

STCP Amendment Proposal Form

PA007

1. Title of Amendment Proposal

STCP 08-2 – Incorporation of Outstanding Change Requests

2. Description of the Proposed Amendment (mandatory field)

Incorporation of the following Change Requests that were outstanding at BETTA Go-Live:

C226

This Change Request is attached at Attachment 1 to this STCP Amendment Proposal Form.

Appendices B and C have been interchanged to ensure consistency with other STCPs that have the Definitions section as the final Appendix in the document. All references to such appendices within the main document have been updated accordingly.

Minor changes to the Headers and Footers within the document are also proposed. These changes serve to ensure that the name of the STCP and its Issue Number and date are clearly visible on all pages.

The following text has also been inserted before each of the Flow Diagrams within the STCPs clarifying that the text of the STCP has precedence in the event there is any disparity between the text and the flow diagrams:

“Note that the Process Diagrams shown in this Appendix [B] are for information only. In the event of any contradiction between the process represented in this Appendix and the process described elsewhere in this STCP, then the text elsewhere in this STCP shall prevail.”

This statement was included in some but not all STCPs during drafting and its inclusion here allows a consistent approach to be taken across all STCPs.

All of the above changes are reflected within the change-marked STCP attached as Attachment 2 to this STCP Amendment Proposal Form.

3. Description of Issue or Defect that Proposed Amendment seeks to Address (mandatory field)

Prior to Go-Live a number of changes to “signed off” STCPs were identified by the User Groups. The incorporation of these Change Requests before Go-Live was not however deemed by the same User Groups as critical for Go-Live and it was agreed between the Parties that such Change Requests should be considered and where appropriate incorporated within the STCP following Go-Live. This STCP Amendment Proposal therefore summarises the outstanding Change Requests for this STCP and outlines draft legal text that would give effect to those outstanding Change Requests.

4. Impact on the STC (information should be given where possible)

Effects on STCP 08-2 Circuit Live Trip & DAR Tests Issue 001 are as detailed in the change marked version attached at Attachment 2 to this STCP Amendment Proposal.

5. Impact on other frameworks e.g. CUSC, BSC (information should be given where possible)

NONE

6. <u>Impact on Core Industry Documentation</u> <i>(information should be given where possible)</i> NONE
7. <u>Impact on Computer Systems and Processes used by STC Parties</u> <i>(information should be given where possible)</i> NONE
8. <u>Details of any Related Modifications to Other Industry Codes</u> <i>(where known)</i> NONE
9. <u>Justification for Proposed Amendment with Reference to Applicable STC Objectives</u> <i>(mandatory field)</i> <p>Although these changes were not deemed as critical for Go-Live it is the view of the proposer that should these Change Requests now be incorporated within STCP 8-2 this would better facilitate the following Applicable STC Objectives:</p> <ul style="list-style-type: none"> the development, maintenance and operation of an efficient, economical and co-ordinated system of electricity transmission protection of the security and quality of supply and safe operation of the GB Transmission System insofar as it relates to the interactions between transmission licensees promotion of good industry practice and efficiency in the implementation and administration of the arrangements described in the STC.

Details of Proposer Organisation's Name	National Grid Company plc
Capacity in which the Amendment is being proposed (i.e. STC Party or other Party as designated by the Authority pursuant to STC section B7.2.2.1 (b))	STC Party
Details of Proposer's Representative Name Organisation Telephone Number Email Address	Mark Duffield National Grid Company plc 01926 654971 mark.duffield@ngtuk.com
Details of Representative's Alternate Name Organisation Telephone Number Email Address	Ben Graff National Grid Company plc 01926 656368 Ben.Graff@ngtuk.com
Attachments (Yes/No): Yes If yes, title and number of pages of each attachment: Attachment 1 (xx Pages): Original Change Requests Attachment 2 (xx Pages): Revised legal text for STCP 08-2: Circuit Live Trip & DAR Tests	

Notes:

- Those wishing to propose an Amendment to the STC should do so by filling in this "Amendment Proposal Form" that is based on the provisions contained in Section 7.2 of the STC.
- The Committee Secretary will check that the form has been completed, in accordance with the requirements of the STC, prior to submitting it to the Committee. If the Committee Secretary accepts the Amendment Proposal form as complete, then she/he will write back to the Proposer

informing them of the reference number for the Amendment Proposal and the date on which the Committee will consider the Proposal. If, in the opinion of the Committee Secretary, the form fails to provide the information required in the STC, then he/she may reject the Proposal. The Committee Secretary will inform the Proposer of the rejection and report the matter to the Committee at their next meeting. The Committee can reverse the Committee Secretary's decision and if this happens the Committee Secretary will inform the Proposer.

