1. SCOPE

This Procedure details the responsibilities of **Control Persons**, *Substation* ***Control Persons*** and **Authorised Persons** who act as **Control Persons**.

2. ISSUE RECORD

This document is not controlled. The current version is held on the Energy Networks Intranet.

Issue Date	Issue No	Author	Amendment Details
May 2001	2	David McKay	Section 7.5 – non-commissioned amended to non- connected. Section 8.1 – Inclusion of additional responsibilities of Control Persons Section 8.2 – Inclusion of additional responsibilities of Control Engineers :8 Page Document.
March 2005	3	Allan MacLeod / Raymond Nelson	General update of PSMC to NMC. BETTA implementation Clarification of Control Centre Responsibilities - now in 8.1 : 8 Page document
Dec 2010	4	Geoff Ryan	General updating. Reference to *Delegated Control Person* removed. Section 8.1 responsibility clarified.

3. ISSUE AUTHORITY

Author	Owner	Issue Authority
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4. REVIEW

This document shall be reviewed as dictated by business change. The proposed revision date can be viewed in the Management Safety Procedures Document Index DOC-00-238.

5. CONTENTS

6. INTRODUCTION

Part C of the Safety Rules details the responsibilities of **Persons**. This Procedure:

(a) defines those **Persons** who shall act as **Control Persons** for:

(i) the **HV** and **LV Systems**, controlled from the Operational Control Centre, associated with the Grid (Transmission) **System**.

(ii) the **HV** and **LV Systems**, controlled from the Operational Control Centre, associated with the Distribution **System**.

(iii) the **LV System**.

(iv) the **LV**, Oil, Air and Gas **Systems** and stored energy associated with items of **Plant** and **HV Apparatus** in substations.

(b) details the limits of **Control Persons** responsibilities.

(c) includes additional responsibilities of **Control Persons** and **Authorised Persons** for the operation of the:

(i) Grid **System(s)** controlled from the Operational Control Centre.

(ii) Distribution **System(s)** controlled from the Operational Control Centre.

7. DEFINITIONS

Terms printed in bold type are as defined in the ScottishPower Safety Rules (Electrical and Mechanical) 4th Edition.

Terms printed in italics are as defined in the Definitions document (OPSAF-11-002) of the Management Safety Procedures.

8. CONTROL RESPONSIBILITIES

8.1 Control Centre Responsibilities

Where the **Company's System(s)** are managed from more than one Operational Control Centre the following shall apply:

8.1.1 Each item of **Plant** or **Apparatus** which forms part of the **Company's System(s)** shall be the responsibility of one **Control Person**. There shall be no joint responsibility for the control of **Plant** and **Apparatus**.

8.1.2 When work or testing is to be carried out on an item of **Plant** or **Apparatus**, which lies within the sphere of more than one Operational Control Centre, each Operational Control Centre shall be responsible for deciding the precautions necessary to isolate the **Plant** or **Apparatus** from the rest of the **System** within their sphere of responsibility.

8.2 HV System (The Grid System) controlled from the Operational Control Centre

8.2.1 The *Grid* ***Control Person*** shall be responsible for the **HV System**, the boundaries of which are defined in OPSAF–11–030 (MSP 4.5).

8.3 HV System (The Distribution System) controlled from the Operational Control Centre

8.3.1 The *Distribution* ***Control Person*** shall be responsible for the **HV System**, the boundaries of which are defined in OPSAF–11–030 (MSP 4.5).

The boundaries may be subject to differences in detail, the differences being agreed and set out in Site Responsibility schedules.

8.3.2 The responsibilities of the *Distribution* ***Control Person*** for the **HV System** may be transferred to a *Field* ***Control Person*** authorised to receive control authority under the conditions detailed in OPSAF–11–034 (MSP 5.4).

8.3.3 The Distribution **System** control boundaries within each Operational Control Centre shall be determined by the Control Room Manager.

