

CONSULTATION DOCUMENT

**Draft Modification Proposal to the
GB Connection Charging Methodology**

GB ECM 01

One-off Charges for System to Generator Intertripping Schemes

July 2005

Table of Contents

1. EXECUTIVE SUMMARY	1
2. INTRODUCTION.....	1
3. BACKGROUND TO THE ISSUES	2
4. EXPLANATION OF THE ISSUES	2
5.0 PROPOSED MODIFICATION.....	4
5.1 DESCRIPTION OF PROPOSED MODIFICATION	4
5.2 Justification for proposed modification.....	5
5.3 Implementation date	6
5.4 Impacts on Other Industry Documents	6
6. RESPONSES TO THIS CONSULTATION	6
APPENDIX 1 – PROPOSED REVISED WORDING OF CHAPTER 3.....	7

1. Executive Summary

This paper sets out for consultation National Grid's proposed modification to the Connection Charging Methodology to define 'One-Off' charges for the provision of Operational Intertrips. The paper has been published on the National Grid charging website at the following address:

www.nationalgrid.com/uk/indinfo/charging/mn_modifications.html

2. Introduction

National Grid is obliged under the Transmission Licence:

- (i) to make revisions to the Charging Statements in order that the information set out in these statements shall continue to be accurate in all material respects;
- (ii) to keep the Connection Charging Methodology at all times under review;
- (iii) to make such modifications of the Connection Charging Methodology as may be requisite for the purpose of better achieving the relevant objectives, which are:
 - a. to facilitate effective competition in the generation and supply of electricity and (so far as is consistent therewith) facilitate competition in the sale, distribution and purchase of electricity;
 - b. to result in charges which reflect, as far as is reasonably practicable, the costs (excluding any payments between transmission licensees which are made under and in accordance with the STC) incurred by transmission licensees in their transmission businesses;
 - c. to take account of the developments in transmission licensees' transmission businesses (so far as is consistent with sub-paragraphs (a) and (b));and, so far as is consistent with sub-paragraph (a) above;
- d. to facilitate competition in the carrying out of works for connection to the GB Transmission system.

Before making a modification to the Connection Charging Methodology, National Grid is also required by the Transmission Licence to consult with CUSC Users on the proposed modification and allow them a period of not less than 28 days within which to make written representations. The Authority can consent to a shorter consultation period.

The purpose of this document is to set out for consultation National Grid's proposal to modify the Statement of the Connection Charging Methodology to meet the Relevant Objectives in Licence Conditions C5 5(b) and C5 5(c). Namely to ensure National Grid applies charges which reflect, as far as reasonably practicable, the

costs incurred by transmission licensees in their transmission businesses and properly takes account of the developments in transmission licensees' transmission businesses.

3. Background to the Issues

In accordance with the Statement of the Connection Charging Methodology, 'One-Offs' are defined as charges levied on Users for works on the electricity transmission system associated with the provision or modification of a connection, which although directly attributable to the connection, may not give rise to additional connection assets. Liability for such charges is established with the principles laid out below:

- Where a cost cannot be capitalised into either a connection or infrastructure asset, typically a revenue cost
- Where a non-standard incremental cost is incurred as a result of a User's request, irrespective of whether the cost can be capitalised
- Termination Charges associated with the write-off of connection assets at the connection site

In August 2004, National Grid proposed a CUSC Amendment Proposal CAP076¹ Treatment of System to Generator Intertrips. The proposal, which was approved on 10 June 2005, improved and clarified the treatment of System to Generator Intertrips in terms of the contractual framework and remuneration of Intertrips. Consequently, National Grid would like to modify the Statement of the Connection Charging Methodology to accommodate the clarification and categorisation of Generator Intertripping schemes.

