Guidance on Regulations -

GUIDANCE ON THE ELECTRICITY SAFETY, QUALITY AND CONTINUITY (AMENDMENT) REGULATIONS 2006

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A. INTRODUCTION

The purpose of this document is to provide guidance to duty holders on their responsibilities contained in the Electricity Safety, Quality and Continuity (Amendment) Regulations 2006, and to clarify necessary actions for duty holders to demonstrate compliance with these amended Regulations. These Regulations will amend the Electricity Safety, Quality and Continuity Regulations 2002, which came into force on 31 January 2003.

There are 4 areas that the amendments to the Electricity Safety, Quality and Continuity Regulations 2002 seek to address:

- 1. To update references to British Standard documents,
- 2. To more clearly exclude trams, trolleybuses and other forms of guided transport from the requirements of the Regulations on 'distributors',
- 3. To improve the resilience and reliability of overhead electricity distribution networks, and
- 4. To extend the scope of the Regulations in order to apply to offshore generating installations.

The Guidance is targeted primarily at the duty holders identified in the Regulations, specifically generators, distributors, suppliers and meter operators, including licensed and non-licensed duty holders. It should be noted that contractors and agents of duty holders, parties constructing networks, persons installing connections, persons operating embedded generation, and consumers may also have duties under the Regulations. The requirements of the Regulations apply to electricity networks used to supply consumers in England, Scotland and Wales.

The Guidance is intended to assist duty holders in meeting the requirements of the Regulations. It will be of interest and practical help primarily to engineers (including those involved in the design, construction, operation or maintenance of power systems), technicians and their managers. While it reflects the DTI's view of the meaning of terms used in the Regulations, only the Courts can provide a binding interpretation. The purpose of the Guidance is to amplify the nature of the safety measures and procedures in general terms so as to help in the achievement of high standards of electrical safety in compliance with the duties imposed.

In accordance with government guidelines for implementation of new legislation, this Guidance is published in advance of the new amended Regulations coming into force so as to allow sufficient time for duty holders to comply with the new requirements by the commencement date.

Further copies of this Guidance document can be found at the DTI website at: http://www.dti.gov.uk/energy/energy-reliability/supply-safety-quality/regulations/page18957.html.

The Statutory Instrument for the Electricity Safety, Quality and Continuity (Amendment) Regulations 2006 will be made available at the Office of Public Sector Information website (www.opsi.gov.uk) shortly.

The guidance associated with the Electricity Safety, Quality and Continuity Regulations 2002 is available for download at the DTI's website at: http://www.dti.gov.uk/files/file26709.pdf

A copy of the Electricity Safety, Quality and Continuity Regulations 2002 may be obtained from The Stationery Office (telephone 0870 600 5522, or on line bookshop www.tso.co.uk). Alternatively the Electricity Safety, Quality and Continuity Regulations 2002 can be viewed at: www.opsi.gov.uk/si/si2002/20022665.htm.

B. BACKGROUND

The Electricity Safety, Quality and Continuity Regulations 2002 (S.I. 2002/2665) replaced the Electricity Supply Regulations 1988 (S.I.1988/1057) which were amended five times since coming into force on 1 October 1988 (amendments 1990, 1992, 1994, 1994 No.2, and 1998). The Electricity Safety, Quality and Continuity Regulations 2002 revoked the 1988 Regulations and all amendments.

Since the Electricity Safety, Quality and Continuity Regulations 2002 came into force (on 31 January 2003), a number of issues have arisen that necessitate amendments in the Electricity Safety, Quality and Continuity (Amendment) Regulations 2006. The objectives of the amendments are:

- To reflect the latest amendments of the British Standard Requirements for Electrical Installations BS7671: 2001 IEE Wiring Regulations 16th Edition ISBN 0 85296 988 0, 2001 [Regulation 1(5)].
- To modify the definition of a 'Consumer' and 'Distributor' to clearly exclude trams, trolleybuses, and other forms of guided transport [Regulation 1(5)].
- To augment the current duty for distributors and generators to maintain clearance between electricity lines and trees to avoid danger to the public [Regulation 18(5)] by requiring the cutting of trees to maintain supplies where reasonably practicable.
- To clearly ensure the ESQC Regulations apply to the newly designated Renewable Energy Zone created in respect of offshore generating installations, in addition to the territorial waters of Great Britain.

A public consultation exercise on specific proposals for the proposed amendments to the Electricity Safety, Quality and Continuity Regulations 2002 was carried out between 7 June and 2 September 2005. A summary of responses received from this consultation was published on 29 November 2005 and can be viewed at: http://www.dti.gov.uk/files/file29465.pdf.

The impact, in terms of costs, benefits and risks, of the new Regulations on businesses is included in the publication entitled *Full Regulatory Impact Assessment - The Electricity Safety, Quality and Continuity (Amendment) Regulations 2006' [URN 06/1295]*. The Regulatory Impact Assessment may be viewed at the following website – http://www.dti.gov.uk/consultations/page15238.html.

