

## APPLICATION SPOTLIGHT – Utilities







# INSULATOR INSPECTIONS AND **DIAGNOSTICS IN SUBSTATIONS**

INSPECT AND DIAGNOSE FAILURES AT LONG RANGES

#### THE CUSTOMER'S CHALLENGE

When an insulator fails, it may cause a widespread outage. There's a good chance it will affect multiple components in the transmission system - creating a larger, more unmanageable problem. It isn't always easy to inspect for potential failures as insulators are often located up high and out of reach. Since it's difficult to inspect, it's also a challenge to diagnose a problem. The failing component could be inside of the insulator, making it harder to get an accurate temperature measurement from a distance.

#### A SOLUTION

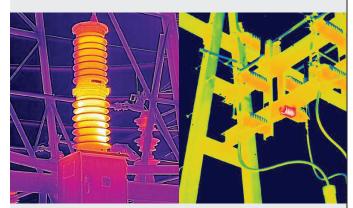
Regular temperature monitoring using a combination of thermal imaging cameras can help you both inspect and diagnose impending failures before they occur. Using a thermal camera, such as the FLIR E8, you can easily scan for temperature differences and hot spots to locate the problem area. Then you can use a high-performance thermal camera, such as the FLIR T640, to diagnose the issue. This type of thermal camera will give you the ability to detect small anomalies, as well as the best accuracy from a longrange distance.

### THE RESULTS

Through regular thermal inspections, you can find fault locations, diagnose the severity of problems, and correct issues before an incident. This will establish a safer work environment, increase product efficiency across the system, and improve customer satisfaction by ensuring no loss of electricity.



If an insulator fails, it may cause widespread outages



Thermal imaging is an invaluable tool when inspecting for and diagnosing potential failures



