

WORK NEAR OVERHEAD POWER LINES

ACTIVITY RAMS — ADAPT TO SITE BEFORE USE

Line owner consulted · divert or switch off first · barriers, goalposts, exclusion zones · contact

KD-RAMS-PL-006 Rev A0

Statutory basis: CDM 2015 reg 25(2) — where there is a risk to construction work from overhead electric power cables, they must be directed away from the area of risk, or the power isolated and, where necessary, earthed; reg 25(3) — where neither is reasonably practicable, suitable warning notices together with barriers suitable for excluding work equipment which is not needed, suspended protections where vehicles need to pass beneath the cables, or measures providing an equivalent level of safety. Electricity at Work Regulations 1989 reg 14 — nobody works so near a live conductor that danger may arise unless it is unreasonable for it to be dead, reasonable to work near it live, and suitable precautions are taken. HSE GS6 (4th edition, 2013) sets out the practice and its order: consult the line's owner; avoid the work, divert or underground the line, or switch it off; only then barriers, safety zones and goalpost crossings. LOLER 1998 reg 8 for any lift made near the line. RIDDOR 2013 Schedule 2 lists plant or equipment unintentionally contacting an uninsulated overhead line above 200 volts, or causing an electrical discharge from one, as a dangerous occurrence. This document is the recorded safe system of work required by HSWA 1974 s.2(2)(a) and MHSWR 1999 regs 3 and 5. Written for Great Britain; in Northern Ireland the equivalent Northern Ireland regulations apply.

1 DOCUMENT AND PROJECT IDENTIFICATION

RAMS REFERENCE	PROJECT / SITE REF	SITE NAME AND ADDRESS	DATE PREPARED	NEXT REVIEW DATE
CLIENT / PRINCIPAL CONTRACTOR	PLANNED START	DURATION	OPERATIVES	SUPERVISING THE WORK

2 SCOPE OF WORKS

Work with plant, cranes, MEWPs, tipper vehicles, scaffolding and long materials within 10 m, measured horizontally at ground level, of the nearest wire of an overhead power line: identifying the line and consulting its owner, diversion or switching off, ground-level barriers and the safety zone, goalpost-controlled crossing points, work that cannot avoid the line, physical restraints on plant, supervision, and what everyone does if contact is made.

This document does not cover: work on the line itself and vegetation clearance around it (the line owner's authorised staff), buried cables (KD-RAMS-GW-001 and KD-RAMS-GW-004), and recovering a MEWP platform after contact (KD-RA-PL-004). The briefing for the workforce is the toolbox talk KD-TBT-OH-038.

SITE-SPECIFIC SCOPE, LOCATIONS AND LIMITATIONS

3 RISK ASSESSMENT — SCORE EACH RISK FOR THIS SITE, THEN ADD WHAT IS MISSING

The hazards and controls below are the starting point for this activity, written by a working main contractor. They are not complete for your site until a competent person has scored each risk, added the site-specific hazards, and struck out anything that does not apply. Rate risks High / Medium / Low before and after controls.

1. Contact with, or arcing from, a live line — plant, loads, scaffold tubes, ladders

At risk: Operators, slingers, anyone touching the plant

Controls: Every line is treated as live until its owner confirms otherwise in writing; electricity can arc across a gap, so no part of any machine, load, tube, ladder or hand tool is allowed within the safe clearance distance the line owner gives. Nothing is worked, moved or erected within 10 m of the nearest wire, measured horizontally at ground level, until the controls in this document are in place, as HSE GS6 (4th edition, 2013) advises.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

2. Line not identified, or its voltage and height not known

At risk: Everyone working near the line

Controls: Drawings, the site survey and the network operator's records checked and the route walked before plant arrives; lines on wooden poles are not assumed to be telephone wires. Voltage and height confirmed with the owner; the height measured only by a suitably trained person using a non-contact measuring device. The owner consulted early — diversion and switching off take time and may be charged for.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

3. Barriers relied on where the line could have been moved or switched off

At risk: Everyone working near the line

Controls: HSE GS6 (paras 12 to 15) sets the order, and the permit records how each step was considered: avoid the work near the line; have the line diverted away from the work area or put underground; have it switched off for the work; only then control the work near the live line — and if it cannot be done safely, it is not done. CDM 2015 reg 25(2) requires the cables to be directed away from the area of risk, or the power isolated and, where necessary, earthed; reg 25(3) allows warning notices with barriers that exclude work equipment not needed, suspended protection where vehicles pass beneath, or equivalent measures only where neither of those is reasonably practicable. Tall plant is scheduled for any switch-off window.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

