CM089 – Electricity System Restoration Standard

12 June 2023

NOTE – THIS TEXT DOES NOT INCLUDE CHANGES TO TOGA REFERENCES AS THIS IS A SEPARATE MODIFICATION

STCP 11-2 Issue 007 Outage Data Exchange

STC Procedure Document Authorisation

Party	Name of Party Representative	Signature	Date
National Grid Electricity System Operator Ltd			
National Grid Electricity Transmission plc			
SP Transmission plc			
Scottish Hydro Electric Transmission plc			
Offshore Transmission Owners			

STC Procedure Change Control History

Issue 001	22/03/2005	BETTA Go-Live Version
Issue 002	26/05/2005	Issue 002 incorporating PA011
Issue 003	05/10/2005	Issue 003 incorporating PA034 and PA037
Issue 004	17/12/2009	Issue 004 incorporating changes for Offshore Transmission
Issue 005	27/07/2010	Issue 005 incorporating PA058 (corrections for Offshore Transmission)
Issue 006	10/08/2016	Issue 006 incorporating PM087
Issue 007	01/04/2019	Issue 007 incorporating National Grid Legal Separation changes
Issue 008	12/04/2023	Issue 008 Incorporating changes to facilitate the Electricity System Restoration Standard

1 Introduction

1.1 Scope

1.1.1 This procedure describes the data exchange requirements between NGESO and the TOs to facilitate the Outage planning process.

1.1.2 This document has been revised as part of the periodic review.

1.1.3 This document applies to NGESO and the following TOs. For the purposes of this document, the TOs are:

- NGET;
- SPT;
- SHETL; and
- All Offshore Transmission Licence holders as appointed by OFGEM

1.1.4 No distinction is generally made within the document between Onshore and Offshore TOs. References are applicable to both unless specific conditions or exceptions are

made in the document relating to an Onshore TO or Offshore TO. Such conditions or exceptions will be prefixed accordingly.

1.1.5 This document recognises that an Onshore TO or Offshore TO may become the owner of one or more Offshore or Onshore Networks and that the ownership of TO networks may change over time.

1.1.6 NGESO shall use the NGESO Outage Database (currently known as TOGA) to

- Manage and maintain details of the Outage Plan
- Manage the process of outage change.
- Manage the introduction of new Offshore TOs
- Manage changes in Offshore Network ownership
- Provide TOs with visibility of all impacting outages (Outage Identification (Outage number)/circuit description/start date/end sate)
- Manage Capacity Declarations by DNOs

1.1.7 The NGESO Outage Database will be available to each TO.

1.1.8 This procedure allows TOs to use the NGESO Outage Database interactively (via web based browser) and to exchange Outage data with NGESO via a file transfer process.

1.1.9 This procedure should be read in conjunction with STCP11-1 Outage Planning, and the TOGA System Interface Specification, Issue 5.0 available on request.

1.2 Objectives

1.2.1 The objective of this procedure is to set out the requirements for exchange of information between NGESO and the TOs to facilitate the process in STCP11-1 Outage Planning.

2 Key Definitions

2.1 For the purposes of STCP11-2:

2.1.1 **Additional Outage Data** means data items listed in the TOGA System Interface Specification.

2.1.2 **Basic Asset Data** means these data items listed in Appendix B of this STCP

2.1.3 **Basic Outage** means a template for data held within NGESO's Outage Database comprising a single item or group of Plant & Apparatus affected when an Outage is released for work.

2.1.4 **Basic Outage Data** means those data items listed in Appendix B of this STCP.

2.1.5 **Boundaries of Influence** means the asset level only and is applicable only to assets not substations,

2.1.6 **Boundary Outages** means an outage that affects more than one Transmission owner

2.1.7 **Capacity Declaration** means a statement indicating restrictions to the import and/or export capability of the network boundary.

2.1.8 **Outage Identification** (aka Outage Number) means a unique identifier, identifying each Outage in the NGESO Outage Database.

2.1.9 **Outage Request** means an Outage Proposal or Outage change request.

2.1.10 **Outage Request Identification** (aka Request Number) means a unique identification for each Outage Request submitted to the NGESO Outage Database.

2.1.11 **Outage Status** means the stage of the planning process which an Outage has reached. Refer to Appendix C1 Status Code list for details.

