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ADOPTION OF THE “RED ZONE /GREEN ZONE” SAFE WORKING PRACTICES

*FOR POLE ERECTION UNITS IN VICINITY OF
HIGH VOLTAGE (HV) OH POWER LINES*

About this document ...

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Content approval

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1 ***Executive Summary:***

For some years there has been a "red Zone /Green Zone" process for MEWP work in the vicinity of High Voltage (HV) OH power lines. Following a serious incident review, it has been determined that this process should also apply to PEU working, due to the similarities between a MEWP boom arm and the PEU jib. This AEC details the requirements for operating the Red Zone /Green Zone process for PEU activities.

This process is compulsory with effect from 22/06/2015

Issue 2 –Note the new section 4.1, with mandatory guidance for the composition of the working party

2 ***Status:***

- Safety
- Working Practice

3 ***Scope:***

- Network Investment
- Contract

The target audience is for people working on Openreach Pole Erection Units in the Openreach network, and Northern Ireland". See Section 10 for Contractor information.

4 ***Detail:***

This is the safe method of working in close proximity to overhead HV power lines.

Consider the work site in plan view (see Fig 1). The 'Red Sector' is considered to be an area contained within the minimum safe distance from the power lines (e.g. 3m from 33KV lines). The safe sector is the 'Green Sector'.

The optimum position for the PEU is such that the arc of operation is a 180° arc on the opposite side of the vehicle to the HV lines. If this is not possible, then particular care must be taken if the jib moves into the opposite arc, nearer to the HV lines.

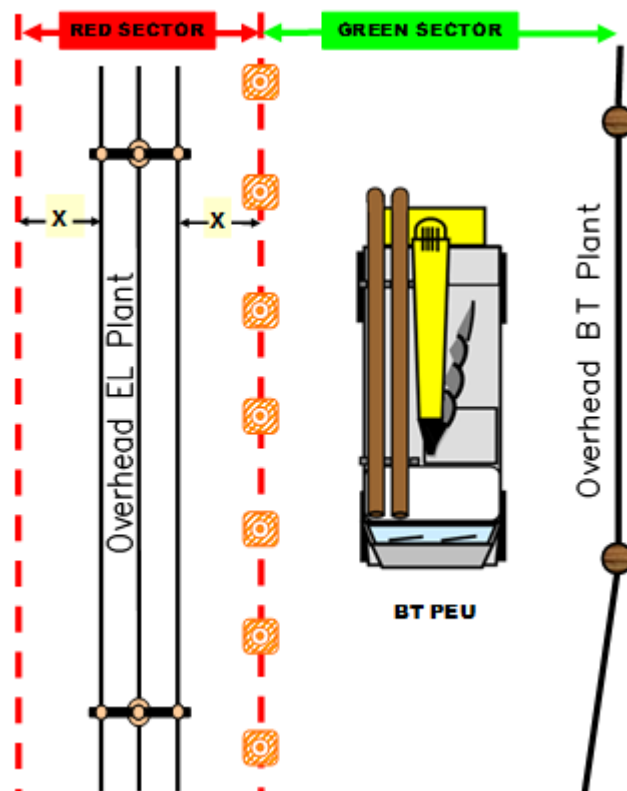
The cones marking the **RED** zone must be thought of as a vertical wall, extending upward beyond all points of reach. It is essential that no part of the PEU, pole or any other equipment encroaches on the 'Red Sector', at ANY time during the work.

