



Safety Alert

Removing fuse from street lighting column – Potential for burns

19 August 2020

The following pages of this safety alert were issued by Highways England's supply chain partner:

Kier Highways

SHE ALERT

Ref: SHE H170 A BCC Arc Flash
Issued by: Kier Highway SHE
Department
Date: 18/08/2020



Removing fuse from street lighting column – Potential for burns

A street lighting electrician was isolating a mains supply to replace a damaged secondary isolator in a sign column. When removing the mains fuse carrier, the live and neutral arced and causing a flash fire.

The operative was experienced and qualified.

The operative had followed the Kier Risk Assessment and Safe System of Work.

The Point of Work Risk Assessment was completed.

He was mentally and physically healthy.

He was wearing the correct arc flash PPE, gauntlet gloves and visor.

His behaviours met expectations – he stood to the side of the column to remove the fuse.

The **preventative** control measure – isolating the column **failed** the investigation showed that the insulation on the live and neutral had shrunk over time, pulling the fuse brought them close enough to arc.

His behaviour influenced by training was effective, stepping to the side shielded him from the direct flash.

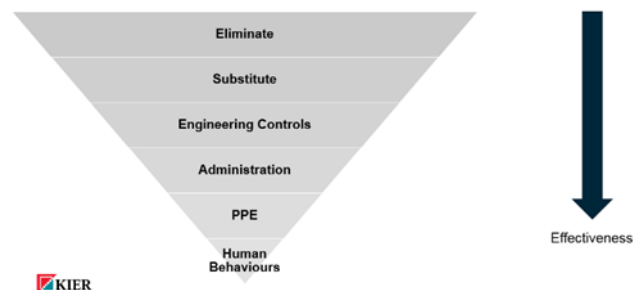
The **Mitigation** control measure – arc flash PPE was effective he sustained no injuries from the 1000°C flash.

The behaviours and effective combination of control measures saved his life.



Immediate actions to prevent reoccurrence

1. Always check electrical components for signs of visible damage.
2. If you are unsure about condition request the DNO isolate the supply upstream.
3. Always follow your safe system of work and training.
4. Wear the correct PPE for the task
5. Behave responsibly at all times, maintain your situational awareness during high risk activities.



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