

Operating points

Pre-disturbance operating point	File names to enter in the “Load System Data” boxes
point A	volt_rat_A.dat dyn_A.dat settings1.dat
point B	volt_rat_B.dat dyn_B.dat settings1.dat
point B with load increased by 400 MW in the Central region	volt_rat_B_plus400.dat dyn_B.dat settings1.dat
Same with 300 MW load increase	volt_rat_B_plus300.dat dyn_B.dat settings1.dat
Same with 275MW load increase	volt_rat_B_plus275.dat dyn_B.dat settings1.dat
Same with 250 MW load increase	volt_rat_B_plus250.dat dyn_B.dat settings1.dat
Same with 100 MW load increase	volt_rat_B_plus100.dat dyn_B.dat settings1.dat

Operating points A and B are defined in the report [1].

The zip file also contains the load flow data files used with ARTERE: lf_A.dat, lf_B.dat, etc.

Disturbances

Disturbance	File name to enter in the “Disturbance file” box
None	nothing.dst
Short-circuit at bus 4032 at t=1.0 s, cleared by opening line 4032-4044 at t=1.1 s	short_trip_branch.dst
Tripping (without fault) of branch 4032-4044 at t=1.0 s	trip_branch.dst
Tripping of generator g2 at t=1.0 s	trip_gen.dst

Configuration files

Name of file	Pre-disturbance operating point	disturbance	Observable file
sim_nothing.cfg	point A	None	obs.dat
sim_trip.cfg	point A	Tripping (without fault) of branch 4032-4044 at t=1.0 s	obs.dat
sim_short_trip.cfg	point A	Short-circuit at bus 4032 at t=1.0 s, cleared by opening line 4032-4044 at t=1.1 s	obs.dat

Reference

[1] Power System Dynamic Performance Committee, Task Force on Test Systems for Voltage Stability and Security Assessment (T. Van Cutsem, chair), "Test Systems for Voltage Stability and Security Assessment", Technical Report PES-TR19, IEEE Resource center, available at http://sites.ieee.org/pes-resource-center/files/2015/08/PES_TR19_Test-Systems-for-Voltage-Stability-Analysis-and-Security-Assessment1.pdf