8.4 LV System

8.4.1 The **LV System** shall include all **LV Apparatus** from, and including, the **LV** busbars supplied from a secondary transformer, including as appropriate, rising and lateral mains, meters, metering equipment and where fitted **the Company's** 100 amp switch.

8.4.2 The **Control Person** for the **LV System** shall be the **Authorised Person** responsible for carrying out the safety precautions to achieve **Safety from the System**. This includes achieving conditions under which **Live LV** work or testing may be carried out.

8.4.3 Where isolation is required at **HV** to achieve **Safety from the System** for work on or testing of **LV Apparatus** the **Control Person** shall be the **Control Person** responsible for that **HV System**.

8.5 Substation LV, Oil, Air and Gas Systems

8.5.1 The *Substation* ***Control Person*** for **LV**, Oil, Air and Gas **Systems** associated with **Plant** or **HV Apparatus** where work on or testing of **Plant** or **HV Apparatus** requires the isolation of these **Systems** shall be the **Senior Authorised Person** responsible for preparing the **Safety Document(s)**.

8.5.2 The *Substation* ***Control Person*** shall decide whether **LV**, Oil, Air or Gas isolation, venting, purging, draining or adjustment of levels and any action to be taken to contain or dissipate stored energy is required. When these are completed as part of the safety precautions, then before the issue of a **Safety Document**, the *Substation* ***Control Person*** shall confirm them with the **Control Person** responsible for the associated **HV System**. The names of both the *Substation* ***Control Person*** and the **Control Person** responsible for the associated **HV System** shall be entered on the **Consent** section of the **Safety Document**.

8.6 Non-Connected Apparatus in Substations

The *Substation* ***Control Person*** shall be responsible for the safety precautions necessary to achieve **Safety from the System** on non-connected **Apparatus** in substations. This responsibility shall be transferred to the *Grid* ***Control Person*** or *Distribution* ***Control Person***, as appropriate, prior to connecting that **Apparatus** to the **System**. This process is defined in OPSAF–11–024 (MSP 3.2).

8.7 Substation Batteries and Associated Distribution Boards

Where work or testing is to be carried out on substation batteries and associated distribution boards, the *Substation* ***Control Person*** shall be the **Authorised Person** in charge of the work.

9. SYSTEM CONTROL AND OPERATIONAL RESPONSIBILITIES OF CONTROL PERSONS

9.1 The **Control Person** shall, in addition, be responsible with respect to control and operation of the **System** for:

(i) Liaising with any other **Control Person(s)**, including IDNO or Customer's Representative(s) who may be affected, to ensure security and continuity of supply to all customers.

(ii) Co-ordinating all outages affecting the **HV System**.

(iii) Maintaining liaison with **Authorised Persons** operating on the **HV System**.

(iv) Issuing **Switching** instructions on the **HV System** whether pre-arranged or not, except in cases of emergency detailed in Appendix 1 of this Procedure.

(v) Making arrangements, as required, for the release of **HV Apparatus** from service.

(vi) Safeguarding the **System** in the event of any abnormal occurrence, and ensuring that any actions taken to correct the abnormality are in line with any relevant instructions.

(vii) Ensuring that instructions issued by the **Control Person** are issued to **Persons** with the correct authorisations to carry out the instruction. (This may include reference to the authorisation database).

(viii) Referring for operational purposes to Site Responsibility Schedules.

(ix) Operating the **HV System** by remote control from a Control Centre.

(x) Operating **HV System Apparatus** by remote control on instruction from the **Control Person** responsible for the operation of that **HV System**.

(xi) Maintaining an up to date set of operational records of the **HV System**, and for keeping himself and other **Control Person(s)** up to date in these matters.

(xii) Ensuring that at the change of shift the **Control Person** taking over has been fully briefed with the operating conditions of the **System** coming under his control.

