GE ENERGY CONSULTING

Generator Protection Study and Relay Settings

Backed by decades of experience designing, manufacturing, and operating heavy duty turbines and generators around the globe, the trusted experts from GE's Energy Consulting team provide innovative solutions across the entire spectrum of power generation, delivery, and utilization. Our team conducts generator protection and coordination studies and develops relay settings for the generator, bus, step-up transformer, and other auxiliary equipment for new and existing power plants and synchronous condenser installations.

These studies incorporate all requirements to coordinate protection between equipment and entities as well as setting relays to prevent unnecessary tripping during system disturbances.

Services Offered:

- ✓ Power plant protection studies for gas, steam, combined cycle, nuclear, and renewable generation, including BESS and hybrid plants
- ✓ Protection design and coordination studies of synchronous condensers
- ✓ Protection evaluation due to equipment modification and upgrades
- ✓ Development and demonstration coordination with equipment capabilities, controls, limiters, and stability limits
- ✓ Root cause analysis (RCA) of trips and disturbances
- ✓ Grid code compliance to NERC PRC standards, country-and region-specific requirements, and more

Key Benefits Provided by GE's Energy Consulting Team:

- Experience: Proven track record conducting more than 300 thermal and renewable generating plant protection studies
- Expertise: Decades of involvement in developing industry standards and technical references related to power plant protection
- Efficiency: Unique knowledge of GE's units as well as wide-ranging experience with non-GE turbines, generators, controls, automatic voltage regulators (AVRs), and protective relays
- Education: A team of experts with a thorough understanding of equipment capabilities and limitations

A typical power plant protection study includes the following components and more:

- Primary Generator Protection
- Backup Generator Protection
- Overall Differential Protection
- Generator Step-Up Transformer Protection
- Excitation Transformer Protection

For more information visit:
www.geenergyconsulting.com

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