The completed form should be returned to:

Lilian Macleod
STC Committee Secretary
Commercial Frameworks
National Grid Company plc
NGT House
Warwick Technology Park
Gallows Hill
Warwick, CV34 6DA

Or via e-mail to: STCTeam@uk.ngrid.com

Attachment 1: Incorporated Outstanding Change Requests

ID	Raised On	Originating Body	Description	Affected Category 2 Documents	Business Owner	CDA Owner	Status	DG1	Last Updated	Comments
C226	12/05/2005	OPUG	Changes required to reflect the agreed comments as described in the CDA Consistency Form dated 5th April 2005 relating to STCP 8-2 Circuit Live Trip & DAR Tests.	STCP 08-2	Chris Whitley	Nadim Al-Hariri	Accepted	X	12-May-05	12 May 05: CR raised 12 May 05: OPUG accepted the CR

Change Request

(Yellow Shaded Boxes For CDA Use Only)

CDA CR ID	C226	Status¹	Accepted	
Company CR ID		Associated CR's		
Description of Change				
Changes required to reflect the agreed comments as described in the CDA Consistency Form dated 5th April 2005 relating to STCP 8-2 Circuit Live Trip & DAR Tests.				
Reasons for Change				
To reflect the comments agreed by OPUG that were raised within the CDA Consistency checks. The form is attached.				
Affected Category 2 Document(s)²			DG's Informed	
STCP8-2 Circuit Live Trip & DAR Tests, Issue 1			OPUG	
Originating Body³	OPUG		HLIA ID	
Raised On	12 th May 2005		DLIA ID	
Business Owner	Chris Whitley		Time Impact⁴	
CDA Owner	Nadim Al-Hariri		Effort Impact⁵	
<Group> Agreed Action – <Date>				
Change Request Source Document				
STCP8-2 Consistency Form.doc				
Document Version Included In		STCP8-2 Circuit Live Trip & DAR Tests, Issue 2		
To Be Included In		<input type="checkbox"/> Testing	<input checked="" type="checkbox"/> STCP Drafting	<input checked="" type="checkbox"/> Post "Go-Live"

¹ One of *Raised*, *HLIA Submitted*, *DLIA*, *DLIA Submitted*, *Accepted*, *Rejected* or *Pending*.² Identifies the directly affected Category 2 documents. A full list of affected Category 1 & 2 documents will be identified by the HLIA.³ One of DG1, DG2, DG3, DG4, Ofgem/DTI or Companies.⁴ One of **Red** (impact on critical path), **Amber** (impact on plan but not critical path) or **Green** (no impact on plan)⁵ One of **High** (>5 Working Days), **Amber** (>1 and <5 Working Days) or **Green** (<1 Working Day)

Category 2 Document Consistency Form

Consistency Form Status		Owning DG/User Group Review	Consistency Form Version		D0.1
Document Name	STCP8-2 Circuit Live Trip & DAR Tests			Version	Issue 1 18/3/2005
				Review Ref	1
Reviewer	Tony Mason			Date	18/03/05
Checked by	Nadim Al-Hariri			Date	04/04/05
Category 2 Documents – Detailed Level Processes and STCPs C: Indicates documents have been checked for consistency and no action required . A: Indicates documents have been checked for consistency and action may be required . N: Indicates documents are related but are unavailable to be checked for consistency.					
D G	Id	Issue	STCP/ DL	Name	Action
1	8-2	Issue 1	STCP	Internal Consistency	A
0	-	Designated	-	SO-TO Code	C
1	1-1	Issue 2	STCP	Operational Switching	C
1	11-1	Issue 2	STCP	Outage Planning	C
0	-	09/03/04	-	STC Procedure Drafting Guidelines	C

Key:**Cat** (Category of comment)

I Inconsistency comment

C Other type of comment

Q Question

Type (Type of comment)

O Inconsistent with Other doc.

D Inconsistent within review doc.

F Clarification/Format/ Grammatical

Sevty (Impact Severity)

H(igh) e.g. Process will not work

M(edium) e.g. Work-a-round required

L(ow) e.g. Cosmetic

Eff (Effort to correct)

H(igh) More than 4 hours

M(edium) More than 10 minutes but less than 4 hours

L Up to 10 minutes

Consistency Form Status

Author Review -

Sent to Author for review

Owning DG Review -

Sent to owning DG for agreed actions

Other DG Review -

Sent to other DG's affected for agreeing actions

Issued -

Issued

Category 2 Document		Internal Consistency			Version		N/A
Id	Sect	Comment	Cat	Type	Severity	Effort	Proposed/Agreed Action
1	Typos	<p>1.2.2 "parties" should be capitalised</p> <p>3.2.3 remove additional space in the penultimate line between "Apparatus" and "will"</p> <p>Appendix A "Appendix B" in the first line should either read "Appendix A" or just "Appendix"</p> <p>1.1.1 in the 3rd line put "Circuit" in front of "Live Trip and DAR Tests"</p> <p>1.1.3 put "Circuit" in front of "Live Trip and DAR Tests"</p> <p>3.4.3 in the last line "Programme" should be lower case</p> <p>3.1.2 Change "Affected Parties" to "affected Parties"</p>	C	F	L	L	<p>Proposed Action:</p> <p>Amend as stated</p> <p>Agreed Action:</p> <p>1.2.2 Agreed</p> <p>3.2.3 Agreed</p> <p>Appendix A : Use "Appendix"</p> <p>1.1.1 Agreed</p> <p>1.1.3 Agreed</p> <p>3.4.3 Agreed</p> <p>3.1.2 Agreed</p>
2	3.3.2	"[6] weeks". Either remove the brackets or state on the front page that this remains an outstanding issue	C	F	L	L	<p>Proposed Action:</p> <p>Amend as stated</p> <p>Agreed Action:</p> <p>Remove brackets</p>
3	3.3.6	<p>"[5] days". Either remove the brackets or state on the front page that this remains an outstanding issue.</p> <p>Is this meant to be 5 Business Days or 5 (calendar) days?</p>	C	F	L	L	<p>Proposed Action:</p> <p>Amend as stated.</p> <p>Agreed Action:</p> <p>Remove brackets add "business"</p>
4	4.1.2	Suggest adding that a Dispute can be raised in accordance with Schedule H of the STC	C	F	L	L	<p>Proposed Action:</p> <p>Amend as stated.</p> <p>Agreed Action: Agreed</p>
5	3.4.2	<p>According to this section the carrying out of the tests will be in accordance with STCP1-1 and the Tests programme. STCP1-1 refers back to this process as the process for the carrying out of the tests. Should the Tests be carried out in accordance with the Tests Programme only?</p> <p>A similar comment has been raised in the consistency form for 1-1 (comment 19).</p>	I	O	M	M	<p>Proposed Action:</p> <p>Decide under what process the Tests are carried out and update the respective processes accordingly.</p> <p>Agreed Action:</p> <p>Disagree.</p> <p>The reference is to carry out the Tests in accordance with the requirements of STCP 1-1 which covers the switching methodology, the Tests programme covers the sequence of testing.</p>

