

A Guide for third party Safety Rule submissions to National Grid

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Purpose and Scope

Users wishing to make a direct connection to the National Electricity Transmission System (NETS) or who are already connected to the NETS will be required to put in place and maintain appropriate Safety Rules which are to be agreed with the host Transmission Owner ¹(TO). For customers directly connected to the NETS in England and Wales the host TO is National Grid Electricity Transmission plc (NGET).

This document outlines the process for submitting **Safety Rules** to NGET, and gives guidance on the minimum standards required. There is a further guidance note which details requirements for the cross boundary and local procedures and this can be found on the National Grid website:

www.nationalgrid.com/uk/Electricity/GettingConnected/Compliance/

This guidance is intended both for Users who are entering the market for the first time and for those who already have Safety Rules registered with NGET.

Overview and References

NGET and Users of its transmission system are required to comply with the **Grid Code**. The Grid Code covers certain material technical aspects relating to connections to and the operation and use of NGET's transmission system or, in as far as relevant to the operation and use of its transmission system, the operation of the electric lines and electrical plant connected to it or to a distribution system. The Grid Code also specifies responsibilities for safety and gives information on Safety Rules in the Connection Conditions (ref: **CC.7 Site Related Conditions**). The Grid Code can be found on the National Grid website:

www.nationalgrid.com/uk/Electricity/Codes/gridcode

The Grid Code **Operating Code No.8 Appendix 1(OC8A)** specifies the standard procedures to be used for the co-ordination, establishment and maintenance of necessary Safety Precautions in respect of England and Wales Transmission System Users. Although not covered by the scope of this document, for Safety coordination in respect of the Scottish Transmission Systems or the systems of Scottish Users, please refer to OC8B. **OC8** can be found on the National Grid website:

www.nationalgrid.com/uk/Electricity/Codes/gridcode/gridcodedocs/

The **Connection and Use of System Code (CUSC)** is the legal document which forms the basis of the contractual framework for connection to, and use of the NETS. Holders of a generation, distribution or supply license are required to be a party to the CUSC Framework Agreement and comply with the CUSC. **Section 2.10** details Safety Rule requirements. Information about the CUSC and the associated charges can be found on the National Grid website:

www.nationalgrid.com/uk/Electricity/Codes/systemcode/contracts/

¹ Note: Connections to the NETS in Scotland are not in the scope of this guidance note. Users wishing to connect in Scotland should contact the appropriate TO for clarification on safety requirements.

How Safety Rules are Submitted

All data submissions associated with new connections to the NETS should be made via a User Data File Structure (UDFS), as part of the Operational Notification (Compliance) Process. Details of the UDFS will be provided to the party seeking connection to the NETS by the Customer Services contact at an inaugural Operational Notification Panel meeting. This meeting will take place after acceptance of a Connection Offer (or where deemed appropriate, a Modification Offer) relating to a connection to the NETS. Whilst the timescales for submitting Local Safety Instructions will be discussed at the inaugural meeting reference should also be made to the provisions of the Grid Code, CUSC and the Bilateral Connection Agreement between NGET and the party seeking connection to or that is already connected to the NETS.

The Customer Services team within NGET are responsible for the Operational Notification Process and management of the User interface for new connections (including submission of general updates to Safety Rules applicable to existing connections) to the NETS. Please click on the link for details of how to contact the Customer Services [Operational Notifications Team](#).

Minimum Standards

Safety Rules should be primarily concerned with achieving safety for persons

There shall be a requirement within the Safety Rules to meet and where appropriate, exceed the requirements of health and safety legislation policies and other commitments to which the third party subscribes. The Safety Rules should be formulated taking into account principally; the Electricity at Work Regulations 1989, the Management of Health and Safety at Work Regulations 1999 and BS EN 50110-1:2004 Operation of Electrical Installations.

Further guidance on suggested format and content is available from the National Grid UK Electricity Transmission plc Safety Rules (Third Edition). The Safety Rules may be found on the National Grid Website at:
www.nationalgrid.com/uk/Electricity/Safety/SR/

The table below sets out the subject matter that should be considered as a minimum standard when submitting Safety Rules to NGET for agreement.

