



Engineering Recommendation G55

Issue 3 2013

Safe tree working in proximity to overhead electric lines

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Last published, 2008

Revised, 2013

Amendments since publication

Issue	Date	Amendment
Issue 2	September 2008	Revision to take in to account developments in a maturing vegetation management industry and to avoid any confusion relating to the referenced documents.
Issue 3	November 2013	Minor revision of Issue 2 to reflect changes in the British Standards referenced and amendment of affected clauses. This issue does not contain any principal technical changes. Details of all other technical, general and editorial amendments are included in the associated Document Amendment Summary for this Issue (available on request from the Operations Directorate of ENA).

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Foreword

This Engineering Recommendation (EREC) is published by the Energy Networks Association (ENA) and comes into effect from date of publication. It has been prepared under the authority of the ENA Engineering Policy and Standards Manager and has been approved for publication by the ENA Electricity Networks and Futures Group (ENFG). The approved abbreviated title of this engineering document is “EREC G55”, which replaces the previously used abbreviation “ER G55”.

This Engineering Recommendation replaces and supersedes Engineering Recommendation G55 Issue 2 September 2008.

Where the term “shall” or “must” is used in this document it means the provision is mandatory. Where the term “should” is used in this document it means the provision is a recommendation. The term “may” is used to express permission.

NOTE: Commentary, explanation and general informative material is presented in smaller type, and does not constitute a normative element.

Introduction

The purpose of this EREC is to provide a common basis for safe working practices for tree work in proximity to any network operator's equipment. It sets out to differentiate between works carried out by or on behalf of network operators and works carried out by third parties not in their employ. The primary focus of this document is to provide detailed advice to ENA member companies. Third parties will be steered towards existing publications for guidance.

This EREC also provides guidance in the establishment and use of management procedures to achieve the safest possible working practices. It takes into account developments in a maturing vegetation management industry and seeks to avoid any confusion in relating to the referenced documents.

Working in proximity to live overhead electric lines and underground electric cables results in many incidents every year. These incidents frequently result in serious injury of people, damage to equipment and disruption of electricity supplies. Some of these incidents are related to tree work in proximity to live electrical equipment.

The risk of injury associated with any task may be minimised with the development of a suitable work plan based on risk assessment, the use of competent staff, the provision of suitable equipment and the application of safe work procedures. These are the actions that should be taken when preparing to work on trees in proximity to all types of electrical equipment to ensure that the risk of an incident is minimised.

Tree work in proximity to live overhead electric lines and other equipment is subject to the provisions of the Electricity at Work Regulations (EAWR) [N1]. This EREC sets out to comply with these provisions.

1 Scope

The approach set out in this EREC is recommended for all tree work carried out in proximity to any network operator's live electrical equipment.

The management procedures established by this EREC should be applied to work initiated by the network operator. Any work initiated by third parties should refer to Clause 4.

Where the staff of any other employers are working in proximity to live electrical equipment then the network operator will provide guidance to assist those employers to meet their responsibilities to provide a safe place of work. For tree work and related activities, the principles on which that guidance is to be founded are set down in this EREC.

This document gives recommendations for tree work with specific regard to the electrical hazard and does not seek to give guidance on managing the non-electrical hazards.

2 Normative references

The following referenced documents, in whole or part, are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Standards publications

BS EN 50110-2:2010, *Operation of electrical installations. National annexes*

Other publications

[N1] The Electricity at Work Regulations, 1989

[N2] ENA SHE Standard 04:2009, *G55/2 Live Zone LV Distance*

[N3] HSE Guidance Booklet GS6:2013, *Avoidance of Danger from Overhead Electric Lines*

[N4] HSE Guidance Booklet HSG 85:2012, *Electricity at Work – Safe Working Practices*

[N5] ENA SHE Public Safety Leaflet:2012, *Safety Advice for Tree Work Near Overhead Power Lines*

[N6] ENA ETR 136:2007, *Vegetation Management Near Electricity Equipment – Principles of Good Practice*

[N7] ENA ETR 132:2006, *Improving Network Performance under Abnormal Weather Conditions by Use of a Risk-Based Approach to Vegetation Management Near Electric Overhead Lines*

[N8] The Electricity Safety, Quality and Continuity Regulations, 2002 (as amended) (ESQCR)

[N9] New Roads and Street Works Act, 1991 (NRSWA)

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

approved insulated tool

tool including attachments approved by the network operator as being insulated and fit for purpose to the extent that it may be used in close proximity to live electrical equipment without presenting a danger to the operator or network

NOTE: Insulated tools shall be suitable for the voltage that they are being used for.

3.2

circuit conductor

electrical conductor arranged to be electrically connected to a network

3.3

competent

suitably trained person, who is recognised as having sufficient technical knowledge, experience and ability to enable them to avoid danger in respect of the electrical overhead line network and who is authorised by the network operator and engaged to work on its behalf