Category 2 Document		Internal Consistency			Version		N/A
Id	Sect	Comment	Cat	Type	Sevty	Effort	Proposed/Agreed Action
6	Swim Lane	This requires updating. It currently reflects the Level 2 process.	I	D	M	M	<p>Proposed Action:</p> <p>Redraw the swim lanes to be consistent with the text</p> <p>Agreed Action:</p> <p>Agreed Swim Lanes updated in line with text.</p>
7	Appendix C - Definitions	<p>Missing definitions:</p> <p>Party (STC)</p> <p>User (STC)</p> <p>Good Industry Practice (STC)</p> <p>Normal Capability Limit (STC)</p> <p>Operational Capability Limit (STC)</p> <p>Business Day (STC) (if comment 3 accepted)</p> <p>Circuit Breaker Fail Protection Systems (not in Grid Code!)</p> <p>Circuit Breaker Fail (not in Grid Code!)</p>	C	F	L	L	<p>Proposed Action:</p> <p>Add to Definition section.</p> <p>Agreed Action:</p> <p>Agreed all missing STC definitions added.</p> <p>Use small 'p' and small 's' in 3.2.6 and add definition for Circuit Breaker Fail only.</p>

Attachment 2: Revised Legal Text for STCP 08-2 Live Trip & DAR Tests

STCP 08-2: Circuit Live Trip & DAR Tests

STC~~P~~ Procedure Document Authorisation

Company	Name of Representative	Signed off (date)
NGT		
SP		
SSE		

<u>Company</u>	<u>Name of Party Representative</u>	<u>Signature</u>	<u>Date</u>
<u>National Grid Company plc</u>			
<u>SP Transmission Ltd</u>			
<u>Scottish Hydro-Electric Transmission Ltd</u>			

STC Procedure Change Control History

~~Issue 1 18/3/5~~

~~Outstanding issues to be resolved post company sign-off~~

<u>Issue 001</u>	<u>18/03/2005</u>	<u>BETTA Go-Live Version</u>
<u>Issue 002</u>	<u>26/05/2005</u>	<u>Issue 002 incorporating PA007</u>

~~Dispute resolution process – further details if needed~~

1 Introduction

1.1 Scope

- 1.1.1 This procedure describes the arrangements and processes across the NGC - TO interface for Circuit Live Trip and DAR Tests as part of maintenance activities within the licensed area of a TO. This does not include Circuit Live Trip and DAR Tests associated with commissioning or decommissioning activities, which are the subject of STCP 19-4 Commissioning and Decommissioning.
- 1.1.2 Circuit Live Trip and DAR Tests are complementary to the testing of Protection Apparatus and its associated electrical signalling that takes place when control of protection equipment is transferred to a TO under a Transmission Status Certificate (TSC).
- 1.1.3 Any requests for Circuit Live Trip and DAR Tests will be made by the TO. It is not anticipated that NGC shall submit any requests under this procedure.
- 1.1.4 The primary information exchange between NGC and TO for planning and implementing Circuit Live Trip and DAR Tests is set out in this procedure. Elements of information exchange mechanisms described in the STC, STCP 1-1 Operational Switching and STCP11-1 Outage Planning may also be used, where appropriate, in the planning and operation of Circuit Live Trip and DAR Tests.
- 1.1.5 This procedure applies to NGC and each TO where, for the purpose of this document, the TOs are:
- SPT; and
 - SHETL.

1.2 Objectives

- 1.2.1 This procedure specifies the following:
- the responsibilities of NGC and the TO(s) in relation to Circuit Live Trip and DAR Tests;
 - the requirements for exchange of information across the NGC - TO interface;
 - the means of communication to be used across the NGC - TO interface.
- 1.2.2 It is designed to enable the ~~parties~~ Parties to discharge their responsibilities under the STC and to ensure that responsibilities are clear.

