE 118-bus version “modified in accordance with European standards such as nominal frequency of 50 Hz, the use of conventional voltage levels and conductor dimensions.”

**Files**: EuropeanVersion/Scenario\_2013.xlsx & EuropeanVersion/Scenario\_2023A.xlsx & EuropeanVersion/Scenario\_2023B.xlsx & EuropeanVersion/Scenario\_2023C.xlsx

**Sources**: RWTH Aachen University “A Benchmark Case For Network Expansion Methods” <https://www.iaew.rwth-aachen.de/go/id/ivfsh/?lidx=1> and the corresponding paper of the same name.