

# Ovation™ Excitation Solutions

## Generator Excitation Control

Power plant generators and associated excitation controls play a critical role in maintaining grid stability. Damage or complete failure of an aging generator excitation control system can force an unplanned outage, resulting in lost revenue.

Spare parts and knowledgeable service for obsolete voltage regulators or excitation control systems are often difficult and expensive to obtain. Additionally, original vendor training may not be available to instruct plant staff on how to properly use and troubleshoot older systems.

Generator excitation standards are constantly changing to keep pace with the evolving power industry. Legacy systems may not adhere to new requirements and upgrades to bring them into compliance may not exist.

In many cases, these issues can be avoided through use of an up-to-date and reliable generator excitation control system.

### Think about your excitation control system needs...



Do your operators know how to use the system to quickly diagnose issues?



Does your existing system meet changing NERC requirements?



Is it expensive to maintain an obsolete system that has an increased risk of failure?

**You need a solution that provides reliable generator excitation control while eliminating the increasing service and training costs associated with aging systems.**

# Fully Integrated Generator Excitation Control



Integrated Ovation excitation capabilities provide the ability to monitor and control all plant systems from common workstations.



The Ovation excitation solution features a native high-performance module that is dedicated to excitation control functions.

The Ovation system includes native generator excitation control capabilities for rotating or static exciters. The Ovation excitation solution leverages the platform's common HMIs, network, historian, alarming system, engineering tools, diagnostic data and security functions to enable better decision making and improve operator efficiency. Integrated power system stabilizer software and a full suite of limiting and protection functions can be added based on specific plant needs.

The flexible, single-platform excitation control solution is designed for synchronous generators used in hydro, fossil and nuclear power plants with field current requirements up to 10,000 amps. The Ovation excitation system, applicable to both new construction and retrofit projects, can be tailored by Emerson's team of excitation experts to accommodate any plant's unique layout and generator design.

Emerson's lifecycle services cost-effectively keep the Ovation excitation solution current with technology enhancements and industry advancements. A host of training programs are available to teach your staff how to operate and maintain the system well into the future.



## Engineering

Standard Ovation engineering tools simplify system configuration and management of the native excitation control logic and graphics.



## Operations

Common Ovation HMIs, alarms and historical capabilities increase visibility of all plant operations, including excitation, to improve efficiency and simplify troubleshooting.



## Lifecycle

The Ovation excitation solution is backed by Emerson's comprehensive lifecycle programs for maintenance, training and service.



## Compliance

Integrated and up-to-date excitation control strategies support the capability to comply with changing industry requirements.

**OVATION**<sup>™</sup>

For more information:  
[www.Emerson.com/Ovation](http://www.Emerson.com/Ovation)