4. Explanation of the Issues

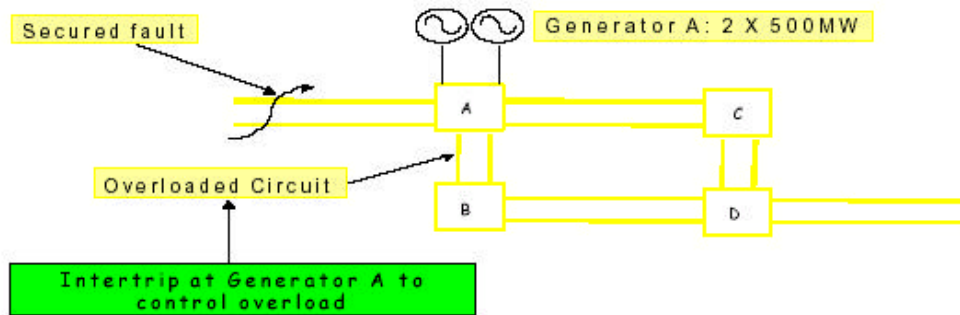
Following the categorisation of operational intertripping schemes as part of the CAP076 change, National Grid has assessed each type of category against the 'one-off' principles to determine if the scheme should be charged as a 'one-off'. This section aims to describe the categories of the intertrips with the assessment against the 'one off' principles detailed in Section 5.

The CAP076 CUSC consultation categorises intertrips into four groups:

Category 1

A System to Generator Intertripping Scheme arising from a Variation to Connection Design consistent with the criteria specified in the Security and Quality of Supply Standard (SQSS) as established pursuant to Condition 12 of the Transmission Licence.

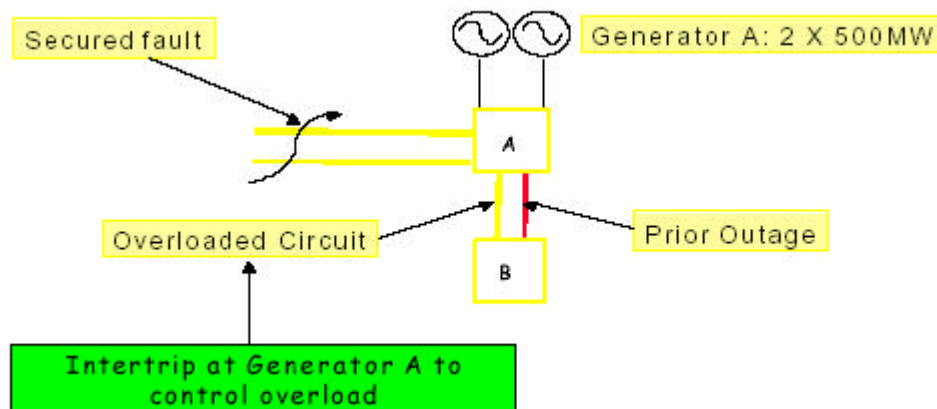
¹ CAP076 Amendment Proposal and Working Group Report are available on the CUSC website at www.nationalgridinfo.co.uk/cusc



In the above diagram, A, B, C and D are illustrative nodes on the transmission system. The generator where an intertrip is required is connected to node A. 'Secured fault' means the fault that is being catered for, i.e. if the secured fault occurred, the circuit as indicated in the diagram would be overloaded if the generator was not inter-tripped.

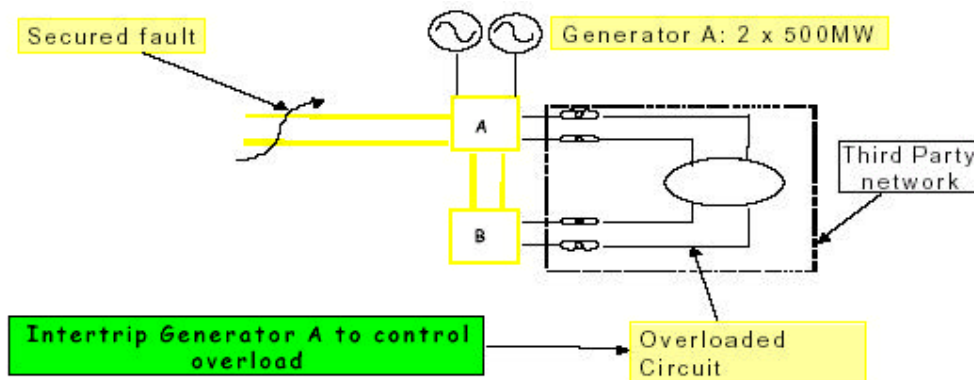
Category 2

A System to Generator Intertripping Scheme required to alleviate an overload on a circuit, that connects the group containing the Generator to the rest of the System. The operation of the Scheme means any MW reduction from the Generator has exactly the same MW reduction on the circuits that connect the Generator to the rest of the System (when any system losses or third party system effects are ignored).



