

# Voltage regulator installation services

Eaton's engineering and consulting services focus on understanding business requirements, and setting strategies to ensure long-term, efficient and safe operation of your power system. Eaton's engineers and consultants can help diagnose problems and identify ways to improve performance, or transform concepts into flexible, practical solutions that can improve productivity and capital utilization. Eaton can help keep power systems safe, efficient, reliable and up-to-date.

Eaton's Cooper Power Systems™ voltage regulators include more than 50 years of voltage regulator knowhow in design, application, training, and customer support. System voltage is maintained within desired limits using a tap-changing autotransformer. Our controls lead the industry by providing advanced technology, superior accuracy, reliability, and serviceability. Continuity of service is guaranteed through rugged, service proven tap changers and industry standard core-and-coil assemblies.

#### Regulator pre-installation support

Eaton offers engineering service support from conceptualization to delivery:

- System, equipment and protection scheme designs
- Short-circuit, equipment coordination, arc flash and load flow studies

 Start-up and commissioning test plans to simulate anticipated normal and emergency operating conditions

### Regulator new construction support

Eaton provides a full range of support services from commissioning to complete turnkey installations

- Unit acceptance testing includes
- · Oil sampling and testing
- Megger, power factor, low voltage ratio and applied voltage testing
- Operational checks with system voltage applied
- Confirmation of voltage regulator setup and control programming
- Site is left with regulator in the neutral position and the power switch off
- Site supervision including equipment handling, installation, and energization

- · Complete turnkey installations
- Training, including equipment operation, protection schemes, troubleshooting and maintenance

## Regulator operation and maintenance support

Eaton provides full maintenance services including periodic maintenance, multi-year service contracts, and remote monitoring and alarming of potential failure indicators

- Periodic maintenance during scheduled outages (inspection, operations, communications,fluid testing)
- Multi-year inspection and analysis service contracts



Cooper Power Systems

### Regulator life extension support

Eaton provides a full complement of upgrade services for voltage regulators. Our services provide the latest equipment and technologies to modernize your system and provide a consistent equipment platform. Eaton's services include upgrades for Cooper Power Systems as well as most any other voltage regulator equipment.



#### The power of Eaton

Eaton offers complete services for all your power distribution and automation needs. The Eaton global service team is one of the largest and most experienced teams of power system engineers in the industry available 24 hours a day. Eaton provides equipment acceptance testing, start-up and system commissioning; power system analysis including arc flash, harmonics and other power quality studies and field measurements; preventive maintenance, testing and field troubleshooting; multi-year service contracts; power system automation and remote monitoring; aftermarket life extension solutions; as well as turnkey project capabilities.

Eaton's field service engineers can install, start up, commission and service Cooper Power Systems as well as any other manufacturer's power equipment to precise standards with minimal disruption to ongoing facility operations.

For expert service, call 1-800-498-2678 or visit: www.Eaton.com/EESS

For Cooper Power Systems regulator product information, call **1-877-277-4636** or visit: www.CooperPower.com

#### Faton

1000 Eaton Boulevard Cleveland, OH 44122 United States Faton com

© 2013 Eaton All Rights Reserved Printed in USA Publication No. PA027009EN/YDP June 2013 Eaton and Cooper Power Systems are registered trademarks.

All other trademarks are property of their respective owners.