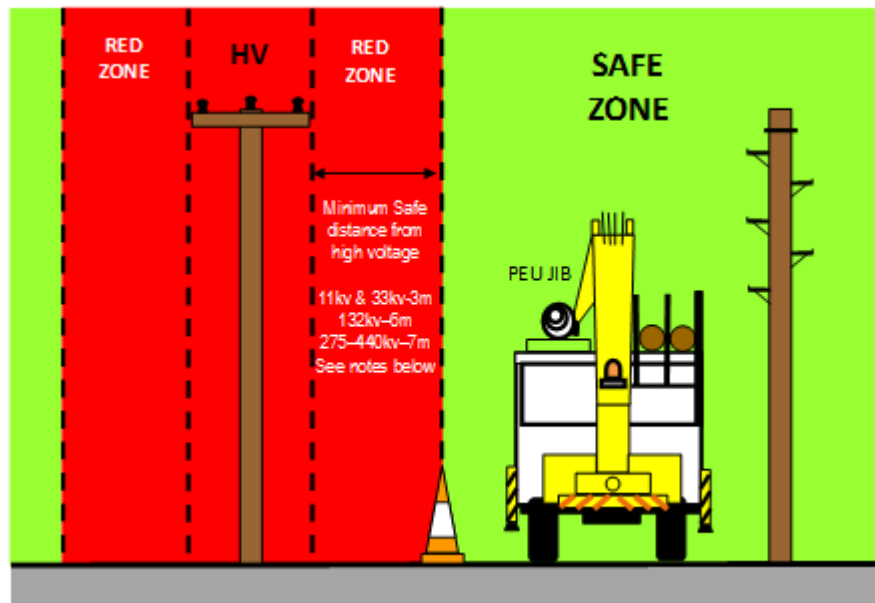
This **MUST** be monitored by the nominated safety person at all times when the jib is being moved.

Under no circumstances should any part of the PEU leave the "Green Sector".

Before work commences, in addition to any required roadworks guarding, the operator and ground support person must also mark the line between the 'Red' and 'Green' sectors with road works guarding cones or road spray paint.

Alternative examples of worksites/road layouts, are shown in Figs 3 & 4 to show how the restricted Zone may look in those or similar circumstances





Figs 1&2 . Position of PEU with regard to Safe Sector working

The nominated safety person has an essential role to ensure the safety of the operative of the PEU and the impact of the operation on others. Where the Safe Sector Method is being used they must:

1. Be involved in the risk assessment
2. Ensure the parameters of jib movement are agreed and ground markers installed as required.
3. Be in attendance and in communication with the operative at all times that the jib is in motion and not leave the immediate vicinity whilst work is being undertaken aloft.
4. Whilst the jib is being moved the nominated safety person **MUST** visually monitor, guide, warn and direct the operative in relation to their position and proximity to the overhead power lines.
5. The nominated safety person will also act in line with instructions from the Line Manager when they are supervising the work.

In all cases where the work site is within 25m of HV lines, then it is also necessary to complete the written Risk Assessment, using pads "Risk & Hazards Worksite Assessment, working in the vicinity of power" (**itemcode 061461**) . The completed on site risk assessment must be retained for 6 months for audit and inspection purposes.

Whenever Poling / PEU work is required to be undertaken within 25 metres of High Voltage power lines the PEU operator must determine whether the work can be undertaken safely and if not the job must not be started and instead be passed back to a manager to decide the way forward.

Warning: In all cases, the work MUST NOT be started where the pole or apparatus to be worked upon is closer than 3 metres to any high voltage equipment, or the work would result in people or equipment being closer than 3 metres to the high voltage equipment.

Alternative Options the manager should consider include:

