Ge 1 5 megawatt wind turbine



Ge 1 5 megawatt wind turbine

ATLANTA--(BUSINESS WIRE)--GE Energy (NYSE: GE) today announced it has ...

The workhorse of GE"s wind turbine fleet, the 1.5-megawatt machine is the most ...

GE"s 1.5 MW series is represented by three-blade, upwind, horizontal axis wind turbines with a rated capacity of 1.5-megawatts. Three different models represent the 1.5 MW series - 1.5se, 1.5sle, and 1.5xle.

The rotor on a GE 1.5 MW turbine is designed to operate in an upwind configuration at 10 to 20 revolutions per minute (rpm). Rotor speed is regulated by a combination of blade pitch angle adjustment and generator/converter torque control. The 1.5 MW series provides the option of a selectable power factor between 0.95 (overexcited) and 0.90 (underexcited) and also a VAR boost, which will override watts production to deliver more VARs during emergency under-voltage conditions.

In this case a remote fault is applied to bus 12 for a duration of 6 cycles (0.1 sec).

For both SCR settings the reactive power output of the WTG is at or near its maximum during the fault in an effort to regulate voltage. After the fault is removed and the rated voltage level is restored, the reactive power returns to its steady state condition.

In this case a under frequency event is created by tripping the 100 MVA generation unit at bus 20.

In this case a under frequency event is created by tripping the 100 MVA load at bus 11

The parameter values shown in the table resulted from a compromise between the simulated cases (i.e. SCR 5 and SCR 10) and network conditions (i.e. fault, under- and over frequency)

Parameterization of WT3 vs GE-1.5 MW - Case 1 and SCR=5

Parameterization of WT3 vs GE-1.5 MW - Case 1 and SCR=10

Parameterization of WT3 vs GE-1.5 MW - Case 2 and SCR=5

Contact us for free full report

Web: https://www.kary.com.pl/contact-us/ Email: energystorage2000@gmail.com WhatsApp: 8613816583346