3 The NGESO Outage Database

3.1.1 Once a prospective new TO has their application approved, NGESO will add that TO to the database such that NGESO will be able to associate the new TO with one or more new assets, offshore substations and parties in the NGESO Outage database.

3.1.2 All new TOs will be able to access TOGA via the current web browser interface.

3.1.3 NGESO will maintain details of Offshore Network ownership and changes of ownership within the NGESO Outage database. The ownership history of an asset will be retained within the database.

3.1.4 NGESO shall hold the master Basic Outage list in the NGESO Outage Database (known as TOGA). Each new request for an Outage shall be based on a Basic Outage.

3.1.5 For each Outage Request, the NGESO Outage Database shall contain:

- a unique Outage Identification (that can be generated either automatically by the NGESO Outage Database, or be provided by the Party entering the record);
- Basic Outage Data (as set out in Appendix B);
- Basic Asset Date (as set out in Appendix B) and
- Additional Outage Data (as set out in the TOGA System Interface Specification).

3.1.6 Details and formats of available fields for data transfers to/from the NGESO Outage Database are those listed in TOGA System Interface Specification, Issue 5.

3.1.7 Data can be entered into the NGESO Outage Database by a TO via one of the three available methods described in section 4.

3.1.8 NGESO will define any associations that connect a TO with the appropriate connecting assets in another TO network (i.e. Boundary of Influence).

3.1.9 NGESO will provide each TO with the means to obtain visibility of any outages that are planned within the boundary of influence with adjacent TO networks.

3.1.10 The NGESO Outage Database provides for an outage change control process, which allows an audit trail to be maintained and allows the history of any planned Outage to be tracked

3.1.11 NGESO shall maintain an up to date NGESO Outage Database (TOGA) user guide that shall be made available to each TO online

4 Outage Data Exchange

4.1 General Process

4.1.1 A master list of Basic Outages and Basic Asset Data shall be held in the NGESO Outage Database. Each TO shall provide Basic Outage Data and Basic Asset Data for all of that TO's Basic Outages. NGESO shall enter additional Basic Outage Data and Basic Asset Data, as appropriate.

4.1.2 NGESO will define any associations that connect a TO with the appropriate connecting assets in another TO network (i.e. Boundary of Influence) within the Basic Outage Data. (See Appendix E)

4.1.3 The TO will advise NGESO as soon as practicable prior to changes of asset ownership and NGESO will maintain details of such changes within the NGESO Outage Database. (See Appendix D)

4.1.4 The Basic Outage Data and Basic Asset Data listed in Appendix B shall be provided and/or maintained by the responsible Party as described in Appendix B. The TO shall

provide new Basic Outage Data and Basic Asset Data as and when new Basic Outages and Basic Asset Data are required for NGESO to review and approve.

4.1.5 TO submission of changes to existing Basic Outages and new Basic Outages shall be flagged by the TO for NGESO to accept and/or add relevant data.

4.1.6 TO submission of changes to existing Basic Assets and new Basic Assets shall be flagged by the TO for NGESO to accept and/or add relevant data

4.1.7 The master list of Basic Outages of a particular TO shall be available for downloading by that TO and NGESO in a flat file format.

4.1.8 NGESO will maintain a list of status codes that are required as part of the Outage data exchange process. This list may be updated as required to meet the requirements of all parties. The current list is contained in Appendix C.

4.1.9 If NGESO is unable to place an Outage Request on the dates requested by a TO, that Outage Request shall have a Request Status changed to “Rejected”. A TO can view in the NGESO Outage Database any rejected Outage Requests submitted by that

particular TO. NGESO can also send any rejected Outage Request electronically to the requesting TO if needed.

4.1.10 For any rejected Outage Requests, NGESO shall contact the TO to discuss the rejected outage and both parties can propose and agree on new dates. The TO shall then resubmit the Outage Request to NGESO for approval and acceptance into plan.

4.1.11 All Parties shall respond to all requests for Outage changes as soon as reasonably practicable, taking account of the time remaining from the request date to the Outage start date or the date of change.

4.1.12 Any Party can download a list of Outages that have changed since that Party last requested such a list.

4.1.13 A list of Outages downloaded by a TO shall contain all planned Outages within that TO network and any appropriate planned Outages within the Boundary of Influence of another TO.

4.1.14 An audit trail shall be maintained for all changes to planned Outages contained within the NGESO Outage Database

4.2 Creating New Outages Request

4.2.1 Any request for a new Outage proposed using an Outage Request that has not been assigned an Outage identification by the relevant TO shall have an Outage Identification automatically generated by the NGESO Outage Database.