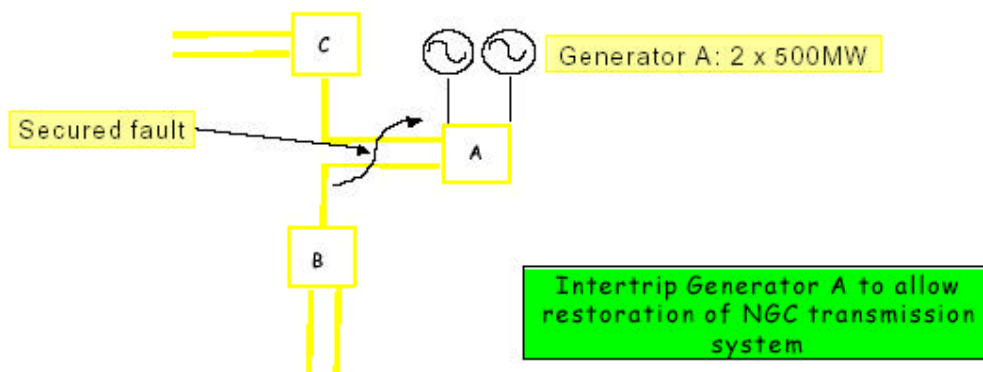
Category 3

A System to Generator Intertripping Scheme installed as an alternative to reinforcement of a third party system, where the Scheme removes overloads on the third party system e.g. DNO system.



Category 4

A System to Generator Intertipping Scheme installed at the request of National Grid under circumstances when the Generator would be disconnected from the Transmission System and where the use of such schemes would be beneficial in order to facilitate the timely restoration of critical circuits.



5.0 Proposed Modification

5.1 Description of proposed modification

5.1.1 Category 1

As Category 1 involves the installation of an intertrip to facilitate the early connection of a generator to the transmission network, National Grid is proposing to charge for the installation of the intertrip on a one-off basis. This category may also apply to a generator requesting a Variation to Connection Design, which will also result in a one off charge for the intertrip installation. This is consistent with the Security and Quality of Supply Standard (SQSS) requirement, which states that a Variation to Connection Design must not result in additional costs to any other User. Furthermore, it is also consistent with the second 'one-off' principle described in Section 3, which relates to a non-standard incremental cost incurred as a result of a User's request.

5.1.2 Category 2

Intertrips installed under Category 2 will be to protect local circuits from overloads resulting from outages on local circuits. As there is a wider system security benefit with the installation of the scheme under this category, and because the circuits involved are infrastructure rather than connection, National Grid is proposing to recover costs for the intertrip installation via the Transmission Network Use of System (TNUoS) revenue recovery mechanism.

5.1.3 Category 3

A new generator could under certain circumstances cause overloads on a third party's network. In this instance, if the identified solution requires work on the third party's network, the generator would be expected to contract with the third party to undertake the required reinforcement work. This would normally be identified during National Grid's assessment of the generator's application, and National Grid would impose a condition of any offer that the third party works are undertaken to reinforce the relevant network. The generator would then be expected to contract with the third party concerned and ensure the necessary works are carried out for third party system reinforcement. Costs for such third party reinforcement work would be borne by the generator. As the installation of a Category 3 intertrip would be an alternative option to third party reinforcement works and to ensure that all works triggered by the need to protect a third party's assets are treated consistently, National Grid is proposing that intertrips installed under this category be charged to the generator as a 'one-off'. This would also be consistent with the first 'one-off' principle, as it would not be appropriate for the intertrip cost to be capitalised into either a connection or infrastructure transmission asset.