2 Key Definitions

2.1 For the purposes of STCP 8-2:

- 2.1.1 Circuit Breaker Fail means Protection Apparatus designed to operate as back-up Protection on the failure of a Circuit Breaker to trip following receipt of a trip command from an associated tripping relay.
- 2.1.2 **Circuit Live Trip and DAR Tests** means the planned switch out of Plant and Apparatus by Protection Apparatus, and restoration of that Plant and Apparatus in whole or in part by automatic or manual means.

3 Process

3.1 General

- 3.1.1 Whenever possible Circuit Live Trip and DAR Tests should be planned in advance but this does not exclude the possibility of agreeing tests at shorter notice, including Control Phase timescales.

- 3.1.2 Circuit Live Trip and DAR Tests shall be planned and carried out by the ~~Affected~~affected Parties such that, with the exception of the Plant and Apparatus subject to the test, there is minimal impact on the GB Transmission System.
- 3.1.3 NGC shall remain responsible for the operational management of the GB Transmission System during any testing.
- 3.1.4 The TO shall be responsible for managing the Tests programme in accordance with the requirements of this procedure.

3.2 Planning Process

- 3.2.1 The TO shall submit all Outage requests for the Circuit Live Trip and DAR Tests in accordance with STCP 11-1 Outage Planning.
- 3.2.2 Any request for such an Outage shall be flagged as 'Circuit Live Trip & DAR Tests', where the circuit will be fully restored by DAR action, and flagged as an 'in-service' Outage request. Although in principle these Circuit Live Trip and DAR Test Outages do not form part of security analysis, the Operational Effect of a DAR sequence failure or the need to restore the circuit manually shall be considered as part of the Outage planning process.
- 3.2.3 Any work requiring either auto isolation of some part of the Plant and Apparatus involved in the Tests, or Plant and Apparatus to remain out of service as a result of the testing, shall be separately requested as an Outage in accordance with STCP 11-1 Outage Planning and will be considered in security analysis. Such Plant and Apparatus will be returned to service in accordance with STCP 1-1 Operational Switching, as appropriate.
- 3.2.4 Plant and Apparatus to be switched out of service by operation of Protection Apparatus as part of planned maintenance work will be treated as an Outage request under STCP 11-1 Outage Planning and included in security studies on that basis, with the Outage booking commented with 'Switch out by protection'.
- 3.2.5 Initiation of a Circuit Live Trip and DAR Test will normally be by operation of Protection Apparatus. If Circuit Live Trip and DAR Tests are planned on Plant and Apparatus with no associated DAR facility, the resource and time needed to restore that Plant and Apparatus to service by manual switching shall be considered for operational impact as part of the planning liaison.
- 3.2.6 Consideration shall be given by NGC and the TO, when scheduling Circuit Live Trip and DAR Tests, to the possible interaction with Circuit Breaker Fail Protection ~~Systems,systems,~~ voltage changes and automatic switching systems. Appendix ~~G-B~~ provides further information and guidance.
- 3.2.7 As part of the planning of Circuit Live Trip and DAR Tests on cross TO boundary circuits, liaison and agreement shall take place between the TOs involved. The requesting TO shall take the lead in co-ordinating discussions and reaching agreement with the other affected TO(s). The requesting TO shall be responsible for liaising with NGC regarding such outcome of discussions.
- 3.2.8 No Circuit Live Trip and DAR Tests will take place on circuits where the Tests would result in operation of an Operational Intertripping Scheme unless this is the stated purpose of the Tests and agreement for the Tests has been reached with all affected parties prior to the Tests.
- 3.2.9 NGC shall be responsible for obtaining the agreement of an affected User or affected TO to Circuit Live Trip and DAR Tests as soon as reasonably practicable. Tests will only be carried out if and when agreement for the Tests has been reached with the affected User or affected TO.

3.3 Tests programmes

- 3.3.1 Where more than a single Circuit Live Trip and DAR Test is proposed on a circuit a written programme of Tests shall be provided by the TO unless agreed otherwise by NGC. The Tests programme shall detail the equipment involved, the sequence of Tests and any Operational Effects (or possible Operational Effects). Such Circuit Live Trip and DAR Tests will normally be planned to take place at the start or completion of an Outage of the circuit.
- 3.3.2 The TO will use reasonable endeavours to provide the proposed programme of Circuit Live Trip and DAR Tests to NGC in the Operational Planning Phase, normally a minimum of ~~6~~6 weeks prior to the date of testing. It is accepted, however that such Circuit Live Trip and DAR Tests may be requested by the TO at shorter notice.
- 3.3.3 NGC and the TO may agree break points in the Tests programme such that the TO can complete sections of the Tests programme without further reference to NGC.
- 3.3.4 NGC will assess the implications of the proposed Tests programme and liaise with each affected User and affected TO, seek their agreement to the Tests programme and collate and co-ordinate the response to the TO as soon as reasonably practicable.
- 3.3.5 If the Tests programme is not acceptable to NGC, an affected User or affected TO then NGC shall refuse the submitted Tests programme and will inform the TO as soon as reasonably practicable. The TO may choose to revise and re-submit the Tests programme to NGC or initiate a dispute. Any revised Tests programme will be assessed by NGC, an affected TO and affected User in accordance with this procedure.
- 3.3.6 The TO will use reasonable endeavours to ensure the agreed Tests programme is made available to NGC at least ~~5~~5 Business Days in advance of testing.