(xiii) Deciding whether **System** conditions allow pre-arranged or additional outages to take place. (NGC are responsible for the Transmission **System** in Scotland).

(xiv) Agreeing with all interested parties the running arrangements of the **HV System** for load flow and short circuit control. (NGC are responsible for the Transmission **System** in Scotland).

(xv) Informing the **Control Person** of any adjacent interconnected **System**, of any **System** difficulties resulting from **System** conditions for which he is the **Control Person**. (NGC are responsible for the Transmission **System** in Scotland).

(xvi) **Control Persons** working in the same Operational Control Centre can pick up another **Control Person's** calls and shall record all **Switching** confirmations and information received on the **Approved** Control Centre **Switching** log. Where appropriate the **Control Person** receiving the **Switching** confirmation may then issue further **Switching** instructions for the job in progress within the limits specified in a local operational control room procedure.

9.2 The *Distribution* ***Control Person*** shall, in addition, be responsible with respect to control and operation of the **System** for:

(i) Agreeing initiation of *Field Control* during abnormal conditions or pre-arranged outages on the **HV** network, as detailed in OPSAF–11–034 (MSP 5.4).

(ii) Recording the work being carried out by **Live** Line Teams.

(iii) Recording the work being carried out by other parties that may affect the integrity of the **HV System** e.g. tree cutting.

10. ADDITIONAL SYSTEM CONTROL AND OPERATIONAL RESPONSIBILITIES OF AUTHORISED PERSONS

Staff authorised to carry out **HV Switching** on the **System** shall, in addition to their responsibilities detailed in the Safety Rules as a **Senior Authorised Person** or **Authorised Person**, be responsible for matters relating to the **HV System** as follows:

10.1 Staff authorised to carry out **Switching** on the **HV System** shall be responsible with respect to control of the **System** for:

(i) Providing the **Control Person** with the information to keep operational records updated.

(ii) Monitoring the **System** during operations and the loading resulting from alterations to the **System**.

(iii) Advising the **Control Person** of any factors, including weather, damage, outside interference, which may affect the integrity of the **System** and security of supplies.

10.2 Staff authorised to carry out **Switching** on the **HV System** shall be responsible with respect to operation of the **System** for:

(i) Operating the **HV System** within the limits set out in their Certificate of Authorisation.

(ii) Ensuring that work carried out on the **HV System** under their authority is under the control of one **Authorised Person**. This is particularly important where two or more **Authorised Persons** are involved in one substation.

(iii) Consulting with the **Control Person** and consequently applying and confirming the settings of the protection equipment on the **System**.

(iv) Carrying out **Switching** instructions issued by the **Control Person** responsible for the **HV Apparatus** that is to be operated.

(v) Notifying the **Control Person** of failure to carry out **Switching** instructions issued by the **Control Person**.

(vi) Taking action in an emergency, as is required in Appendix 1 of this Procedure.

11. APPENDIX 1 - HIGH VOLTAGE SWITCHING - EMERGENCY CONDITIONS

1. FOREWORD

1.1 PSSI 1 gives instruction for carrying out **HV Switching** and lays down that, except for emergency **Switching**, all **HV Switching** shall be carried out to the instruction of the **Control Person**.

2. CIRCUMSTANCES WHEN EMERGENCY HV SWITCHING CAN BE CARRIED OUT

2.1 The existence of an emergency can only be determined by either the **Person** at the **Location** or the **Control Person** on receipt of information from the emergency services or public, and who shall decide what action is to be taken.

2.2 **HV Switching** in emergency conditions shall be carried out in accordance with PSSI 1 and the **Person** at the **Location** shall inform the **Control Person** as soon as practicable after the operation.

2.3 Circumstances in which emergency **HV Switching** may be carried out are:

(a) When there is a danger to life – i.e. where a person is within or is likely to encroach the specified **Safety Distance** of **Live** exposed **HV** conductors.

(b) When it is apparent that a fault has occurred which has not been cleared from the **System**.