



CONSERVATION VOLTAGE REDUCTION

The INCON® Distribution Transformer Monitor (DTM) provides continuous, meter-grade precision performance monitoring of high-value, mission critical, low voltage pad mount and conventional pole mount transformers. With its ability to monitor key metrics like voltage, current, power factor, and phase angle at the distribution transformer level, the DTM provides utilities with crucial insights for Conservation Voltage Reduction (CVR) initiatives.

IMPLEMENTING CVR AT THE EDGE

CVR is a strategic approach to energy conservation that focuses on regulating voltage levels throughout the power distribution network. By maintaining optimal voltage levels, CVR aims to minimize energy losses, improve equipment efficiency, and enhance overall grid performance. Traditionally, utilities faced challenges in precisely monitoring and controlling voltage at the edges of their networks, where distribution transformers play a pivotal role. The DTM can provide utilities with the tools they need to identify and monitor energy usage at the very edge of their networks.

OPTIMAL VOLTAGE CONTROL

Voltage Levels: Monitoring voltage at the distribution transformer level allows utilities to ensure that voltage levels are within the desired range and dynamically control voltage levels with precision. This precision is vital for optimizing energy distribution and reducing unnecessary energy losses.

LOAD BALANCING

Current Levels: Measuring current at the distribution transformer level helps utilities understand the load distribution across the network. This information is crucial for load balancing, preventing overloads, and ensuring that transformers operate within their capacity limits.

EFFICIENT ENERGY CONSUMPTION

Power Factor: Power factor measurement is essential for evaluating the efficiency of energy consumption. By assessing how effectively electrical power is converted into useful work, utilities can identify areas for improvement and enhance overall system efficiency.

POWER FACTOR CORRECTION

Phase Angles: Maintaining a consistent phase relationship between voltage and current is essential for energy efficiency. Monitoring phase angle helps in maintaining a power factor close to unity, which is crucial for streamlined energy distribution.



**THE AVAILABILITY OF
REAL-TIME DATA ON POWER
FACTOR, VOLTAGE, CURRENT,
AND PHASE ANGLE EMPOWERS
UTILITIES TO MAKE
INFORMED DECISIONS.**

**THIS DATA-DRIVEN APPROACH
ENHANCES THE UTILITY'S
ABILITY TO RESPOND TO
CHANGING CONDITIONS AND
IMPLEMENT STRATEGIES FOR
CONTINUOUS IMPROVEMENT.**