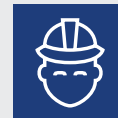




## APPLICATION SPOTLIGHT—Utilities



Improve  
Productivity



Improve  
Safety



Improve  
Reliability

# INSPECTION & MAINTENANCE OF A THREE-PHASE PAD MOUNTED TRANSFORMER

## WORK SAFELY WITHOUT OPENING CABINETS; AVOID OUTAGES THAT LEAD TO CUSTOMER DISSATISFACTION

### THE CUSTOMER'S CHALLENGE

Opening a cabinet to perform maintenance on a pad-mounted transformer presents an inherent safety risk. The person conducting the inspection needs to be a qualified technician with the proper electrical safety training and the appropriate Personal Protective Equipment (PPE). These safety guidelines are meant to protect workers, but can't completely remove all risk. Unseen critical issues could be hiding behind closed cabinet doors, leading to shock hazards or even an arc flash event. Before a technician can open the cabinet doors, they must complete a Job Safety Analysis (JSA) and a Job Hazard Analysis (JHA) – necessary steps that can add significant time to the job. Multiple technicians may be needed to perform the scheduled maintenance, increasing overall costs, while mandatory maintenance schedules established by insurance companies may require specific inspection and maintenance activities.

### A SOLUTION

Combining an infrared camera and IR Windows can provide a multitude of benefits. Some companies find that installing a pair of IR Windows – one on the LV side and another on the HV side – allows inspectors to perform quick and safe inspections using an IR camera. IR Windows allow inspectors to determine whether any corrective measures are needed without having to open the cabinet doors. FLIR IRWx-PS large-format windows are designed to meet IP67/NEMA 6, with dust/water resistant protection and anti-corrosion features. The FLIR E75 can record visual, thermal, and enhanced thermal images to help inspectors identify hot spots. It features on-screen area measurement, a range of auto-calibrating optics, and a Wi-Fi connection to smart devices for sharing images and reports from the field.

### THE RESULTS

IR Windows paired with an inspection routine using IR cameras allow companies to be proactive rather than reactive, catching major issues before they escalate enough to cause an outage. IR Windows can significantly reduce inspection times because inspectors armed with IR cameras can scan through the windows for issues with overheating terminations, cables or windings. Companies may find this combination not only saves money through faster inspection times, but also through efficiency. This improved process could also allow companies to increase the number of inspections, ensuring transformer reliability.

For more information about FLIR in electric power distribution or to schedule a product demonstration visit:  
[www.flir.com/power-distribution](http://www.flir.com/power-distribution)

Imagery for illustration purposes only.  
[www.flir.com](http://www.flir.com)  
NASDAQ: FLIR

CORPORATE HEADQUARTERS  
FLIR Systems, Inc.  
27700 SW Parkway Ave.  
Wilsonville, OR 97070  
PH: +1 877.773.3547

Equipment described herein is subject to US export regulations and may require a license prior to export. Diversion contrary to US law is prohibited. ©2019 FLIR Systems, Inc. All rights reserved. 05/19- 19-1239-INS



*Infrared scanning is applicable on all electrical assets but inspectors typically need to fill out JSA and JHA forms, then put on extensive PPE, before opening cabinets*



*With IR Windows, inspections can be performed more efficiently because the cabinet remains closed at all times. Here, a pair of IR Windows are installed on the LV and HV side of a pad-mounted transformer, allowing a more comprehensive view of the equipment inside*



FLIR IRW-12PS

FLIR E75

