Viper Innovations

Millions to Be Saved in CP7 with New Approach to Life Extension of Signalling Power Assets

Network Rail rolls out CableGuardian technology across multiple regions

CP7 has been touted as the 'make-do-and-mend' control period. Prospective economic headwinds, the impact of inflation and the need to balance government books mean that Network Rail would have to deliver more with less.

Network Rail will have to find even more efficiencies in the delivery of work and seek novel and innovative ways to maintain safety, performance, efficiency and sustainability.

There have been discussions in the media about the potential to allow some assets to degrade over CP7 with the expectation of renewal in CP8. However, there has been resultant pushback from the Office of Rail and Road (ORR) and other railway stakeholders challenging this thinking. Nonetheless, life extension works (LEW) will be front-and-centre in ensuring the railway operates safely and in compliance. However, what's the possibility of determining the life remaining in the asset to ensure minimum intervention and maximum asset availability and efficiency – all with minimal environmental impact?

It is essential to understand that very few railway assets have such an impact on performance as a failure

of signalling power. In addition, the invasive and high-pressure environment of fault finding, maintenance, incident response and SPS can be a recipe for disaster. Safety issues, performance failure, missed KPIs and waste all result from being unable to predict and prevent failures and intervene before life expiry. Furthermore, renewals on SPS tend to be a blanket approach based on information gathered during a 5-yearly test, which can be affected by local climatic conditions at the time of the test and referenced against asset age. This leaves the asset manager with very little intelligence to determine the actual underlying condition of the asset and no real prospect of being able to deliver spot renewals.

So, what's the solution?

Previously, no technology was designed to provide the necessary insight into this asset. Monitoring technology for SPS has always focused on triggering an alert when base thresholds for safety are breached. Compliance with BS7671 was the endgame, with an eye specifically on the basic electrical safety of the asset, but since 2018, thanks to a proactive collaboration between Network Rail and Viper Innovations, there is an answer.

CableGuardian is the only technology proven to provide an in-depth understanding of asset conditions, allowing you to deliver in both the project and maintenance domains. To maximise efficiency and sustainability in renewals and to deliver LEW or spot renewals for SPS systems, CableGuardian has been designed to monitor insulation resistance (IR) and insulation capacitance (IC) to best-in-class levels. The CableGuardian technology can proactively monitor the safety and performance degradation of cables, switchgear and transformers over multiple control periods. This allows teams to intervene well before failure or plan renewal years in advance, therefore allowing the engineer to plan exact life extension works to the minimum spec, enable maintenance-delivered rolling renewals based on hard evidence and encourage planning to be done multiple control periods ahead.

Network Rail has proven over a prolonged period that CableGuardian pays back handsomely in whatever configuration it is deployed, from Schedule 8, maintenance savings and operational expenditure. So, if you are looking for ways to deliver a life extension strategy for assets, improve the safety, performance and efficiency of SPS asset management or are looking for MVP strategies for project delivery, contact Viper Innovations today.

Click **here** to visit Viper Innovations.

Learn more about CableGuardian:
www.viperinnovations.com/cableguardian

Contact us!

VIPER INNOVATIONS

Proven Tier 1 monitoring technology supporting rail operators since 2018

5+ YEARS

MILLIONS TO BE SAVED IN CP7 WITH NEW APPROACH TO LIFE EXTENSION OF SIGNALLING POWER ASSETS

CableGuardian is a Network Rail approved Tier 3, Tier 2 and Tier 1 cable monitoring system as specified in NR/L2/SIGELP/27725 – Insulation Monitoring and Fault Location Systems for use on Signalling Power Systems.

Our unique technology provides unparalleled insights across the lifecycle of a system, moving to a true condition-based asset management approach that allows cable faults to be quickly and accurately located.

Improve signalling resilience by turning data into information and insight. Realise safety, performance and efficiency benefits for your operational assets with proven results since 2018. Network Rail Approved: PA05/06538.

£5M SAVED in penalty payments

30K AVOIDED in delay minutes

£150K SAVED in maintenance costs

CABLE GUARDIAN®
A VIPER INNOVATION

Helping passengers arrive on time

Find out more…

www.viperinnovations.com/cableguardian