3.4 Operational Process

- 3.4.1 NGC shall be responsible for operational liaison in order to obtain agreement from an affected User or affected TO for the Tests to proceed in the Control Phase. Where a Tests programme is used NGC shall inform each affected User and affected TO prior to the start of the Tests if NGC intends to allow the TO to become the operational contact for the Tests.
- 3.4.2 Tests shall be carried out in accordance with the requirements of STCP 1-1 Operational Switching and the Tests programme if appropriate for Plant and Apparatus under NGC operational control (not released to the TO) and will normally be carried out under a verbal Switching Method agreement recorded by NGC and the TO.
- 3.4.3 When NGC has given permission for the TO to carry out Circuit Live Trip and DAR Tests the TO shall contact affected Users and advise that the TO has become the point of operational contact for the Tests ~~Programme~~programme and that the test will shortly commence.
- 3.4.4 Prior to Circuit Live Trip and DAR Tests on cross TO boundary circuits, operational liaison and agreement shall take place between the TOs involved. The requesting TO shall take the lead in co-ordinating discussions and reaching agreement with the other affected TO(s). The requesting TO shall be responsible for liaising with NGC regarding such outcome of discussions.
- 3.4.5 In the event of failure of Tests (e.g. failure of a circuit breaker to re-close in programmed sequence) the TO shall contact NGC as soon as reasonably practicable, and seek agreement to vary the Tests programme to allow restoration of the circuit and re-testing as appropriate.
- 3.4.6 If during Tests, an unexpected alarm or event occurs that the relevant TO believes has or may have an Operational Effect on the proposed Tests programme, the TO shall contact NGC as soon as reasonably practicable to discuss the implications of the unexpected alarm or event. Parties shall use reasonable endeavours to agree the subsequent actions to be followed in a timely manner.
- 3.4.7 If during Tests, NGC becomes aware of any reason to stop or delay the Tests they shall contact the TO as soon as reasonably practicable to discuss and agree any action that may be required.