4.2.2 Requests for new Outages can be entered into the NGESO Outage Database by a TO using one of the three methods described below:

4.2.2.1 By direct entry into NGESO Outage Database (for Request or Pending). In such case:

- the TO shall choose the appropriate Basic Outage template in the NGESO Outage Database, and add the necessary information; and
- this data shall be visible to NGESO as an Outage Request or Pending, depending on the method used.
- this entry type is best suited to single or low volume entries

4.2.2.2 Via electronic upload into NGESO Outage Database (for Request only). In such case:

- the TO shall produce a list of Outage Requests in the appropriate format and containing the agreed data (including the Basic Outage Data Reference Identifier);
- the TO shall upload the information into the NGESO Outage Database; and
- each upload shall be assigned a unique batch identification by the NGESO Outage Database
- this entry type is best suited to mid to high volumes of entries

4.2.2.3 Via electronic file transfer (for Request only). In such case:

- the TO shall produce a list of Outage Requests in the appropriate format and containing the agreed data (including the Basic Outage Data reference);
- the TO shall send a file electronically to NGESO; and
- NGESO shall ensure that such a file is loaded into the NGESO Outage Database and forward any error file/ rejection to the relevant TO.
- the outcome of the Outage Request shall be flagged back to the TO in a flat file transfer.
- This entry type is best suited to a high volume of entries or where an interface to a User database is used.

4.2.3 Offshore TOs can also request new outages for Offshore TOs to be entered into the NGESO Outage Database by NGESO if required. The Offshore TO shall provide the

information as described in 4.2.2.3. NGESO will inform the Offshore TO when the data is available within the NGESO Outage Database.

4.2.4 The TO may submit more than one Outage Request for an item of Plant and Apparatus at the same time e.g. if an Outage is required on a circuit for both construction and maintenance at the same time this may be shown as two Outages.

4.2.5 The TO shall provide requests for Outage changes in accordance with STCP 11-1: Outage Planning. These shall include the Additional Outage Data detailed in the TOGA System Interface Specification Issue 5.

4.2.6 When NGESO agrees to an Outage Request, it shall move into the Outage Plan

4.3 Submitting an Outage Request (for a change to an existing Outage)

4.3.1 Requests to change existing Outages can be entered into the NGESO Outage Database by a TO using one of the three methods described below:

4.3.1.1 By direct entry into NGESO Outage Database (for Request or Pending). In such case:

- the Onshore TO shall choose the appropriate Outage record in the NGESO Outage Database, take a copy to create an Outage Request or Pending booking and update the fields as required;
- once the Outage Request has been agreed by NGESO, the appropriate Outage Status shall be set and the Outage shall form part of the Outage Plan.
- this entry type is best suited to single or low volume entries

4.3.1.2 Via electronic upload into NGESO Outage Database (for Request only). In such case:

- the process in 4.2.2.2 shall be followed, with the addition of the existing Outage Identification; and
- this record shall be recognised as an existing Outage and the NGESO Outage Database shall therefore apply the information to the correct record.
- this entry type is best suited to medium to high volumes of entries

4.3.1.3 Via electronic file transfer (for Request only). In such case:

- the Onshore TO shall send a file containing the Outage Request (identified with its existing Outage Identification) electronically to NGESO directly from their own database; and
- NGESO shall ensure that such a file is loaded into the NGESO Outage Database and forward any error file /rejection to the relevant Onshore TO should the file fail to load.
- Once assessed the outcome of the Outage Request shall be flagged back to the Onshore TO in a flat file transfer.
- This entry type is best suited to a high volume of entries or where an interface to a User database is required

4.3.2 Offshore TOs can also submit request for outages involving existing outages to be entered into the NGESO Outage Database by NGESO. The Offshore TO shall provide the information as described in 4.4.1.3. NGESO will inform the Offshore TO when the data is available within the NGESO Outage Database.

4.3.3 Regardless of the manner in which the Outage Request is entered into the NGESO Outage Database:

- NGESO shall assess and attempt to place the Outage Request;
- Any Outage Request submitted after the Plan Freeze date must be accompanied by a unique Outage change code and change description (see Appendix C5); and

4.3.4 An Outage Request will only become part of the Outage Plan when it has been approved by NGESO.

4.4 Service Reductions (unplanned Transmission Owner Outages) of greater than 3 hours duration.

4.4.1 It shall be possible to separately identify Service Reductions that result in Plant and/or Apparatus being out of service for greater than 3 hours duration within the NGESO Outage Database and run a report on these entries.

