Arc from 132 kV Overhead Power Lines

On the 7th May 2020, an aggregate lorry was delivering materials to a site compound which had a run of 132 kV power lines directly above it, the minimum height of these was 6.7 metres. The power lines had been risk assessed but on the morning of the incident the driver failed to take heed of the instructions given to him by the supervisor and an operative in the compound just prior to the incident.

The driver reversed into an area where loads had been safely delivered previously without incident. After tipping he pulled forward away from the load with the lorry ram still extended causing an electrical arc between the cables and the lorry. This caused 5 tyres on the vehicle to blow out but fortunately the driver stayed in the cab and no injuries were sustained. A full investigation is being carried out and the outcome of this will be communicated to all relevant personnel in the company concerned.

Interim actions undertaken by the company until the investigation is completed.

Where any activity is required to be carried out beneath or adjacent to Overhead Power Lines, regardless of voltage, the following MUST be carried out:

- Consultation with the Distribution Network Operator (DNO) to establish if the lines can be insulated, isolated or diverted where practical to do so.
- If the above measures are not practical, we must follow the advice of the DNO regarding minimum safe distances, both vertically and horizontally.
- Physical measures must be implemented to prevent encroachment into the danger zone, taking account of vehicle and plant height, including those with tipping, rotating and reaching capability. These measures could include goal posts, conspicuous bunting, barriers and warning signage.
- A Traffic Management Plan developed to identify defined traffic routes. This should be communicated to all relevant staff and suppliers.