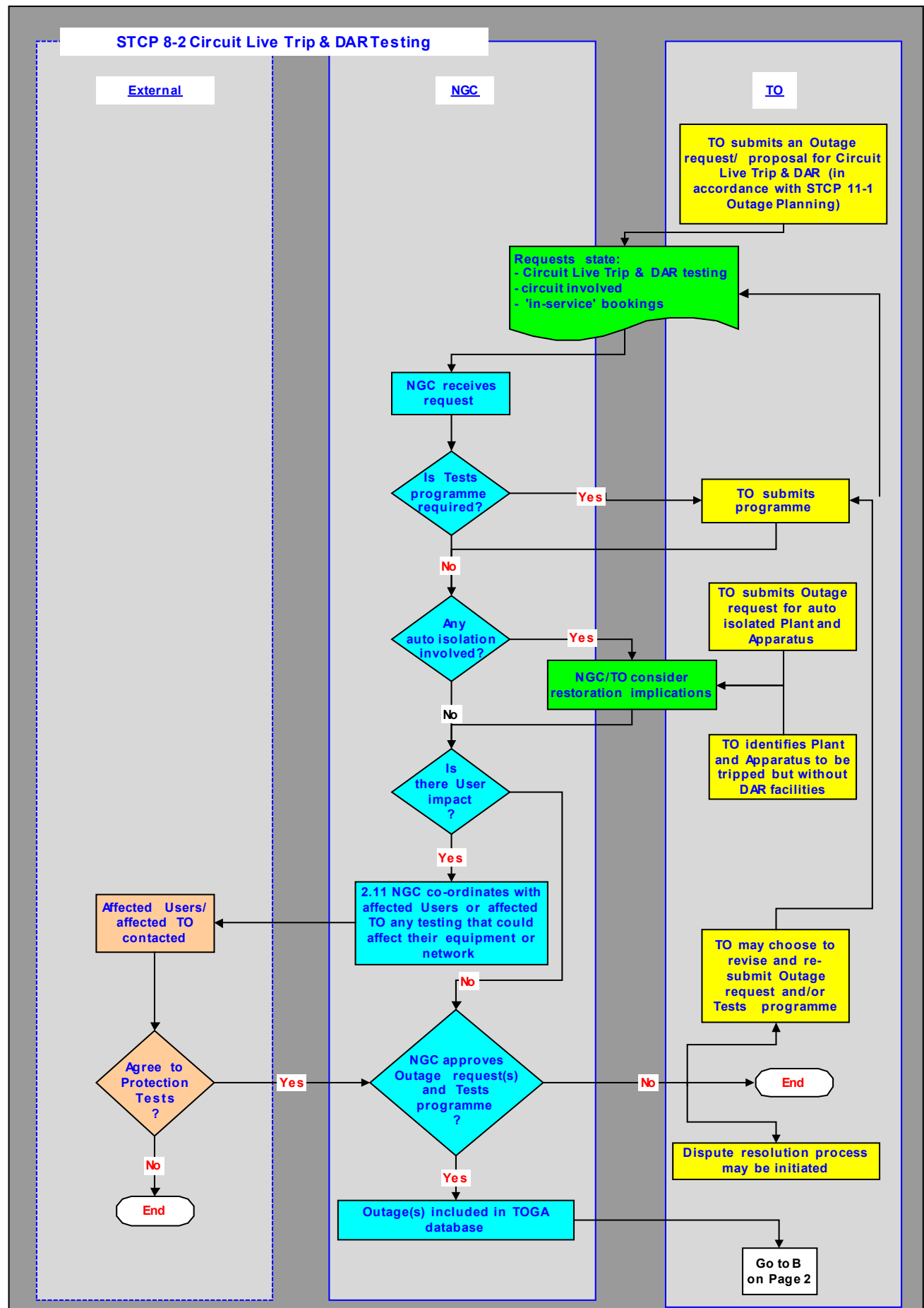
4Disputes

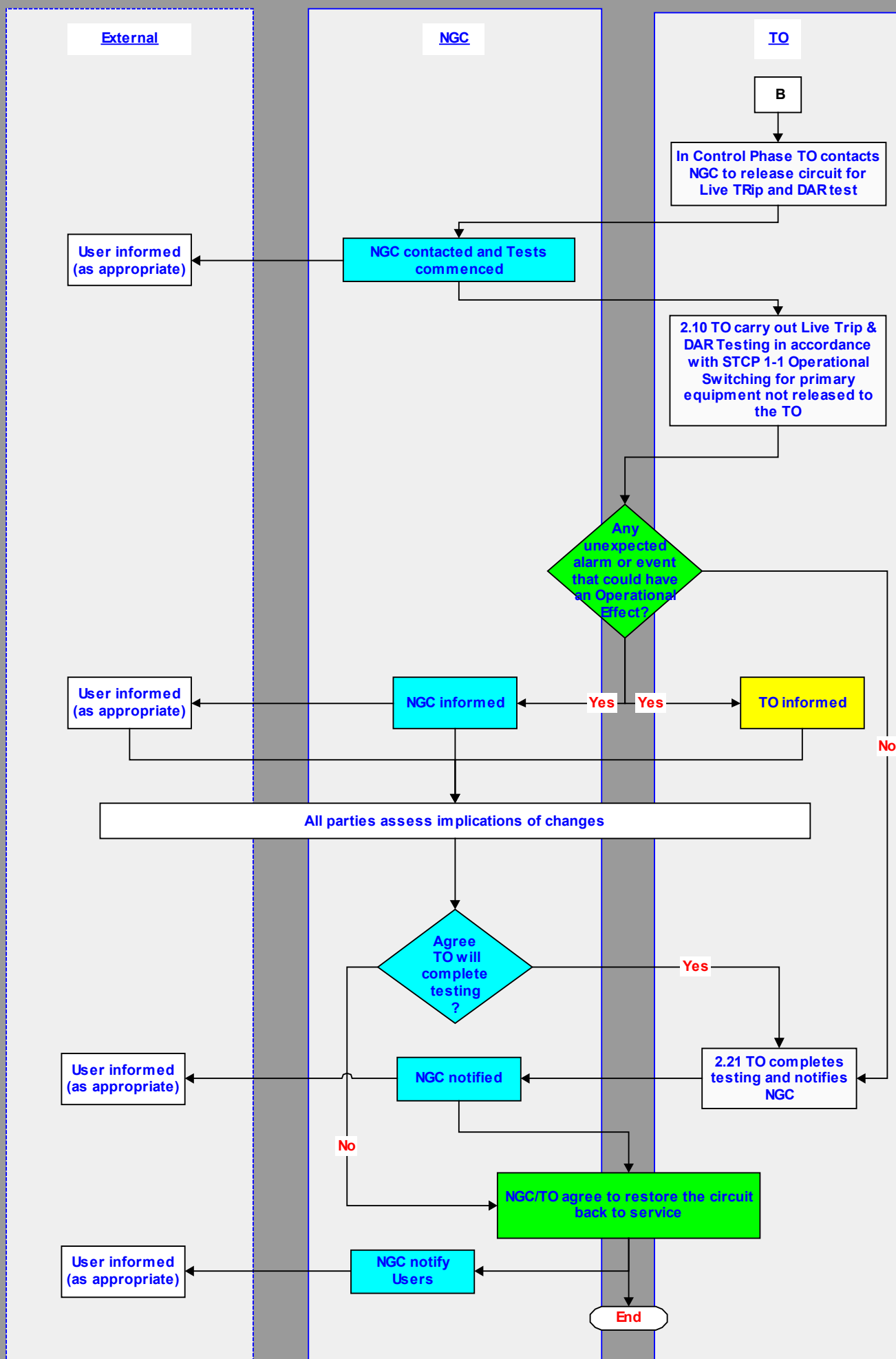
~~4.1.1In the event that there is a dispute regarding the acceptability or otherwise of a Circuit Live Trip and DAR Tests programme or associated Outage, the Tests shall not take place until the Dispute has been resolved.~~