4.4.2 The TO shall normally enter, by any agreed method in section 4.2 and within 24 hours of the Event, Service Reductions that result in Plant and/or Apparatus being out of service for greater than 3 hours duration. If this is not possible, NGESO will enter these Service Reductions into the NGESO Outage Database and liaise with the TO to align databases as required.

4.5 Capacity Declarations

4.5.1 If a DNO network acts as the connecting point for an Offshore TO and that DNO network restricts the capacity of the Offshore Network then the DNO should declare a capacity restriction. This will allow the Offshore TO and any associated generators to take appropriate action. (See Appendix F)

4.5.2 NGESO can create a capacity declaration on behalf of a DNO.

4.5.3 The information submitted as a Capacity Declaration is as follows

- Maximum export capacity (MVA and MW)
- Maximum Import capacity (MVA and MW)
- The period over which the capacity limits are valid
- Designated circuit (optional)

4.5.4 When it receives a DNO capacity declaration NGESO will carry out a process to determine how (or if) the restriction should be apportioned between the connecting parties.

4.5.5 NGESO will distribute this information to ensure all parties get appropriate visibility.

4.5.6 Where a Network restriction exists in a TO network due to a customer choice connection then NGESO can also declare a Capacity Declaration to one or more connecting parties using the same process as above.

5 NGESO Initiated Outage Request changes

5.1 An Outage Request change may be requested by NGESO for operational reasons. This could occur in any timescale. NGESO shall liaise with the TO on the details and reason for the proposed Outage change and agree appropriate change codes to be used in accordance with Appendix C5.

5.2 If the TO accepts the Outage Request change then NGESO shall request the TO submit an Outage Request change using one of the three methods described in section 4.4, indicating that NGESO are the initiating Party by use of the change codes. NGESO will approve the Outage Request change and update the NGESO Outage database.

5.3 Where the TO disagrees with an NGESO initiated change to an Outage and an alternative cannot be agreed, NGESO may, where operational circumstances dictate,

remove the Outage from the Plan, flag the change to the TO and update the NGESO Outage database accordingly. The TO may then choose to dispute the Outage removal or submit a modified Outage Request.

Appendix A Flow Diagram

The Process Diagrams shown in this Appendix A are for information only and Offshore TOs should refer to section 4 for clarity. In the event of any contradiction between the process represented in this Appendix A and the process described elsewhere in this STCP, then the text elsewhere in this STCP shall prevail.

STCP11-2 Outage Data Exchange Interface page 1
SO
TO
TO Initiated basic data change
B
TO provide Basic Outage Data and/or Basic Asset Data to SO in accordance with STCP 11-2 Appendix B
SO receives Data from TO
Is Data complete and in correct format?
No
TO amends Data
Yes
TOGA Database entry updated
SO provides confirmation to TO
TO receives confirmation and updates own records

STCP11-2 Outage Data Exchange Interface page 2
External
SO
TO
SO initiated change
SO Identify Outage Request change or Basic data change requirement
Is this a Basic Data request/change or an outage request/ change?
Outage Request
Basic Data Request
Go to B Below
SO/TO liaison
Does TO agree with placement?
No
Yes
So still need to make Outage change?
No
End
Yes
TO creates Outage Request change
SO approve Outage Request
External Parties to participate if applicable
Dispute resolution process may be initiated
TO to participate
Database updated

STCP11-2 Outage Data Exchange Interface page 1
SO
TO
SO Initiated basic data change
B
SO defines Basic Data changes required to TO
TO provides Basic Outage Data and/or Basic Asset Data to SO in accordance with STCP 11-2 Appendix B
SO receives Data from TO
Is Data complete and in correct format?
No
TO amends Data
Yes
TOGA Database updated
SO provides confirmation to TO
TO receives confirmation and updates own records

Appendix B: Basic Outage and Basic Asset Data

B.1 TOGA Basic Outage Data

The list of data stored against a Basic Outage record is shown below. Refer to TOGA System Interface Specification, Issue 5.0 available on request.

