



## Help Prevent Transformer Fires

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Instead of living in fear of what would happen if a major generator step-up transformer were to fail catastrophically, Sunflower Electric Power Corp. in Western Kansas chose to install transformer protection equipment rather than purchase a backup transformer. Based on Sunflower's experience with the installation, Corey Linville, manager of generation expansion at Sunflower will co-present the session "Preventing Power Transformer Explosions and Fires in Substations" at the Finepoint Circuit Breaker Test and Maintenance Training Conference on Oct. 7 in Atlanta, Georgia.

Sunflower Electric is a small electric cooperative, and its largest generating unit is Holcomb 1, a 360-MW coal-fired plant that provides more than 50% of the electric power consumed by its member-owners. The generator step-up transformer on Holcomb 1 runs almost continuously at conditions very close to its nameplate design.

"We have no spare for this transformer. If it were to fail catastrophically, the expense of the associated downtime would be enormous," Linville said. "We have been quoted lead times of several months to replace the transformer."

So Sunflower opted to install transformer protection equipment from Transformer Protector Corp. TPC claims that its technology can prevent explosions in all oil-filled transformers 0.1 MVA and larger, and Linville will explain why his utility decided to use TPC equipment and give a description of the installation process.

"Large transformers at power generating stations are essential pieces of equipment. Plants can't run without them," Linville said. "Costs to purchase spare transformers continue to escalate as budgets continue to tighten. The TPC equipment provides an intermediate strategy that protects against long outages associated with transformer failures without incurring the significant costs of purchasing a spare transformer."

Linville will cover the theory behind the transformer protection equipment's operation (to react within milliseconds to a fault condition to immediately remove the potential for an explosion and fire), and the basics of how the equipment is installed and operated on a large power generation transformer.

Linville, manager of generation expansion, has 16 years of experience in power production engineering.

Visit Transformer Protector Corp. in Booth #57 at the Hospitality Expo.

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