

ESR Supporting Procedure 12

HV System Change Certificate

SHEQ/HS/TCSESR/SP/012-2.0

DOCUMENT AUTHORISATION SHEET

Version 2.0

Report Date 22/08/2014

Revised by:

Name: David White

Position: Senior Asset Manager

Date: 22/08/2014

Reviewed by:

Name: Douglas Ogram

Bill Mills

Position: ESR Consultant

HSE Consultant to TCS

Date: 27/02/2014

22/08/2014

Authorised by:

Name: Mike Lee

Position: Head of Asset Management

Date: 09/09/14

| Version No. | Date | Comment | Author | Reviewed | Authorised |
|-------------|------------|-----------------------|--------|----------|------------|
| A | 30/01/2014 | First Draft | LB | | |
| 1.0 | 27/02/2014 | First Issue | LB | DO/BM | |
| 2.0 | 22/08/2014 | Review and Amendments | DW/RC | BM | ML |
| | | | | | |

Contents

| | | |
|----------|--|----------|
| 1 | Additional Abbreviations AND Definitions | 2 |
| 2 | Scope | 3 |
| 3 | Overview | 3 |
| 4 | HV Procedure | 3 |
| 4.1 | Removal of HV Equipment..... | 3 |
| 4.2 | Change of Circuit Name or Nomenclature | 3 |
| 4.3 | Addition of Plant | 4 |
| 4.4 | Transfer of Control Person..... | 4 |
| 4.5 | Temporary Removal of Equipment from the System..... | 4 |
| 4.6 | Testing..... | 4 |
| 4.7 | Time Scales..... | 4 |
| 5 | Earthing, LV and Mechanical Procedure | 4 |
| 5.1 | Addition of Earthing, LV or Mechanical Plant not involving third parties | 4 |
| 5.2 | Removal of Earthing, LV or Mechanical Equipment | 4 |
| 5.3 | Safety Management..... | 5 |
| 5.4 | Document Completion | 5 |
| 6 | Notes | 5 |

Appendices

Appendix 1 – HVSCC certificate

1 ADDITIONAL ABBREVIATIONS AND DEFINITIONS

Terms printed in bold type are as defined in the TCS Electrical Safety Rules.

| | |
|--|---|
| <i>Commissioning</i> | The preparation for and energising of Equipment for the first time. This is a two-stage process consisting of Stage 1 Commissioning and Stage 2 Commissioning. Further information is available in STCP 19-4. |
| <i>Commissioning Engineer.</i> | An appropriately qualified engineer responsible for defining the arrangements for achieving Safety from the System , to manage the implementation of STCP19-4 requirements (including <i>Operations Diagrams</i>) and to confirm the adequacy of the health and safety file on completion. |
| Control Person | The Control Person for the HV System as defined in the Site Responsibility Schedule . Where authorisations allow, this may be done by the <i>Local Control Person</i> . |
| HV System Change Certificate. (HVSCC) | A certificate used to notify NETSO, contractors and TCS when adding <i>Plant</i> or removing Equipment to/from the System , and changes in name or Nomenclature for existing circuits or Equipment. On the completion of Part 6 the changes defined in Part 3 become effective. The <i>Local Control Person's</i> copy of the document <i>shall</i> be the definitive document. The <i>Control Person's</i> copy of the document <i>shall</i> have printed names in Part 6, backed up with logged statements. |
| <i>Local Control Person</i> | A Senior Authorised Person acting as the Control Person for LV and mechanical Equipment . |
| <i>Occupier</i> | The person having control over the premises and who regulates and controls the work that is done there. |
| <i>Occupier's Representative</i> | The person identified by the <i>Occupier</i> who <i>shall</i> discharge the duties and responsibilities of the <i>Occupier</i> on the premises. On TCS Operational sites this will normally be the Asset Manager. On National Grid Operational sites this will normally be the Delivery Manager or Delivery Engineer. On third party operational sites it will be a representative of the party who regulates and controls the work that is done there. |

| | |
|---------------------------|---|
| <i>Operations Diagram</i> | The series of TCS issued diagrams which define the following information: Sheet 1 S/S Single Line Diagram Sheet 2 S/S Technical Data Sheet Sheet 3 S/S Gas Zones Sheet 4 S/S Gas Zone Alarm Schedule |
| Plant | Electrical and/or Mechanical items, which are not part of the System and Disconnected from the System . |
| S/S | Substation |

2 SCOPE

TCS Electrical Safety Rule 2.7(2) requires that **Equipment** *shall* only be added to or removed from the **System** in accordance with an **Approved** procedure. This document as the **Approved** procedure defines when **TCS** Electricity Safety Rules apply or cease to apply to **Equipment**. Where **Equipment** is to be added to or removed from a **System** subject to the application of **TCS** Electricity Safety Rules, this procedure and STCP 19-4 *shall* be followed.

This procedure defines a safe system of working when adding **Plant** or removing **Equipment** to/from the **System** and when changes in Name or Nomenclature for existing circuits or **Equipment** are required. This procedure provides a method of formally identifying the existence of **Equipment** to the **Control Person**.

3 OVERVIEW

When **Plant** is brought onto a **TCS** operational site the requirements of **TCS** Electricity Safety Rules *shall* apply with regard to the movement of large objects and any potential proximity to **HV Equipment**. Before **Plant** can be connected or is readily connectable to the **HV System** it must be formally identified as **HV Equipment**.

