GE'S ROTATING STABILISERS STRENGTHENING GRID RESILIENCE

GE'S ROTATING STABILISER SOLUTION

The global energy mix is changing as more clean renewable energy sources are added to the grid. **The variability of renewable energy sources raises clear challenges to the integration of renewables as well as to grid stability.** With GE's vast experience in rotating machine technology, our Rotating Stabiliser offers a CO_2 free and cost-effective solution to replicate the synchronous inertia response provided by traditional thermal power generation.

GROWING RENEWABLE ENERGY PENETRATION
CAN LEAD TO MORE DISTURBANCES ON THE GRID.

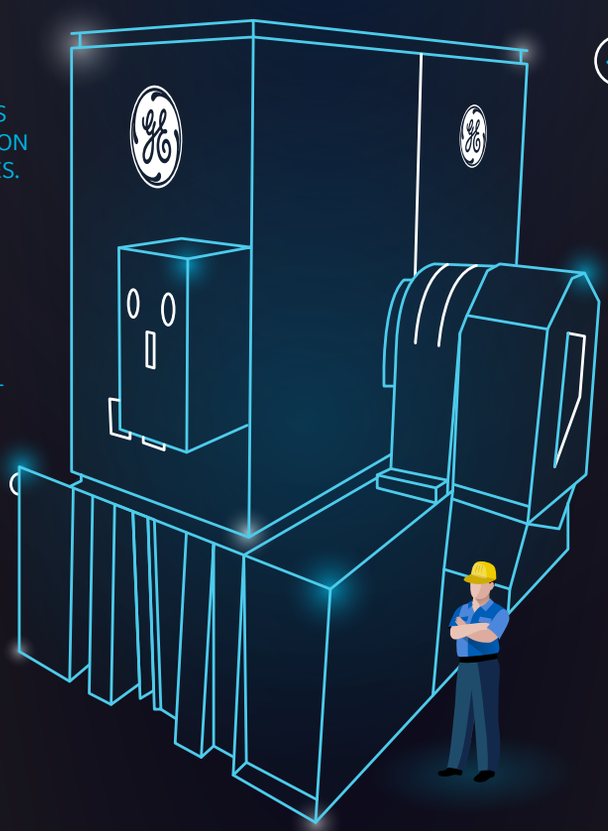
AS VARIABLE RENEWABLE POWER SOURCES ARE ADDED
TO THE GRID, ADDITIONAL STABILIZATION IS NECESSARY.

NEW TECHNOLOGIES AND APPLICATIONS
CAN HELP ENSURE BOTH FLEXIBILITY AND GRID STABILITY.

KEY ADVANTAGES AND FEATURES

CO_2-FREE, HIGH-INERTIA MACHINES
CAN HELP STABILIZE WEAK GRIDS AND ENABLE HIGHER PENETRATION OF RENEWABLE ENERGY SOURCES.

GE'S ROTATING STABILISER
CAN HELP PROVIDE THE SAME SYNCHRONOUS INERTIA AS COAL OR GAS POWER.



GE'S ROTATING STABILISER IS A VERY SPECIAL TYPE OF ELECTRICAL MACHINE:

- ACTS AS A **HIGH-INERTIA SYNCHRONOUS CONDENSER**
- CAN **GENERATE AND ABSORB KVAR** WITH NO POWER GENERATION
- **RUNS STABLY AT ZERO LEADING** POWER FACTOR UNDER-EXCITED
- **ENGINEERED TO RUN STABLY AT LAGGING POWER FACTOR** OVER-EXCITED PLANTS BUT WITHOUT THE ASSOCIATED CO_2 EMISSIONS AND HIGH RUNNING COSTS
- **CAN BE DISPATCHED AS REQUIRED** BY THE SYSTEM OPERATOR

gepowerconversion.com

contactus.powerconversion@ge.com