Field	Responsibility for provision	Description
Basic Reference	By Agreement	Reference identification associated with basic Outage data. This is currently used by the TO to link initial plan build Outage Requests to their work management system. When creating a single Outage this reference is found and shall provide basic template for an Outage Request. The format shall include the first Substation code and a unique identification associated with each circuit.
Status	NGESO	Status of basic Outage
Outage Equipment Description	By Agreement	Full description of circuit out of service
Outage Type	NGESO	Standard or comment
Branch Assets	NGESO-T	The code used to identify each element of the Outage (NGESO NASAP)
Substations involved	TO	List of substations affected by the Outage
NGESO-T Significance	NGESO	A flag from A to E indicating the significance. A=MIS, B= TO Outages at interface sites, C= Customer Outages at interface sites, D = Customer Outages that may affect operation of National Electricity Transmission System, E = Outages of no interest to NGESO.
External interested parties	NGESO	Indicates which Outages need to be notified to TOs and external parties under Grid Code OC2
External party comments	NGESO	Comments for external parties
NGESO interested parties	NGESO	NGESO internal groups
TO interested parties	TO	Optional field to indicate which TO groups may be interested in the Outage
Operational comments	TO and NGESO	Generic comments relevant to both Licensees whenever the Outage is taken out of service
Licensed Area		Default to supplying TO
Valid From	TO	Date from which the basic data record becomes active. For a new circuit would normally be the date that the circuit is expected to come under safety rules.
Valid To	TO	Used to indicate when a record is no longer valid.
Last Updated Date	*System generated	Date on which last update occurred
Last updated by	*System generated	Party ID carrying out last update

Equipment Owner	NGESO	Defaults to the owning TO. This would be different if there are basic Outages for DNO assets.
Basic Group	NGESO	The same code as the basic Outage identification for the basic Outage that includes all combinations of a potential Outage.
Free Codes	TO or NGESO	Optional. A definable code stored in NGESO Outage Database that enables grouping of Outages to enable reporting. Usually applied when creating an Outage
Tower References	TO	Optional field that can be used to indicate Transmission Towers of special interest
Risk flag	NGESO/TO	The indication that demand may be at increased risk during this Outage
Demand at Risk	NGESO	Information about demand at risk during this Outage.
Impact on Restoration Plans	TO	Information about whether an outage will have an impact on a Restoration Plan and to confirm which Restoration Plan is affected.

*System generated fields are completed automatically on submitting a change to the NGESO Outage Database.

B.2 TOGA Basic Asset Data

This list of Basic Asset Data stored against a particular asset and within a number of Basic Outages is shown below

Field	Responsibility for provision	Description
Basic Asset Code	NGESO	The basic asset code is used to identify unique assets within the TOGA database. Each asset will require a unique code which is generated by NGESO, with liaison with the TO if required.
Description	NGESO/TO	A full and meaningful description of the asset being added/removed from the TOGA database is required to ensure it can be identified and added/removed from Basic Outage Data
Owner Specific Code	TO	There is also an option to add an owner specific code for any given basic asset. This ensures that the asset owner can also track the asset using their respective systems
Commissioning Date	TO	There is a requirement to ensure that the correct commissioning date is entered into TOGA. This ensures that assets are added and removed from the database as and when required.
Decommissioning Date	TO	Assets should have appropriate and correct decommissioning dates entered into the TOGA database. This ensures that the asset remains on record, but is no longer in use.

Licensed Area		Default to supplying TO
Rating	N/A	Not used
Asset Type	TO	List to be provided – see below
Owner ID – Description	TO/NGESO	This field should show the asset owner
Node 1	NGESO	Substation in which assets are located.
Node 2	NGESO	Alternative substation in which asset forms part of (end B of an A-B cct)
Reference	N/A	Not used
Comments	TO/NGESO	Any additional comments about asset
Monitoring Category	TO/NGESO	List to be provided – see below
SO Parties	NGESO	NGESO to add appropriate SO parties that can view or edit the asset
TO Parties	NGESO	NGESO to add appropriate TO parties that can view or edit the asset

B.3 Asset Types

Asset Type	Description
BUSBAR	Busbar
CBK	Circuit Breaker
CAB	Cable
COMP-C	Compensation Equipment - Capacitor
COMP-SVC	Compensation Equipment - Static VAr Compensator
COMP-X	Compensation Equipment - Reactor
DUM	Dummy Asset (for modelling purposes, for instance)
LINE	Overhead Line
OTH	Other (miscellaneous)
TRA – CON	Transmission – Connection
TRA – MIS	Transmission – Main Interconnected System
TRA – OTH	Transmission – Other
TRA – QB	Transmission – Quadrature Booster
TRA – SER	Not in use

