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 long-range 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.