The *Local Control Person* in conjunction with the **Senior Authorised Person(s)** is responsible for the safety aspects of new **Plant** entering site until it is declared as part of the **TCS System** and defined as **Equipment**.

The **Control Person** has no responsibilities for the **Plant** until after it has been declared as **HV Equipment**. This two-stage process described recognises both **Control Person's** responsibilities.

The **Site Responsibility Schedule** *shall* be amended to identify each **Control Person's** responsibility following the addition/removal of **Equipment** to/from the **System**.

The process of declaring an item of **Plant** as **HV Equipment** has also to be co-ordinated with the requirements of the *Operation Diagram* and **Site Responsibility Schedule**.

4 HV PROCEDURE

4.1 Removal of HV Equipment

A permanent physical disconnection (greater than the **Safety Distance**) between the **Equipment** and the **HV System** *shall* be established while the **Equipment** is part of the **HV System**. The **Equipment** will then be declared as being removed from the **HV System**. The former **HV Equipment** will then become **Plant**. Part A of an **HVSCC** *shall* be completed and issued for this purpose.

4.2 Change of Circuit Name or Nomenclature

When **HV** circuit names or **Equipment** nomenclature change, the appropriate *Operation Diagrams* *shall* be updated. Part B of an **HVSCC** *shall* be completed and issued for this purpose.

4.3 Addition of Plant

Prior to any physical connection being made between the **HV System** and **Plant**, the **Plant** *shall* be declared as part of the **HV System** and defined as **HV Equipment**. Part C of an **HVSCC** *shall* be completed and issued for this purpose.

Note: completion of matrix in Part 3 N/A required for sections not used.

4.4 Transfer of Control Person

When **Equipment** is transferred from the **TCS** Electricity Safety Rules to / from the Safety Management System of another company the **Site Responsibility Schedule** *shall* be updated and signed by all interested parties prior to the transfer. Part D of the **HVSCC** should be used to define the **Equipment** and control party at the start and finish of the process.

4.5 Temporary Removal of Equipment from the System

Equipment temporarily removed from the **System**, e.g. for workshop/factory repairs etc, *shall* be considered as not subject to the requirements of the **TCS** Electricity Safety Rules from the time of removal from the normal position until the time of return or replacement.

An **HVSCC** is not required. On site procedures *shall* define how residual **Dangers** will be managed.

4.6 Testing

Where there is a requirement for testing to be carried out there is no requirement for test leads to be declared as part of the **System** providing they are part of a discrete test instrument.

4.7 Time Scales

Where due to unforeseen circumstances the timescales for an **HVSCC** cannot be adhered to, all relevant parties (**TCS**, **NETSO**, third parties etc) must be in agreement before Part 2 of the certificate can be completed.

5 EARTHING, LV AND MECHANICAL PROCEDURE

5.1 Addition of Earthing, LV or Mechanical Plant not involving third parties

Prior to any physical connection being made between Earthing, **LV** and Mechanical **Plant**, these items *shall* be declared by the **Local Control Person** as part of the **System** and defined as **Equipment** using one of the following options:

- The **Plant** will become part of the **System** immediately prior to first connection.
- The **Plant** will become part of the **System** immediately after cancellation of the **Safety Document** that has been issued for the purpose of connection of the new **Equipment**.

Prior to the connection being established the **Local Control Person** *shall* ensure that site drawings and records of the **System** are updated and that all relevant personnel made aware of the changes.

5.2 Removal of Earthing, LV or Mechanical Equipment

Following the physical disconnection being made between Earthing, **LV** and Mechanical **Equipment**, and the rest of the **System** those items will be declared as not being part of the **System** and defined as **Plant**, using one of the following options:

- The **Equipment** will become **Plant** after the last disconnection from the **System**.
- The **Equipment** will become **Plant** immediately after cancellation of the **Safety Document** that has been issued for the purpose of disconnecting the **Equipment** from the **System**.

Appendix 1 – HVSCC Certificate

HV SYSTEM CHANGE CERTIFICATE (HVSCC)

Location : _____ Certificate No.: _____

Date : _____

To: _____ (NGET)

From : _____ TO Company: _____

PART 1: NOTICE

DRAFT / FINAL ¹ proposed effective time and date :-

*Revise table below in event of effective time/date change - for any changes to PART 3 re-issue certificate

| Proposed | Date | Time | |
|-------------|------|------|--------------|
| Revision 1* | Date | Time | Date revised |
| Revision 2* | Date | Time | Date revised |
| Revision 3* | Date | Time | Date revised |

(For more than 3 changes issue a new copy of this certificate retaining all other data unchanged.)

Tick below where **applicable**.

- The Plant and Apparatus scheduled in PART 3A will be removed from the National Electricity Transmission System.
- The Plant and Apparatus scheduled in PART 3B is subject to a circuit name/nomenclature change.
- The Plant and Apparatus scheduled in PART 3C will be declared as part of the National Electricity Transmission System but is NOT made available for configuration by NGET.

Please return comments on a DRAFT certificate within 14 days of receipt

PART 2: DECLARATION

The following H.V. System changes have now taken effect :

(Mark sections applicable below)

- The Plant and Apparatus scheduled in Part 3A has been removed from the National Electricity Transmission System and a Decommissioning Report to this effect will be issued.
- The change scheduled in Part 3B has become effective.
- The Plant and Apparatus scheduled in Part 3C is declared as part of the National Electricity Transmission System but is NOT made available for operational service or configuration by NGET.

Issued by: _____ Date: _____ Time: _____

TO Company :

Acknowledged: _____ Date: _____ Time: _____

