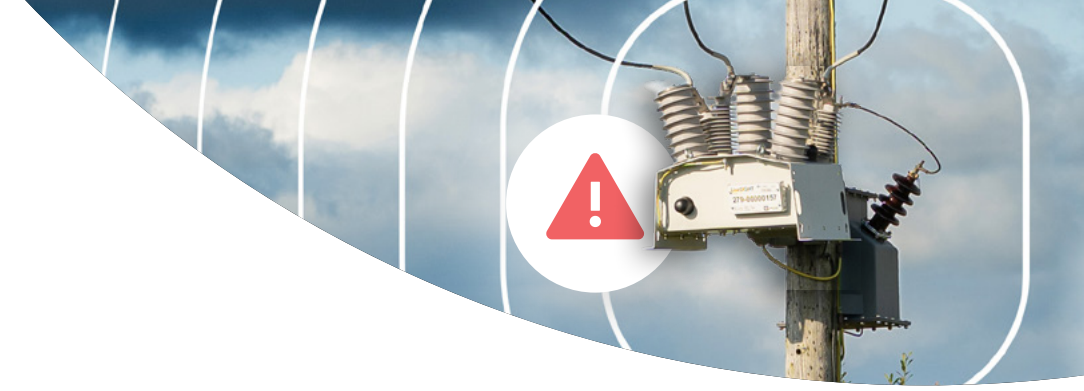


camlin energy

Case Study

LineSIGHT

Executive Summary

On the morning of Saturday 26th September 2026, the LineSIGHT system successfully detected an anomalous response using its TDR capability on the Ashleigh Road circuit on SP ENW's 11 kV network. The anomaly was indicative of a line lowering from its safe normal height, with the automated alert raised within 2 hours of the event, as designed. Several locations were identified to be investigated, with one of these locations measured to be within 91m from actual, while manual review narrowed this to within 10m of the actual location, **confirming both the technological feasibility and LineSIGHT's capability to monitor electrical networks for this safety-critical condition.**

Subsequent review identified no pre-fault activity, for example, arcing, before or after the event thus **this fault was invisible to conventional protection and monitoring systems.**

Camlin and SP ENW are continuing to work together where opportunities for further improvements have been identified to further expand LineSIGHT capability as well as the business processes delivering a more efficient and safer network.

Lowered Line Event

A low line clearance condition occurred on the Ashleigh Road circuit on the morning of Saturday 26th September. The fault location is shown in the figure below.

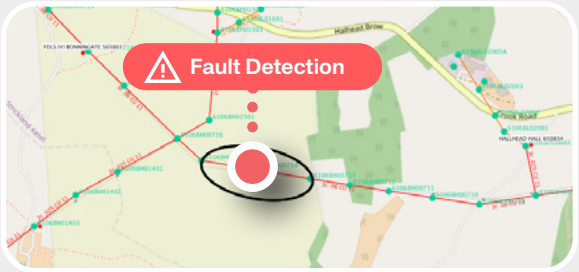


Figure 1: Location of lowered line

> **Upon site visit by SP ENW, a low line condition was confirmed, with the following observation:**
> "Line hanging around 10/12 foot off the ground … at HVP XXXXXX close to …" §

Detection and Location

On 26th September, LineSIGHT device 279-00001721 captured a "high confidence" line anomaly alert as the change in TDR response at this time met all the classification criteria for identifying this as a potential lowered line. A second LineSIGHT device, 279-00002155, also detected the change in network response however the locations did not align to a single point. The automated alert produced several potential locations with notification automatically raised as "high confidence" estimation within 2 hours of the event to SP ENW.

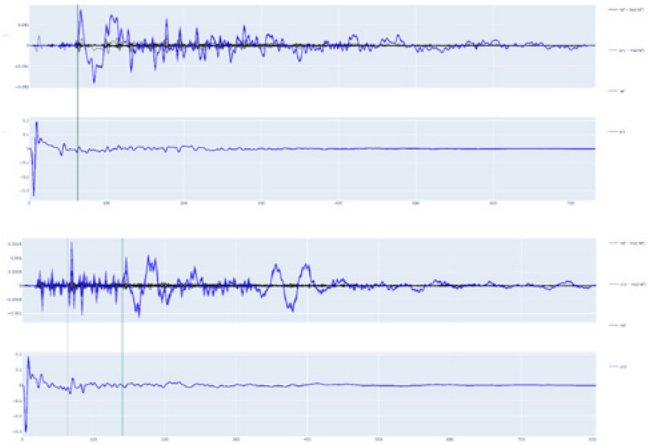


Figure 2: Event TDR data from the 2 devices that detected the event. The green line represents the true location of the change, and the grey line the automated estimated location.