B.4 Monitoring Category

Category	Description
Blank	Other

Connection	Connection Asset only
MIS	Asset forms part of the Main Interconnected System
Compensation	Asset forms part of Compensation equipment

Appendix C: NGESO Outage Database(TOGA) Codes

C.1.1 Request Outage status codes (As used by SP,SHETL)

Status	Request Description	*Final?
Request - Initial (Set by TO)	Initial Outage request before submission to NGESO. This is used while a TO is assessing its requests before submitting to the NGESO. SP will not use this code, as SP's own systems will manage this.	No
Request - With SO (Sent by TO to NGESO)	With NGESO for assessment. This is the NGESO 'INBOX'. NGESO will assess all Outages that are given this status whether for the first time or subsequent updates. Outages that have acceptable actual dates can be accepted directly into the plan by NGESO.	No
Request - Rejected (Set by NGESO)	Outage request that will not be placed but may still required by TO. NGESO shall discuss with TO before setting to this status.	Yes
Request - Cancelled ((Normally set by TO but can be set by NGESO)	An Outage request for a new Outage or a change to an existing Outage that is no longer required. If the request is for a change to an existing Outage the existing Outage will remain unchanged.	Yes
Request - In Plan (Set by NGESO)	The Outage Request is in the Plan. This is set automatically by agreeing any request Outage into the Plan	Yes

*Final ?- If a status is Final then another request with a different request identification can be raised against a planned Outage with the same planned Outage identification.

C.1.2 Pending Outage status codes (As used by NGET)

Status	Request Description	*Final?
Pending – Awaiting Agreement	The status of a change requested by the TO, yet to be approved by NGESO. This could be a new outage, a change to the details of an existing outage, or request to remove an outage from the plan.	
Pending – Rejected Pending	Status of a change submitted by the TO, which has been rejected by NGESO	

Status	Request Description	*Final?
Pending – Editable	Pending outage is in an editable state, whilst TO create / update booking, prior to submitting all details to NGESO	

C.2 Planned Outage status codes (set by NGESO)

Status	Description
Planned - Planned	An Outage that forms part of the plan. An Outage will first get this status when it goes into the plan for the first time either from an Outage Request
Planned - Started	An Outage that has started and actual start dates have been entered. Note it is only possible to update the end date at this status.
Planned - Complete	An Outage that has been completed and actual start and end dates have been entered. Note it is NOT possible to update any dates at this status.
Planned – Not Taken	An Outage that has not been taken. If necessary the TO can then use an Outage Request to make suggestions
Planned – Cancelled	An Outage that has been cancelled but a record that is retained for history. This status can be set by NEGT directly by changing the planned Outage status or by accepting an Outage request submitted from TO. An Outage is usually cancelled by the TO either by submitting a file request to cancel an Outage or by submitting via the screen a direct cancellation of a planned Outage to be agreed by NGESO
Planned - TBA	A previously Planned booking, which, has been removed from the plan. Currently with TO to make a change, not yet resubmitted to NGESO for approval.

C.3 Work types

The following are the available work types. Several of these can be used when creating an Outage (multiple selection)

Code	Description
ADR	AD HOC REPAIRS/MAINTENANCE (O/S)
ANC	Ancillary Equipment
AVC	SGT AVC OUT OF SERVICE (O/S)
CAP	Capability Declaration
CBG	Circuit Breaker Gas top up
CLR	CLEARANCE OUTAGE (O/S)
COM	COMMISSIONING
DAR	DAR OUTAGE
DEC	Defect repairs – Cables
DEL	Defect repairs – Lines
DEP	Protection Depletion
DER	Defect repairs - compensation devices