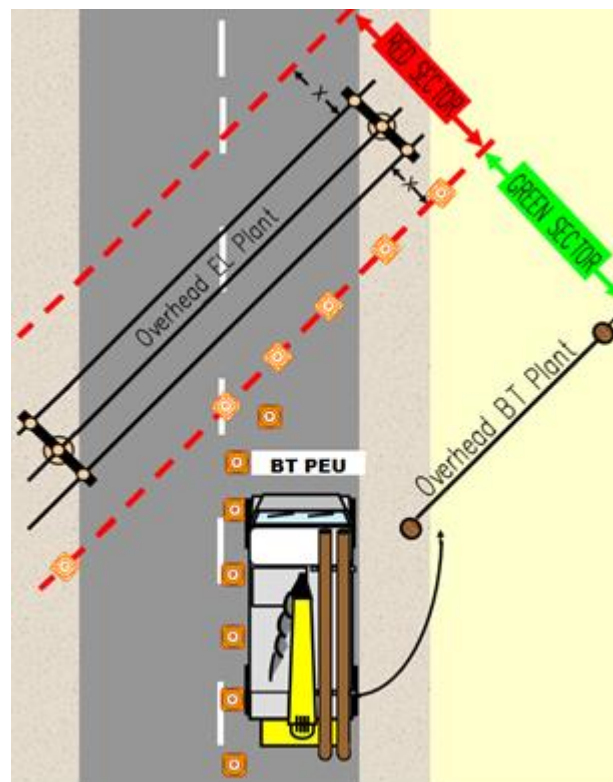
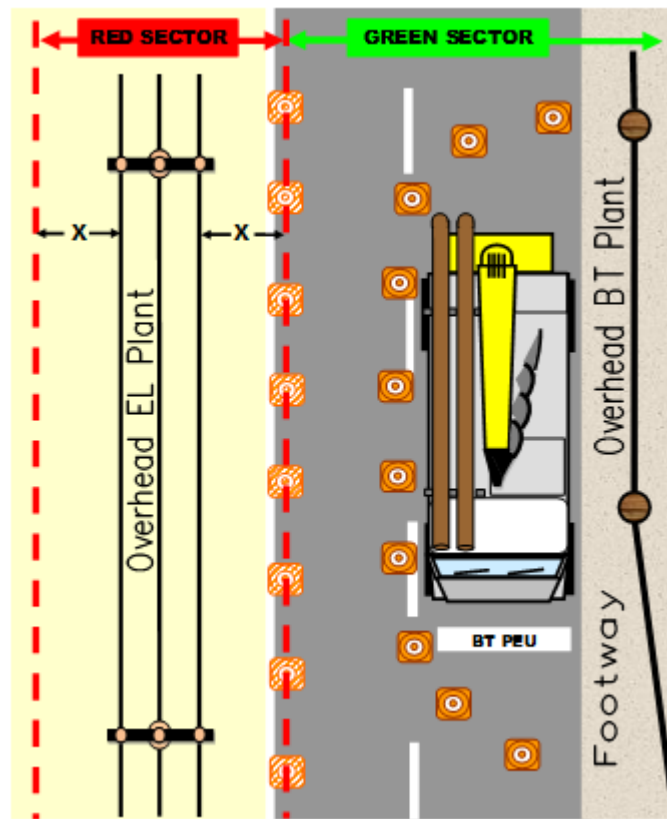
1. Using the "Limited Access Certificate" (LAC) process (contact Safety Direct for details of this new process)
2. Re-planning the work,
3. Asking the DNO to carry out the work or arranging for the power to be turned off.

If the decision is they can work safely with the lines powered, the operator must complete an on site power risk assessment to determine the position of the PEU and the order in which the work will be undertaken.

4.1 Composition of working party

Generally a PEU working party will be 2 people, and during normal operations both team members will be fully involved in operating the PEU controls and manoeuvring the pole.

When working in the vicinity of HV lines, it is mandatory for a third person to be in attendance. They will be the nominated safety person to watch and concentrate solely on the movement of the PEU and pole, and to ensure there is no ingress into the Red zone.



Figs 3&4. Alternative example positions of PEU with regard to Safe Sector working

5 *Training:*

Standard poling courses will need to be amended to include this procedure

6 *Quality Standards:*

Quality standards have been considered and changes are not required.

7 *Accreditation:*

Accreditation checks for poling teams will need to be amended to include this procedure.

8 *Quality Checks and Independent Audit:*

QPW checking and IA checks have been considered and changes are not required.

9 *Planning Policy:*

"Planning Policy has been considered and changes are not required".

10 *Contract Impact:*

The information in this document is issued to Contractors on the following basis

- **Mandatory**

Mandatory = Contains content which the contractor must comply with and which may require commercial activity / rate review. I.e. change of Quality Specification or Safety requirement.

All Contractors will need to be able to demonstrate that they are following this procedure, or have a similar process to ensure safe working when using PEUs in the vicinity of HV EL lines

11 *Reference Documentation:*

11.1 ISIS:

EPT/OHP/B034 will be updated accordingly.

11.2 Manufacturer's Instructions:

Considered and no changes are required

11.3 E- Assistant:

Considered and no changes are required

11.4 Quality:

Considered and no changes are required

11.5 Accreditation Documents:

Considered and no changes are required

11.6 FPQ:

Considered and no changes are required

11.7 Supply Chain:

Considered and no changes are required

11.8 Communications:

- Health and Safety News

END OF DOCUMENT