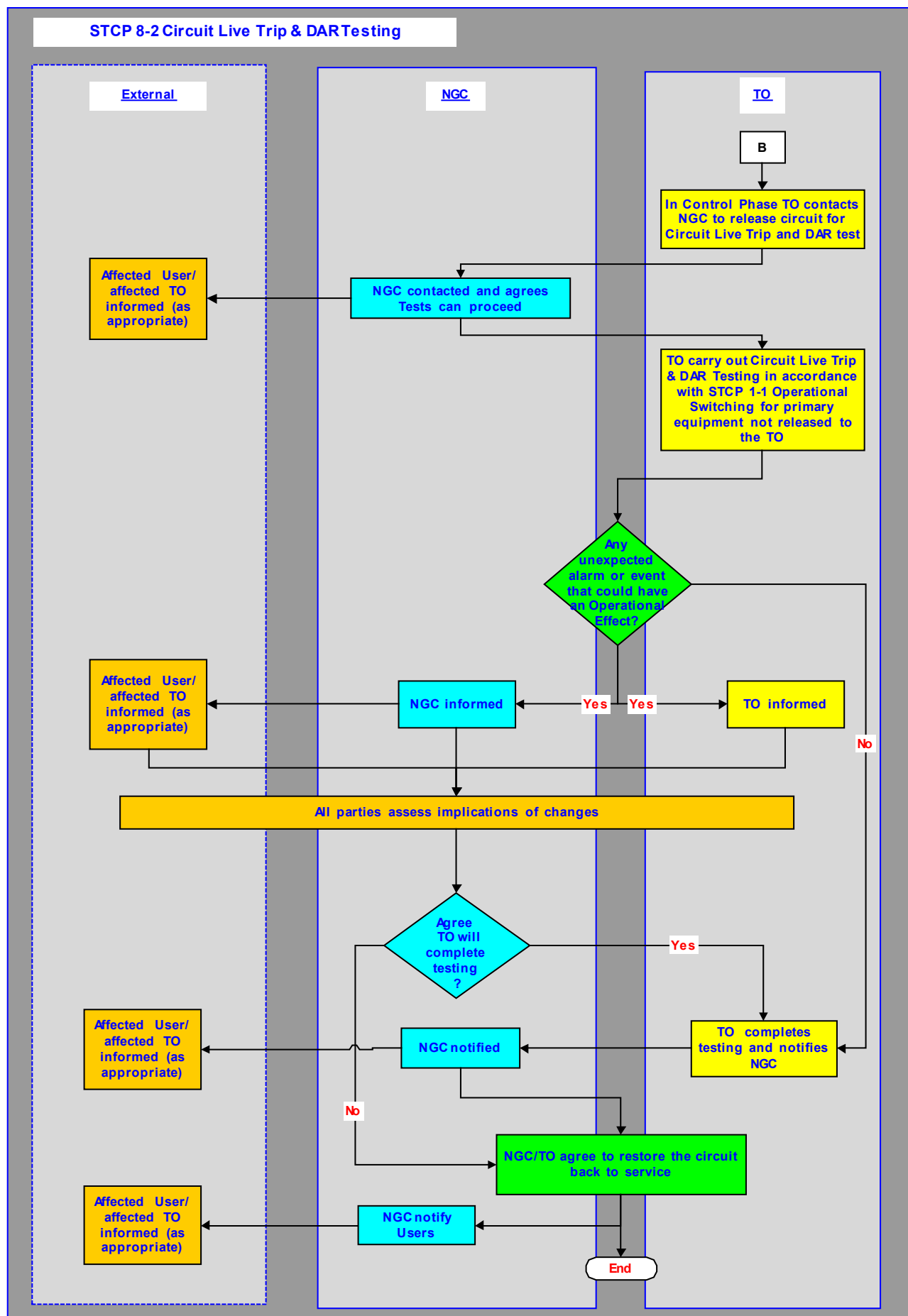
~~4.1.2Any affected party may initiate a Dispute in the event that agreement cannot be reached.~~

Appendix A: Process Diagrams

Note that the Process Diagrams shown in this ~~Appendix B~~appendix are for information only. In the event of any contradiction between the process represented in this ~~Appendix~~appendix and the process described elsewhere in this STCP, then the text elsewhere in this STCP shall prevail.







Appendix B Issues to be considered for Circuit Live Trip and DAR Tests

B.1 Voltage Criteria

B1.1 Guidance on the acceptable transient voltage change for planned Circuit Live Trip and DAR Tests is contained in the GBSQSS.

B1.2 Consideration shall be given as to the control arrangements available (e.g. telecommand or tap change controls) to ensure Good Industry Practice can be followed to ensure the voltage change is minimised by bringing equipment associated with the testing to minimum MVAR import/export conditions.

B.2 Circuit Restrictions

B2.1 Trip testing shall normally take place with 'Circuit Breaker Fail' ('CBF') protection in service where installed to assist in the rapid clearance of a fault.

B2.2 For circuits with charging currents that exceed 80% of 'CBF' current check settings, there is a risk that if the circuit breaker fails to open a back trip could be initiated. Where NGC conclude the consequences of this are acceptable, the 'CBF' can remain in service. Where it is not acceptable for operational reasons (e.g. loss of supply would result) the 'CBF' protection can be switched out at the relevant end provided Intertripping exists to ensure remote end clearance of genuine faults.

B2.3 The TO shall identify those circuits where the charging current is likely to exceed 80% of the 'Circuit Breaker Fail' current check setting.