DES	Defect repairs – Switchgear
DET	Defect repairs – Transformers
DOC	Information Only
EPR	External Party Request
GEM	GENERATOR EQUIPMENT MAINTENANCE
GEN	GENERATOR OUTAGE (O/S)
HVC	HVSCC implementation
IET	IET Testing
INS	INSURANCE INSPECTION
OFC	OVER FLYING CONDUCTORS
OPS	OPERATIONAL SWITCHING
PRC	Post fault repairs - Cables
PRL	Post fault repairs - Lines
PRO	PROTECTION OUTAGE (O/S)
PRP	Post fault repairs - protection
PRR	Post fault repairs - compensation devices
PRS	Post fault repairs - Switchgear
PRT	Post fault repairs - Transformers
PTT	ON LOAD TRIP TEST
RAT	RATING RESTRICTION (I/S)
ROM	ROUTINE MAINTENANCE (O/S)
ROT	RISK OF TRIP (I/S)
RSS	REQUIREMENT FOR SAFETY SWITCHING
SCO	SYSTEM CONSTRUCTION OUTAGE (O/S)
TCP	Tree Cutting Proximity outage
UCO	USER CONSTRUCTION OUTAGE (O/S)
UMO	USER MAINTENACE OUTAGE
UNC	UNCLASSIFIED
VCO	Voltage Control Circuit Outage (SO)

C.4 TO Priority Codes

Priority code indicates of how important a particular Outage is with 1 is being the most critical.

Priority	Description ***
1	Must Have – Includes urgent defect repairs, construction work associated with third party connections, work associated with Network Rail possessions and Priority Strategic Wider Works
2	Other construction work and essential maintenance including overdue maintenance and non urgent defect repairs
3	Routine maintenance that will have a significant impact on resource if moved
4	Routine maintenance that can be flexible
5	Other work that is taken when an opportunity arises and can easily be moved with no impact on TO resource

*** Descriptions for each Priority are not exhaustive list of works examples. An Outage can be given a Priority 1 status if TO of the requesting party can provide reasonable justification to NGESO.

C.5 Change codes

NGESO Outage Database change codes must be unique and can be allocated for use in an individual Licensed Area or can be allocated for use by all TO's in all Licensed Areas. The following codes are in use.

Code	Description
1	New work identified in current year
2	OESB / EMI / RHMZ
3	Prev WND– Previous Work Not Done
4	WSE– Insurance inspection (Written Scheme Examination)
5	Maintain FOI (– Fix on Inspection) / Defects
6	Faults
7	TO control Availability
8	Construction Resource
9	TO Resource
10	Outage Omissions
11	Replan TBA
12	Work Removed (R&C) – Work Removed (Risk and Criticality)
13	Bundling / Opportunity Outage
15	Weather
23	Snagging additional works added during outage
24	Safety Incident on site
26	Commissioning delays
27	Commissioning outages additional
28	Scope Change
29	Commissioning outage re-sequenced
31	Request to accelerate
33	Outage not required
34	HVSCC / Data Set Switch changes
36	Drawing / Design Issues
40	Early completion of work
41	Environmental
42	LV Demand Security
43	MIS Security
44	Supplier / Contractor delay
45	New DNO outage
46	DNO outage change
52	NAP PERFORMANCE
53	Outage delay by System Operator

Code	Description
54	ERTS Reduction
55	ERTS Increase
56	Outage overrun
57	Knock on from TO initiated change
58	Reinstated - Outage returned to the plan after being temporarily suspended.
59	Incorrect Outage duration for work
60	Customer requested change
61	TO consequential change from NGESO initiated change
62	TO consequential change due to another TO change
63	TOCO accepted after plan freeze
64	Economic delay / recall by System Operator

C.6 Unique Outage Identification (Outage Number) Prefixes

Company	Outage Identification Prefix
Scottish Power Transmission	SP
Scottish Power Distribution (DNO)	SD
Scottish Hydro Electric Transmission	SH
Scottish Hydro Electric Power Distribution (DNO)	HD
National Grid Electricity Transmission Plc	(no prefix)
National Grid Electricity System Operator Ltd	NG
Balfour Beatty Gwynt Y Mor	GY
Blue Transmission London Array	BA
Blue Transmission Walney Ltd	BT
Thanet OFTO limited	TH
Balfour Beatty – Greater Gabbard	GG
Transmission Capital OFTO	TC
Blue Transmission Sherringham Shoals	BS
West of Duddon Sands OFTO	WD
XXAdd Company name	A two-letter prefix for specific company as agreed with NGESO Add ID prefix to be used

C.7 Party Codes

These are the codes that are used to indicate who is requesting the Outage or change to an Outage. They can be codes that refer to NGESO, TO or an external party. The following table lists these codes. Note all users of the NGESO Outage Database (TOGA) will have a party code assigned to them. (This list will be subject to update to include further external parties)

