# Wattsguard™

## Mitigating risk for Rising and Lateral Mains

camlin energy

# WATTSGUARD

## MONITORING AND PROTECTION FOR RISING AND LATERAL MAINS

Many multi-occupancy buildings contain ageing Rising and Lateral Mains (RLMs) that are scheduled for replacement. DNOs have a responsibility to maintain these circuits in buildings that need modernisation, reducing the risk of electrical failures that may lead to fires due to the age and condition of wiring.

Modernisation reduces the risk of electrical failures and subsequent fires. DNOs are faced with the challenge of prioritising RLM refurbishments across many buildings. By revealing electrical breakdown activity, Wattsguard can provide clear guidance on which buildings to prioritise for upgrade. This significantly reduces risk by enabling the targeting of low-grade health assets.

Deployed in hundreds of buildings across the UK, Wattsguard combines Camlin Energy's fieldproven Weezap LV vacuum circuit breaker with our Sapient network visibility performance optimisation service.

Wattsguard continuously monitors power quality data and perturbations in load patterns, allowing identification of insulation breakdown. When a breakdown is detected, Sapient issues an alarm, advising manual inspection or isolation of power to pre-empt potentially hazardous situations that may present significant safety risks to building occupants.

In addition, by monitoring the load pattern in the building and using the digitally programmable protection available in Weezap, a more suitable protection setting can be used, reducing the energy let through into the building in the case of an arcing fault.

In cases where an LV feeder way supplies underground network as well as RLM circuits, Weezap can be combined with Camlin Energy LV monitor device PRESense, installed at the base of the risers, to provide information about activity in individual risers and phases, which can help pinpoint emergent problems very quickly.

When used in conjunction with the Sapient service a PRESense can detect and profile issues with RLM buildings and enable the appropriate targeting of the Wattsguard solution, allowing DNO's to continuously maintain a profile of 'at risk' buildings, to reduce costs of inspection cycles.





## COMPLETE SERVICE OFFERING

### Installation

Experienced Sapient staff confirm the installation is set up correctly, check appropiate settings for an RLM installation, and test the communications link. They raise the install on the Sapient system for continuous monitoring.

01. DEVICES INSTALLED ONSITE

### Data Analysis

Power quality data is checked for overload conditions. Load data analysis gives new protection settings. Waveform data is checked for signs of insultation breakdown. Remote operation of circuit breakers can be performed on pre-arranged conditions.

02. DATA CAPTURE AND PROTECTION

03. EXPERT ANALYSIS

### Ongoing Monitoring

Regular communications with equipment ensures continuing protection, and power quality and perturbation data is collected.

04. CLOSING THE LOOP

### Alarms and Reporting

Alarms are generated for overload or insulation breakdown. Reports provide information on relative health, allowing optimisation of RLM investment.

# BENEFITS

By analysing RLM network data, Operators can proactively implement measures such as adaptive protection and remote operation, reducing safety risks to occupants.

Analysis of load data allows Wattsguard protection settings to be optimised for more sensitive, reliable detection of likely fault conditions and fewer false triggers.

With continuous monitoring capability, Wattsguard significantly reduces the risk associated with aging RLM installations, giving Operators advanced warning of imminent electrical insulation failure.

Wattsguard can provide valuable information to identify and rank lower health assets, allowing operators to prioritise their investments in modernisation of RLM networks.

# CAPABILITY

• 24/7 monitoring of RLM networks in high-rise and multioccupancy buildings • Weezap LV vacuum circuit breakers installed on RLM network continuously monitor power quality fluctuations. • Remote operation allows DNOs to safely take an installation offline before staff attend onsite. • Power quality data collected by Weezap communicated to Sapient monitoring and analytics centre for automated and manual analysis. • Alarms generated by insulation breakdown or overload conditions.





# CONTACT DETAILS


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