

## Incident

An electrical fire broke out in the main pump drive cabinet of a pump power building at a municipal water supply facility. The facility, located in a remote area, housed critical equipment essential for municipal water pumping operations.

## Challenges

The fire damage required disconnecting the main high-voltage electrical power from the building. The one large Variable Frequency Drive (VFD) in the main building was the source of the fire damage and required replacement. The replacement process was projected to take over six months due to equipment availability. Additionally, the remaining PLC controls, transformers, and high-voltage switchgear in the building were contaminated and needed thorough decontamination before the replacement pump drive could be installed. A second adjacent pump power building maintained temporary power for essential heating and freeze protection during the winter months.

Time sensitivity was a significant factor, as restoration needed to be completed before the new year to ensure operational readiness for the replacement pump drive. The project involved decontamination of high-voltage switchgear, transformers, breaker panels, PLC control panels, and safety disconnect switches.

## Outcome

AREPA successfully restored all recoverable equipment within the affected building. The restoration was completed on time, meeting the year-end deadline and ensuring the facility's readiness for the installation of the replacement pump drive.

Restoring the equipment significantly reduced the time needed to achieve operational readiness compared to a full replacement. This approach also resulted in substantial cost savings by eliminating the need for complete equipment replacement.

This project demonstrated AREPA's ability to address complex restoration challenges under time-sensitive conditions, allowing critical municipal infrastructure to resume operations efficiently and cost-effectively.

## Photos