C. ARRANGEMENT OF THE REGULATIONS

The Electricity Safety, Quality and Continuity (Amendment) Regulations 2006 are made by the Secretary of State for Trade and Industry under powers contained in the Electricity Act 1989 as amended. The Regulations are a statutory instrument and therefore have the force of law.

Regulation 1 relates to the citation, commencement and interpretation of these Regulations.

Regulation 2 details the amendment to the definition of 'British Standard Requirements' in the Electricity Safety, Quality and Continuity Regulations 2002 [ESQCR].

Regulation 3 relates to the application of the ESQCR to tramways, trolley vehicle systems and other forms of guided transport.

Regulation 4 relates to the avoidance of supply interruption caused by trees.

Regulation 5 extends the scope of the ESQCR to apply to offshore waters, specifically the GB Territorial Sea and the Renewable Energy Zone.

The Explanatory Note included after the Regulations provides a summary of the amendments. The Explanatory Note is not part of the statutory instrument.

Once the Electricity Safety, Quality and Continuity (Amendment) Regulations 2006 are passed, the Guidance associated with the Electricity Safety, Quality and Continuity Regulations 2002 will also be updated to reflect the amendments made.

D. SO FAR AS IS REASONABLY PRACTICABLE

The term *reasonably practicable* is used frequently throughout the Regulations. Essentially the term requires duty holders to undertake a risk assessment of the circumstances at hand, i.e. how do the risks of interference, danger or interruption of supply compare with the time, trouble and expense, which would be involved in taking steps to eliminate or minimise the risks? The greater the degree of risk the less weight can be given to the cost of measures needed to prevent that risk.

In the context of paragraph E 4(2) below, reference to *reasonably practicable* shall also take account of a duty holder's compliance with the listed industry standards and the good management practices listed.

E. THE REGULATIONS

1. Citation, commencement and interpretation

1(1)	The Electricity Safety, Quality and Continuity (Amendment) Regulations
	2006 will come into force on 1 October 2006.
1(2)	These Regulations amend the Electricity Safety, Quality and Continuity
	Regulations 2002 [ESQCR], which came into force on 31 January 2003.

2. Amendments to British Standard Requirements

2	In light of the requirement to harmonise cable core colours across the EU	
	and the need to update the standard to incorporate the requirements posed by	
	the ESQCR, this British Standard has been amended further by Amendment	
	No2 (AMD 14905) March 2004.	

3. Application of ESQCR to tramways etc.

3(a)	&	These ensure that operators of tramway, trolleybus and other forms of	
3(b)		guided transport networks are excluded from the duties that a 'consumer'	
		or 'distributor' must comply with.	

4. Avoidance of supply interruptions caused by trees

4(1)	The requirement on distributors to maintain sufficient clearance between overhead line networks and trees (and other vegetation) shall apply 6 years after the original Regulations come into force (i.e. from 31 January 2009). This is to allow duty holders sufficient time to implement their plans and procedures in order to demonstrate compliance.
4(2)	In order to improve the reliability and continuity of supply 'so far as is reasonably practicable', distributors will be expected to have appropriate policies, procedures, resources and programmes in place to ensure sufficient clearances are maintained between trees and overhead lines, so as to avoid contact (electrical or physical) between them causing interference or interruption (by 31 January 2009). From that date, it is expected that all duty holders will operate progressive vegetation control programmes in accordance with the industry standards listed below: • ENA TS 43-8 'Overhead Line Clearances' [Issue 3, 2004] in relation to clearances from lines to trees and other vegetation for all lines; and • ENA ETR132 Improving Network Performance under Abnormal Weather Conditions by Use of a Risk-Based Approach to Vegetation Management Near Electric Overhead Lines' [dated March 2006]

which outlines a risk-based methodology for targeting critical circuits. Duty holders are required to operate progressive tree cutting and felling programmes where appropriate, with a view to improving performance in storms.

Distributors will also be expected to demonstrate that:

- Clear tree cutting and felling standards have been set,
- Vegetation management programmes are up-to-date,
- Overhead line inspection schedules are up-to-date and any subsequent remedial actions are dealt with in a timely fashion,
- All vegetation control is carried out to best arboricultural and forestry practice, and
- They have used all reasonable endeavours to seek to develop and maintain excellent lines of communication with all key stakeholders.

Licensed distributors should also note that they have powers under paragraph 9 of Schedule 4 of the Electricity Act 1989 (as amended) to fell or lop trees which could become a source of danger or interference with the working of the electric line.

5. Application of ESQCR to offshore waters

5(1),	The purpose of these Regulations is to extend the scope of the ESQCR to		
5(2) &	explicitly include the territorial sea of Great Britain, and beyond into the		
5(3)	newly created Renewable Energy Zone. This ensures that the Regulations		
	addressing public safety and supply interruption apply equally to generating stations that are installed either offshore or onshore.		

F. QUERIES

Any queries on the scope, application or interpretation of the current Electricity Safety, Quality and Continuity Regulations 2002, or these amendments or on the contents of these Guidance Notes should be addressed to either:

- The Chief Engineering Inspector (before 30 September 2006) or
- The Head of Network Planning and Resilience (after 1 October 2006).

Both can be contacted at the DTI by telephoning 0207 215 5000, or writing to the address on the front cover.