5.1.4 Category 4

Under Category 4, the intertrip would be installed to allow restoration of critical circuits on the transmission system. As there is the wider benefit of system security with the installation, National Grid are proposing to recover costs for the intertrip via the TNUoS revenue recovery mechanism.

5.2 Justification for proposed modification

This proposed change to the Connection Charging Methodology is required to identify how National Grid proposes to charge for the four categories of intertrip schemes defined in the CUSC Amendment Proposal 076: Treatment of System to Generator Intertripping Schemes. The change is therefore required to meet the Relevant Objective in Licence Condition C5 5(c): that the Connection Charging Methodology properly takes account of the developments in the transmission licensees' transmission businesses.

The 'one-off' charges proposed to be levied for Category 1 and 3 type operational intertrip schemes would be calculated in accordance with Section 3.4 of the Statement of Connection Charging Methodology. The charge would therefore be based on the costs incurred and would therefore meet the Relevant Objective in Licence Condition C5 5(b): that charges reflect, as far as reasonably practicable, the costs incurred by transmission licensees in their transmission businesses.

The proposed changes achieve the Relevant Objectives in the Licence as they are consistent with the 'one-off' principles contained in the Connection Charging Methodology, which itself achieves the Relevant Objectives and which was approved by the Authority in December 2004. The 'one-off' principles are contained in Section 3.2 of the Statement of Connection Charging Methodology (replicated in Section 3 above).

5.3 Implementation date

The implementation date for the proposed change is 1 November 2005.

5.4 Impacts on Other Industry Documents

No impacts on other industry documents

6. Responses to this Consultation

Comments and views are invited on all the issues raised in this consultation document. In order that your comments and views are considered as part of National Grid's report to the Authority, responses must be received by close of business on **12 August 2005**.

If you wish to provide comments on this proposed modification, responses are welcome via email to: Craig.Maloney@ngtuk.com

Alternatively, users can choose to provide their comments in writing, addressed to:

Craig Maloney
Transmission Charging Development Team
National Grid Transco plc
National Grid Transco House
Warwick Technology Park
Gallows Hill
Warwick
CV34 6DA

If you have further queries, please do not hesitate to contact Craig on 01926 655896.

Appendix 1 – Wording of Chapter 3 and Glossary

Proposed addition to Paragraph 3.2 of the Statement of the Connection Charging Methodology:

Consistent with these principles and in accordance with Connection Charging Methodology modification GB ECM 001 which was implemented on 1 November 2005, a one off charge will be levied for a **Category 1 Intertripping Scheme** or a **Category 3 Intertripping Scheme**. A one off charge will **not** be levied for a **Category 2 Intertripping Scheme** or a **Category 4 Intertripping Scheme**.

Proposed addition to the Glossary of the Statement of the Connection Charging Methodology:

Category 1 Intertripping Scheme	A System to Generator Operational Intertripping Scheme arising from a Variation to Connection Design following a request from the relevant User which is consistent with the criteria specified in the Security and Quality of Supply Standard.
Category 2 Intertripping Scheme	<p>A System to Generator Operational Intertripping Scheme which is:-</p> <ul style="list-style-type: none"> (i) required to alleviate an overload on a circuit which connects the Group containing the User's Connection Site to the GB Transmission System; and (ii) installed in accordance with the requirements of the planning criteria of the Security and Quality of Supply Standard in order that measures can be taken to permit maintenance access for each transmission circuit and for such measures to be economically justified, and the operation of which results in a reduction in Active Power on the overloaded circuits which connect the User's Connection Site to the rest of the GB Transmission System which is equal to the reduction in Active Power from the Connection Site (once any system losses or third party system effects are discounted).
Category 3 Intertripping Scheme	A System to Generator Operational Intertripping Scheme which, where agreed by NGC and the User, is installed to alleviate an overload on, and as an alternative to, the reinforcement of a third party system, such as the Distribution System of a Public Distribution System Operator.

Category 4 Intertripping Scheme

A System to Generator Operational Intertripping Scheme installed to enable the disconnection of the Connection Site from the GB Transmission System in a controlled and efficient manner in order to facilitate the timely restoration of the GB Transmission System.