Code	Type	User
PLSP	TO	Scottish Power Planning Group
PLSH	TO	Scottish Hydro Electric Transmission
SPD	EXT	Scottish Power Distribution
SHEPDL	EXT	Scottish Hydro Electric Distribution
PLNTH	SO	National Grid Electricity System Operator Ltd
PLSTH	SO	National Grid Electricity System Operator Ltd
PLSCOT	SO	National Grid Electricity System Operator Ltd
NGET	TO	National Grid Electricity Transmission Plc
BBGYM	TO	Balfour Beatty Gwynt Y Mor
BTLA	TO	Blue Transmission London Array
BLTR	TO	Blue Transmission Walney Ltd
THAW	TO	Thanet OFTO limited
GERG	TO	Balfour Beatty – Greater Gabbard
TCS	TO	Transmission Capital Services
BTSS	TO	Blue Transmission Sherringham Shoals
WOD	TO	West of Duddon Sands OFTO

Appendix D: Change of Network Ownership

A TO can be associated with one or more assets/substations through the add asset, add substation, edit asset and edit substation screens.

It is expected that over time the network assets may be bought and sold leading to different TO's being associated to the assets.

The TO will advise NGESO as soon as practicable prior to changes of asset ownership and NGESO will maintain details of such changes within the NGESO Outage database

Authorised NGESO users are able to access a Change of Ownership screen that allows the ownership of assets to be transferred from one TO to another TO.

A history detailing the past and present ownership of assets will be retained in the TOGA database.

TOGA will maintain the integrity of outage requests and reports etc. over any period of ownership change against the following criteria:

- After the change date the new TO will be able to see all past outage information for that network including outages requested by the previous TO.
- After the change date the old owner will not be able to see any information for that network.

- Until the changeover date the old TO will be able to submit outage requests even for the period after the ownership changeover
- Until the changeover date the new TO will be able to see any outage associated to the network
- When a TO of an network is replaced by a new TO a re-association of the assets/substations will be carried out within that network to the new TO.

Appendix E: Boundary of Influence

Authorised NGESO users will define the association that will connect a TO party with the appropriate connecting asset in other TO networks (i.e. Boundary of Influence)

A Boundary of Influence is defined at asset level only and is applicable only to basic assets not substations,

If a Boundary of Influence is created between a TO and an asset it does not automatically create the reverse Boundary of Influence. This has to be done manually.

All TO's will have visibility of planned outages within their own network and any outages that may be planned within the Boundary of Influence (i.e. impacting outages).

Appendix F: Capacity Declaration

Where an Offshore transmission connection is to a DNO network and that DNO requires some restriction on the output of the Offshore Network then the DNO should declare a Capacity Declaration.

The Capacity Declaration applicable to the DNO network will provide information on:

- Maximum export capacity
- Maximum import capacity
- Period over which the capacity limits are valid
- Designated circuits (optional)

Each Capacity Declaration may optionally be associated with an outage.

The Capacity Declaration will be facilitated within TOGA by creating a Planned Outage against the assets associated with a Basic Outage. NGESO will create a capacity declaration on behalf of a DNO and the NGESO will create a capacity declaration on behalf of the Offshore TO.

When it receives a DNO capacity declaration NGESO will carry out a process to determine how (or if) the restriction should be apportioned between the connecting parties.

An authorised NGESO user will carry out a process to determine how (or if) the Capacity Declaration should be apportioned between the connecting parties at that connection point.

NGESO will distribute information on this apportionment to ensure all parties get appropriate visibility.

Where a network restriction exists in a TO network due to a customer choice connection NGESO may declare a Capacity Declaration to one or more connecting parties using the same process.

Appendix G: Abbreviations and Definitions

Abbreviations

TOGA	Transmission Outage and Generation Availability (currently the name for the NGESO Outage Database)
DCC	Directly Connected Customers
DNO	Distribution Network Operator(s)
STC	System Operator – Transmission Owner Code
SPT	SP Transmission plc
SHET	Scottish Hydro Electric Transmission plc

Definitions

STC definitions used:

NGESO

NGET

Outage

Outage Plan

Outage Proposal

Restoration Plan

Services Reduction

National Electricity Transmission System

Definitions used from other STCPs:

STCP 11-1:	NGESO Outage Database
STCP 11-1:	Plan Freeze
STCP 11-1	Offshore Network