Figure 3 demonstrates how some of the estimates have clustered in close proximity to actual. Using a manual review of the data, it was possible to triangulate the location using the 2 devices' responses to identify the exact location of the event.

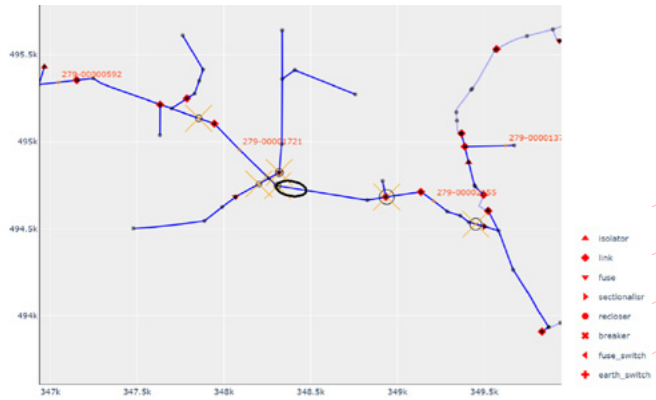


Figure 3: Automated location estimates from TDR data as yellow crosses, true location circled in black.

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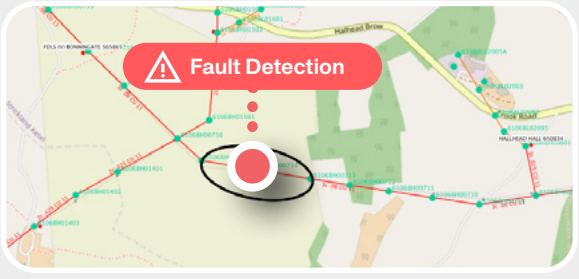


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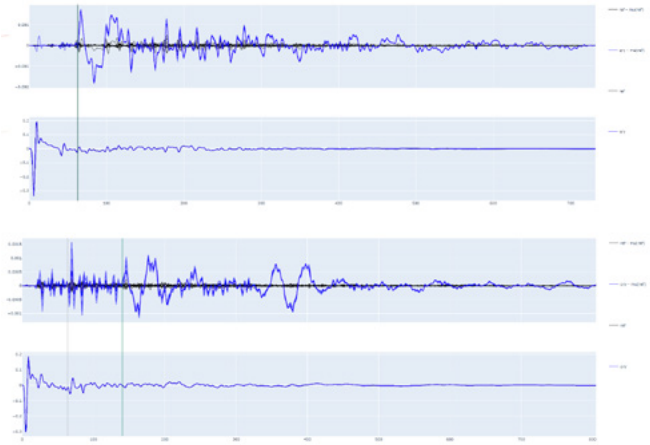


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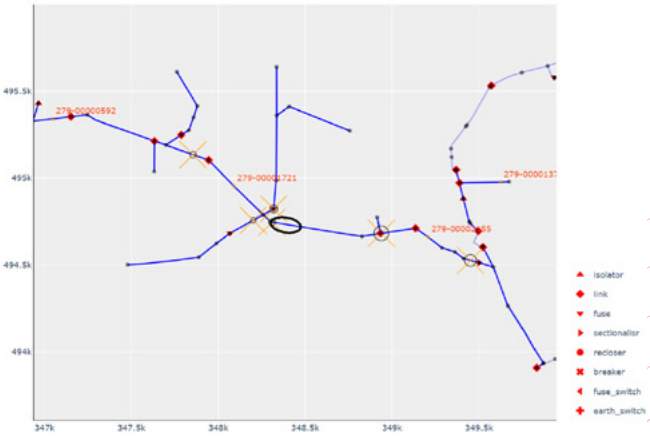


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