4. Plant or materials straying into the safety zone beside the line

At risk: Operators, everyone near the line

Controls: Where nothing passes under the line, a safety zone is fenced off at ground level with barriers plant cannot simply drive through — filled drums or concrete blocks marked in contrasting colours, an earthed and flagged wire fence, or a marked earth bank — extending 6 m horizontally from the nearest wire on either side, as GS6 advises, and wider on the owner's advice or where a jib could swing into it. Barriers visible at night; nothing stored in the zone; high-level bunting 3 to 6 m above ground over the barriers where cranes work, put up without approaching the wires.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

5. Plant passing under the line*At risk: Operators, banksmen*

Controls: As few crossing points as possible, fenced both sides, with a goalpost at each end whose crossbar is non-conducting and marked in red and white — or tensioned steel wire earthed at each end where the crossing is too wide to span, set further from the line so plant pushing against it cannot stretch it towards the wires. Warning notices on both approaches state the crossbar clearance height; notices and crossbars lit at night and in poor weather; the crossing surface levelled and maintained. Tipper bodies down and booms, jibs and buckets stowed before crossing. Every plant movement under the line uses a goalpost crossing.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

6. Work that cannot avoid the area under or close to the line*At risk: Operators, slingers, everyone in the work area*

Controls: If the work cannot be done safely it is not done (GS6 para 15). GS6's exclusion-zone method is for transitory or short-duration, ground-level work; anything longer near a live line needs the owner's specific advice on clearances and controls, or a switch-off. For short-duration work, only after the owner has confirmed the line cannot be switched off: the exclusion zone the owner advises for that voltage is marked, and no part of plant or equipment — ladders, poles and hand tools included — can enter it, with an allowance for measuring error and for movement in wind. Cranes and excavators fitted with physical restraints set so they cannot reach the exclusion zone, with further restraint where a telescopic or fly jib could extend beyond it; insulating guards and proximity warning devices on their own are not enough. Long objects carried horizontally and low. The work directly supervised by someone who knows the risks. No work under or close to the line in darkness or poor visibility.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

7. Scaffolds, structures and stacked materials near the line*At risk: Scaffolders, erectors, everyone near the line*

Controls: Scaffold tubes and boards handled so no part can reach the safe clearance distance; nothing stacked so high that a person standing on it could breach the clearance; separation of any structure from the line agreed with the owner before it is set out; a horizontal barrier of timber or other insulating material beneath the line only with the owner's agreement and any switch-off the owner needs to erect and remove it.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

8. Contact made — shock and burns to people near the machine*At risk: Operators, everyone nearby*

Controls: The emergency procedure is briefed before work starts: never touch the wires; assume they are live even if not sparking, because lines can be switched back on automatically or remotely; call the emergency services, give the location, say electricity wires are involved and ask them to contact the line owner. The operator stays in the cab, or — only if the cab must be left, for example for fire — jumps clear as far as possible and does not touch the machine while standing on the ground. Everyone keeps well away from the machine, any wire on the ground and anything it touches, and nobody returns until the owner confirms it is safe. Plant or equipment unintentionally contacting an uninsulated overhead line above 200 volts, or coming close enough to cause an electrical discharge, is a dangerous occurrence listed in RIDDOR 2013 Schedule 2 even when nobody is hurt: report it at once through the site procedure so the report is made, and leave the scene as it is once it is safe.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

9. Untrained or unfamiliar operators*At risk: Operators, everyone nearby*

Controls: CPCS/NPORS (or IPAF for MEWPs) verified before the seat; familiarisation on the specific model recorded; no keys left in machines; authorised-operator list held at the control point.

INITIAL (H/M/L)	RESIDUAL (H/M/L)	SITE-SPECIFIC ADDITIONAL CONTROLS, OR N/A	ACTION OWNER	BY WHEN

Site-specific hazards not listed above — every site has at least one:

HAZARD	WHO IS AT RISK	CONTROLS	INITIAL HI...	RESIDUAL...	ACTION OWNER	BY WHEN

4 METHOD — SEQUENCE OF WORK

- 01 Identify every overhead line within 10 m of the work, its route, voltage and owner, from the network operator's records and a walk of the site.
- 02 Consult the owner before work is programmed: can the work avoid the line; can the line be diverted or put underground; can it be switched off for the work, and for how long?
- 03 Record the outcome on the overhead lines permit; where the line stays live, obtain the owner's safe clearance distance and exclusion zone for the plant and work planned.
- 04 Set out the safety zone and put up the ground-level barriers, high-level bunting where cranes work, and warning notices before any plant arrives.
- 05 Build goalpost crossings for every route under the line: fenced passage, non-conducting crossbars at the stated clearance height, notices on both approaches, lighting.
- 06 Fit and prove height and slew restraints on cranes and excavators working near the line; record the settings.
- 07 Brief every operator, banksman and slinger on the zones, the crossings and the contact procedure, using KD-TBT-OH-038.
- 08 Work under direct supervision; tipper bodies down and booms stowed before crossing; long items carried low; no work near the line in darkness or poor visibility.