B2.4 The operation of auto-reclose schemes, during Circuit Live Trip Tests of circuits, may result in circuits returning under DAR which could bring the site above the Normal Capability Limit of the switchgear. In such cases Tests should only be carried out where agreement has been reached on fault level management. Further guidance is available in STCP 4-4 'Provision of Operational Information'. Different auto-reclose schemes deal with this temporary potential over stressing in differing ways; some can configure the site to the pre-fault arrangement automatically; others require manual intervention.

B2.5 The TO will identify those circuits associated with sites where auto-reclose schemes may result in temporary overstressing of switchgear and agree fault level management measures to be implemented during the Tests.

B2.6 Some circuits on the transmission system are monitored by generation or demand disconnection schemes. Circuit Live Trip Tests shall not be undertaken on circuits which, if tripped, would cause subsequent tripping of generator or other circuits, unless this is the specific intention of the Tests and all affected parties have agreed the Tests may take place .

B.3 Other Considerations

B3.1 Consideration shall be given to the consequences of DAR failure and the means to ensure rapid restoration of a circuit by other means. This may involve the TO ensuring attendance can be arranged at sites involved within an agreed time period.

B3.2 Circuit Live Trip and DAR Tests should not normally take place during periods of predicted or actual local adverse weather conditions.

B3.3 Consideration shall be given by the TO and NGC to existing Operational Capability Limits affecting equipment when evaluating their suitability for Circuit Live Trip and DAR Tests.

Appendix ~~B~~C – Definitions & Abbreviations

~~BC~~C.1 Abbreviations

DAR	Delayed Auto Reclose
NGC	National Grid Company
SHETL	Scottish Hydro Electric Transmission Ltd
SPT	Scottish Power Transmission
STC	System Operator –Transmission Owner Code
STCP	System Operator –Transmission Owner Code Procedure
TO	Transmission Owner

~~BC~~C.2 Terms defined in the STC:

Business Day

Dispute

GB Transmission System

Operational Effect

Outage

Tests

Party

User

Good Industry Practice

Normal Capability Limit

Operational Capability Limit

~~BC~~C.3 Terms defined in the Grid Code:

Apparatus

Circuit Breaker

Circuit Breaker Fail

Control Phase

Good Industry Practice

Operational Intertripping Scheme

Operational Planning Phase

Plant

Protection

Protection Apparatus

CB.4 Terms defined in other STCPs

Transmission Status Certificate
Switching Method

STCP1-1: Operational Switching
STCP1-1: Operational Switching

~~Appendix C – Issues to be considered for Circuit Live Trip and DAR Tests~~

~~C.1 Voltage Criteria~~

~~C1.1 Guidance on the acceptable transient voltage change for planned Circuit Live Trip and DAR Tests is contained in the GBSQSS.~~

~~C1.2 Consideration shall be given as to the control arrangements available (e.g. telecommand of tap change controls) to ensure Good Industry Practice can be followed to ensure the voltage change is minimised by bringing equipment associated with the testing to minimum MVar import/export conditions.~~

~~C.2 Circuit Restrictions~~

~~C2.1 Trip testing shall normally take place with ‘Circuit Breaker Fail’ (‘CBF’) protection in service where installed to assist in the rapid clearance of a fault.~~

~~C2.2 For circuits with charging currents that exceed 80% of ‘CBF’ current check settings, there is a risk that if the circuit breaker fails to open a back trip could be initiated. Where NGC conclude the consequences of this are acceptable, the ‘CBF’ can remain in service. Where it is not acceptable for operational reasons (e.g. loss of supply would result) the ‘CBF’ protection can be switched out at the relevant end provided Intertripping exists to ensure remote end clearance of genuine faults.~~

~~C2.3 The TO shall identify those circuits where the charging current is likely to exceed 80% of the ‘Circuit Breaker Fail’ current check setting.~~

~~C2.4 The operation of auto-reclose schemes, during Circuit Live Trip Tests of circuits, may result in circuits returning under DAR which could bring the site above the Normal Capability Limit of the switchgear. In such cases Tests should only be carried out where agreement has been reached on fault level management. Further guidance is available in STCP 4-4 ‘Provision of Operational Information’. Different auto-reclose schemes deal with this temporary potential over stressing in differing ways; some can configure the site to the pre-fault arrangement automatically; others require manual intervention.~~

~~C2.5 The TO will identify those circuits associated with sites where auto-reclose schemes may result in temporary overstressing of switchgear and agree fault level management measures to be implemented during the Tests.~~

~~C2.6 Some circuits on the transmission system are monitored by generation or demand disconnection schemes. Circuit Live Trip Tests shall not be undertaken on circuits which, if tripped, would cause subsequent tripping of generator or other circuits, unless this is the specific intention of the Tests and all affected parties have agreed the Tests may take place.~~

~~C.3 Other Considerations~~

~~C3.1 Consideration shall be given to the consequences of DAR failure and the means to ensure rapid restoration of a circuit by other means. This may involve the TO ensuring attendance can be arranged at sites involved within an agreed time period.~~

~~C3.2 Circuit Live Trip and DAR Tests should not normally take place during periods of predicted or actual local adverse weather conditions.~~

~~C3.3 Consideration shall be given by the TO and NGC to existing Operational Capability Limits affecting equipment when evaluating their suitability for Circuit Live Trip and DAR Tests.~~