

NCR Summary

SITE NAME

Energy South (NG): ZA - 4M8000

IE1 REF

DESCRIPTION OF NCR AND WHAT CAUSED IT

On 31.07.2024, following an inspection of sag for span ZA521 to ZA522, the team noticed that the span had sagged lower than anticipated overnight. This led to concerns regarding the integrity of the permanent joints installed at both ZA521 and ZA522 and whether the steel core had moved within the joint.

NOTE: No physical evidence of this movement recorded, other than the conductor sag being lower than expected.

NOTE: As this is a new model of press (CHS Electric), investigation works took place, to rule out the possibility of the steel core slipping within the joint.

NOTE: Whilst the investigation underway, the teams have been prohibited from using CHS presses.

WHAT HAS BEEN DONE TO FIX IT?

When tested under 5t load, the steel core within the CHS Joint moved approximately 10mm. This was evidenced by the black mark moving 10mm out of the joint. The Izumi Pressed Joint did not move under 5t load.

The CHS Joint was then left under load at 3.9t to mirror the sagging load of the ZA521 – 522 Span, this joint was left under load over night. On return to the CHS Joint in the morning, the Steel had moved a further 10mm out of the CHS Joint.

Joint was left and monitored under 3.9t load to determine if additional movement would be present.

On 01.08.24, steel core was found to have moved an additional 15mm out of the joint.

On 02.08.24, steel core had moved a further 15mm, bringing the total movement to 40mm.

NOTE: 10-11.08.24, Joints were replaced at ZA 470 & 522. During replacement activities, it was discovered that the steel core was not present within the joints at ZA 522. The steel core had retracted approx. 1.5m within the span, which consequently resulted in Near Miss being raised.

NCR REF NO.

5027

DATE & TIME NCR IDENTIFIED

30 Jul 2024 11:00

IMMEDIATE ACTION TAKEN

The team visually inspected the CHS Press against the Izumi Press, which is the normal press type used for OHL Operations.

A testbed was set up in the compound, to compare how a CHS Pressed Joint compares with an Izumi Pressed Joint.

Individual Joints were pressed onto the Steel Core of the Conductor with each press type. The joints were then marked and loaded with 5t, then monitored to establish if the joints would fail.

Team identified where CHS presses (on joints) have previously been used on site. These presses have now been tested & same issues identified.

NOTE: 01.08.2023 - CHS present at site to witness testing - defect raised for equipment.

Offending CHS presses removed & taken out of use.

NCR STATUS

● Open

NOTE: 16.08.2024, The defective joints have been sent to XYTechs for testing along with the conductor aluminium strands to investigate whether the remaining aluminium in the span had experienced significant enough forces to overstress it beyond design capabilities and potentially render it unsuitable for future use.

Supporting Documents

There are no records to display.