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ACTIVITY RAMS — ADAPT TO SITE BEFORE USE

continued

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- 09 Check barriers, goalposts, notices and restraints at the start of every shift and after any strike or damage; stop work until they are put right.
- 10 STOP if anything touches or comes close to the line: follow the contact procedure, keep everyone clear, call the emergency services and the owner; report it as a RIDDOR dangerous occurrence and preserve the scene.
- 11 Remove barriers and goalposts only when the last tall plant has left, and hand the line back to the owner as agreed.

SITE-SPECIFIC AMENDMENTS TO THE SEQUENCE

5 PLANT, EQUIPMENT AND MATERIALS

- | | |
|--|--|
| ☐ Ground-level barriers — filled drums, concrete blocks or earthed wire fence | ☐ Height and slew restraints on cranes and excavators |
| ☐ Goalposts with non-conducting crossbars and warning notices | ☐ Lighting for crossings and notices |
| ☐ High-level bunting and flags | ☐ Non-contact height measuring device (trained user only) |

INSPECTION / THOROUGH EXAMINATION REFS

COSHH ASSESSMENT REFS

6 PPE — THE LAST LINE OF CONTROL, NOT THE FIRST

- | | | |
|--|--|---|
| ☐ Head protection | ☐ High visibility | ☐ Eye protection |
| ☐ Safety footwear | ☐ Gloves — task-rated | ☐ Hearing protection |

RPE TYPE, FACE-FIT STATUS, AND ANY OTHER PPE REQUIRED

7 PERMITS REQUIRED BEFORE THIS WORK STARTS

A permit authorises this work in that place, on that day. It extends the safe system of work in this document — it does not replace it (HSE HSG250). The site issues the permit; record its number before work starts.

KD-PTW-OH-031 — Work Near Overhead Power Lines Permit

Before any plant, load, scaffold or long material is used inside the safety zone or under the line.

PERMIT NUMBER

KD-PTW-LO-008 — Lifting Operations Permit

For any crane or other lift made near the line.

PERMIT NUMBER

8 EMERGENCY ARRANGEMENTS — COMPLETE FOR THIS SITE

FIRST AIDER AND LOCATION

NEAREST A&E

ASSEMBLY POINT

HOW THE ALARM IS RAISED

EMERGENCY ACCESS FOR THIS WORK AREA

SPILL / ENVIRONMENTAL RESPONSE

9 BRIEFING RECORD — EVERYONE WORKING UNDER THIS RAMS SIGNS BEFORE STARTING

By signing you confirm the contents of this RAMS have been explained to you, you understand the hazards and controls, and you will work to the sequence stated. Tell the supervisor if the work or the site does not match this document — work stops until it does.

NAME	COMPANY	SIGNATURE	DATE

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continued

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10 PREPARED AND ACCEPTED

Prepared / adapted for this site by — I confirm I have adapted this document to the site, scored the risks, and that it describes how the work will actually be done.

PRINTED NAME	ROLE / COMPETENCE	COMPANY	SIGNATURE	DATE	TIME

Accepted for the site by — principal contractor or site manager review.

PRINTED NAME	ROLE	COMPANY	SIGNATURE	DATE	TIME

Review this RAMS if the work, the site or the law changes, and at least before each new phase of the works. Flatten the completed PDF before filing so the record cannot be silently edited.

R REVISION HISTORY

Every revision of this document, and every review that found nothing to change. The revision on the front of this sheet is the one you are holding — check kubitdocs.com for the current one before use.

Rev	Date	Class	What changed	Authorised by
D0	2026-09-12	first-issue	First issue.	— not yet approved —
A0	2026-09-12	review	Approved for issue by the author. Content unchanged from the reviewed draft; the draft status strip is removed. No independent third-party review has been carried out.	Author — director, UK principal contractor, SMSTS. Not an independent review.

Class: first-issue · material (the law, a control, a field or the scope changed — past buyers are notified) · editorial (wording or layout only) · review (checked, nothing changed) · withdrawal. Revision prefix D = draft, not approved and not for sale; A = approved for issue by the person named, on the date shown.