Together with technology development, the need to keep an installation safe and the surrounding community protected from potential injuries constantly increases. A challenge for old substations is to keep them updated to comply with stricter safety and environmental rules and regulations.

**Increase safety with less flammable fluid BIOTEMP®.** Fire extinguishing systems and secondary oil containment with increased size to accommodate part of the water coming from this system, may be required to meet local building codes and spill prevention plans. Additionally, firewalls and large separation between individual pieces of equipment are a common requirement for the planning of a new substation. However, space restrictions and increasing costs to install or maintain old systems are current issues which need to be addressed in existing substations. Insurability can also be an issue, as the non-compliance with the current requirements may increase the risks and potential costs regarding the installation liability.

With BIOTEMP®, ABB Transformer Service helped a customer to overcome this challenge and re-establish confidence in the installation safety. In this situation the customer’s insurance carrier conducted a risk assessment and concluded that the transformers within several sub-stations needed to be separated by fire walls and protected by deluge sprinkler systems. The insurer agreed to retro-filling the transformers with BIOTEMP®, a “less flammable” fluid, as a less expensive alternative to the firewalls and sprinklers.

The transformers that were successfully retrofilled in 2004 continue to operate safely today.