Please note that the contents of the table are not exhaustive and should be used as guide when compiling Safety Rules.

Safety Rules Minimum Standards	
Subject	Guidance
Definitions	There should be a definitions section that applies to the rules
Specific Interpretations	Where relevant use specific interpretations such as 'shall', 'shall where practicable' and 'shall where reasonably practicable'. Mandatory requirements should be recognised
Approach	Give clear direction on safety distances: <ul style="list-style-type: none"> • Across relevant voltages that are the minimum distances needed to be maintained between exposed high voltage conductors or supporting insulators and a person's body (including machinery, hand held tools etc). • Preferably support any given text on safety distances by pictograms • The 300mm safety distance from insulators supporting exposed unearthed HV conductors which are outside of the appropriate Safety Distance should be adequately detailed
Control	The rules should contain methods of control and detail of responsible personnel for: <ul style="list-style-type: none"> • Release of equipment from operational service • Making the equipment safe to work on • Restoration of equipment • Across Boundaries control e.g. The Interaction between control persons via records of Inter System Safety Precautions etc
Isolation and Earthing	There should be clear rules on : <ul style="list-style-type: none"> • How Isolation is to be established • The application of Primary earths and other drain earths. • The use of caution and danger notices. • Considerations given to the type of substation and associated equipment e.g. Gas Insulated Switchgear (GIS) • Where applicable, procedures for monitoring density of gas dependant points of isolation
Locking/keys	Ensure the rules give adequate information regarding locking the following: <ul style="list-style-type: none"> • Points of isolation • Fuses/links • Primary earths • Mechanical equipment • The rules should also give adequate information on the control of associated keys and use of key safes
HV and Mechanical equipment	Rules should contain, where applicable, information for controlling: <ul style="list-style-type: none"> • stored energy • restoration of motive power <p>Where there is a risk of danger from pressurisation or internal access may be required then the rules should give instruction for:</p> <ul style="list-style-type: none"> • draining • venting • purging of equipment
Low Voltage Equipment	For work on Low Voltage Equipment the rules should cover the application of the following: <ul style="list-style-type: none"> • Control and release from service, including isolation. • Exclusion of danger from charged conductors • Where unreasonable to make dead the application of suitable precautions and documentation e.g. Certificate for Live work

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Subject	Guidance
Safety Document Procedures	The rules should give detail outline of procedures for the: <ul style="list-style-type: none"> • Preparation, Issue, Transfer, Clearance and Cancellation of Safety Documents. • Document templates should be included
Categories of Authorisation	The rules should define Categories of Authorisation, for example: <ul style="list-style-type: none"> • Person • Competent Person • Authorised Person • Senior Authorised Person • Control Person etc
Operation of Equipment	The rules should give clear definition on the prohibition of using pre arranged signals or time intervals for the operation of equipment to achieve safety from the system
Demarcation	The rules should define the requirements for demarcated work areas and protection from any system hazards in any such area
Identification of Equipment	There should be a rule that details requirements for identification of equipment to be worked on.
Supporting Documents	The rules should be supported by, make reference to, or contain local instructions/procedures , for example: <ul style="list-style-type: none"> • Safety Precautions Required by both Parties • Safety Precautions Across Boundaries etc • Further detail on cross boundary and local procedure content can be found in the New Connection Guidance notes that can be found on the National Grid website: www.nationalgrid.com/uk/Electricity/GettingConnected/Compliance/
General Provisions	The rules should cover: <ul style="list-style-type: none"> • General Safety as well as Safety from the System • Recognition of other rules and rules being mandatory • Special Instructions for when the rules cannot be applied • Procedures for dealing with any objections on Safety grounds in the application of the rules
Legislation	Referenced Legislation should be the current edition and have the correct name
Legible	Rules should be clear and legible

If any of the details provided by the User do not meet the minimum standards, NGET will provide details back to the User. Working together, both NGET and the User must agree Local Safety Rules that satisfy the requirements prior to the connection/energisation date.